LONG TERM MONITORING PLAN

STUDY AREA 6 NORTH

(NJDEP SITES 087 AND 088)

AND

STUDY AREA 6 SOUTH

(NJDEP SITES 073, 124, 125, 134, 140, AND 163)

OPEN SPACE AREAS AND OTHER DEED NOTICE AREAS

JERSEY CITY, NEW JERSEY

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This Long Term Monitoring Plan is hereby approved by the following parties and each agrees to abide by the obligations placed upon them by this Long Term Monitoring Plan.



02/08/18

Honeywell
William J. Hague, Global Director, Remediation Design and Construction

Date

The City of Jersey City
Joe Cunha, City Engineer

Date

Jersey City Municipal Utilities Authority
Richard Haytas, Engineer

Date

Alicia C. Alcorn, counsel for plaintiffs
Hackensack Riverkeeper, Inc.,
William Sheehan, Lawrence Baker,
Rev. Winston Clarke

Date

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Jersey City Municipal Utilities Authority Richard Haytas, Engineer	Date
Alicia C. Alcorn, counsel for plaintiffs Hackensack Riverkeeper, Inc., William Sheehan, Lawrence Baker, Rev. Winston Clarke	Date

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Honeywell has prepared this Long Term Monitoring Plan (LTMP) to protect the remedial actions implemented for chromium at Study Area 6 North (SA-6 North) and Study Area 6 South (SA-6 South) in Jersey City, Hudson County, New Jersey (also referred to herein as the "Sites") as shown on **Illustration 1**. The Sites are referred to by the New Jersey Department of Environmental Protection (NJDEP) as Hudson County Chromate Sites and include:

SA-6 North Site Name	**NJDEP Site No.**
Jersey City Incinerator Site	**087**
JCIA Well Site	**088**
SA-6 South Site Name	**NJDEP Site No.**
Degen Oil	**073**
Roosevelt Bowling Lanes	**124**
Delphic Consolidated	**125**
Old Dominion	**134**
ABF Trucking	**140**
Posnak & Turkish	**163**

The LTMP satisfies the requirements for long term monitoring, maintenance, and protection of engineering and institutional controls as set forth in the following documents:

- "First Amended Consent Decree regarding the Remediation and Redevelopment of Study Area 6 North," ECF No. 435, entered by the United States District Court, District of New Jersey on August 2, 2012, in Civil No. 05-05955, later consolidated with Civil No. 95-2097 (SA-6 North Consent Decree) Paragraphs 60 through 68; and
- "First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South between Honeywell, Hackensack Riverkeeper, Inc. and the City of Jersey City," ECF No. 434, entered by the United States

District Court, District of New Jersey on August 2, 2012, in Civil No. 05-05955, later consolidated with Civil No. 95-2097 (SA-6 South Consent Decree) Paragraphs 74 through 81. [1]

This LTMP also satisfies post-remediation operation, maintenance, and monitoring provisions outlined in the following documents:

- NJDEP-approved Remedial Action Work Plans (RAWPs) for both Sites discussed more fully in Sections 2.1.1 and 2.1.2;
- Deed Notices (see **Appendix A-4**); and
- NJDEP-issued Remedial Action Permits (see **Appendix A-6**)

These Consent Decrees amended the original Consent Decrees for SA-6 North and SA-6 South dated April 21, 2008 and December 19, 2008, respectively. The "Parties" referenced in this report are the signatories to the Consent Decrees: Jersey City Entities (City of Jersey City [Jersey City], Jersey City Municipal Utilities Authority [JCMUA], Jersey City Incinerator Authority [JCIA]), Hackensack Riverkeeper (Riverkeeper), and Honeywell.

[1] The Consent Decrees are available from the United States District Court for the District of New Jersey and a website maintained by Honeywell. The Honeywell website url is: http://www.jerseycitychromiumcleanup.com/



Illustration 1: SA-6 North, SA-7, and SA-6 South

Remedial actions at SA-6 North and South were implemented by Honeywell and were completed from May 2013 to December 2016. Work was conducted in accordance with:

- Administrative Consent Order (ACO) between Honeywell and the NJDEP dated June 17, 1993 and modified pursuant to a Consent Judgment between Honeywell and the NJDEP dated September 7, 2011 (Consent Judgment).
- New Jersey Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E) (NJDEP, 2012).
- NJDEP's Chromium Policy Directive dated February 8, 2007.
- The SA-6 North and SA-6 South Consent Decrees.
- The SA-6 North and SA-6 South Combined 100% Design dated June 2013 (Amec 2013) and related Design Change Bulletins (DCBs).[2] Whenever the 100% Design is referenced in this LTMP, it is inclusive of any changes created by DCBs.

[2] The 100% Design Reports are available from the United States District Court for the District of New Jersey and a website maintained by Honeywell. The specific url for the Honeywell maintained website is: http://www.jerseycitychromiumcleanup.com/.

- As required by the TRSR, Honeywell has submitted Remedial Action Reports (RARs) for SA-6 South and SA-6 North to NJDEP. The NJDEP approved the SA-6 South RAR on March 30, 2017 and the SA-6 North RAR on June 1, 2017. Pursuant to the Consent Decrees, Honeywell will also file with the United States District Court for the District of New Jersey in Docket No. 95-2097 Construction Completion Reports ("CCRs") for Study Area 6 North and for Study Area 6 South after the CCRs have been approved by the Special Master and Parties. The RARs and CCRs include Record Drawings which show the manner in which the 100% Design was modified based on field conditions through the DCBs.

The Areas of Concern (AOCs) for this LTMP include the Open Space Areas at SA-6 North (referenced as AOC-1 Open Space Area in the SA-6 North Consent Decree) and SA-6 South (referenced as Open Space AOC in SA-6 South Consent Decree) which encompass approximately 11 acres and 8 acres, respectively. In this document, the Open Space Areas at SA-6 North and SA-6 South are referred to as the "Open Space Areas." This LTMP also applies to several other areas where hexavalent chromium contamination remains that are identified as Deed Notice Areas 2, 3, 4, 6, 7, 9, and 10 (described later in this section) and shown on **Figure 5** (collectively referred to herein as "Deed Notice Areas").[3] Although this LTMP is only required by the Consent Decrees governing implementation of the Chromium Remedy at SA-6 North and South, because the two deed notices for the Open Space Areas and the deed notice for Deed Notice Area #4 include features of the Chromium Remedy implemented on and for SA-7 (as described further below in this Section), this LTMP also pertains to those applicable portions of SA-7. The LTMP elements applicable to the Deed Notice Areas are summarized on **Table 5**. However, failure to include an activity in Table 5 otherwise required by this LTMP, does not excuse the failure to conduct the activity. Record Drawings that were included in the SA-6 North and SA-6 South RARs for Deed Notice Areas where engineering controls were constructed by Honeywell are included in **Appendix A-2**. Figures illustrating the engineering controls and depth to chromium-impacted soils for each of the Deed Notice Areas are included in Appendix E.

[3] Although deed notices apply to the Open Space Areas at SA-6 North and SA-6 South, the term "Deed Notice Area" in this LTMP means the seven areas designated as Deed Notice Areas 2, 3, 4, 6, 7, 9, and 10 and does not refer to the Open Space Areas.

The term "Chromium Remedy" shall refer to the remedies implemented within SA-6 North and South pursuant to the Consent Decrees, including the capped Open Space Areas, the groundwater remedies, and the engineering controls (e.g., hardscape cement/asphalt or soil/gravel caps) covering the hexavalent chromium contamination that remains within the Deed Notice Areas.

The horizontal extents of the capped areas of both SA-6 Open Space Areas are defined by an existing soil-cement bentonite (SCB) wall along the common boundaries with SA-7 and the hydraulic barrier walls installed on the other three sides as part of the Chromium Remedy (the northern border of the SA-6 North Open Space Area has been modified to address areas where treatment of soils was ineffective or impractical (see Sections 2.1.3 and 3.1.13)). The final borders of the SA-6 North and SA-6 South Open Space Areas are defined in the Record Drawings provided in the RARs and CCRs and metes and bounds provided in the Deed Notices of these areas. Remedial actions in the Open Space Areas include engineering and institutional controls as set forth in the Consent Decrees and specified in the Chromium Remedy 100% Design Reports for the Sites dated June 2013 (Amec, 2013).

Specifically, the Chromium Remedy for the Open Space Areas is defined in the SA-6 North Consent Decree, Paragraph 56(a), and SA-6 South Consent Decree, Paragraph 65(a), as an engineered Resource Conservation and Recovery Act (RCRA) cap that consists of a gas collection system, base protective layer, geomembrane liner, geocomposite drainage layer, filter fabric, and warning layer.

The Chromium Remedy in SA-6 North AOC 1 and SA-6 South Development AOC also includes excavation as shown on **Figures 2A** and **2B**. AOC 2 at SA-6 North is defined in the SA-6 North Consent Decree as the Historic Fill Remedy area. In the SA-6 South Development AOC, future groundwater monitoring will be implemented as part of this LTMP.

Several other areas, designated as the Deed Notice Areas, exist where soils exceed 20 milligrams per kilogram (mg/kg) for hexavalent chromium and where the provisions of this LTMP apply until such time that soils within these areas no longer contain hexavalent chromium concentrations exceeding 20 mg/kg. Honeywell will establish deed notices for each of these areas. Site 163 as described below, Deed Notice Area 3, will also receive a conservation restriction and the title to this area

will be transferred to Jersey City. Each of these areas is shown on **Figure 5** (with their designated identification labels) and is described as follows:

- Deed Notice Area 2: A small area on SA-6 South within the Route 440 Right of Way (ROW) where Public Service Electric & Gas (PSE&G) owns and operates a gas main located adjacent to the hydraulic barrier alignment along the eastern edge of the SA-6 South Open Space AOC. It is anticipated that this gas main will be relocated during the Route 440 Road Widening Project. Excavation of residual chromium contamination proximate to the gas line in this area will be deferred by Honeywell until the gas line is relocated, as required by the Consent Order Entering the Combined 100% Design for Study Area 6 North and Study Area 6 South, ECF No. 1180, entered by the United States District Court, District of New Jersey on July 9, 2013, in Civil No. 95-2097 ("Order Entering the 100% Design").
- Deed Notice Area 3: A portion of Site 163 at SA-6 South where remaining chromium-impacted soils[4] were identified in the area south of the northern curbline of the future Kellogg Street/Riverside Drive which is also partially within the future River Front Park. As documented by Honeywell in DC 2015-09-28, and as further agreed to by the Parties, Honeywell will restrict the future use of this area by a deed notice, implement a conservation restriction, and transfer title to Jersey City (as called for in Paragraph 61(c)(ii)(3) of the Study Area 6 South Consent Decree).
- Deed Notice Area 4: An area along the Hackensack River bulkhead at SA-6 South (Site 073) and SA-7. This area is divided into two tracts as shown in Figure 5. Tract 1 is adjacent to SA-7 and Tract 2 is adjacent to SA-6 South (Site 073). Excavation of residual chromium contamination in the Tract 2 area will be deferred by Honeywell until a future date when the bulkhead will either be repaired or replaced (as part of the Bayfront Redevelopment project) as required by the Order Entering the 100% Design. During the SA-7 Remedy, the SA-7 deferred area known as the "Wedge" was excavated to remove hexavalent chromium-impacted soil to 240 mg/kg. Post-excavation samples collected at that time indicate that hexavalent chromium-impacted soil above 20 mg/kg, but less than 240 mg/kg remains in the "Wedge" area.

[4] "Chromium-impacted soils" are those soils containing hexavalent chromium concentrations exceeding 20 mg/kg.

This area is included in Tract 2 and will be remediated as part of the bulkhead repair or replacement. The chromium-impacted soils in the Tract 1 area will remain in place.

- Deed Notice Area 6 & Deed Notice Area 9: Three small areas on SA-6 North within the Route 440 ROW where the PSE&G gas main is located north of the SA-6 North Open Space AOC. One area was within Excavation Area 1 and the other within Excavation Area 2/3. It is anticipated that this gas main will be relocated during the Route 440 Road Widening Project. Excavation of residual chromium contamination proximate to the gas line in this area will be deferred by Honeywell until the gas line is relocated as required by the Order Entering the 100% Design.
- Deed Notice Area 7: In-situ treatment area 10 (TA-10) is located immediately proximate to and north of the hydraulic barrier and overlies a section of the 72-inch force main (FM). Because of the proximity of chromium-impacted soils requiring treatment to the FM, in-situ treatment and/or excavation of chromium-impacted soils were not technically feasible for the entire TA-10 due to potential structural impact to the FM. Therefore, Honeywell implemented an in-situ injection program in the portion of TA-10 (subarea TA-10-1) that lies north of the northern curbline of the future Stegman Boulevard to be constructed during the Bayfront Redevelopment project. Honeywell has conducted additional in-situ injections to further treat residual chromium contamination in subarea TA-10-1, and will conduct further sampling in the Spring of 2018 to verify that concentrations of hexavalent chromium in these soils have been reduced to below 20 mg/kg. The TA-10-1 area, *i.e.*, the area north of the northern curbline of the future Stegman Boulevard, will be deed noticed until the additional sampling confirms that hexavalent chromium concentrations have been reduced to below 20 mg/kg. The remainder of TA-10, the portion that lies south of the northern curbline of the future Stegman Boulevard, will be capped by Stegman Boulevard, and incorporated into the Deed Notice and Conservation Restriction for the Study Area 6 North Open Space Area.
- Deed Notice Area 10: In-situ Treatment Area 7 (TA-7) is an area where a limited amount of shallow soils contain hexavalent chromium at concentrations exceeding 20 mg/kg. Honeywell will excavate the shallow soils following relocation of the fueling system in this area by JCMUA. In the

meantime, Honeywell will establish a deed notice for this area. Once the shallow soils have been excavated, the deed notice will be terminated.

- Deed Notice Area 14: The eastern portion of the Soil-Cement-Bentonite (SCB) underground hydraulic barrier wall of SA-7, the associated eastern perimeter pools, and associated shallow piezometers, together, serve as a portion of the chromium remedy for SA-7 in order to protect SA-7 from re-contamination from the east. This area is approximately 0.6 acres. An isolated portion of the SA-7 SCB wall included in this deed notice was sampled during the implementation of the SA-7 chromium remedy and is >20 mg/kg for hexavalent chromium, but less than 240 mg/kg.

According to Paragraph 61 of the SA-6 North Consent Decree and Paragraph 75 of the SA-6 South Consent Decree,

> *Honeywell shall be responsible for implementing, monitoring, maintaining, repairing, and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan.*

The activities related to the LTMP implementation are outlined in **Table 1**. However, failure to include an activity in Table 1, otherwise required by this LTMP, does not mean that the activity does not need to be conducted. The implementation of this LTMP will occur as set forth within this LTMP and as outlined in **Table 1**.

Honeywell may elect to implement certain activities under this LTMP in conjunction with the routine maintenance activities undertaken by the title owner, consistent with the Consent Decrees, and the title owner may undertake certain routine maintenance activities on Honeywell's behalf as defined in Section 3.2.7. Any such monitoring activities conducted by the title owner as part of routine maintenance activities shall be overseen by Honeywell, shall be performed by workers properly trained concerning the Chromium Remedy, and shall be reported by Honeywell in quarterly and annual reports.

The provisions of this LTMP will be reviewed and evaluated annually. In addition, regardless of what entity undertakes LTMP activities on Honeywell's behalf,

Honeywell remains responsible for the long term maintenance and protection of the Chromium Remedy.

The objectives of the LTMP are:

- Monitor and maintain the integrity and effectiveness of the Chromium Remedy;
- Monitor and enforce the requirements of the Open Space Design Standards (OSDS), which are part of the 100% Design Report and are included in this LTMP as **Appendix D-1;** and
- Monitor and enforce the restrictions of the institutional controls (including applicable prohibitions on excavation and allowable development in the Open Space Areas as defined in the Consent Decrees and OSDS).

1.2 STANDARD FOR REPAIR OR REPLACEMENT OF THE CHROMIUM REMEDY

Pursuant to the Consent Decrees, Honeywell is preparing a Study Area 6 South CCR and a Study Area 6 North CCR. Once the CCRs are approved by the Parties, they will be entered with the Court, along with a Consent Order explaining that the CCRs supersede the 100% Design, pursuant to paragraph 5 of the Consent Order Entering Consolidated 100% Design for Study Area 6 North and Study Area 6 South Jersey City Municipal Utilities Auth. v. Honeywell, D.N.J., Consol. Cases, Civ. No. 95-2097, July 9, 2013, ECF No. 1180. Honeywell will prepare additional CCRs upon completion of each of the deferred areas, and enter the CCRs for each deferred area with the Court, along with an appropriate Consent Order.

Therefore, the Order to be entered following the final approval of the CCRs for Study Areas 6 South and 6 North, including the attached record drawings, the 100% Design as modified by the Design Change Bulletins (DCBs), and CCRs, will become the "100% Design" standard to which the Chromium Remedy will be repaired or replaced as necessary under this LTMP. The 100% Design includes the Chromium Remedy as-built grades and the development grades for both SA-6 North and SA-6 South Open Space Areas. For the purposes of any restoration or repairs necessary to either the SA-6 North or SA-6 South Open Space Areas, the grade to which a restoration or repair will be made is the appropriate as-built or development grade that is applicable at the time of the restoration or repair.

As of the date this 2017 LTMP is approved by the Parties and the Special Master, the Order entering the CCR has not yet been submitted to the Court for approval and entry. In this LTMP, the term "100% Design" means the set of documents to be submitted to the Court with the CCR, setting forth in detail, with drawings and text, the completed as-built remedy for Study Area 6 North and Study Area 6 South.

1.3 DOCUMENT ORGANIZATION

This document was prepared in accordance with the requirements specified in the SA-6 North and South Consent Decrees, the NJDEP TRSR and applicable provisions of the United States Environmental Protection Agency (USEPA) Comprehensive Five-Year Review Guidance (OSWER Directive 9355.7-03B-P, dated June 2001), and contains the following sections:

Section 1: *Introduction*. This section describes the purpose, scope, and organization of the document.

Section 2: *Site Background*. This section provides site background information including location, contaminants of concern and remedial action work implemented.

Section 3: *Monitoring Plan*. This section provides details of the monitoring program and contingency plan.

Section 4: *Reporting*. This section describes the monitoring and certification reporting requirements.

Section 5: *Honeywell Program Organization*. This section describes Honeywell's program organization for the monitoring program.

Section 6: *References*. This section lists references used in preparing this document.

Section 7: *List of Acronyms/Abbreviations*. This section includes a list of commonly referenced acronyms found throughout this document.

2.0 SITE BACKGROUND

2.1 SITE DESCRIPTION

This section presents background information on the Sites and remedial measures. A site location map is included as **Figure 1**. **Figures 2A** (SA-6 North) **and 2B** (SA-6 South) show the implemented remedial actions associated with each Site. Relevant regulatory correspondence related to the remedial action is included in **Appendix A**.

The remedial actions support the Bayfront Redevelopment Plan and future land uses. Honeywell is working closely with Jersey City to implement a sustainable, mixed-use development for the approximately 100 acres of land comprising SA-6 and Study Area 7 (SA-7) (collectively referred to as Bayfront I) that includes residential, commercial and open "green" space areas.

The remedial actions for chromium support two general use areas at both SA-6 North and South: Residential Development Area and Open Space Area. Mixed uses, including commercial and retail, may be incorporated into the Residential Development Area depending on the details of the development. The Open Space Areas provide for recreational uses and create a green corridor that improves public access and view of the waterfront.

The remedial actions in the Residential Development Areas allow for unrestricted uses in most of these portions of the Site with respect to chromium impacts. However, the Deed Notice Areas within the Residential Development Area have use restrictions consistent with the Consent Decrees and deed notices. In the Deed Notice Areas, engineering controls in the form of concrete and asphalt cover materials will prevent contact with contaminated soils. Deed Notice Area 3 will also be conservation restricted so that it must remain open space, recreational parkland that is part of the future Kellogg Street/Riverside Drive/River Front Park. In the Open Space Areas, engineering controls in the form of a RCRA-type cap prevent contact with contaminated soils and allow for open space, recreational, and parkland uses consistent with the Consent Decrees. The Groundwater Remedy engineering controls include hydraulic barrier walls and a contingent groundwater extraction system in order to prevent contact by ensuring the containment of contaminated shallow groundwater.

The engineering controls for the SA-6 North and South Open Space Areas are shown schematically on **Figures 3A** and **3B**. The engineering controls for the shallow groundwater are shown on **Figures 4A and 4B**. The engineering controls and depth to chromium-impacted soils for the Deed Notice Areas are shown on figures from the Deed Notices provided in **Appendix E**. In accordance with Section 3.1.8, groundwater gradients will be monitored to contain groundwater contamination by means of an inward hydraulic gradient within the SA-6 North and South Open Space Areas and an outward hydraulic gradient from SA-7 at all times. Institutional controls ensure that engineering controls for the Open Space Areas, Deed Notice Areas, and shallow groundwater will be maintained in the future. More details about the Chromium Remedial actions are discussed in the following sections.

2.1.1 SA-6 North

SA-6 North encompasses 42 acres and extends from Route 440 on the east to the Hackensack River on the west, bordered on the north by a car dealership and on the south by SA-7. The Site is the former location of the JCIA and the Jersey City Department of Public Works (JCDPW). The JCMUA still operates on a portion of SA-6 North. At SA-6 North, Chromium and Non-Chromium Remedies have been implemented in accordance with two NJDEP-approved RAWPs:

- January 4, 2008 (amended February 2008): *Remedial Action Selection Report and Remedial Action Work Plan for Chromium* to address chromium contamination at SA-6 North (SA-6 North Chromium RASR/RAWP). This document was approved by the NJDEP in a letter dated February 19, 2009.
- November 30, 2008: *Remedial Investigation Report/Remedial Action Selection Report/Remedial Action Work Plan for Non-Chromium Contaminants of Concern to address non-chromium contamination at SA-6 North (SA-6 North Non-Chromium RIR/RASR/RAWP).* This document was approved by NJDEP in a letter dated November 10, 2009.

The overall Chromium Remedy for SA-6 North incorporated a combination of excavation, capping, and physical and hydraulic containment of shallow groundwater, as summarized below and as discussed in Section 1.1. The major components of the Chromium Remedy relative to the Jersey City Entities designated

portions of SA-6 North, and the current status of structures at SA-6 North are shown on **Illustration 2** (see **Figure 2A** for an enlarged view of Illustration 2 with more detail and **Figure 5** for the Deed Notice Areas).

- Within the designated Residential Development Area (AOC-2), chromium-impacted soils exceeding 20 mg/kg hexavalent chromium within 20 feet of the ground surface were excavated in accordance with the NJDEP Chromium Policy Directive (2007), except for the Deed Notice Areas. Excavated soils with concentrations of hexavalent chromium above 240 mg/kg were disposed of offsite. Excavated soils with concentrations of hexavalent chromium between 20 and 240 mg/kg were consolidated under the Open Space Area cap.
- Within the designated Open Space Area (AOC-1), chromium-impacted soils have been isolated using an engineered barrier consisting of a RCRA-type cap and a vertical steel sheet pile hydraulic barrier. The hydraulic barrier ties into the existing hydraulic barrier associated with the SA-7 remedy along the southern boundary of SA-6 North. The cross-section of the cap is shown on **Figure 3A**.
- Within the Deed Notice Areas, chromium-impacted soils are isolated by cement/asphalt cover and/or clean soil engineering controls. Figures illustrating the engineering controls and depth to chromium-impacted soils for the Deed Notice Areas in Study Area 6 North are contained in **Appendix E**.
- Within the designated Open Space Area, a contingent groundwater extraction system will be operated if necessary to hydraulically contain the shallow groundwater.
- Bedrock and deep overburden groundwater at SA-6 North is being contained and monitored and is addressed in the Integrated Groundwater Sampling and Analysis Plan. Long-term monitoring of the bedrock and deep overburden groundwater at SA-6 North is outside the scope of this LTMP.
- Post-remediation shallow groundwater monitoring will be performed to verify the effectiveness of the groundwater containment, extraction and treatment remedy.
- Institutional controls per NJDEP Technical Regulations, New Jersey Administrative Code (N.J.A.C.) N.J.A.C. 7:26E-1.8, include a Deed Notice for

capped contaminated soils in the SA-6 North Open Space Area, 4 additional areas to be deed noticed as described in Section 1.1, a Classification Exception Area (CEA) for residual chromium groundwater impacts, and Notice to Stakeholders regarding contamination and remedial actions. Additional institutional controls for the SA-6 North Open Space Area pursuant to the Consent Decrees include transferring ownership to Jersey City after construction of roads and utility corridors and the granting of a Conservation Restriction. The OSDS (**Appendix D-1**) acts as an administrative control to define and control permitted site activities, development, and usage.

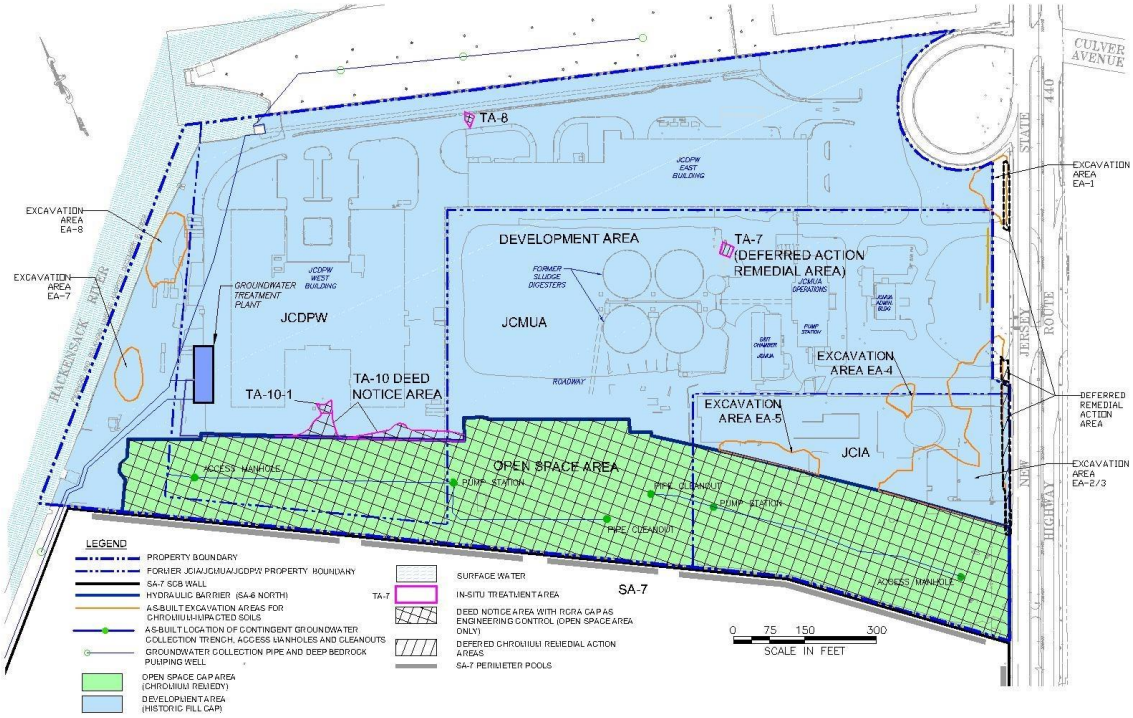

Illustration 2: Major Elements of the SA-6 North Chromium Remedy and Current Site Conditions

Remedial actions related to non-chromium contamination resulting from historic industrial, commercial and municipal operations are being coordinated with the Chromium Remedy. Honeywell is implementing the Non-Chromium Remedial actions pursuant to an agreement with Jersey City (Settlement Consent Order By

and Between the Jersey City Entities and Honeywell International Inc., which was entered by the United States District Court, District of New Jersey on April 21, 2008). The Non-Chromium Remedial actions are being implemented under the oversight of a Licensed Site Remediation Professional (LSRP)[5]. The main non-chromium contaminants subject to remediation include:

- Petroleum-related impacts associated with underground storage tank areas;
- Metals (lead, zinc, and mercury); and
- Polycyclic aromatic hydrocarbons (PAHs) and other metals associated with historic fill.

Monitoring and maintenance of the Non-Chromium Remedial Actions are not part of this LTMP and are/will be governed by provisions of the non-chromium RAWP. Remedial Action Permit Applications for soil and groundwater for the non-Chromium Remedial Actions will be submitted by Honeywell after the recording of the deed notice for historic fill. The Remedial Action Permits issued for the Chromium Remedy by the NJDEP will be included as **Appendix A-6** of this LTMP.

2.1.2 SA-6 South

SA-6 South encompasses 25 acres and extends from Route 440 on the east to the Hackensack River on the west, bordered on the north by SA-7 and on the south by Kellogg Street (and a jug-handle between Kellogg Street and Route 440), and Droyers Cove. The La Mexicana Diner, a shopping center and the Droyers Point Society Hill development are also located to the south. At SA-6 South, Chromium and Non-Chromium Remedies are being implemented in accordance with four NJDEP-approved RAWPs:

- December 23, 2008: *Supplemental Remedial Investigation Report, Remedial Action Selection Report, and Remedial Action Work Plan for Chromium* to address chromium contamination at SA-6 South, exclusive of Site 163 (SA-6 South Chromium SRIR/RASR/RAWP). This document was approved by the NJDEP in a letter dated March 24, 2009.

[5] An LSRP was not engaged to oversee the Chromium Remedy since the Sites were subject to federal court Consent Decrees and the NJDEP retained traditional case oversight responsibilities under their Site Remediation Program.

- March 21, 2011: *Remedial Action Selection Report/Remedial Action Work Plan for Non-Chromium Contaminants of Concern* to address non-chromium contamination at Site 163 only (Site 163 Non-Chromium RASR/RAWP). This document was prepared and submitted under the LSRP program and is subject to NJDEP's Industrial Site Recovery Act (ISRA) requirements triggered by Honeywell's acquisition of the property in January 2010 (ISRA Case Number E20100027). By virtue of the fact that it was submitted under the LSRP program, this document is approved.
- March 30, 2012: *Remedial Investigation Report/Remedial Action Selection Report/Remedial Action Work Plan for Non-Chromium Contaminants of Concern* to address non-chromium contamination at SA-6 South, exclusive of Site 163 (SA-6 South Non-Chromium RIR/RASR/RAWP). This document was approved by NJDEP in a letter dated June 28, 2012.
- May 18, 2012: *Supplemental Remedial Investigation Report, Remedial Action Selection Report, and Remedial Action Work Plan* to address chromium contamination at Site 163 only (Site 163 Chromium SRIR/RASR/RAWP). This document was approved by NJDEP in a letter dated June 22, 2012.

The overall Chromium Remedy for SA-6 South incorporated a combination of excavation, capping, treatment and physical and hydraulic containment of shallow groundwater, as summarized below and as discussed in Section 1.1. The major components of the Chromium Remedy relative to the six designated NJDEP sites at SA-6 South are shown on **Illustration 3** (see **Figure 2B** for an enlarged view of Illustration 3 with more detail and **Figure 5** for the Deed Notice Areas).

- Within the designated Development AOC, except in the Deed Notice Areas, chromium-impacted soils within 20 feet of the ground surface were excavated and/or treated. Excavated soils with concentrations of hexavalent chromium above 1,000 mg/kg were disposed offsite. Excavated soils with concentrations of hexavalent chromium between 20 and 1,000 mg/kg were consolidated under the Open Space AOC cap.
- Within the Deed Notice Areas, chromium-impacted soils are isolated by cement/asphalt cover and/or clean soil engineering controls. Figures illustrating the engineering controls and depth to chromium-impacted soils for the Deed Notice Areas in Study Area 6 South are contained in **Appendix**

E. In addition, Deed Notice Area 3 will be subject to a conservation restriction and title to this area will be transferred to Jersey City.

- Within the designated Open Space AOC, chromium-impacted soils are isolated using an engineered barrier consisting of a RCRA-type cap and a vertical steel sheet pile hydraulic barrier. The hydraulic barrier ties into the existing hydraulic barrier associated with the SA-7 remedy along the northern boundary of SA-6 South.
- Within the designated Open Space AOC, a contingent groundwater extraction system will be operated if necessary to hydraulically contain the shallow groundwater.
- Bedrock and deep overburden groundwater at SA-6 South is addressed in the Integrated Groundwater Sampling and Analysis Plan. Except for the L-Well monitoring discussed in Section 3.1.9, long-term monitoring of the bedrock and deep overburden groundwater is outside the scope of this LTMP.
- Post-remediation groundwater monitoring will be performed to verify the effectiveness of the groundwater containment, extraction and treatment remedy.
- Institutional controls per NJDEP Technical Regulations N.J.A.C. 7:26E-1.8 will be established, including a Deed Notice for capped contaminated soils in the SA-6 South Open Space AOC, 3 additional areas to be deed noticed as described in Section 1.1, a CEA for residual groundwater impacts, and Notice to Stakeholders regarding contamination and remedial actions. Additional institutional controls for the SA-6 South Open Space Area pursuant to the Consent Decrees include transferring ownership to Jersey City after construction of roads and utility corridors and granting of a Conservation Restriction. The OSDS (**Appendix D-1**) acts as an administrative control to define permitted site activities, development, and usage.

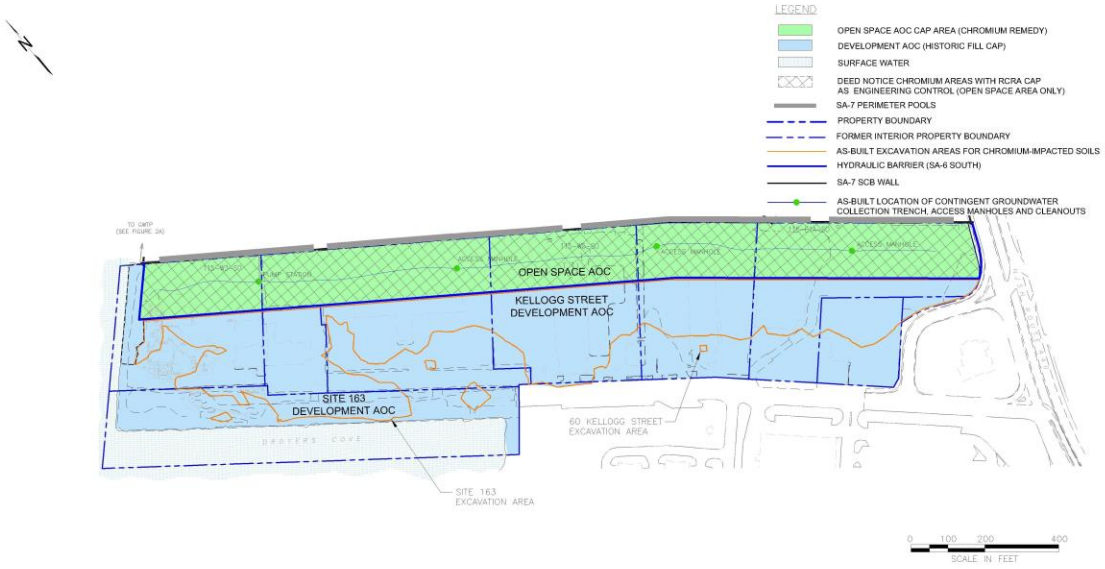

Illustration 3: Major Elements of the SA-6 South Chromium Remedy and Current Site Conditions

Similar to SA-6 North, the Non-Chromium Remedial actions are being implemented under the oversight of an LSRP and include the following contaminants:

- Petroleum-related impacts associated with historic fill;
- Isolated areas of chlorobenzene and trichloroethylene;
- Metals (mercury); and
- PAHs and other metals associated with historic fill.

Similar to SA-6 North, the monitoring and maintenance of these Non-Chromium Remedial actions are not part of this LTMP, but instead are governed by provisions of the non-chromium RAWPs. Remedial Action Permit Applications for soil and groundwater will be submitted by Honeywell after the recording of the deed notice for historic fill. The Remedial Action Permits issued for the Chromium Remedy by NJDEP will be included as **Appendix A-5** of this LTMP.

2.1.3 Administrative and Institutional Controls

Key administrative/institutional controls for the protection of the Chromium Remedial measures include:

- The SA-6 North and South Consent Decrees
- This Long Term Monitoring Plan
- Deed Notices (see **Appendix A-4**)
- 100% Design, including the OSDS (see **Appendix D-1**) and DCBs (see DCB Log in **Appendix A-1**) (in the next annual update the record drawings for SA-6 North and South from the Construction Completion Reports, as well as the Consent Order explaining how the drawings entered with the CCR supersede the 100% Design, will also be included. As built drawings for the Deferred Areas will be added in subsequent annual updates to this LTMP as the Deferred Areas are remediated.)
- Conservation Restrictions (see **Appendix A-3**)
- Remedial Action Soil and Shallow Groundwater Permits (see **Appendix A-6**)
- Subsurface Work Authorization Form/Digging and Excavation Permit for Open Space Areas and Deed Notice Areas (see **Appendix B-2**)
- Terradex LandWatch System
- Periodic communications to Honeywell concerning disturbances of the Chromium Remedy via calls or meetings
- Onsite monitoring and inspection
- Historic Displays
- Notice to Stakeholders
- Notice provided in contract documents
- Monitoring of groundwater under the Integrated Groundwater Sampling and Analysis Plan (see Appendix D-2)
- CEA and associated biennial updates for groundwater (see Appendix A-5)
- After Initial Development, if any signs are placed in the Open Space Areas by the City of Jersey City, the signs will include a prohibition on digging in the Open Space Area (e.g., No Digging per Jersey City Code Ch. 239).

Deed Notices

As shown on **Figure 5,** Deed Notices will be prepared and recorded at the office of the Hudson County Register for all areas where chromium-impacted materials

remain following completion of remedial actions. The signed, recorded Deed Notices will be included in **Appendix A-4** of this LTMP as part of the first annual review of the LTMP. Changes to Deed Notices will be summarized in future LTMP reports in tabular form as follows:

Changes in Deed Notices

Change Date	Description of Change	Recording Date	Record Number

The Deed Notices will specify conditions for any alteration, improvement, and/or disturbance of the engineering controls, and provide monitoring, maintenance, notification and reporting requirements. These requirements include notification by the site owner/operator to Honeywell and the NJDEP prior to disturbance of engineering controls, and documentation that applicable worker health and safety laws and regulations are followed during the disturbance and restoration of those controls. The Deed Notices will contain figures and cross-sections showing the engineering controls and details regarding notification and reporting requirements. Pursuant to the deed notices and the Remedial Action Permits, Honeywell shall submit Biennial Certification Reports regarding the effectiveness and integrity of the institutional and engineering controls.

Honeywell's additional reporting requirements with respect to the Deed Notice Areas are set forth in Sections 3.1, 3.2 and 4.0 of this Long Term Monitoring Plan.

Open Space Design Standards ("OSDS")

The OSDS must be complied with by all entities, including contractors, performing work in the Open Space Areas. Honeywell and the site owner shall use their best efforts to ensure the use of, and to monitor and enforce compliance with the OSDS. The OSDS for the SA-6 North and South Open Space Areas, also referred to within the OSDS as "Central Park" at SA-6 North and "Promenade" at SA-6 South, were included as Appendix L to the 100% Design. The OSDS specifies conditions to protect the Chromium Remedy including prohibiting excavation except for limited purposes; requiring excavation plans; and defining permitted uses, intrusive excavation, permitted landscape, and development.

The OSDS is included in **Appendix D-1**.

Conservation Restrictions

Conservation Restrictions were prepared for both SA-6 Open Space Areas at the time of property transfer from JCRA to Bayfront Redevelopment LLC per Paragraph 60(b) of the SA-6 North Consent Decree and at the time of the granting of the option to buy to Jersey City per Paragraph 74(b) of the SA-6 South Consent Decree (see **Appendix A-3**). The Conservation Restrictions allow for implementation, monitoring, maintenance, repair and replacement of the Chromium Remedy and permissible development pursuant to paragraph 74(k) of the SA-6 South Consent Decree and paragraph 60(k) of the SA-6 North Consent Decree, including construction and placement of roads and utilities. The Conservation Restrictions were recorded at the office of the Hudson County Register. The Conservation Restrictions for the SA-6 North and SA-6 South Open Space Areas will be updated to reflect the as-built surveyed locations of the hydraulic barrier walls. In addition, the Conservation Restriction for the SA-6 North Open Space Area will be modified to include the TA-10 area that lies south of the northern curbline of the future Stegman Boulevard that will be capped by Stegman Boulevard.

A conservation restriction will be developed for the Site 163 deed notice area (Deed Notice Area 3) and recorded with the Hudson County Register. The Conservation Restriction for Deed Notice Area 3 will allow for implementation, monitoring, maintenance, repair and replacement of the Chromium Remedy and permissible development including construction and placement of River Front Walk, roads and utilities.

All new and/or updated Conservation Restrictions will be recorded with the Hudson County Register once completed and approved. The recorded Conservation Restrictions will be attached to this LTMP as part of **Appendix A-3**.

If subsequent changes are made to any Conservation Restriction(s), the amended Conservation Restriction(s) will be recorded with the Office of the Hudson County Register, substituted in **Appendix A-3** of this LTMP as part of the annual review of the LTMP, and provided and summarized in future LTMP reports in tabular form as follows:

Changes in Conservation Restrictions

Change Date	Description of Change	Recording Date	Record Number

NJDEP Remedial Action Soil and Shallow Groundwater Permits

Honeywell will submit Remedial Action Permit Applications for Soil and Shallow Groundwater for the SA-6 Open Space AOCs to the NJDEP following completion of remedial actions. The permits will contain requirements for monitoring, maintenance and reporting to document the protectiveness of the remedial actions and engineering controls. The permits will include requirements for monitoring of engineering controls in accordance with the Deed Notice, schedule for submittal of Biennial Certification Reports to the NJDEP, and requirements pertaining to financial assurances and permit transfer, modification and termination. Groundwater monitoring and reporting requirements will be consistent with the Integrated Groundwater Sampling and Analysis Plan (SAP) prepared by Cornerstone Environmental Group, Inc. dated November 13, 2013; revised April 29, 2014 (Cornerstone, 2014), and future amendments to the Integrated Groundwater SAP.

Separate Remedial Action Permits for Regional Groundwater are anticipated for the deep overburden and bedrock zones.

Subsurface Work Authorization Form/Digging and Excavation Permit

Completion of a Subsurface Work Authorization Form/Digging and Excavation Permit ("Dig Permit") checklist is required prior to any subsurface work within the Deed Notice Areas, and prior to any subsurface work within the Open Space Areas conducted after completion of the Initial Development (as that term is defined in the Consent Decrees) consistent with Section 3.2.1.5.2. The Dig Permit controls and coordinates work by other entities with Honeywell prior to conducting utility work or any other subsurface work that may disturb the engineering controls and/or expose chromium-impacted materials. Honeywell shall use its best efforts to ensure all entities planning to conduct subsurface work comply with the Dig Permit process, as described in Section 3.2.1.5.2. The Dig Permit Form is included in **Appendix B**.

Terradex LandWatch System

Honeywell is incorporating into the administrative controls the use of the Terradex LandWatch system to obtain notification of any proposed soil disturbances at the sites through the New Jersey One Call system.

Terradex, Inc., a private company, works in conjunction with the New Jersey One Call system to obtain notification of soil disturbances at subject sites. Terradex installs a transmitter, which qualifies as an "underground utility" under the New Jersey Underground Utility Protection Act, which in turn triggers the requirements of the One Call process. Under this process, any person seeking to disturb soil at a site is required to notify One Call, which in turn notifies operators of registered utilities prior to the soil disturbance activity. Installation of the Terradex LandWatch system allows Honeywell and its contractors to be notified through One Call of soil disturbing activities at the sites, similar to the way in which a utility would be notified.

The Terradex LandWatch system shall be used pursuant to this LTMP both during and after the Initial Development construction (as defined in the Consent Decrees). Honeywell's use of this system as an institutional control at the Sites is necessarily dependent on the ongoing operations of Terradex LandWatch, as well as on Terradex's ability to continue to work in conjunction with the New Jersey One Call system. Use of this system also assumes there are no changes in New Jersey law or regulation that would preclude Honeywell's use of the system in this manner. Accordingly, Honeywell will review the viability of continued use of the Terradex LandWatch system during the annual reviews of the LTMP. Provided that Terradex continues to offer Terradex LandWatch service at a price that is cost-effective, that One Call continues to allow Terradex to operate in this manner, and that no changes to New Jersey law or regulation bar Honeywell from using the Terradex LandWatch system in cooperation with the One Call system, Honeywell will continue to use the Terradex LandWatch system as a component of the institutional controls at the sites to provide for the protectiveness of the remedy. If Honeywell intends to terminate the Terradex system because it becomes unavailable, ineffective or not cost-effective, then Honeywell shall report, at least 90 days in advance of its intended action, to the Special Master and non-Honeywell Parties Honeywell's decision to terminate Terradex, Honeywell's reasons for doing so, and will discuss with the Special Master and Parties alternative institutional controls to be considered. The 90-day period shall not apply if Honeywell becomes aware that the Terradex LandWatch system

will be unavailable with less than 90 days advance notice. In this case, Honeywell will report to the Parties as much in advance of the termination due to unavailability as is feasible.

The use of the Terradex LandWatch system will commence following completion of the remedial activities and be in place for all work related to the Bayfront Redevelopment project at Study Areas 6 and 7.

Onsite Monitoring and Inspections During the Initial Development

During the Initial Development as defined in the Consent Decree, Honeywell will provide one or more full-time inspectors on-site to review development activities, to monitor any activities involving disturbances of the Open Space Areas or the Deed Notice Areas, and to verify that any disturbances are conducted in compliance with the Consent Decrees, the Long Term Monitoring Plan, the Deed Notices and, for the Open Space Areas, with the OSDS. Reports from Honeywell's inspectors on development activities, and a 6-month look ahead schedule of anticipated activities, will be included in monthly reports from Honeywell to the Special Master and the Parties. Any Party may request that the frequency of the reports be modified due to site conditions or development activities.

Historic Displays and Other Signage

Per SA-6 North and South Consent Decrees (Paragraphs 60(l) and 74(l), Honeywell will develop a permanent plan to inform visitors to the Open Space Areas of the history of chromium production, contamination, and remediation. Additional signage providing a phone number to call prior to any digging will be installed in the Deed Notice Areas so that Honeywell is notified prior to any subsurface work. Once developed, the plan for historic displays and additional signage will be attached to this LTMP and shall be subject to periodic monitoring and maintenance as described in Section 3.1.11.

After development, if any signs are placed in the Open Space Areas by the City of Jersey City, the signs will include a prohibition on digging in the Open Space Area (e.g., No Digging per Jersey City Code Ch. 239).

Jersey City will post signs prohibiting through trucks on roads within the Open Space Areas as required by OSDS Section 2.2.1.

Contract Documents

This section sets forth the obligations of Honeywell and the City of Jersey City to inform those with whom they enter contracts to purchase, lease or perform work on the areas where hexavalent chromium contamination remains **about** the Chromium Remedy and precautions that must be taken to protect workers, the public, and ensure the continued protectiveness of the Chromium Remedy.

The requirements of this Section of the LTMP apply to intra- and inter-governmental agreements among Jersey City departments or entities and agreements between Jersey City and any County, State, or federal government entity.

All documents transferring title or leasing of any portion of the Deed Notice Areas, and all contract documents entered into with respect to any portion of the Open Space Areas or Deed Notice Areas that allow for the installation, repair, replacement, or maintenance of any permissible development, and all contract documents that allow for subsurface work in the Open Space Areas or Deed Notice Areas will include in such documents the notices set forth in sub-paragraphs (a) and (b) of this section.

(a) In bold noticeable format, a notice of the Chromium Remedy and the requirement that all work in and/or operation of facilities within the Open Space Areas or Deed Notice Areas must comply with the SA-6 North and South Consent Decrees, Deed Notices, Open Space Design Standards (if applicable), the Long Term Monitoring Plan, and worker training materials to be developed by Honeywell.

(b) Such contract documents shall also include a copy of the Consent Decrees and Deed Notices applicable to the property at issue, Long Term Monitoring Plan, and, if applicable, Open Space Design Standards and the requirement that all subsurface work in the Open Space Areas and Deed Notice Areas and work that impacts the Chromium Remedy must comply with those documents.

Any pre-contract bidding documents related to subsurface work or activities within the Open Space Areas or Deed Notice Areas must include a notice of the Chromium Remedy and the statement that the winning contract bidder must comply with the

Consent Decrees, Deed Notices, Long Term Monitoring Plan and OSDS (if applicable) in connection with its performance of any awarded contract.

Classification Exception Areas for Groundwater

A regional CEA for groundwater has been established for the SA-5-7 sites as an institutional control to identify chromium groundwater impacts above the NJDEP groundwater quality standards (GWQS) and prevent the use of groundwater within the designated CEA areas (see **Appendix A-5**). The CEAs will address the shallow, deep overburden, and bedrock zones. The shallow zone refers to groundwater within fill material (above the meadow mat and underlying native soils), generally to a depth of 20 feet below grade. The deep overburden zone refers to groundwater below the fill and meadow mat down to bedrock, generally from approximately 20 feet to 90 feet below grade. The bedrock zone refers to groundwater within the upper 20 to 40 feet of fractured bedrock. The shallow groundwater CEA may be modified in the future following completion of remedial actions.

The LTMP monitoring and contingency plan is provided in Section 3. LTMP reporting requirements are indicated in Section 4.

3.0 MONITORING PLAN

Pursuant to Paragraph 61 of the SA-6 North Consent Decree and Paragraph 75 of the SA-6 South Consent Decree, Honeywell shall be responsible for monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall conduct monitoring that will ensure that the integrity and effectiveness of the Chromium Remedy are maintained, and to ensure that the restrictions of the institutional and administrative controls are being satisfied. Honeywell will conduct on-site monitoring during any investigation, development, construction, or other activities in the Open Space Areas or Deed Notice Areas that involve disturbance of the Chromium Remedy.

This section provides the details of the LTMP and Contingency Plan addressing the integrity of the engineered barrier(s) and Chromium Remedies for the SA-6 North and South Open Space Areas and Deed Notice Areas. The primary purpose of the monitoring plan is to monitor and verify the effectiveness of the Chromium Remedy in protecting human health and the environment. **Table 2** provides a summary list of contingency plan triggering events. **Table 3** provides a timetable containing the LTMP inspection/monitoring requirements. **Table 4** summarizes reporting requirements. Monitoring requirements specified in the SA-6 North Consent Decree Paragraphs 60 and 64 and SA-6 South Consent Decrees Paragraphs 74 and 78 include:

- Quarterly inspections to ensure permitted land usage;
- Quarterly inspections to ensure the integrity and effectiveness of the Chromium Remedy;
- Quarterly visual inspection monitoring of the grade and slope to verify the integrity of the Chromium Remedy;
- Quarterly visual inspection monitoring to determine if settlement or subsidence has occurred that could impair the integrity of the Chromium Remedy;
- Quarterly visual inspection monitoring to determine if disturbance has occurred that could impair the integrity of the Chromium Remedy;

- Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy;
- Quarterly visual inspection monitoring of the vegetative cover to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design, including the OSDS, and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy;
- Maintenance of the vegetative cover to include mowing to ensure tree species cannot become established except in designated areas and removal of any vegetation not permitted by the OSDS that would impair the integrity of the Chromium Remedy;
- Quarterly groundwater elevation monitoring to ensure specified hydraulic gradients across the hydraulic barriers;
- At least one round of L-Well groundwater sampling;
- Quarterly shallow groundwater sampling in the SA-6 South Development AOC to measure total chromium levels;
- Monthly monitoring of vented gases and the gas venting system for 1 year. Frequency will be reduced to quarterly after 1 year if data are stable;
- Quarterly inspection of all signage;
- Baseline topographic survey at completion of the Chromium Remedy and additional surveys every 5 years for an additional 15 years; and
- Inspection of visible utility lines and manholes for disturbance.

The Long Term Monitoring Plan specifies monitoring activities in accordance with the monitoring requirements of the SA-6 Consent Decrees. In the event that the Consent Decree requirements with respect to long term monitoring are modified in the future (either by the consent of the Parties, or by order of the Court upon a motion by any party), Honeywell will revise the Long Term Monitoring Plan to reflect any such modified requirements of the Consent Decree.

Additional details for each inspection or monitoring activity are provided in Section 3.1. A Contingency Plan is provided in Section 3.2 that describes the corrective actions and remedy procedure to be implemented if the inspection program identifies evidence of deterioration or disturbance of the engineering controls or their failure to

perform as designed, and requirements in the event of any planned or unplanned disturbance of the Chromium Remedial measures. Honeywell shall be responsible for implementing the Contingency Plan.

Routine maintenance and repairs are addressed in **Section 3.2.7** that details training for future workers who will perform work at the areas encompassed within the Chromium Remedy.

3.1 INSPECTIONS AND MONITORING

Inspections will be conducted as detailed in the following sections and as summarized on **Table 3**. The observations will be recorded on an inspection form and photo documentation will be provided. The NJDEP Field Sampling Procedures Manual (FSPM), August 2005, updated 2011 (NJDEP, 2005), Chapter 10 – "Documentation" provides guidance for recordkeeping and photo documentation. An example inspection form is included in **Appendix B**. Completed forms will be submitted on a quarterly basis to the Special Master (during the term of his appointment), Riverkeeper, and Jersey City. The Inspection Forms will include a section on Dig Permits and Intrusive Excavation Plans completed or submitted during the quarterly period. Only those Dig Permits and Intrusive Excavation Plans not previously submitted to the Parties will be attached to the Inspection Forms. However, Dig Permits are not applicable to the Open Space Areas during Initial Development for the Open Space Areas when Honeywell's onsite construction management personnel will inspect and monitor activities at the Open Space Areas. Once Initial Development is over at an Open Space Area, and Honeywell's construction management personnel are no longer on site at that Open Space Area, Dig Permits will be necessary for that Open Space Area.

3.1.1 Timing and Schedule of Inspections

With the exception of groundwater monitoring at SA-6 North and methane gas monitoring as detailed in Sections 3.1.8 and 3.2.3 through 3.2.6, the quarterly inspections and measurements will start in 1st Quarter 2017 as set forth in SA-6 North Consent Decree Paragraph 64 and SA-6 South Consent Decree Paragraph 78 (see **Table 3**). The inspections will be timed to coincide with other inspections or activities at the Sites. The Contingency Plan, referenced in Section 3.2, will be implemented if inspection reveals evidence of erosion, differential settlement, deterioration of the integrity or effectiveness of the Chromium Remedy, or recent

activities impacting the Chromium Remedy. **Table 2** cross-references the subsections within Section 3.1 to summarize the inspection triggers that may warrant corrective actions as identified in Section 3.2.

With the exception of groundwater monitoring in the SA-6 South Development Area (see Section 3.2.5), after two years of quarterly inspections and annual reporting, Honeywell will evaluate the inspection results with respect to maintenance of the integrity and effectiveness of the Chromium Remedy. Following this evaluation, Honeywell will confer with the Special Master and Parties. The Special Master and any Party may propose modification of the frequency of inspections and monitoring based on the first two years of results, subject to review and approval by the Parties and the Special Master. Any proposal to modify monitoring will consider NJDEP guidelines under Remedial Action Permits and be consistent with the requirements of the SA-6 Consent Decrees.

3.1.2 Chromium Remedy Visual Inspections

Quarterly visual inspections of the Chromium Remedy will be conducted to verify that there are no prohibited or other activities (e.g., digging, drilling, and excavation) or site use that could jeopardize the integrity or effectiveness of the Chromium Remedy.

In addition, evidence of deterioration of vegetative coverage, erosion, differential settlement, or surface drainage that requires maintenance will be recorded and evaluated. Erosion or excavation in the Open Space Areas that exposes or penetrates the root barrier or exposes the orange warning layer is a condition that could impact the integrity of the Chromium Remedy and will require corrective action by Honeywell pursuant to the Contingency Plan. Erosion of the surface cover or excavation in the Deed Notice Areas that penetrate the surface cover or hardscape engineering controls (e.g., cement/asphalt/soil caps) would be considered a condition that could impact the integrity of the Chromium Remedy and will require investigation and corrective action by Honeywell pursuant to the Contingency Plan.

Field observations will include information on the extent of deterioration including dimensions and depth of erosion, differential settlement or other disturbance of the cover/capped area, including whether such deterioration or disturbance fully penetrates the vegetative cover down to the underlying Horizon B or C soils. Field

observations regarding evidence of deterioration or disturbance of the Chromium Remedy will be addressed as indicated in the Contingency Plan.

Field observations for each of the Open Space Areas and Deed Notice Areas will be recorded on an inspection form and photo documentation provided. The NJDEP August 2005 Field Sampling Procedures Manual provides guidance for recordkeeping and photo documentation. An example quarterly inspection form is included in **Appendix B.**

If field observations indicate that a disturbance occurred that caused deterioration or full penetration of the surface cover or hardscape engineering controls (e.g., cement/asphalt/soil caps) in the Deed Notice Areas, or the surface cover and the underlying cap components (i.e., root barrier, clean soil layer, orange demarcation layer, drainage layer and geomembrane liner) in the Open Space Areas, then soil sampling and analysis for hexavalent chromium shall be performed by Honeywell to evaluate whether there has been any migration of contaminated soils and determine requirements for corrective action.

Prohibited use or unplanned use of the Open Space Areas or Deed Notice Areas shall be documented. Honeywell shall notify all appropriate parties of any prohibited or unplanned uses of which it becomes aware, and Honeywell shall use its best efforts to cause such use to cease.

Prohibited or restricted uses of the Deed Notice Areas will be outlined in the deed notice for each area, and include prohibition of residential use and use of the property as a school or childcare facility. Additional prohibited and permissible uses of Deed Notice Area 3 are outlined in the SA-6 South Consent Decree Paragraph 61(c)(ii)(3), which includes the requirement that the area be covered with road, walkway or other hardscape.

Prohibited and permissible uses of the Open Space Areas are outlined in SA-6 North Consent Decree Paragraphs 60 (j and k), SA-6 South Consent Decree Paragraphs 74 (j and k), and the OSDS Section 2, and include:

Prohibited:

- Development not permitted by the Consent Decrees or OSDS;

- Development that would jeopardize the Chromium Remedy or not meet the Consent Decrees, OSDS, and related permits;
- Development that would not maintain 75% landscaping in the Open Space Areas (exclusive of roads and pedestrian thoroughfare);
- Utilities within 2 feet of the warning layer unless in utility corridor;
- Irrigation or sprinkler lines within 2 feet of warning layer (unless within utility corridor); and
- Permanent concession facilities.

Permissible (with restrictions):

- Roads and pedestrian thoroughfares (per the OSDS and Redevelopment Plan);
- Curbing and fences;
- Sidewalks, paths, walkways, and nature trails;
- Utilities and utility corridors, lighting, and restrooms;
- Irrigation or sprinkler components or systems;
- Water features;
- Above-ground storm water cisterns;
- Signs;
- Benches, trash receptacles, and bicycle racks;
- Recreational facilities; and
- Landscaping consistent with the OSDS that will not jeopardize the Chromium Remedy.

3.1.3 Surface Grade Visual Inspections

Quarterly visual inspections of the Open Space Areas and Deed Notice Areas cover will identify erosion that has occurred and the signs of potential erosion. Disturbances to the Chromium Remedy components observed during quarterly visual inspections will identify situations that may require further evaluation. Prior to conducting repair of a visually-observed depression (which holds water for more than 24 hours after a storm event), the depression dimensions will be checked by use

of a GPS or other acceptable survey method to verify if the depression or settlement may impair the integrity or effectiveness of the Chromium Remedy and/or has resulted in a loss of positive drainage. The results will be evaluated and a determination made as to whether simply filling the depression to restore positive drainage is adequate or more extensive corrective action is required.

Quarterly visual inspections will look for signs of erosion of the cover soils. Field observations regarding evidence of erosion shall be further reviewed and addressed by Honeywell as indicated in the Contingency Plan to maintain the cap integrity.

3.1.4 Differential Settlement Visual Inspections

Quarterly visual inspections will identify noticeable settlement or elevation changes of the cover in the Open Space Areas and Deed Notice Areas. Settlement would be indicated by subsidence of surface features (e.g., vegetative cover, roads, pedestrian thoroughfares, foundations). If such settlement has occurred, it will be evaluated to establish the cause. If the cause cannot be readily identified, Honeywell will propose further investigative measures.

Benchmarks will be established on the installed Pump Station, Vaults, and access manhole structures associated with the contingent groundwater extraction system as shown on **Figure 2A** and **2B**. Quarterly visual inspections will include measurement of the reveal (distance from the ground to the benchmark) in order to determine if settlement is occurring. The locations of benchmarks will be included in the quarterly monitoring logs and the measurements at each location shall be recorded in the logs.

The Open Space Areas were surcharged prior to cap placement to remove 100% of primary consolidation related to development grading. Therefore, Honeywell anticipates that future settlement in the Open Space Areas should be limited to long term secondary consolidation below the cap and settlement of the loosely placed planting soils.

Settlement will be evaluated to determine if it may impair the integrity or effectiveness of the Chromium Remedy. Settlement will also be evaluated to determine if it will result in a loss of positive drainage. Such conditions will trigger corrective actions by Honeywell pursuant to the Contingency Plan.

A loss of positive drainage may be indicated by ponded water remaining 24 hours after a storm event, or an increase in "reveals" of fixed structures (e.g., planting soils adjacent to contingent groundwater pump vaults). An increase in "reveals" will be evaluated to determine if they are a safety concern (e.g., a tripping hazard) or a maintenance concern (e.g., an impediment to mowing). If settlement in excess of 3 inches is observed adjacent to structures in the landscaped areas, and Honeywell determines that such settlement does not impair the integrity or effectiveness of the Chromium Remedy, the areas will be backfilled to restore the grades to in accordance with the "As Built" grades. The evaluation will assess whether the settlement is due to a loss of ground or consolidation of the cover soils.

If warranted, corrective actions will be implemented by Honeywell to restore affected areas to the 100% Design and the "As Built" grades, or to a level of protection at least equivalent to the original Chromium Remedy. If Honeywell deems it necessary to restore to a standard different from those defined in the 100% Design and "As Built" grades, the proposed restoration plan will be submitted to the Parties and the Special Master for review and approval.

3.1.5 Disturbance Visual Inspections

Quarterly visual inspections of the Open Space Areas and Deed Notice Areas will identify evidence of a disturbance, other than planned disturbances. In the Open Space Areas, evidence of a disturbance that exposes or penetrates the root barrier or exposes the distinctive warning layer, or which otherwise indicates that the integrity of the Chromium Remedy has been compromised, is a trigger for corrective action. In the Deed Notice Areas, evidence of a disturbance of the surface cover or hardscape engineering controls (e.g., cement/asphalt/soil caps) is a trigger for corrective action by Honeywell.

Corrective action requirements are described in the Contingency Plan. If Honeywell deems it necessary to restore to a standard different from those defined in the 100% Design and "As Built" grades, the proposed restoration plan will be submitted to the Parties and the Special Master for review and approval.

3.1.6 Burrowing Animals Visual Inspection

Quarterly visual inspections of cover will be conducted to determine if any disturbance caused by burrowing animals is affecting the integrity of the Chromium Remedy. In the event of a disturbance affecting the integrity of the Chromium

Remedy, the burrowing animals will be humanely removed and the Chromium Remedy repaired or replaced to the 100% Design by Honeywell. Corrective action requirements are indicated in the Contingency Plan.

3.1.7 Vegetative Cover Visual Inspection

Quarterly visual inspections of vegetative cover above the cap will be conducted to determine whether there has been any vegetative cover disturbance that could affect the integrity of the Chromium Remedy. Damage to or impairment of vegetative cover could allow erosion of the Chromium Remedy cover soils; therefore, the integrity and health of vegetative cover will be inspected. The varieties of vegetation will be inspected for compliance with the 100% Design, including OSDS Section 2.2.9, and the Redevelopment Plan. Additionally, inspections will include observations of whether maintenance activities are being performed adequately. The inspection form includes a notation for the status of compliant vegetation and proper maintenance of the vegetative cover. Maintenance activities will need to be tailored to the type and species of the vegetative cover as well as seasonal criteria.

Field observations will include information on the extent of degradation or disturbance including dimensions and depth of erosion or missing vegetation, and any evidence of damage to surface cover or hardscape cover materials (e.g., cement/pavement) from tree roots. Field inspection reports will identify generalized areas of erosion rills on a site map and include photographic documentation. In the event of material disturbance to the Chromium Remedy, Honeywell shall implement appropriate restoration procedures to repair or replace the Chromium Remedy to the 100% Design, including the OSDS. If Honeywell deems it necessary to restore to a standard different from those defined in the 100% Design and the OSDS, the proposed restoration plan will be submitted to the Parties and the Special Master for review and approval. Corrective action requirements for vegetative cover are indicated in the Contingency Plan.

3.1.8 Groundwater Elevation Monitoring

Honeywell must demonstrate that (a) the groundwater elevation gradient along the boundary between SA-7 and Route 440 is outward from SA-7; (b) the groundwater elevation gradient along the boundaries between SA-6 and SA-7 is outward from SA-7 and inward into SA-6, and (c) along all other boundaries of the SA-6 containment areas, an inward gradient is present in the entire area of contaminated shallow groundwater.

The Integrated Groundwater Sampling and Analysis Plan (SAP) encompasses monitoring throughout SA-5, SA-6 and SA-7. Water levels at the boundary between SA-6 and SA-7 have been monitored since 2009. Results of this groundwater monitoring are documented annually in the Integrated Groundwater Monitoring Reports (IGWMRs). The SAP is updated annually to reflect changes in monitoring well locations/availability and changes in individual Study Area requirements. All groundwater monitoring requirements in this LTMP will be incorporated into the SAP, as will future changes to these requirements.

Measurements Within SA-6

Groundwater monitoring well location maps for SA-6 North and SA-6 South are included as Figure 4A and Figure 4B, respectively. Groundwater elevations will be monitored at the following locations within SA-6 North and SA-6 South:

- Five piezometer pairs along the western, northern, and eastern borders of the SA-6 North Open Space Area;
- Five piezometer pairs along the western, southern, and eastern borders of the SA-6 South Open Space Area; and
- Seven monitoring wells located in the SA-6 North and South Open Space Areas near the boundary with SA-7: 115-E1A-SO, 115-W5-SO, 115-W3-SO, 115-E4-SO, 115-E5-SO, 115-W1-SO, and 115-W6-SO.

Groundwater elevations at all monitoring locations will be measured quarterly. At some locations, initial measurements will be more frequent. Groundwater level measurements within SA-6 North and SA-6 South Open Space Areas will be continuously collected using automatic data loggers and manually collected monthly for a period of at least one year from the respective completion dates of the caps (4th quarter 2015 for SA-6 South and 4th quarter 2016 for SA-6 North). After one year, Honeywell may evaluate whether the automatic data loggers are still necessary, and, if the Parties agree, automatic data logging may be discontinued and manual measurements may be reduced to quarterly. Manual groundwater elevation measurements will be recorded on the Groundwater Elevation Monitoring Form in **Appendix B-4**.

Measurements Within SA-7

In April 2017, Honeywell completed initial water level monitoring in four piezometers installed in January 2017 within the interior pool of SA-7.[6] Groundwater elevation monitoring for SA-7 is discussed below relative to continued operation of the perimeter pools. Honeywell plans to decommission the perimeter pools along the northern and southern borders of SA-7. Honeywell will continue to operate and monitor the eastern perimeter pool to maintain an outward gradient from SA-7 towards Route 440.

Water levels will be monitored along the eastern boundary of SA-7 pursuant to the SAP in order to determine whether the gradient along the boundary between SA-7 and Route 440 remains outward from SA-7.

The SA-6 remedial designs anticipate that water levels within the Open Space Areas will be below elevation +4.0 feet above mean sea level (ft msl based on the National Geodetic Vertical Datum 1929 elevation reference datum), while the water table within SA-7 will be controlled by the top of the westernmost barrier wall along the Hackensack River, which is set at +4.0 ft msl.

Currently, perimeter pools are used to ensure an outward gradient from SA-7. Water levels in the perimeter pools are measured manually each month and compared to water levels in adjoining portions of SA-6 per the procedures in the SAP. This monitoring began with the completion of the SA-7 remedy in 2009 and will continue while the pools are in operation. The data collected to date indicate that the clay check dam and weir system that controls the pools function as designed to maintain specified groundwater levels. With few exceptions, the pools have maintained an outward gradient from SA-7.

When the northern and southern perimeter pools are decommissioned, the current monthly monitoring of water levels at the northern and southern perimeter pools will be replaced with quarterly water-level measurements of the four piezometers in

[6] The term "interior pool of SA-7" refers to the zone of shallow groundwater located within SA-7, inside of the SCB hydraulic barrier walls to the north, east, and south and the sheet-pile hydraulic barrier wall to the west. This area was remediated via excavation to the meadow mat or overlying natural sediments and must be protected from recontamination pursuant to the January 13, 2012 Amended Order Modifying Injunction, ECF No. 1116.

SA-7. After 5 years of monitoring, Honeywell may propose, subject to review by the Parties and approval by the Special Master, to decrease the frequency of groundwater level monitoring.

If activities are instituted, such as construction, within the SA-7 interior pool that are of a nature that may lower the groundwater elevations, Honeywell will initiate an initial month of twice a week groundwater elevation monitoring and, after the initial month, conduct quarterly groundwater level monitoring for the duration of the activities.

Criteria for Operating Contingent Pumping System

The Chromium Remedy includes contingent pumping systems designed to be capable of maintaining an inward gradient into the SA-6 North and South Open Space Areas. The 100% Design specified the installation of nine contingent pumping wells within each Open Space Area. However, a DCB dated February 12, 2015 modified the design to a perforated pipe installed in a stone-filled trench or "French Drain" system installed below the water table with sumps outfitted with pumps along the trenches. The French Drain systems have been installed, and they were operated during construction of both caps to lower the groundwater level.

Water levels will be monitored at the locations set forth in the beginning of Section 3.1.8 as shown on Figures 4A and 4B to determine whether to operate the contingent pumping systems. A “Head Difference” will be calculated by subtracting the water-level elevation at each monitoring point inside the Open Space Areas from the elevation at the nearest monitoring point on the opposite side of the adjacent SCB or sheet pile. The two points being compared constitute a “Piezometer Pair.” In the event that the water level data is generated by automatic data loggers in Piezometer Pairs, the Head Difference determination will be calculated by using the arithmetic mean values over the monitoring period, or one month, whichever is shorter.

Following excavation of chromium-impacted soils in the SA-6 South deferred bulkhead area, Honeywell will backfill the excavated area between the bulkhead and the western SA-6 South hydraulic barrier wall with a permeability which is agreeable to the Parties and Special Master. The purpose of such material will be to minimize pore velocity of water flow adjacent to the western SA-6 South hydraulic barrier wall during tidal cycles. Honeywell will include specifications for the backfill material in the workplan for the deferred bulkhead area Chromium Remedy that

will be subject to the Special Master review and approval requirements of the SA-6 South Consent Decree. When water levels are monitored continuously, head differences between the interior and exterior piezometers across the hydraulic barrier wall in this area after remediation will be calculated using the arithmetic mean values over the monitoring period, or one month, whichever is shorter.

Whenever a calculated Head Difference falls below 0.5 ft, the frequency of manual water-level measurements at that Piezometer Pair (including downloading of the data from the automatic data loggers, if installed) will increase to monthly until the Head Difference exceeds 0.5 ft for three consecutive months. At inboard piezometers not adjacent to SA-7 where the head difference is less than 0.5 ft, Honeywell will sample groundwater quality quarterly until the head difference returns to greater than 0.5 ft. At all inboard piezometers adjacent to the piezometer where the head difference is less than 0.5 ft along the same hydraulic barrier wall, Honeywell will sample groundwater quality for two consecutive quarters or until the head difference returns to greater than 0.5 ft. whichever comes first. If groundwater quality at the adjacent piezometer is less than 70 µg/L in these two quarters, then no further sampling at this location is needed. If groundwater quality at the adjacent piezometer is greater than 70 µg/L, then sampling will continue until the Head Difference returns to greater than 0.5 ft.

A Head Difference less than 0.1 ft between SA-6 and SA-7 triggers operation of the pumping system in the affected Open Space Area. A Head Difference of 0.1 ft across any other side of an SA-6 Open Space Area triggers operation of its pumping system unless water quality sampling as described above demonstrates it to be unnecessary. Water quality sampling demonstrates pumping to be unnecessary only if all inboard piezometers with Head Differences of less than 0.1 ft and all adjacent inboard piezometers along the same sheet pile barrier wall contain less than 70 µg/L of dissolved (filtered) total chromium in the two most recent quarterly sampling rounds (or in an initial round if results of a second sampling round are not yet available). In lieu of sampling adjacent inboard piezometers, Honeywell may alternatively elect to operate the pumping system.

If the Head Difference remains below 0.5 ft and above 0.1 ft for 12 months, Honeywell may propose reduction of the head measurement frequency to quarterly and reduction of the water quality sampling frequency to annually. If a pumping system is in operation, Honeywell may propose less frequent or no water quality

sampling. These proposals are subject to review by the Parties and approval by the Special Master.

If 5 years of groundwater level monitoring demonstrate that there have been and will continue to be inward gradients across the SA-6 hydraulic barriers without the need for pumping, Honeywell may propose to further reduce the frequency of groundwater level monitoring. Such a proposal will be documented in a revision to the LTMP during the annual review and evaluation process as described in Section 1.1, be subject to review and approval by the Parties and Special Master, and comport with Consent Decree requirements or, if necessary, be submitted to the Court in a motion to amend the Consent Decree.

3.1.9 Groundwater Sampling

L-Well

Paragraph 72 of the SA-6 South Consent Decree specifies that one round of monitoring be conducted to evaluate whether the hexavalent chromium-contaminated groundwater in the plume diversion area ("L-Wells"), which is found in the middle and lower portions of the deep overburden, remains contained following implementation of the Chromium Remedy. In accordance with the L-Well Groundwater Monitoring Plan (L-Well GWMP) included in **Appendix D-3**, baseline groundwater sampling of the ten (10) L-Wells specified in the L-Well GWMP was conducted in May 2013 prior to initiation of the Chromium Remedy. Additionally, as indicated in the L-Well GWMP and subsequent communications between Honeywell and the Parties, construction activity constraints restricted the access for interim sampling of four of the ten L-Wells prior to the completion of the SA-6 South cap. The L-Well GWMP proposed that the groundwater samples from these locations be collected using a GeoProbe® (or another appropriate drilling method) before the start of cap construction. All Parties agreed to this interim sampling and methodology.

The interim sampling of the four L-Wells was conducted in June 2015 after surcharging of the cap area, but prior to the installation of the cap. The samples were analyzed for total and hexavalent chromium and major ion chemistry per the L-Well GWMP. The baseline and interim sampling results were submitted to the Parties on July 10, 2015. Honeywell implemented additional post-remediation L-Well sampling in June 2016 and March and April 2017. This post-remediation L-Well sampling is discussed further in Section 3.2.4.

SA-6 South Development AOC

In accordance with the Development AOC Shallow Groundwater Monitoring Plan (SGWMP) included as Appendix D of the SA-6 South 100% Design Report (Amec, June 2013), 12 monitoring wells were installed south of the SA-6 South Open Space AOC within the Development AOC to monitor groundwater quality (see **Figure 4B**). The first groundwater sampling event occurred in April 2016. To date, six quarters of groundwater samples have been collected in the SA-6 South Development AOC. The SGWMP for SA-6 South indicated that groundwater sampling would be conducted for a one-year period (4 rounds of monitoring), at which point, groundwater sample results and continuation of groundwater monitoring would be evaluated. Based upon detection of total chromium results of groundwater samples greater than 70 µg/L in unfiltered samples from several wells in the SA-6 South Development AOC during the first year of sampling, Honeywell elected to continue sampling for an additional four quarters. Once the results of the remaining quarterly groundwater sampling rounds are evaluated, Honeywell plans to present an amended RAR to NJDEP, proposing cessation of quarterly groundwater sampling and abandonment of the Development AOC shallow groundwater monitoring wells in accordance with N.J.A.C. 7:9D.

Samples will be collected via low-flow purging/sampling protocols per the FSPM and the Data Validation Report (Appendix H of SA-6 North 100% Design Report). The Riverkeeper and NJDEP will be notified prior to each sampling event. The samples will be analyzed for total and hexavalent chromium (filtered and unfiltered).

A report of these data will be submitted per the SA-6 South Consent Decree Paragraphs 70 and 86(c)(vii). The contingency plan in Section 3.2 will be implemented if the groundwater analytical results are above the NJDEP GWQS of 70 µg/L.

3.1.10 Gas Venting System & Vented Gases

Monthly monitoring of vented naturally-occurring methane from the SA-6 North and SA-6 South Open Space Areas is being conducted for the first year to evaluate whether methane gas levels are a concern. The methane monitoring form is included in **Appendix B-3**. Sample ports were installed in the gas vents. The size and location of the ports were based on the specific instruments selected for conducting the sampling. Monitoring events are scheduled based on barometric conditions. To the extent possible, the majority of events should be timed to collect

information at intervals during the low pressure barometric conditions, but not at the beginning of low pressure barometric conditions to avoid sampling atmospheric air that enters through the vents during high pressure.

The initial two events recorded conditions at all vents. The collected data was evaluated to select specific vents for on-going monitoring. At a minimum, one of the events recorded flow velocities at selected gas vents at intervals (minimum of 6 data points) over a full barometric cycle. Monitoring events included measuring the percentage of methane (with a multi-gas meter capable of detecting methane, oxygen, and carbon dioxide), barometric pressure, and velocity. The readings were recorded on the inspection form found in **Appendix B-3**.

The monthly inspections have commenced in January 2017. If the Parties and the Special Master agree that the system has been stable for a year, then Honeywell may propose to modify the monitoring frequency to quarterly consistent with the Consent Decree. Such a proposal by Honeywell would be subject to review and approval by the Parties and the Special Master. In the event of detections per the Health and Safety Plan (HASP), as indicated in Section 3.2.6, treatment of the gases by Honeywell may be implemented. The HASP will be maintained at the Site.

3.1.11 Sign Inspections

Pursuant to Paragraph 60(l) and Paragraph 74(l) of the SA-6 North and South Consent Decrees, respectively, Honeywell is required to install signs or displays that discuss the history of the chromium production, contamination, and remediation for visitors to the Open Space AOCs. In addition, in the Deed Notice Areas, Honeywell will install signs prohibiting digging and providing a telephone number to call prior to any digging. The signs and displays will be inspected by Honeywell during the regular quarterly visual inspections. When necessary, signs and displays shall be repaired and/or replaced.

Jersey City will post signs prohibiting through trucks, as required by OSDS Section 2.2.1, after the completion of construction of the roadways. Honeywell will work with the City of Jersey City to ensure that the appropriate signs are posted after the roadways are built. When necessary, the signs prohibiting through trucks shall be repaired and/or replaced by Jersey City.

The next annual update to this LTMP will include as an appendix a signage plan (developed in a separate submittal) which will include examples of the three types of signs required (i.e., Site History, Call Before Digging, and No Through Trucks) and a figure showing the locations of the signs.

Once Jersey City posts signs that include the prohibition on digging per Jersey City Code Ch. 239 in the Open Space Areas, those signs will be documented in the sign appendix to this LTMP.

3.1.12 Topographic Survey

A baseline topographic survey was performed at the completion of the Chrome Remedy as stipulated in Paragraph 64(a)(iv) and Paragraph 78(a)(iv) of the SA-6 North and South Consent Decrees. The baseline topographic survey is included in **Appendix A-2**. In addition, topographic surveys will be performed at five-year intervals following the baseline survey for up to 15 years post construction. Each topographic survey will be presented with 1-foot contours.

In the event that permanent changes to the topography occur during the 5-year periods between topographic surveys (for example, due to development or other activities that raise the elevation of the area), the next required topographic survey will replace the baseline survey in Appendix A-2. The permanent topography changes set forth in the updated baseline survey in Appendix A-2 will be the basis for evaluating whether there has been subsidence or settlement in subsequent years.

Additional topographic surveys may be performed on limited areas in the event that surveying is needed to confirm that corrective action activities were restored to the 100% Design. All future topographic surveys will be included in this LTMP as part of the annual review and update of the LTMP.

3.1.13 Soil Sampling at In-Situ Injection Areas

In-situ injections of calcium polysulfide designed to treat low-level hexavalent chromium-impacted soil have been performed at several areas at SA-6 North and SA-6 South in accordance with site-specific Work Plans for the in-situ injection programs.

Treatment Area 10-1 ("TA-10-1") in SA-6 North, required an additional injection to treat one recalcitrant location. Following this additional injection, initial soil

sampling was conducted, which confirmed that hexavalent chromium concentrations in the soils in this area were below 20 mg/kg. (These results were shared with the Parties.) Final confirmation sampling of this area will take place in Spring 2018 pursuant to Honeywell's submittals, dated June 20, 2017 and September 6, 2017. Plaintiffs approved Honeywell's sampling plan via email on September 11, 2017.

Treatment Area 7 ("TA7") in SA-6 North, requires additional remediation. Results of soil sampling conducted three years after in-situ treatment indicated that one recalcitrant location within the shallow soils in TA-7 continues to exceed 20 mg/kg hexavalent chromium. Once JCMUA relocates the existing fuel island and aboveground storage tanks in this area, this isolated location of shallow soils that exceeds 20 mg/kg for hexavalent chromium in the TA-7 shallow soils will be excavated and disposed of offsite. In the meantime, Honeywell will deed notice this area (Deed Notice Area 10) until the excavation can occur. After excavation, the deed notice for the area will be terminated and the LTMP updated accordingly.

3.1.14 Other Inspections

An annual inspection of disturbance to visible utility lines and manhole covers within the SA-6 North and South Open Space Areas will be conducted by Honeywell. The inspection will include observations of any development, disturbance or utility repair work. When necessary, manhole covers will be repaired and/or replaced.

Inspection of road surface conditions by a licensed New Jersey Professional Engineer will be undertaken by Honeywell or the City of Jersey City at least once every five years to ensure roads remain in good repair and are maintained as required by OSDS Section 2.2.1.

Honeywell will provide notice to Jersey City of any damage observed during the quarterly visual inspections of the Open Space Areas, and, as necessary, Honeywell will inform Jersey City of the need to perform maintenance or repairs.

The contingency plan will be implemented by Honeywell or the City of Jersey City if inspection reveals evidence of deterioration of utility lines, manhole covers or road surfaces in the SA-6 North and SA-6 South Open Space Areas or the Deed Notice Areas. However, as provided in the Consent Decrees, Honeywell is responsible for repair and replacement of the Chromium Remedy as necessary.

3.2 CONTINGENCY PLAN

The contingency plan addresses requirements to provide for the continued integrity of the Chromium Remedy in the Open Space Areas and the surface cover and hardscape engineering controls (e.g., cement/asphalt/soil caps) in the Deed Notice Areas in the event of:

(a) a planned penetration or disturbance of the Deed Notice Areas, Open Space Areas, underground barrier walls, or other planned activity that could compromise the integrity of the Chromium Remedy; or

(b) an unplanned event or accident that causes a disturbance or penetration of the Deed Notice Areas, Open Space Areas, or remedial measures associated with the Chromium Remedy.

This Contingency Plan also addresses maintenance and repair due to field observations of degradation during inspections. Any disturbance of the Chromium Remedy may trigger corrective action pursuant to this Contingency Plan. Additional triggering events are described in Section 3.1 and summarized in **Table 2**.

In the event of disturbance, further evaluation or investigative measures will be undertaken to evaluate whether the integrity of the Chromium Remedy in the Open Space Areas or the Deed Notice Areas has been compromised, or whether the contingent groundwater system for water level maintenance has been disturbed. Based on the results of the evaluation, appropriate action will be taken in accordance with SA-6 North Consent Decree Paragraph 61 and SA-6 South Consent Decree Paragraph 75 to repair or replace the Chromium Remedy so as to conform to the 100% Design. The need for the operation of the groundwater pumping system will also be evaluated.

Corrective actions will be implemented to conform to the 100% Design or to a level of protection at least equivalent to the original Chromium Remedy. If Honeywell deems it necessary to restore to a standard different than those defined in the 100% Design, the proposed restoration plan will be submitted to the Parties and the Special Master for review and approval.

The Contingency Plan requires an annually updated plan to notify NJDEP, the Special Master and Parties, as specified in the SA-6 North and SA-6 South Consent

Decrees, of (a) any event penetrating or compromising the cap; or (b) compromising the integrity of the Chromium Remedy; and (c) the steps taken to identify the extent of the problem; and (d) the standards for remedying the problem. Refer to Section 3.2.1 below for details regarding notification and reporting for any event penetrating the cap or otherwise compromising the integrity of the Chromium Remedy. Annual plan updates, notification and reporting requirements are discussed in Section 4.0.

3.2.1 Chromium Remedy Disturbance

3.2.1.1 Notification

In accordance with SA-6 North Consent Decree Paragraph 64(c) and SA-6 South Consent Decree Paragraph 78(c), in the event of any planned or unplanned activity that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy in the Open Space Areas or the Deed Notice Areas, Honeywell shall provide notice to the Special Master and Parties. In the event of planned events, Honeywell shall provide notice at least five business days in advance of any actions. In the event of unplanned or emergency events, Honeywell shall provide notice within 48 hours of learning of any unplanned or emergency event. **Figure 7** summarizes the notification and response actions required for planned or unplanned actions in flow chart format.

In accordance with proposed Deed Notice requirements of N.J.A.C. 7:26E-8, the site owner/operator will be required to provide notification to the NJDEP and Honeywell prior to any alteration, improvements, or disturbance of engineering controls, and to take steps so that all applicable worker health and safety laws and regulations are followed during the work. A Soil Remedial Action Permit modification is required prior to disturbance of engineering controls, except when certain conditions are met as set forth in Paragraph 7A of the Deed Notices. In the event of an emergency that necessitates disturbance to engineering controls, immediate notification to the NJDEP and then Honeywell is required by the person causing such disturbance (see Section 3.2.1.3 of this LTMP on unplanned or emergency cap disturbances for details). The Deed Notices contain specific details on notification and reporting requirements in the event of alterations, improvements or disturbances of engineering controls.

3.2.1.2 Planned Disturbance of Chromium Remedy or Deed Notice Areas

For any planned disturbances of the Open Space Areas, or planned disturbances in the Deed Notice Areas, all entities will notify Honeywell at least seven business days

prior to any planned disturbance of the Chromium Remedy and initiate completion of the Dig Permit Form. However, Dig Permits are not applicable to the Open Space Areas during Initial Development for the Open Space Areas when Honeywell's onsite construction management personnel will inspect and monitor activities at the Open Space Areas. Once Initial Development is completed and Honeywell's construction management personnel are no longer on site, Dig Permits will be necessary for the Open Space Areas.

Prior to performing subsurface work in the area of the existing engineering controls, parties conducting work are required to notify Honeywell to enable coordination of work; and establish requirements for worker protection, handling and disposal of chromium-impacted media (if applicable), and repair and restoration of the engineering controls. As indicated on the Dig Permit Form, mechanical digging is restricted within the Open Space Areas below the root barrier. Excavations that will penetrate the root barrier must be performed using hand/soft dig techniques or other method(s) approved by Honeywell for those soils below the root barrier. Honeywell has established a telephone notification and response system (referred to as the Chromium Response Hotline: **855-727-2658**) to notify Honeywell of any work activities in the Open Space Areas or Deed Notice Areas, planned or required on an emergency basis, that may disturb engineering controls or underlying chromium-impacted soil.

Pursuant to the Consent Decrees, Honeywell is responsible for the restoration of the Chromium Remedy. Upon conclusion of a disturbance, the engineering controls and any other impacted remedial measures must be restored by Honeywell and Honeywell must prepare and submit any required reports to the Special Master, the Parties, and the NJDEP.

In the Open Space Areas, any restoration of the Chromium Remedy, including the root barrier and the first 12 inches of cover soils above the root barrier, will be conducted by Honeywell and certified by a licensed New Jersey Professional Engineer to be in conformance with the 100% Design and OSDS. Where cover soils above the root barrier exceed 12 inches in thickness (as will be shown on **Figures 7 & 8** in the next version of this LTMP**)**, any restoration of the cover soils between the ground surface and 12 inches above the root barrier may be conducted by Honeywell, or another entity and inspected by Honeywell, and verified to be in conformance with the 100% Design and OSDS, including the requirements of OSDS Section

2.1.1.D that the excavated soils were segregated by type (*i.e.*, Horizon A, B, or C) and that the last out/first in principle (*i.e.*, where the last soils excavated are the first soils returned to the excavation) was followed. Provided however that, until **Figures 7 & 8** are attached to a future version of this LTMP, any restoration of the Chromium Remedy will be conducted by Honeywell and certified by a licensed New Jersey Professional Engineer to be in conformance with the 100% Design and OSDS.

In the Deed Notice Areas, restoration of the surface cover or hardscape engineering controls may be conducted by Honeywell, or another entity and inspected by Honeywell, and certified by a licensed New Jersey Professional Engineer to be in conformance with the 100% Design.

Remedial measures must be restored to conform to the 100% Design or to a level of protection at least equivalent to the original Chromium Remedy. If Honeywell deems it necessary to restore to a standard different than those defined in the 100% Design, the proposed restoration plan will be submitted to the Parties and the Special Master for review and approval.

3.2.1.3 Unplanned or Emergency Disturbance of the Chromium Remedy or Deed Notice Areas

In the event of any inadvertent disturbance to the engineering controls or underlying soils by workers, Honeywell and/or the title owner of the Open Space Areas and/or Deed Notice Areas will advise workers to stop work, cover and secure the area using appropriate measures (e.g., plastic sheeting, traffic cones or barrier) and notify appropriate site management personnel. Further work will then be coordinated with Honeywell with respect to the management of chromium-contaminated materials and repair/restoration of engineering controls.

In the event of an emergency that involves disturbance of engineering controls in the Open Space Areas or Deed Notice Areas and/or presents the potential for exposure to workers or the public or environment to contaminated materials, the current owner and/or the party causing such disturbance shall provide notification to the NJDEP Hot Line (1-877-WARNDEP or 1-877-927-6337) upon discovery of such conditions. The Honeywell Remediation Manager must also be notified via the Chromium Response Hotline (**855-727-2658**) by the current owner and/or the party causing the disturbance upon discovery of such conditions (additional Honeywell contact is provided in Section 5). The Special Master and Parties must also be notified by

Honeywell within 48 hours of Honeywell receiving notice of the emergency disturbance.

Pursuant to the Consent Decrees, Honeywell is responsible for the restoration of the Chromium Remedy. Upon conclusion of the emergency, the engineering controls and any other impacted remedial measures must be restored by Honeywell and any required reports must be prepared and filed with the Special Master, the Parties, and NJDEP, by Honeywell and/or the owner/operator, as may be necessary for the particular emergency.

In the Open Space Areas, any restoration of the Chromium Remedy, including the root barrier and the first 12 inches of cover soils above the root barrier, will be conducted by Honeywell and certified by a licensed New Jersey Professional Engineer to be in conformance with the 100% Design and OSDS. Where cover soils above the root barrier exceed 12 inches in thickness (as will be shown on **Figures 7 & 8** in the next version of this LTMP**)**, any restoration of the cover soils between the ground surface and 12 inches above the root barrier may be conducted by Honeywell, or another entity and inspected by Honeywell, and verified to be in conformance with the 100% Design and OSDS, including the requirements of OSDS Section 2.1.1.D that the excavated soils were segregated by type (*i.e.*, Horizon A, B, or C) and that the last out/first in principle (*i.e.*, where the last soils excavated are the first soils returned to the excavation) was followed. Provided however that, until **Figures 7 & 8** are attached to a future version of this LTMP, any restoration of the Chromium Remedy will be conducted by Honeywell and certified by a licensed New Jersey Professional Engineer to be in conformance with the 100% Design and OSDS.

In the Deed Notice Areas, restoration of the surface cover or hardscape engineering controls may be conducted by Honeywell, or another entity and inspected by Honeywell, and certified by a licensed New Jersey Professional Engineer to be in conformance with the 100% Design.

Remedial measures must be restored to conform to the 100% Design or to a level of protection at least equivalent to the original Chromium Remedy. If Honeywell deems it necessary to restore to a standard different than those defined in the 100% Design, the proposed restoration plan will be submitted to the Parties and the Special Master for review and approval.

Deed Notice requirements for emergency situations include taking measures to limit the disturbance of engineering controls and minimizing the time of such disturbance as needed to respond to the emergency; taking measures to limit the risk of exposure of persons and the environment to contaminants; restoring the engineering control to pre-emergency conditions as soon as possible; and submittal of a Deed Notice Disturbance Report to the NJDEP within 60 days after completion of the restoration of the engineering control (refer to the Deed Notice for specific requirements for emergency situations). The Deed Notice Disturbance Report will be submitted to the Special Master and Parties concurrent with submission to NJDEP.

3.2.1.4 Post-Work Documentation

Following completion of work involving the planned or unplanned disturbance and restoration of the Chromium Remedy in the Open Space Areas (e.g., engineering controls or cap materials) and surface cover or hardscape engineering controls (e.g., cement/asphalt/soil caps) in the Deed Notice Areas, Honeywell, and/or their contractor/engineer will document that the work was completed in compliance with the Consent Decrees and OSDS for the Open Space Areas and in conformance with the Deed Notice requirements in the Deed Notice Areas, and a licensed New Jersey Professional Engineer will certify that remedial measures were restored in conformance with the 100% Design to a level of protection at least equivalent to the original Chromium Remedy, as applicable and approved by Parties and the Special Master.

Within 60 days of completion of the restoration, Honeywell will provide a report documenting restoration completion in conformance with the 100% Design to the Special Master and the Parties. If the disturbance or restoration extends beyond 60 days, Honeywell will submit monthly notices documenting the status and progress of the disturbance and restoration work, and include a look-ahead schedule for the restoration work. The final documentation will also be filed with NJDEP as required by the Deed Notice.

3.2.1.5 Coordination of Work Between Honeywell and Other Parties

Various parties may perform subsurface work at the Open Space Areas and in the Deed Notice Areas. These parties may include private developers, Jersey City entities, PSE&G, Comcast, Verizon, NJDOT and/or other utilities and their contractors. Honeywell will undertake reasonable efforts to work with such parties to make them aware of the Chromium Remedy, specifically, the cap components in

the Open Space Areas, the underground barrier walls, the groundwater remedy engineering controls, and the hexavalent chromium contamination present under the surface cover or hardscape engineering controls (e.g., cement/asphalt/soil caps) in the Deed Notice Areas. In consultation with the City of Jersey City, Honeywell will develop the worker training materials required by paragraph 64(d) of the SA-6 North Consent Decree and paragraph 78(d) of the SA-6 South Consent Decree. The worker training materials will address the chromium contamination, protection of the Chromium Remedy, as well as safe procedures in the vicinity of the methane gas vents in the Open Space Areas. Honeywell will append worker training materials to this LTMP once the materials are approved by the City of Jersey City. The Parties anticipate that the worker training materials will be attached to the 2018 update to this LTMP. All such approved worker training materials will be made available to such other parties intending to work in the Open Space Areas or the Deed Notice Areas.

Currently, Honeywell provides annual notification letters to utilities and other entities in accordance with the Consent Decrees; these notification letters include information on site conditions in the Open Space Areas and in the Deed Notice Areas, remedial measures, engineering and institutional controls, and instructions for contacting Honeywell prior to performing ground-disturbing work at the sites. Honeywell may also receive notification of work by other parties through the Terradex LandWatch system or the Chromium Response Hotline.

For emergency situations including ground-disturbing activities where subsurface work needs to be done within a short timeframe before a determination can be made on whether or not the work is in an area of chromium-impacted soils, the entity conducting the work should assume work is being conducted in chromium-impacted soils and should only proceed with work using properly trained contractors (i.e., OSHA 40-hour HAZWOPER training) until such time that Honeywell can respond and review the location and nature of the emergency work with the contractor. Honeywell will provide technical assistance and field support (to be determined in cooperation with the party conducting the work). Once Honeywell reviews the work with the party and determines that the location and nature of the emergency work does not correspond to impacted soils, a reduction in such conservative and protective measures may be warranted.

For non-emergency work in the Open Space Areas, there are two distinct procedures that Honeywell will follow for coordination and inspection of subsurface activities, dependent upon whether these activities occur prior to or after completion of the Initial Development in the Open Space Area to be performed in accordance with the Initial Development Plan. The steps outlined in 3.2.1.5.1 will be followed in the Open Space Areas during the period of initial construction while Honeywell maintains full-time inspector(s) at the Site. Full-time on-site inspector(s) will be available throughout all construction activities for the future development up until such time as the Open Space Areas hardscaping/landscaping/roadways are constructed in accordance with the approved Initial Development Plan. The steps outlined in 3.2.1.5.2 will be followed in the Open Space Areas post-construction of the Initial Development Plan, when full-time inspector(s) will no longer be maintained by Honeywell at the Site.

For non-emergency work in the Deed Notice Areas, the steps outlined in 3.2.1.5.1 and 3.2.1.5.2 will be followed in conjunction with one another immediately after completion of the Chromium Remedy.

3.2.1.5.1 Honeywell's Onsite Inspector is Present to Oversee Work in the Open Space Areas and Deed Notice Areas During Initial Development of Open Space Areas

The following steps summarize procedures for communication and coordination of work between Honeywell and other entities and/or their contractors for performing subsurface work in the Open Space Areas or Deed Notice Areas on SA-6 North, SA-6 South, and SA-7 during Initial Development in the Open Space Areas:

1. During workdays, the on-site inspector inquires with the utility, developer and/or their contractors regarding planned subsurface work activities. All on-site entities performing work in the Open Space or Deed Notice Areas will be informed that they must notify and confer with the on-site inspector prior to beginning any subsurface work.
2. The inspector will provide background information to the supervisor on the nature of the Chromium Remedy in the Open Space Area(s) (e.g. engineering controls) or Deed Notice Area conditions prior to conveying Honeywell approval to proceed with the subsurface work/soil disturbance. Honeywell

shall only approve work that is consistent with and meets the requirements of the Consent Decrees and the OSDS (where applicable).

3. Depending upon the extent of the planned activity, Honeywell or its inspector may request a follow-up meeting and/or that additional details of the scope be submitted before providing its approval to proceed.

4. Honeywell coordinates with the party as needed for performance of field work including the use of qualified contractors for excavation of chromium-contaminated materials and disposal at a facility licensed to accept such materials, on-site observation by a licensed New Jersey Professional Engineer of any excavation and work within one foot of the root barrier in the Open Space Areas, backfilling, and site restoration including repair/replacement of engineering controls. Honeywell makes available to the party the worker training materials referenced above in Section 3.2.1.5. Work coordination will also include arrangements as needed between the Parties to observe or inspect cap repairs and site restoration work. Honeywell (or its designated contractor) will observe any planned disturbance of the Chromium Remedy in the Open Space Areas or Deed Notice Areas. Honeywell (or its designated contractor) will provide technical assistance and field support as needed for documentation and reporting requirements and make arrangements for disposal of chromium contaminated materials. Honeywell will be responsible for all repairs to the Chromium Remedy as set forth in Sections 3.2.1.2 and 3.2.1.3.

5. Honeywell includes a summary of the construction work in its reports to the Special Master and the Parties, which includes the work conducted and the restoration of engineering controls.

6. Honeywell and/or title owner prepares and submits a Deed Notice Disturbance Report/Post Work Documentation Report in accordance with requirements in the recorded deed notices, the reporting requirements of this LTMP and/or the requirements specified in the Consent Decrees.

3.2.1.5.2 For all Subsurface Work in the Deed Notice Areas, the Dig Permit Requirement Applies

The Dig Permit (see **Appendix B-2**) is required in the Deed Notice Areas as soon as this LTMP becomes applicable for any work with the potential to disturb the Chromium Remedy engineering controls.

3.2.1.5.3 After the Term of Honeywell's Onsite Inspector Ends, the Dig Permit Requirement Applies to Subsurface Work in the Open Space Areas

After the completion of the Initial Development of the Open Space Areas, the Dig Permit (see **Appendix B-2**) is required in the Open Space Areas: (1) for any mechanical excavation that will reach a depth of 12 inches or more from the ground surface at any location in the Open Space Areas; and (2) for any hand excavation in the Open Space Areas deeper than 12 inches from the ground surface that, based on the location of the planned digging in the zones set forth in **Figures 7 & 8**[7,8], requires the Dig Permit.

3.2.1.5.4 Procedures for Use of the Dig Permit

The following steps summarize procedures for communication and coordination of work between Honeywell and other parties and/or their contractors for performing subsurface work on SA-6 North, SA-6 South, and SA-7 when the Dig Permit is required:

1. Other party notifies Honeywell regarding work project (e.g., utility repair) or Honeywell is notified of work through the Terradex LandWatch system.
2. Any proposed excavation in the Open Space Areas or a Deed Notice Area will trigger review and oversight by Honeywell. Honeywell shall review all proposed subsurface work to determine if it will disturb the Chromium Remedy.
3. After Honeywell has received notification of planned work, Honeywell will initiate telephone contact with third party contractors and follow-up with electronic mail notification within 24 hours advising the contractor of the

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[7] A Dig Permit is required for all hand digging to a depth of 12 inches or more from ground surface that is also within 12 inches of the root barrier. Figures 7 & 8 will provide zones based on the depth of fill to the root barrier across the Open Space Areas, which must be referenced by workers in the field to determine when a Dig Permit is required for hand digging operations.

[8] Figures 7 and 8 will be incorporated into this LTMP in the first annual update in 2019. Until Figures 7 and 8 are incorporated into this LTMP, all digging or other intrusive work, regardless of depth, location or scope, shall be subject to the oversight requirements of Section 3.2.1.2 of this LTMP.

nature of the Chromium Remedy (e.g., engineering controls) or Deed Notice Area conditions, and the need for approval from Honeywell before proceeding with the soil disturbance.

4. Honeywell will communicate with the party intending to work in an Open Space Area or in a Deed Notice Area by electronic mail communication. The electronic mail communication will include a copy of the annual utility notification letter. Honeywell will copy the Special Master and the Parties on the electronic mail communication to parties intending to work in the OpenSpace Areas or Deed Notice Areas. If a Dig Permit is required for the proposed activity, as set forth in Sections 3.2.1.5.2 and 3.2.1.5.3, and is completed prior to the electronic mail communication, it will be attached to the electronic mail communication to the Special Master and the Parties. If a Dig Permit is required for the proposed activity, but is not completed prior to the electronic mail communication, it will be submitted to the Special Master and the Parties once it has been completed.

Depending on the scope and location of the proposed work, the electronic mail notifications shall state:

For work within the Deed Notice Areas

"NOTICE: Confirming our telephone conversation and based on the information provided, you have proposed actions that may disturb a federal court ordered remedy at a chromium contaminated site for which Honeywell is responsible. We request an on-site meeting with a representative of your firm to review the specific scope and location of the proposed work prior to any disturbance. If your proposed actions are found to be within areas known as the Deed Notice Areas, and will disturb the Chromium Remedy engineering controls, we will review work controls and safety measures appropriate for work in this area, including completing a Dig Permit Form. All areas of chromium-impacted soils have a Deed Notice placed upon them that must be complied with. If your proposed actions are found to be within a deed noticed area, the Deed Notice will be provided to you."

Or

For work within the Open Space Areas

"NOTICE: Confirming our telephone conversation and based on the information provided, you have proposed actions that may disturb a federal court ordered remedy at a chromium contaminated site for which Honeywell is responsible. We request an on-site meeting with a representative of your firm to review the specific scope and location of the proposed work prior to any disturbance. All areas of chromium-impacted soils have a Deed Notice placed upon them that must be complied with. If your proposed actions are found to be within areas of known chromium-impacted soils, the Deed Notice will be provided to you. In addition, Honeywell has prepared Open Space Design Standards to address all work in specific areas referred to as the Open Space Areas. If your proposed actions are found to be within the Open Space Areas, the Open Space Design Standards will be provided to you and must be followed. If your proposed actions are found to be within the Open Space Areas, and will cause a disturbance of soils at a depth of 12 inches or more from ground surface that is also within 12 inches of the root barrier, we will review work controls and safety measures appropriate for work in this area, including completing a Dig Permit Form."

Or

"NOTICE: Confirming our telephone conversation and based on the information provided, the planned intrusive work is outside of the areas of known chromium-impacted soils. We do not require any additional coordination with Honeywell for this work."

5. Honeywell determines whether the proposed work location is within an Open Space Area or a Deed Notice Area and provides confirmation to the party as described above. For work in the Open Space Areas that requires a Dig permit as set forth in Section 3.2.1.5.3, Honeywell, in consultation with the party performing work, completes the Dig Permit (see **Appendix B-2**). For work in the Deed Notice Areas that requires a Dig permit as set forth in Section 3.2.1.5.2, Honeywell, in consultation with the party performing the work, completes the Dig Permit (Appendix B-2). If the work location is confirmed to be in an Open Space Area or a Deed Notice Area, then Honeywell coordinates with the party regarding response and fieldwork activities and notifies the Parties and Special Master at least five working days prior to start of field activities. If Honeywell determines that the

proposed work is not in an Open Space Area or a Deed Notice Area, then the party would proceed with work without further coordination with Honeywell.

Note: Excavation within the Open Space Areas must comply with all requirements of the OSDS Section 2.1, including submission of Intrusive Excavation Plans and performance of any excavation work below the root barrier by hand/soft dig techniques or other method approved by Honeywell for those soils below the root barrier.

6. Honeywell provides notice to the Special Master and the Parties regarding the work and schedule for any planned activity involving disturbance and restoration of engineering controls.

7. Honeywell provides notification to the NJDEP, as required in accordance with Deed Notice requirements for disturbance of engineering controls (refer to the Deed Notice section of Section 2.1.3 for notification requirements).

8. Honeywell coordinates with the party as needed for performance of field work including the use of qualified contractors for excavation of chromium-contaminated materials and disposal at a facility licensed to accept such materials, on-site observation by a licensed New Jersey Professional Engineer of any excavation and work within one foot of the root barrier in the Open Space Areas, backfilling, and site restoration including repair/replacement of engineering controls. Honeywell makes available to the party the worker training materials referenced above in Section 3.2.1.5. Work coordination will also include arrangements as needed between the Parties to observe or inspect cap repairs and site restoration work. Honeywell (or its designated contractor) will observe any planned disturbance of the Chromium Remedy in the Open Space Areas or Deed Notice Areas. Honeywell (or its designated contractor) will provide technical assistance and field support as needed for documentation and reporting requirements and make arrangements for disposal of chromium-contaminated materials. Honeywell will be responsible for all repairs to the Chromium Remedy as set forth in Sections 3.2.1.2 and 3.2.1.3.

9. Following the completion of work in an Open Space Area or a Deed Notice Area, Honeywell prepares an updated chromium soils map to be included as part of the next annual update to this LTMP. Such maps will be attached to the Deed Notice (as part of the biennial certification process), the Deed Notice

Disturbance Report/Post Work Documentation Report and included with the annual notifications to stakeholders.

10. Honeywell and/or title owner prepares and submits a Deed Notice Disturbance Report/Post Work Documentation Report in accordance with requirements in the recorded deed notices (within sixty (60) calendar days after the end of each alteration, improvement, or disturbance), the reporting requirements of this LTMP and/or the requirements specified in the Consent Decrees.

3.2.2 Vegetative Cover Degradation and Differential Settlement

Vegetative cover degradation and the need for replacement of vegetation will be determined based on field observations from the quarterly monitoring program and professional judgment regarding the potential for adverse impact to the underlying Chromium Remedy. Disturbances in the vegetative cover such as soil erosion, settlement, or missing vegetation will be promptly corrected by either re-grading, repairing or replacement of vegetation, and if appropriate, the restoration of the area to its original grade set forth in the 100% Design. Additional topsoil will be added along with planting of new grass or other vegetation to repair the erosion or settlement in the vegetative cover areas.

If settlement of three inches or more has occurred in any area within the Open Space Areas, within 30 days of discovery, it will be evaluated by a licensed New Jersey Professional Engineer to determine if it may impair the integrity or effectiveness of the Chromium Remedy. If settlement is determined to impair the integrity or effectiveness of the Chromium Remedy, within 30 days, Honeywell will propose corrective actions to prevent future settlement and to repair or replace the impaired Chromium Remedy. If settlement in excess of 3 inches is observed adjacent to structures in the landscaped areas, and it is determined that such settlement does not impair the integrity of effectiveness of the Chromium Remedy, the areas will be backfilled to restore the grades in accordance with the 100% Design grades.

If field conditions or weather do not permit prompt repairs of vegetative cover, appropriate interim measures will be taken (e.g., geotextile mesh, silt fence or straw bales) so that the affected area is adequately protected until site conditions allow for the implementation of the appropriate corrective actions.

Burrowing animals present a potential problem for maintaining the integrity of the Chromium Remedy and engineering controls, even in an urban environment. Once a burrow has been located, the inhabiting animal(s) will be humanely removed to prevent further damage. If necessary, local animal control experts will be consulted for recommended control or removal methods. After the animal has been removed, the burrow will be inspected to determine the integrity of the underlying Chromium Remedy. Areas exhibiting evidence of damage will be repaired by removing sufficient area of the soil cover to repair the damaged section. Following repairs, the soil will be replaced in accordance with the original condition and will be seeded.

If field observations during the monitoring program indicate that tree roots are causing damage to roadways, the tree or vegetation causing the damage will be promptly removed and the pavement repaired as soon as practicable and in a manner which avoids interference with regular operations.

3.2.3 Contingent Groundwater Extraction System

If the trigger conditions specified in Section 3.1.8 are satisfied in an Open Space Area, Honeywell shall expeditiously activate the Area's contingent groundwater extraction system. The system shall be operated to maintain head differences of 0.5 ft or greater at all piezometer pairs in the Open Space Area. Water levels shall be monitored monthly in all piezometer pairs for six months or until the head difference of 0.5 ft is attained, whichever is longer.

When either groundwater extraction system at SA-6 North or SA-6 South is in operation, flow to the treatment facility will be monitored weekly, including total gallons pumped.

Honeywell may propose to deactivate a groundwater extraction system based on either (a) correction of hydraulic conditions outside the Open Space Areas that created an outward gradient, or (b) for piezometers not adjacent to SA-7, two consecutive quarterly rounds of groundwater sampling that show less than 70 µg/L of dissolved (filtered) total chromium in the relevant previously contaminated piezometers. The proposal to deactivate shall be subject to review by the Parties and approval by the Special Master. The monitoring requirements of Section 3.1.8 apply following deactivation of a pumping system. In addition, if the deactivation is due to correction of hydraulic conditions, water levels shall be monitored monthly in

the piezometer pairs where an inward gradient had been absent earlier for one year or until water levels stabilize, whichever is longer.

3.2.4 SA-6 South L-Well Monitoring

Baseline samples of the prescribed L-Wells were collected in May 2013 in accordance with the L-Well GWMP (see **Appendix D-3**). Additionally, in June 2016 and March and April 2017, Honeywell completed the post-remediation round of L-Well sampling in accordance with Paragraph 72 of the SA-6 South Consent Decree. Honeywell submitted the results to all Parties in correspondence dated April 26, 2017.

The post-remediation round results were compared to baseline sampling results to determine whether or not a "substantial change" in major ion chemistry has occurred or whether the L-Well plume is migrating. Based upon comparison of the baseline and post-remediation data, the April 26, 2017 submittal indicated that the plume does seem to be migrating and recommended additional delineation sampling.

In June 2017, in-situ grab groundwater samples were collected using a GeoProbe drill rig at four locations downgradient of L-Well 124-MW-106T, where previous samples collected in 2016 and 2017 indicated total chromium results greater than the NJDEP GWQS of 70 µg/L. The results were presented in a technical memorandum submittal to all Parties from Honeywell dated July 27, 2017. All sample results were less than 70 µg/L for total chromium and non-detect for hexavalent chromium in all in-situ grab sample locations. Based on these sample results, Honeywell recommended, and the Parties and Special Master agreed, that no further remediation of the L-Well groundwater was required.

3.2.5 SA-6 South Development AOC

In accordance with the SA-6 South Development AOC SGWMP, and detailed in Section 3.1.9, if groundwater sampling shows that total chromium in shallow groundwater in the SA-6 South Development AOC is above the NJDEP GWQS of 70 µg/L for dissolved (filtered) total chromium, an evaluation of remedial measures will be submitted to the Special Master and the SA-6 South Consent Decree Parties. This evaluation could include additional groundwater sampling, delineation, or remedial measures to capture or treat shallow groundwater with dissolved (filtered) total chromium above 70 µg/L.

Following completion of each quarterly sampling event, Honeywell shall provide the

data to the Special Master and Parties. Honeywell shall include these monitoring results in the annual IGWMR for the year in which the data was collected. To date, six quarters of groundwater samples have been collected in the SA-6 South Development AOC. The SGWMP indicated that groundwater sampling would be conducted for a one-year period (4 rounds of monitoring), at which point, groundwater sample results and continuation of groundwater monitoring would be evaluated. Based upon detection of total chromium results of groundwater samples greater than 70 µg/L in unfiltered samples from several wells in the SA-6 South Development AOC during the first year of sampling, Honeywell elected to continue sampling for an additional four quarters. Once the results of the remaining quarterly groundwater sampling rounds are evaluated, Honeywell plans to present an amended RAR to NJDEP proposing cessation of quarterly groundwater sampling and abandonment of the Development AOC shallow groundwater monitoring wells in accordance with N.J.A.C. 7:9D.

3.2.6 Methane Monitoring

As reported in the Methane Investigation Report (Appendix M of the SA-6 North 100% Design Report), instantaneous vadose zone methane concentrations were as high as 20% (by volume) at SA-6 North and 17% at SA-6 South. Further, the Methane Investigation Report indicated that the proposed capping system will limit the aerobic oxidation of methane which is currently estimated by stable isotope tracing to be on the order of 25% of current emissions. Therefore, after the caps are installed, emissions are expected to be greater than the levels measured during the preparation of the 100% Design as presented in the Methane Investigation Report prior to cap installation.

A methane venting system is part of the capping systems in the Open Space Areas (see **Figure 3**). In accordance with SA-6 North Consent Decree Paragraph 64(a)(ix) and SA-6 South Consent Decree Paragraph 71(a)(ix), methane levels will be monitored monthly with a combustible gas indicator (CGI) for the first year to document whether levels reach 10% of the lower explosive limit (LEL) per the HASP. Treatment and/or additional monitoring of the methane gas will be evaluated if 10% LEL (5,000 parts per million [0.5%]) is measured during the monitoring event.

As set forth in Section 3.1.10, if the monthly monitoring indicates stable readings (i.e., below 10% LEL) over a year, then Honeywell may propose to modify the

monitoring frequency to quarterly consistent with the Consent Decree. Any such proposal by Honeywell will be subject to review and approval by the parties and the Special Master. Since the Methane Investigation Report indicated that methane may increase during lower atmospheric pressure weather patterns, the monthly monitoring will be conducted during lower pressure time periods, but not at the beginning of low pressure conditions, to the extent possible.

3.2.7 Routine Maintenance and Repairs

Per SA-6 North Consent Decree Paragraph 64(d) and SA-6 South Consent Decree Paragraph 78(d), maintenance of the vegetative cover will include mowing and removal of vegetation that could potentially damage the Chromium Remedy and/or that is inconsistent with the requirements of the OSDS Section 2.2.9.

The title owner of the Open Space Areas (currently Bayfront and in the future the City of Jersey City), in cooperation with Honeywell, will train their maintenance workers to conduct routine maintenance per SA-6 North Consent Decree Paragraph 64(d) and SA-6 South Consent Decree Paragraph 78(d) in methods that will not jeopardize the Chromium Remedy. At the title owner's request, Honeywell will provide initial and annual refresher training to the title owner's maintenance workers. The training will include identifying prohibited uses or features in the Open Space Areas.

In accordance with paragraph 64(d) of the SA-6 North Consent Decree and paragraph 78(d) of the SA-6 South Consent Decree, Honeywell will develop and provide training materials to the City of Jersey City and the Developer of the Open Space Areas and Deed Notice Areas. Honeywell will work with the City of Jersey City and the Developer as appropriate to develop the worker training materials to be used to train maintenance workers coming onsite. The worker training materials will be developed and attached to this LTMP prior to the title owner taking over maintenance responsibilities. The training materials will be reviewed by Honeywell for applicability on an annual basis and updated if necessary, and the LTMP appendix will be updated accordingly.

The title owner will provide annual reports that only trained workers were utilized in the Open Space Areas and Deed Notice Area 3 area (Site 163 deed notice area) and include proof of the type of training of workers to the Parties and the Special Master. The title owner will also annually provide notice of any violations of the

restrictions in the Consent Decrees and the OSDS on the use of the Open Space Areas and Deed Notice Area 3 area found during routine maintenance. The title owner of the Open Space Areas and Deed Notice Area 3 area will establish procedures for training maintenance workers, and will provide that only those properly trained workers are performing maintenance activities. In the event that Honeywell and the title owner decide that any long term monitoring activities can be conducted in coordination with routine maintenance activities, such monitoring activities will be subject to Honeywell oversight, will be performed by workers properly trained, and will be reported by Honeywell in quarterly and annual reports.

Replacement or repairs of the historic displays in the Open Space Areas and "Call Before Digging" signage in the Deed Notice Areas will be conducted by Honeywell as necessary so that they remain in a readable condition.

Replacement or repairs of the "No Thru Trucks" signage will be conducted by Jersey City as necessary so that they remain in a readable condition.

Repair or replacement of roads, manhole covers, and utility lines will be conducted by Honeywell or the City of Jersey City as necessary in conformance with the OSDS.

4.0 REPORTING

This section provides requirements for reporting and periodic plan updates. **Table 3** provides a timetable of the LTMP inspection/monitoring requirements. **Table 4** summarizes reporting requirements.

4.1 QUARTERLY AND ANNUAL REPORTING

Honeywell will maintain written logs and/or other records to document monitoring and remediation activities undertaken as part of this LTMP. Monitoring and remediation activities will be documented in writing, utilizing industry standard methods (such as bound field books). Copies of records, including groundwater data, will be provided to the Parties, quarterly and/or annually, as required in Paragraphs 64 and 65 of the SA-6 North Consent Decree and Paragraphs 78 and 79 of the SA-6 South Consent Decree. A report of all groundwater data for the Development AOC will be submitted annually per the SA-6 South Consent Decree Paragraphs 70 and 86(c)(vii). Honeywell shall maintain written records of any additional monitoring undertaken in response to changes in site conditions and such monitoring and the results shall be promptly reported to the Special Master and the Parties and, insofar as they concern groundwater, shall also be included in the IGWMR for each year samples are collected or field measurements made.

The Deed Notices for SA-6 North and SA-6 South are anticipated to be recorded by the third quarter of 2017. The implementation of the LTMP, including quarterly and annual inspections of the Open Space Areas and Deed Notice Areas, is scheduled to begin in the 1st Quarter 2017 for SA-6 South and in the 2nd Quarter 2017 for SA-6 North in compliance with the requirements of the SA-6 South and North Consent Decrees. Quarterly and annual inspections will be recorded on inspection log forms (example form provided in **Appendix B-1**) and submitted to the Special Master and Parties on a quarterly basis. Honeywell anticipates that copies of inspection logs/records will be provided on or about the 1st Quarter 2017 and quarterly thereafter. Inspection logs will include copies of all Dig Permits, Intrusive Excavation Plans, Deed Notice Disturbance Reports, and Post Work Documentation Reports for the period.

Reporting of groundwater monitoring results is performed on an annual basis as part of the Integrated Annual Groundwater Performance Reports for Study Areas 5,

6 and 7 by Honeywell (currently prepared for Honeywell by Cornerstone); the most recent report was submitted in the 3rd Quarter 2017. It is anticipated that future reports will also include Remedial Action Protectiveness Biennial Certification Reports for SA-6 South Shallow Groundwater, following NJDEP issuance of a Remedial Action Permit for Shallow Groundwater.

4.2 BIENNIAL CERTIFICATION REPORTS

Per N.J.A.C. 7:26E-8 Remedial Action Protectiveness Biennial Certification Reports for soils and shallow groundwater as part of the Deed Notice and/or CEA requirements will be prepared with the first submittal by August 31, 2018 summarizing the observations of the quarterly and annual inspections and documenting any changes or alteration to the engineering controls. The NJDEP reporting form(s) required by the TRSR will be used for this Report. The current form is included in **Appendix C**.

As required by the TRSR, the report will compare New Jersey laws, remediation standards, and other regulations applicable at the time the engineering or institutional controls were established with any relevant subsequently promulgated or modified laws, regulations or remediation standards to determine whether any changes in applicable laws, regulations, or remediation standards have occurred; and whether the institutional controls comply with the requirements of any new laws and regulations. The report will also assess whether the remedy is functioning as intended, whether the exposure assumptions and remedial action objectives used at the time of the remedy selection are still valid, and whether any other information has come to light that requires a reassessment of the protectiveness of the remedy. If necessary, any such decision points will be documented in the appropriate attachments of the NJDEP forms.

Copies of the Biennial Certification Report will be provided to Parties mandated by the TRSR and Paragraphs 60 of the North Consent Decree and Paragraph 74 of the South Consent Decree as follows:

- Office of the Jersey City Clerk
- Hudson County Clerk
- Jersey City Dept. of Health & Human Services
- Hudson Regional Health Commission

- Owner of Property indicated on the Deed Notices
- Current Property Owner/Operator of all portions of SA-6 North and SA-6 South
- Riverkeeper
- NJDEP
- Special Master.

4.3 CHROMIUM REMEDY DISTURBANCE REPORTS

Following completion of work involving the disturbance and restoration of the Chromium Remedy (e.g., engineering controls or cap materials) in the Open Space Areas or Deed Notice Areas, Honeywell will provide documentation of the completed work, and certification by a licensed New Jersey Professional Engineer, that the work was completed in compliance with the SA-6 North or South Consent Decrees and OSDS, and that remedial measures were restored in conformance with the 100% Design or to a level of protection at least equivalent to the original Chromium Remedy. Post-work documentation will be addressed either as part of the Report of Deed Notice Disturbance to the NJDEP when such a report is required, or in the Post Work Documentation Report pursuant to Section 3.2.1 if the Report of Deed Notice Disturbance is not required. A copy of the Report of Deed Notice Disturbance will be provided to the Special Master and Parties concurrent with submittal to the NJDEP. The Report of Deed Notice Disturbance/Post Work Documentation Report shall be completed and submitted within 60 days of restoration of the Chromium Remedy. If the disturbance or restoration extends beyond 60 days of the initial disturbance, Honeywell will provide a monthly notice documenting the status and progress of the disturbance and restoration work, and include a look-ahead schedule for the restoration work.

Based upon the completed work to restore the Chromium Remedy, Honeywell shall make updates, if necessary, to the 100% Design Record Drawings.

4.4 MONITORING PLAN UPDATE AND PROCEDURES FOR CHANGES

In accordance with Paragraph 64(b) of the SA-6 North Consent Decree and Paragraph 78(b) of the SA-6 South Consent Decree, the LTMP will be reviewed annually and updated as needed based on changes to field conditions, regulatory requirements, and/or other relevant project documents for the AOCs. The process for making changes to the LTMP is described below.

In accordance with Paragraphs 64 of the SA-6 North Consent Decree and 78 of the SA-6 South Consent Decree, any Party to the Consent Decree may propose changes to the scope of monitoring activities in the LTMP. If the Parties agree to proposed changes, then the LTMP will be revised to incorporate the agreed upon changes, subject to approval by the NJDEP and Special Master or by the Court. If the Parties are unable to reach agreement, the Party proposing the change may submit the dispute to the court for resolution. Changes to the LTMP that concern groundwater monitoring shall be incorporated into the SAP.

4.5 CONTINGENCY PLAN AND NOTIFICATION PLAN

In accordance with Paragraphs 64, 66 and 68 of the SA-6 North Consent Decree, and Paragraphs 78, 80 and 82 of the SA-6 South Consent Decree, Contingency Plan requirements include a plan to notify relevant parties (NJDEP, Special Master, and Parties) of any event penetrating or disturbing the Deed Notice Areas, Open Space Areas, or underground barrier walls, or harming the integrity of the Chromium Remedy; the steps taken to identify the problem; and the standards for remedying the problem. The Notification Plan is set forth in Section 3.2.1 of this LTMP. This plan shall be updated annually.

4.6 NOTICE TO STAKEHOLDERS

In accordance with Paragraphs 66 and 68 of the SA-6 North Consent Decree, and Paragraphs 80 and 82 of the SA-6 South Consent Decree, stakeholders (including owners and tenants) shall be notified regarding conditions and activities affecting the Sites as follows. Stakeholders include all owners, residents, lessees, and commercial tenants.

- Annual summary notice of the Chromium Remedy that is made available on any Honeywell developed website (current website: http://www.jerseycitychromiumcleanup.com) to inform the public of contamination at Study Area 5, Study Area 6 North and Study Area 6 South. This notice will include a description of long term monitoring and additional remediation activities undertaken at each AOC. This annual update is required upon completion of the annual long-term monitoring requirements.

- Written notice at the purchase or lease to the tenants occupying SA-6 or SA-7 describing the long term monitoring or maintenance activities undertaken or planned with respect to the Chromium Remedy.
- Annual notice to all stakeholders describing the long term monitoring and additional remediation activities undertaken and planned with respect to the Chromium Remedy. This notice shall include language that stakeholders report activities seen that may jeopardize the integrity of the engineering controls.

In accordance with Paragraph 67 of the SA-6 North Consent Decree and Paragraph 81 of the SA-6 South Consent Decree, Honeywell will provide annually a letter to the Riverkeeper and Jersey City documenting compliance with the above notification requirements. The annual notice letter sent in or around April each year to Riverkeeper and Jersey City will also include:

- Notifications received through the Terradex system of entities, including utilities, seeking to engage in subsurface activities at the sites (see Section 2.1.3).
- Notice describing an owner/operator or Honeywell-planned or emergency excavation and safety measures implemented to protect individuals near the Sites.

4.7 ANNUAL REPORT BY TITLE OWNER

The title owner shall annually provide to the Special Master and Parties a Training Report describing the training that has been provided to maintenance and other workers who will be working within the Open Space Areas and Deed Notice Area 3 area (Site 163 deed notice area). The Report shall include the training materials used.

The report shall also include notice of any violations of the restrictions of the Consent Decrees, Deed Notices, and the OSDS, relating to the Open Space Areas and the Deed Notice Area 3 area identified by workers, including a description of the violation, when it was discovered, when it was reported to Honeywell, what corrective action(s) were implemented, and any steps taken to prevent the violation from recurring.

In accordance with Paragraph 60(j)(xii) of the SA-6 North Consent Decree and Paragraph 74(j)(xii) of the SA-6 South Consent Decree, after the City of Jersey City takes title to the Open Space Areas, Jersey City shall annually provide to the Special Master, Parties and the holder of the Conservation Restrictions a report describing any alterations or additions to the development of the Open Space Areas.

5.0 HONEYWELL PROGRAM ORGANIZATION

This section provides Honeywell's program organization and key personnel.

Honeywell Project Manager/Remediation Manager

Honeywell will designate a Remediation Manager to act as the primary contact for this project. Honeywell's business address and Project Manager follows:

William J. Hague
Honeywell
115 Tabor Road (4D-8)
Morris Plains, NJ 07950
Phone: (973) 455-2175

NJDEP Primary Contact

NJDEP will maintain a case management team for this project. NJDEP's business address follows:

New Jersey Department of Environmental Protection
Division of Responsible Party Site Remediation
401 E. State Street, P.O. Box 420, Mail Code 401-06
Trenton, NJ 08625-0420
Phone: To Be Determined

Environmental Consultant – Amec Foster Wheeler Environment & Infrastructure, Inc.

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) is responsible for conducting inspections, monitoring and preparing reports and at the direction of Honeywell, and may also provide other services, such as oversight of cap repair, if necessary. Amec Foster Wheeler's business address and general phone number follows:

Amec Foster Wheeler Environment & Infrastructure, Inc.
American Metro Center
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
Phone: (609) 689-2829

Primary contacts for Amec Foster Wheeler are as follows:

Project Responsibility	**Name**	**Telephone Number**
Program Manager	Ed Gaven	609-631-2905
Project Manager	Dennis Nagg	609-631-2928
Engineering Manager/Engineer of Record	Joe Clifford	609-631-2903
Designated Local Health & Safety Officer	Andrew Shust	609-631-2921
Field/Technical Support	Telly Giouzelis Dave Ambrose Brian Shea	609-631-2906 484-542-0980 201-323-2557

6.0 REFERENCES

Amec Environment & Infrastructure, Inc., 2012a; March 2012; Remedial Investigation Report/Remedial Action Selection Report/Remedial Action Work Plan for Non-Chromium Contaminants of Concern, Study Area 6 South, exclusive of Site 163.

Amec Environment & Infrastructure, Inc., 2012b; May 2012; Supplemental Remedial Investigation Report/Remedial Action Selection Report/Remedial Action Work Plan Study Area 6 South Site 163.

Amec Environment & Infrastructure, Inc., June 2013; 100% Design Reports SA-6 North and SA-6 South.

Cornerstone Environmental Group, April 2014; Integrated Groundwater Sampling and Analysis Plan, Study Areas 5, 6, and 7.

MACTEC Engineering and Consulting, 2008a, January 2008; Remedial Action Selection Report/Remedial Action Workplan for Chromium, Study Area 6 North, Site 087 and Site 088. January 2008 with amendment February 2008.

MACTEC Engineering and Consulting, 2008b, November 2008; Remedial Investigation Report/Remedial Action Selection Report/Remedial Action Workplan for Non-Chromium, Study Area 6 North.

MACTEC Engineering and Consulting, 2008c, December 2008; Supplemental Remedial Investigation Report, Remedial Action Selection Report, and Remedial Action Workplan for Chromium, Study Area 6 South, exclusive of Site 163.

MACTEC Engineering and Consulting, 2011; March 2011; Remedial Action Selection Report/Remedial Action Workplan for Non-Chromium Contaminants of Concern, Site 163.

NJDEP, 2005; revised 2011; Field Sampling Procedures Manual, August 2005.

NJDEP, 2007; Chromium Policy Directive dated February 8, 2007.

NJDEP, 2012; Technical Requirements for Site Remediation, N.J.A.C. 7:26E. Last amended May 7, 2012.

United States District Court, District of New Jersey, 1993, modified 2011; Administrative Consent Order (ACO) between Honeywell and the NJDEP

dated June 17, 1993 and modified pursuant to a Consent Judgment between Honeywell and the NJDEP dated September 7, 2011.

United States District Court, District of New Jersey, 2008; Settlement Consent Order By and Between the Jersey City Entities and Honeywell International Inc.

United States District Court, District of New Jersey, 2012; First Amended Consent Decree regarding the Remediation and Redevelopment of Study Area 6 North (SA-6 North Consent Decree).

United States District Court, District of New Jersey, 2012; First Amended Consent Decree Regarding Remediation and Redevelopment between Honeywell, Hackensack Riverkeeper, Inc. and the City of Jersey City (SA-6 South Consent Decree).

United States Environmental Protection Agency, 2001; Comprehensive Five-Year Review Guidance (OSWER Directive 9355.7-03B-P).

7.0 LIST OF ACRONYMS AND ABBREVIATIONS

ACO	Administrative Consent Order
AOC	Area of Concern
CEA	Classification Exception Area
CGI	Combustible Gas Indicator
DCBs	Design Change Bulletins
FM	Force Main
FSPM	Field Sampling Procedures Manual
ft msl	feet above mean sea level
GWMP	Groundwater Monitoring Plan
GWQS	Groundwater Quality Standards
HASP	Health and Safety Plan
IGWMR	Integrated Groundwater Monitoring Report
ISRA	Industrial Site Recovery Act
JCDPW	Jersey City Department of Public Works
JCIA	Jersey City Incinerator Authority
JCMUA	Jersey City Municipal Authority
LEL	Lower Explosive Limit
LSRP	Licensed Site Remediation Professional
LTMP	Long Term Monitoring Plan
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
OSDS	Open Space Design Standards
OSWER	Office of Solid Waste & Emergency Response
PSE&G	Public Service Electric & Gas
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
ROW	Right-Of-Way
SA	Study Area
SAP	Integrated Groundwater Sampling and Analysis Plan
SGWMP	SA-6 South Development Area Shallow Groundwater Monitoring Plan

TA	Treatment Area
TRSR	Technical Requirements for Site Remediation
USEPA	United States Environmental Protection Agency

TABLES

Table 1
LTMP Implementation
Study Areas 6 North & South

Consent Decree Task	Responsible Party	Frequency	LTMP Major Section	SA-6 North AOC 1 Open Space Consent Decree Reference/ Comment	SA-6 South Open Space AOC Consent Decree Reference/ Comment
CEA	Honeywell	One Time	4.2 Biennial Certification Reports	58g	69g
L Well GW Remedy	Honeywell	1 year after Chromium Remedy	3.1.9 Groundwater Sampling 3.2.4 L-Well Monitoring	N/A	72
Deed Notice	Honeywell and/or Title Owner	Completion Chromium Remedy	2.1.3 Administrative and Institutional Controls 3.1.13 Soil Sampling of In-Situ Injection Areas 3.2.1 Chromium Remedy Disturbance 4.1 Quarterly and Annual Reporting 4.2 Biennial Certification Reports	60c	74c
Implement, monitor, maintain, repair, replace Chromium Remedy	Honeywell	Implied Perpetuity	3.1 Inspections and Monitoring 3.2 Contingency Plan 4.4 Monitoring Plan Update and Procedures for Changes	61	75
LTMP	Honeywell	Annual Review	4.4 Monitoring Plan Update and Procedures for Changes	62-63	76-77

Table 1
LTMP Implementation
Study Areas 6 North & South

Consent Decree Task	Responsible Party	Frequency	LTMP Major Section	SA-6 North AOC 1 Open Space Consent Decree Reference/ Comment	SA-6 South Open Space AOC Consent Decree Reference/ Comment
Annual Reports of LTMP Activities to RK, Jersey City, SM, & NJDEP	Honeywell	Annual	4.1 Quarterly and Annual Reporting	64	78
Inspection Prohibited/ Permissible Uses/Stop Usage	Honeywell	Quarterly	2.1.3 Administrative and Institutional Controls 3.1.2 Chromium Remedy Visual Inspections	64 (a) i	78 (a) i
Inspect Grade and Slope for erosion/ remediate significant erosion	Honeywell	Quarterly	3.1.3 Surface Grade Visual Inspections 3.1.4 Differential Settlement Visual Inspections	64 (a) ii	78 (a) ii
Inspect Cap settlement/ subsidence; propose further investigation; remediate	Honeywell	Quarterly	3.1.3 Surface Grade Visual Inspections 3.1.4 Differential Settlement Visual Inspections	64 (a) iii	78 (a) iii
Baseline Topographic Survey	Honeywell	Baseline & three 5-year intervals	3.1.12 Topographic Survey	64 (a) iv	78 (a) iv
Inspect Capped area disturbance, exposure of warning layer or cap materials, and/or animal burrowing; construction or utility work; repair	Honeywell	Quarterly	3.1.3 Surface Grade Visual Inspections 3.1.4 Differential Settlement Visual Inspections 3.1.5 Disturbance Visual Inspections	64 (a) v & vi	78 (a) v & vi

Table 1
LTMP Implementation
Study Areas 6 North & South

Consent Decree Task	Responsible Party	Frequency	LTMP Major Section	SA-6 North AOC 1 Open Space Consent Decree Reference/ Comment	SA-6 South Open Space AOC Consent Decree Reference/ Comment
			3.1.6 Burrowing Animal Visual Inspections 3.1.7 Vegetative Cover Visual Inspection 3.2.7 Routine Maintenance and Repairs		
Inspect Vegetative Cover / Mowing	Honeywell	Quarterly/ Mowing As Needed	3.1.7 Vegetative Cover Visual Inspection 3.2.7 Routine Maintenance and Repairs	64 (a) vii	78 (a) vii
Groundwater Level Measurements	Honeywell	Quarterly	3.1.8 Groundwater Elevation Monitoring	64 (a) viii	78 (a) viii
Monitoring Gas Venting System & Vented Gases	Honeywell	Monthly – 1st year; quarterly if stable	3.1.10 Gas Venting System and Vented Gases 3.2.6 Methane Monitoring	64 (a) ix	78 (a) ix
Contingency Plan (as part of LTMP)	Honeywell	Annually Updated	3.2 Contingency Plan 4.5 Contingency Plan And Notification Plan	64 (c)	78 c
Routine Maintenance	Title Owner of Open Space	Annual	3.2.7 Routine Maintenance and Repairs	Par. 64 d	78 d
Training Materials to Owner for Routine Maintenance	Honeywell	Reviewed Annually	3.2.7 Routine Maintenance and Repairs	Par. 64 d	78 d
Report Describing Training of Maintenance	Title Owner of Open Space	Annual	3.2.7 Routine Maintenance and Repairs	Par. 64 d	78 d

Table 1
LTMP Implementation
Study Areas 6 North & South

Consent Decree Task	Responsible Party	Frequency	LTMP Major Section	SA-6 North AOC 1 Open Space Consent Decree Reference/ Comment	SA-6 South Open Space AOC Consent Decree Reference/ Comment
Workers to Parties & SM			4.5 Contingency Plan And Notification Plan		
Written Logs of activities of LTMP	Honeywell	Quarterly	4.1 Quarterly and Annual Reporting	64 e	78 e
Monitoring and Reporting to RK and JC all submitted to NJDEP	Honeywell	Varies, Pursuant to LTMP Requirements	4.1 Quarterly and Annual Reporting 4.2 Biennial Certification Reports 4.5 Contingency Plan And Notification Plan	65	79
Annual Reports of LTMP Activities to Stakeholders	Honeywell	Annual	4.1 Quarterly and Annual Reporting 4.2 Biennial Certification Reports 4.5 Contingency Plan And Notification Plan	66	80

Table 2
Contingency Plan Triggers Cross-References
Study Areas 6 North & South

Contingency Plan Section	Trigger Section
3.2.1 Chromium Remedy Disturbance	3.1.2 Chromium Remedy Visual Inspections 3.1.3 Surface Grade Inspections 3.1.4 Differential Settlement Visual Inspections 3.1.5 Disturbance Visual Inspections 3.1.6 Burrowing Animals Visual Inspection 3.2.1.1 Notification
3.2.2 Vegetative Cover Degradation	3.1.2 Chromium Remedy Visual Inspections 3.1.3 Surface Grade Inspection 3.1.4 Differential Settlement Visual Inspections 3.1.5 Disturbance Visual Inspections 3.1.6 Burrowing Animals Visual Inspection 3.1.7 Vegetative Cover Visual Inspection
3.2.3 Contingent Groundwater Extraction System	3.1.8 Groundwater Elevation Monitoring
3.2.4 SA-6 South L-Well Monitoring	3.1.9 Groundwater Sampling
3.2.5 SA-6 South Development AOC	3.1.9 Groundwater Sampling
3.2.6 Methane Monitoring	3.1.10 Gas Venting System & Vented Gases
3.2.7 Routine Maintenance and Repairs	3.1.1 Timing and Schedule of Inspections 3.1.2 Chromium Remedy Visual Inspections 3.1.3 Surface Grade Inspections 3.1.7 Vegetative Cover Visual Inspection 3.1.11 Sign Inspections 3.1.12 Topographic Survey 3.1.14 Other Inspections

Table 3
LTMP Inspection/Monitoring Timetable
Study Areas 6 North & South

Monitoring Plan Task	Frequency	SA-6 North AOC 1 Open Space Reference/Comment	SA-6 South Open Space AOC Reference/Comment
INSPECTIONS / MONITORING			
Prohibited/Permissible Uses	Quarterly	Consent Decree Par. 64 (a) i	Consent Decree Par. 78 (a) i
Grade and Slope for erosion	Quarterly	Consent Decree Par. 64 (a) ii	Consent Decree Par. 78 (a) ii
Cap settlement/ subsidence	Quarterly	Consent Decree Par. 64 (a) iii	Consent Decree Par. 78 (a) iii
Baseline Topographic Survey	Baseline & three 5-year intervals	Consent Decree Par. 64 (a) iv	Consent Decree Par. 78 (a) iv
Capped area disturbance, exposure of warning layer or cap materials, and/or animal burrowing; construction or utility work	Quarterly	Consent Decree Par. 64 (a) v & vi	Consent Decree Par. 78 (a) v & vi
Vegetative Cover / Mowing/removal of vegetation	Quarterly / As Needed	Consent Decree Par. 64 (a) vii	Consent Decree Par. 78 (a) vii
Groundwater Level Measurements Perimeter Pools	Quarterly Monthly	Consent Decree Par. 64 (a) viii Integrated Groundwater Monitoring Plan	Consent Decree Par. 78 (a) viii Integrated Groundwater Monitoring Plan
Gas Venting System & Vented Gases	Monthly – 1st year; quarterly if stable	Consent Decree Par. 64 (a) ix	Consent Decree Par. 78 (a) ix
Groundwater Sampling Development AOC L-Wells	 Quarterly 1 year after completion of Chromium Remedy	 Not Applicable Not Applicable	 Consent Decree Par. 70 and 86 Consent Decree Par. 72
Signs or displays	Quarterly	Consent Decree Par. 60 (l)	Consent Decree Par. 74 (l)
Disturbance to visible utility lines and manhole covers	Annually	LTMP, Section 3.1.14	
Road surface conditions	Every 5 Years	LTMP, Section 3.1.14	

Table 4
LTMP Reporting Timetable
Study Areas 6 North & South

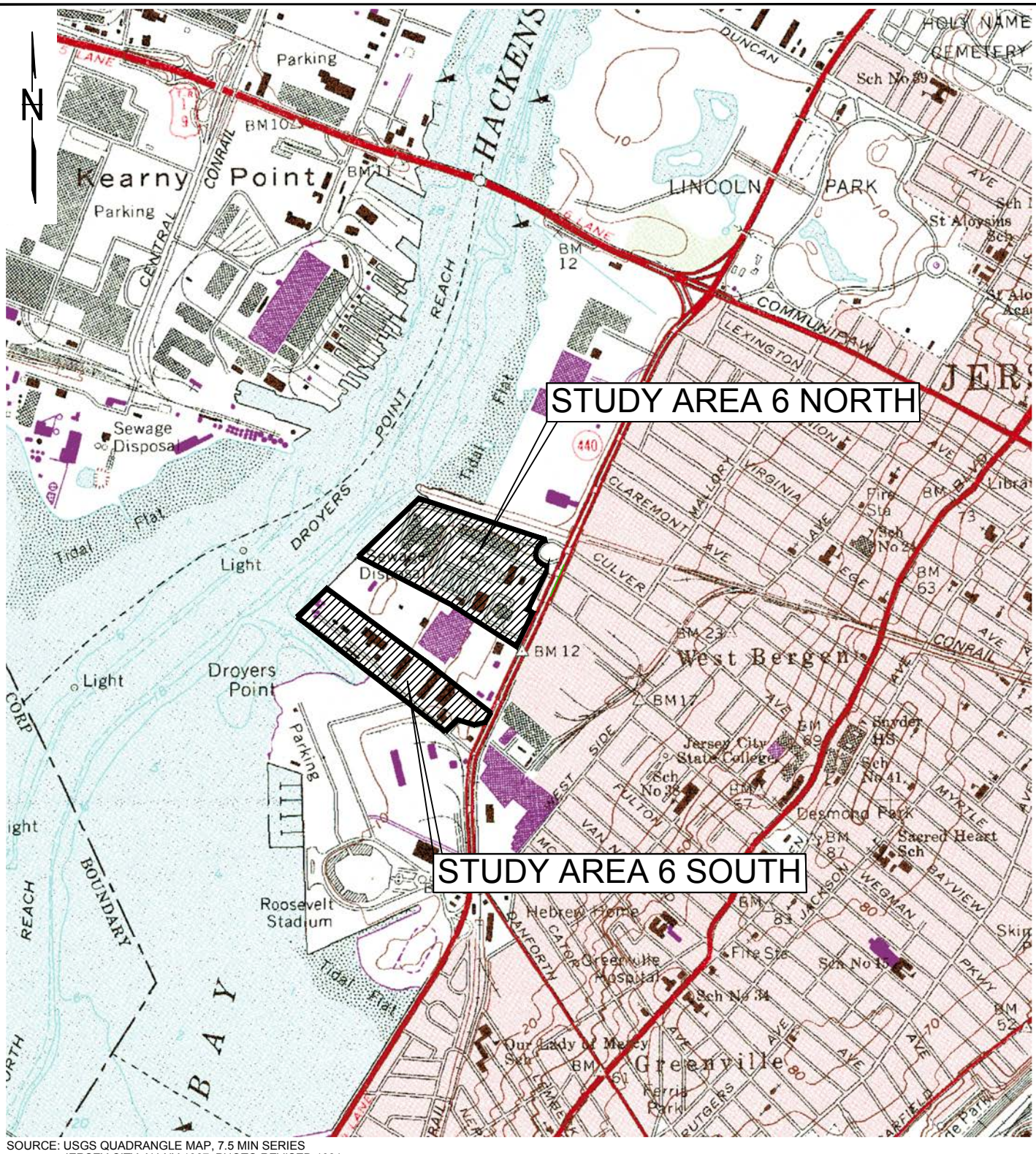
Monitoring Plan Task	Responsible Party	Receiving Party	Frequency	SA-6 North AOC 1 Open Space Reference/Comment	SA-6 South Open Space AOC Reference/ Comment
REPORTING					
Annual Report of Alterations/Additions to development	Jersey City	Holders of Conservation Restriction; Honeywell; Riverkeeper	Annual	Consent Decree Par. 60 (j)	Consent Decree Par. 74 (j)
Biennial Certification Report-Soil	Honeywell	Parties; Hudson County Clerk; Jersey City and Regional Health Departments	Biennial	Consent Decree Par. 60 (c)	Consent Decree Par. 74 (c)
Inspection Monitoring Logs	Honeywell	Riverkeeper; Jersey City (For North)	Quarterly	Consent Decree Par. 64 (e)	Consent Decree Par. 78 (e)
Report of LTMP Activities Completed	Honeywell	Riverkeeper; Jersey City (for North); Special Master; NJDEP; Stakeholders	Annual	Consent Decree Par. 64 and 68	Consent Decree Par. 78 and 82
Contingency Plan Annual Update	Honeywell	NJDEP; Special Master; Parties	Annual	Consent Decree Par. 64 (c)	Consent Decree Par. 78 (c)
All documents submitted to NJDEP	Honeywell	Riverkeeper; Jersey City (for North)	As needed	Consent Decree Par. 65	Consent Decree Par. 79
Annual groundwater data and remedial system performance; Notification Prior to Groundwater Sampling	Honeywell	Riverkeeper;, Jersey City; Special Master; NJDEP	Annual	Integrated Annual Groundwater Performance Report for SA-5, SA-6, and SA-7	Consent Decree Par. 70 and 86
Annual Worker Training Documentation	Owner	Honeywell	Annual	Consent Decree Par. 64 (d)	Consent Decree Par. 78 (d)
Documentation of Public Notice (below)	Honeywell	Riverkeeper; Jersey City (for North)	Annual	Consent Decree Par. 67	Consent Decree Par. 81
Deed Notice Disturbance Report/Post Work Documentation	Honeywell/Title Owner	NJDEP; Special Master; Parties	next biennial certification	LTMP Section 3.2.1.2/Section 3.2.1.3/Section 3.2.1.4/Section 4	LTMP Section 3.2.1.2/Section 3.2.1.3/Section 3.2.1.4/Section 4
PUBLIC NOTICE					
Notice of contamination, remedial actions, importance of Stakeholders to report activities that may impact engineering controls	Honeywell	Stakeholders	Annual & Deed/lease	Consent Decree Par. 66	Consent Decree Par. 80
Update website to inform the public about chromium remedies	Honeywell	Stakeholders	Annual	Consent Decree Par. 68	Consent Decree Par. 82

Notes:
Jersey City – City of Jersey City Entities
Parties – include Jersey City, Riverkeeper, Honeywell
NJDEP – New Jersey Department of Environmental Protection
Stakeholders – residents and commercial tenants of SA-6 and SA-7

Table 5
LTMP Elements Applicability to Deferred Areas Other than Open Space Areas
Study Areas 6 North & South

Monitoring Plan Task	Frequency	DN #2	DN#3	DN#4	DN #6	DN#7	DN#9	DN#10	DN#14
INSPECTIONS / MONITORING									
Prohibited/Permissible Uses	Quarterly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Grade and Slope for erosion	Quarterly	NA	NA	NA	NA	NA	NA	NA	NA
Cap settlement/ subsidence	Quarterly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline Topographic Survey	Baseline & three 5-year intervals	NA	NA	NA	NA	NA	NA	NA	NA
Capped area disturbance, exposure of warning layer or cap materials, and/or animal burrowing; construction or utility work	Quarterly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vegetative Cover Mowing as needed	Quarterly	NA, paved surface	NA, paved or stone surface	NA, paved or stone surface	Yes	NA, paved surface	NA, paved surface	NA, paved surface	NA, paved surface
Groundwater Level Measurements Perimeter Pools	Quarterly Monthly	NA	NA	NA	NA	NA	NA	NA	NA
Gas Venting System & Vented Gases	Monthly – 1st year; quarterly if stable	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Sampling Development AOC L-Wells	 Quarterly 1 year after completion of Chromium Remedy	NA	NA	NA	NA	NA	NA	NA	NA
Signs or displays	Quarterly	NA	NA	NA	NA	NA	NA	NA	NA

FIGURES



SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480170562 *DRAWING:* 3480170562-5710-SLM0-0000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**FIGURE 1** SITE LOCATION MAP STUDY AREA 6 NORTH - SITES 087 & 088 STUDY AREA 6 SOUTH - SITES 073, 124, 125, 134, 140 & 163 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 07/13/15 *CHECKED/DATE:* DEN 07/13/15		

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LEGEND

- PROPERTY BOUNDARY
- FORMER JCIA/JCMUA/JCDPW PROPERTY BOUNDARY
- SA-7 SCB WALL
- HYDRAULIC BARRIER (SA-6 NORTH)
- AS-BUILT CHROMIUM EXCAVATED LIMIT
- AS-BUILT LOCATION OF CONTINGENT GROUNDWATER COLLECTION TRENCH, ACCESS MANHOLES AND CLEANOUTS
- GROUNDWATER COLLECTION PIPE AND DEEP BEDROCK PUMPING WELL
- TA-7 IN-SITU TREATMENT AREA
- DEED NOTICE AREAS WITH CLEAN SOIL / ASPHALT / CEMENT ENGINEERING CONTROLS
- DEFERRED CHROMIUM REMEDIAL ACTION AREAS
- SA-7 PERIMETER POOLS
- OPEN SPACE CAP AREA (CHROMIUM REMEDY)
- DEVELOPMENT AREA (HISTORIC FILL CAP)
- SURFACE WATER

REV.	DATE	STATUS	BY
1	11/08/17	LABELED EXCAVATION AREAS ALONG WITH DEFERRED REMEDIAL ACTION AREAS	CW

Amec Foster Wheeler PROJECT No. 3480170562
DRAWING: 3480170562-6100-ER6N-2A00-2

PREPARED/DATE: STR 01/25/17

CHECKED/DATE: DN 01/31/17

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

FIGURE 2A
IMPLEMENTED REMEDIAL ACTIONS FOR STUDY AREA 6 NORTH
STUDY AREA 6 NORTH -SITES 87 & 88
JERSEY CITY, NEW JERSEY

P:\CAD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\S710\571004\tmp\3480170562-6100-ER6N-2A00-2.dwg Thu, 07 Dec 2017 - 10:07am scott.rudkin

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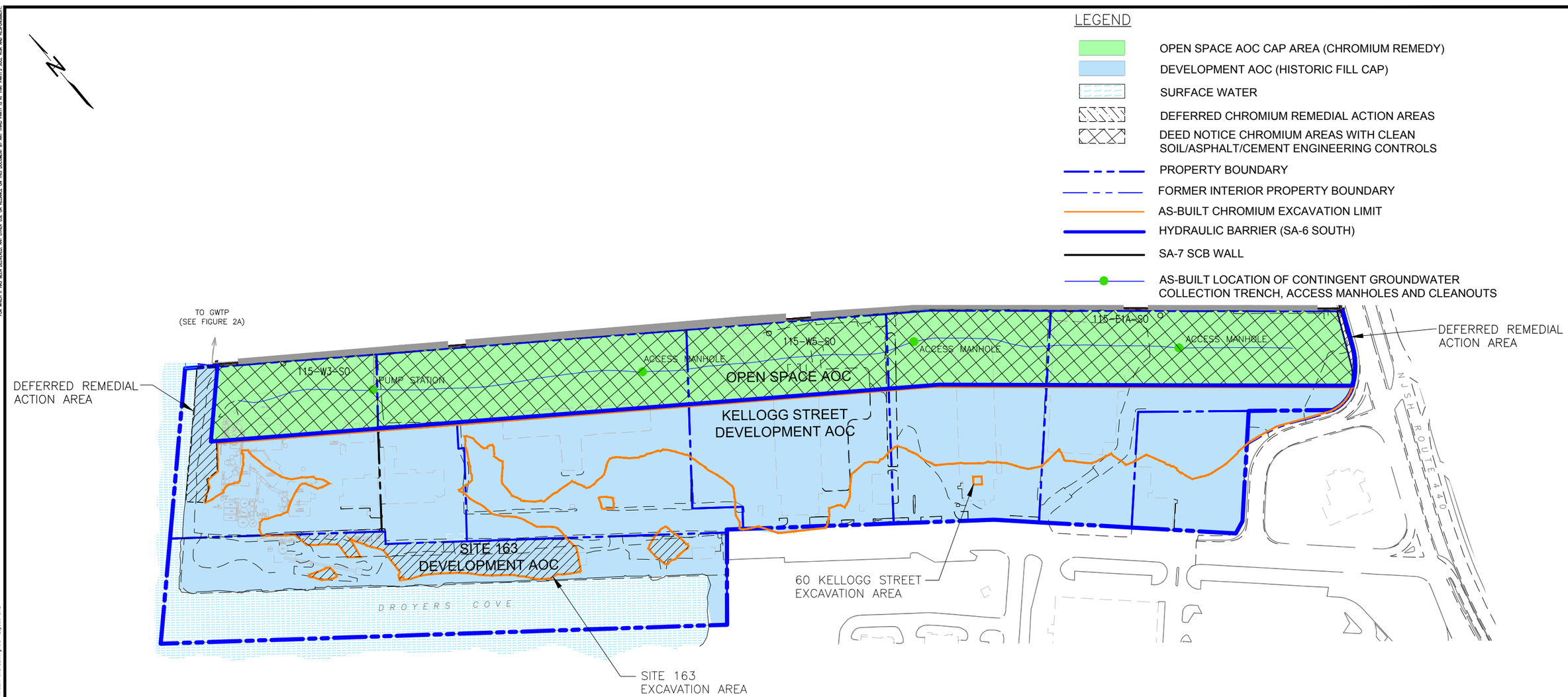

SOURCE:
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JOB NO. 10000292A, DATED DECEMBER 17, 2010.

REV.	DATE	STATUS	PRPD BY	CHKD BY
1	11/08/17	LEGEND UPDATE	CW	NW

Amec Foster Wheeler PROJECT No. 3480170562
DRAWING: 3480170562-5710-ERA0-6S02

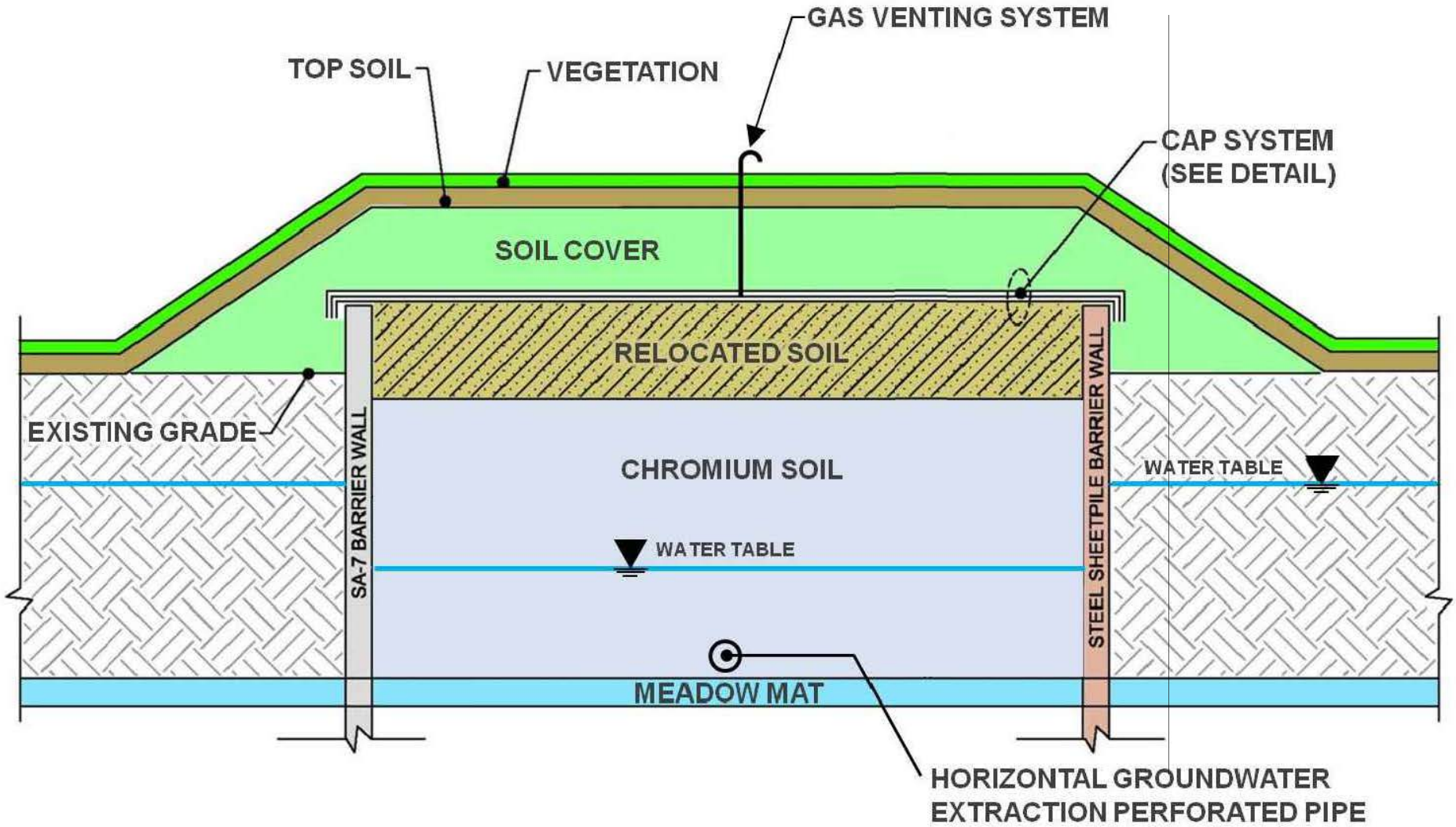
PREPARED/DATE: CW 11/08/17

CHECKED/DATE: NW 11/08/17

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

FIGURE 2B
IMPLEMENTED REMEDIAL ACTIONS FOR STUDY AREA 6 SOUTH
STUDY AREA 6 SOUTH
SITES 073, 124, 125, 134, 140 & 163
JERSEY CITY, NEW JERSEY

P:\2400\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480159488\5710\571004\dwg\3480170562-5710-ERA0-6S02.dwg Thu, 16 Nov 2017 - 11:10am charles.wingfield Layout: SITE



CHROMIUM REMEDY COMPONENTS

NTS

REV.	DATE	STATUS	DRFT BY	CHKD BY

Amec Foster Wheeler PROJECT No. 3480170562
DRAWING: 3480170562-5710-CPCS-0000

PREPARED/DATE: STR 07/20/15

CHECKED/DATE: DEN 07/20/15

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HAMILTON, NEW JERSEY 08619

FIGURE 3A
CAP-CROSS SECTION
STUDY AREA 6 NORTH - SITES 87 & 88
STUDY AREA 6 SOUTH -
SITE 073, 124, 125, 134, 140 & 163
JERSEY CITY, NEW JERSEY

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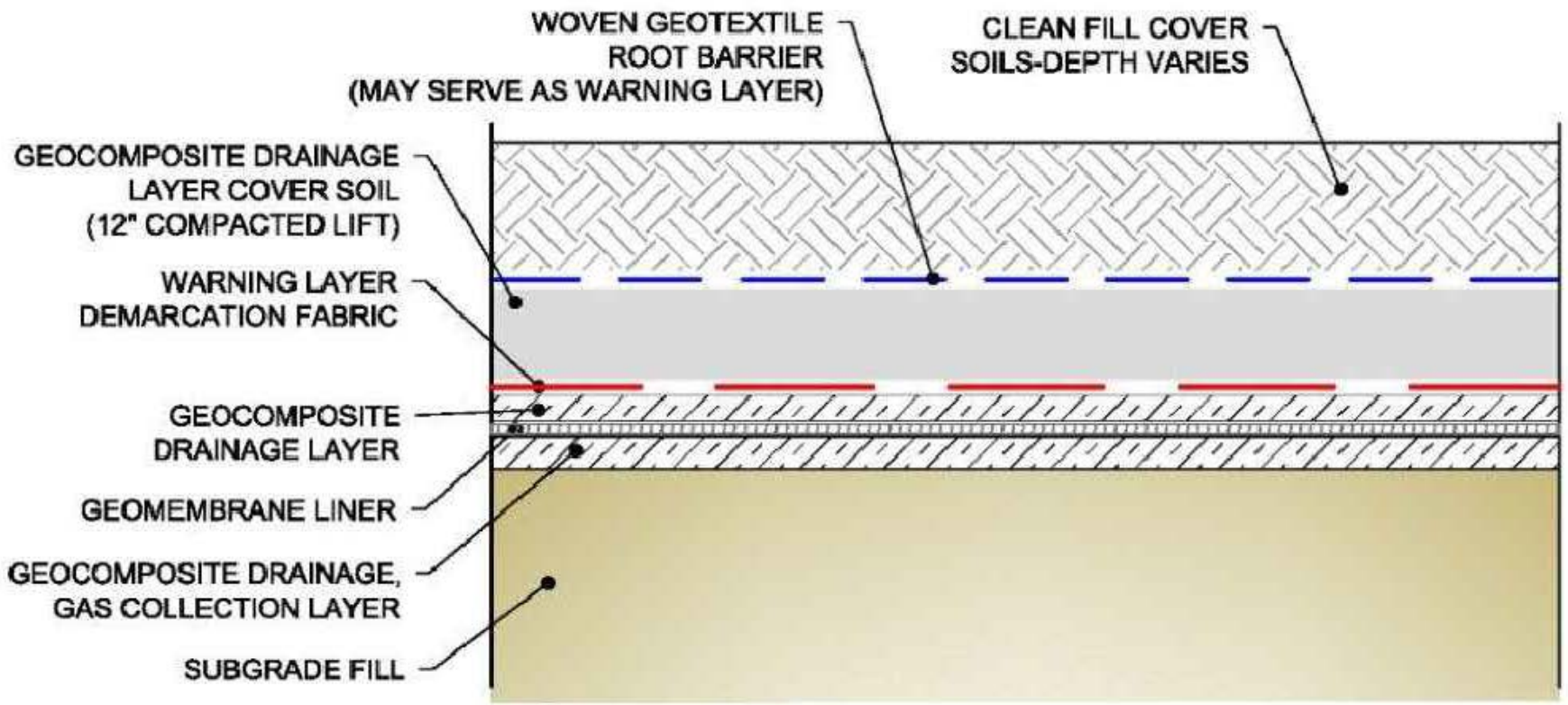

CAP SYSTEM DETAIL

NTS

REV.	DATE	STATUS	DRFT BY	CHKD BY

Amec Foster Wheeler PROJECT No. 34BD170562
DRAWING: 34BD170562-5710-C5D0-0000

PREPARED/DATE: STR 07/20/15

CHECKED/DATE: DEN 07/20/15

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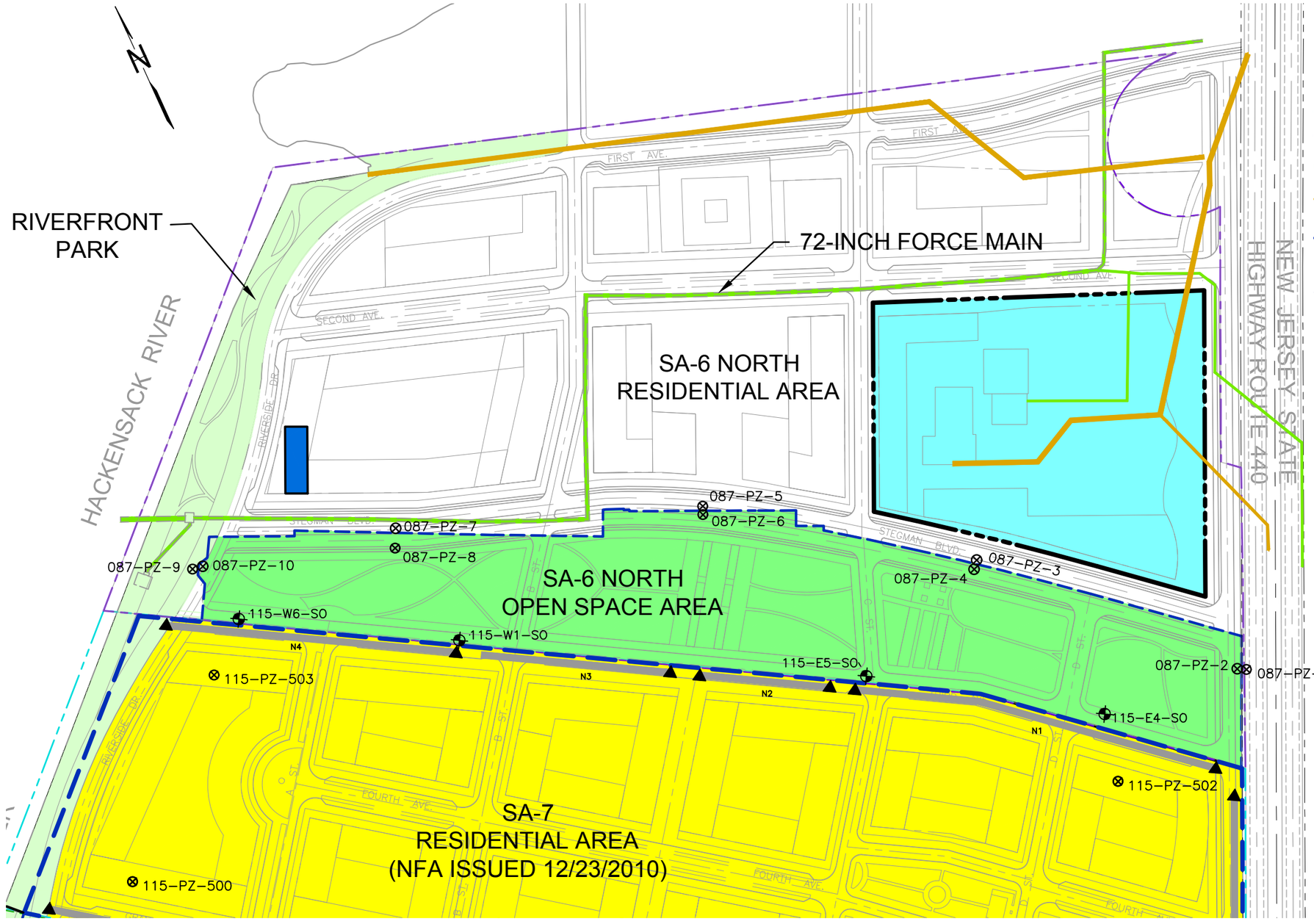
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

FIGURE 3B
CAP SYSTEM DETAIL
STUDY AREA 6 NORTH - SITES 87 & 88
STUDY AREA 6 SOUTH -
SITE 073, 124, 125, 134, 140 & 163
JERSEY CITY, NEW JERSEY



LEGEND

- EXISTING SHALLOW MONITORING WELL LOCATION
- PIEZOMETER
- SA-7 PERIMETER POOL STANDPIPES
- 6 FUTURE BLOCK / LOT DESIGNATION
- PROPERTY LINE SA-7
- PROPERTY LINE SA-6 NORTH
- 72-INCH FORCE MAIN
- STORMWATER / 96-INCH CSO
- SA-7 SOIL/CEMENT BENTONITE BARRIER
- SA-6 NORTH VERTICAL HYDRAULIC BARRIER (STEEL SHEETPILE)
- BLOCK 6 JCMUA PROPERTY
- GROUNDWATER TREATMENT PLANT
- N1 PERIMETER POOL AND DESIGNATION

NOTES:

1. NFA = NO FURTHER ACTION
2. SA-6 NORTH SHALLOW GROUNDWATER IS SUBJECT TO A CLASSIFICATION EXCEPTION AREA (CEA) FOR BOTH CHROMIUM & NON-CHROMIUM CONTAMINANTS
3. SEE FIGURE 5 FOR DEED NOTICE AREAS.

0 150 300 600
SCALE IN FEET

REV.	DATE	STATUS	PRPD BY	CHKD BY

Amec Foster Wheeler PROJECT No. 3480170562
DRAWING: 3480170562-6100-BF6N-F400

PREPARED/DATE: STR 01/25/17
CHECKED/DATE: DEN 01/31/17

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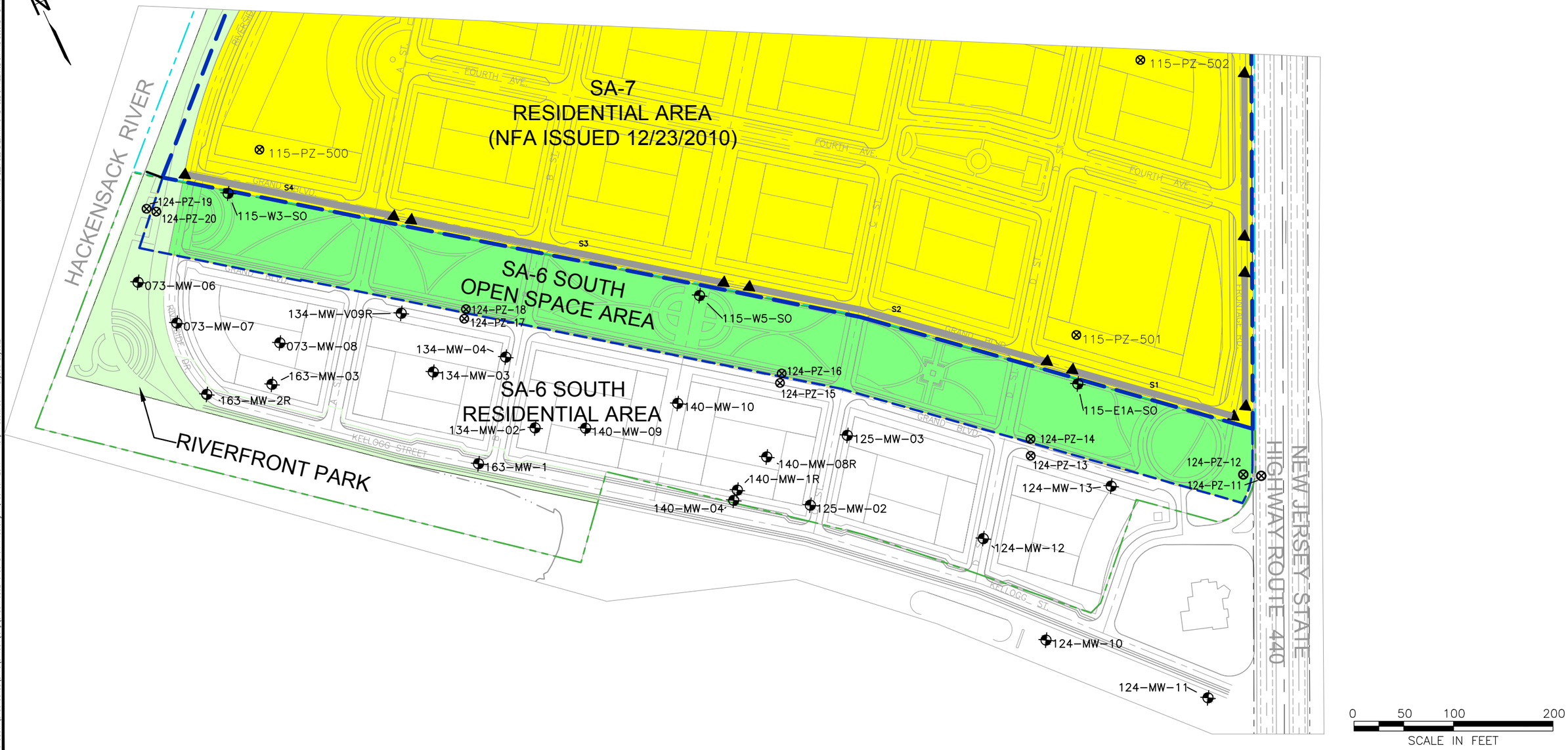
FIGURE 4A
SHALLOW GROUNDWATER MONITORING WELL LOCATION MAP FOR STUDY AREA 6 NORTH
STUDY AREA 6 NORTH - SITES 87 & 88
JERSEY CITY, NEW JERSEY

LEGEND

- EXISTING SHALLOW MONITORING WELL LOCATION
- PIEZOMETER
- SA-7 PERIMETER POOL STANDPIPES
- S1 PERIMETER POOL AND DESIGNATIONS
- PROPERTY LINE SA-7
- PROPERTY LINE SA6 SOUTH
- SA-7 SOIL/CEMENT BENTONITE BARRIER
- SA-6 SOUTH VERTICAL HYDRAULIC BARRIER (STEEL SHEETPILE)

NOTES:

1. NFA = NO FURTHER ACTION
2. SA-6 SOUTH SHALLOW GROUNDWATER IS SUBJECT TO A CLASSIFICATION EXCEPTION AREA (CEA) FOR BOTH CHROMIUM & NON-CHROMIUM CONTAMINANTS
3. SEE FIGURE 5 FOR DEED NOTICE AREAS



REV.	DATE	STATUS	PRPD BY	CHKD BY

Amec Foster Wheeler PROJECT No. 3480170562
DRAWING: 3480170562-6100-BF6N-F400

PREPARED/DATE: STR 01/25/17

CHECKED/DATE: DEN 01/31/17

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FIGURE 4B
SHALLOW GROUNDWATER MONITORING WELL LOCATION MAP FOR STUDY AREA 6 SOUTH
STUDY AREA 6 SOUTH - SITES 073, 124, 125, 134, 140 & 163
JERSEY CITY, NEW JERSEY

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LEGEND

- 72-INCH FORCE MAIN
- STORMWATER / 96-INCH CSO
- GROUNDWATER COLLECTION PIPING / TEMPORARY TREATMENT PLANT LOCATION (● ACCESS MANHOLE, EXTRACTION PUMP STATION OR CLEANOUT)
- SA-7 PERIMETER POOL
- SA-6 NORTH & SA-6 SOUTH VERTICAL STEEL HYDRAULIC BARRIER
- SA-7 SOIL/CEMENT BENTONITE BARRIER
- APPROXIMATE LOCATION OF HEXAVALENT CHROMIUM SOIL > 20 MILLIGRAMS PER KILOGRAM ON SA-7
- OPEN SPACE AREA WITH DEED NOTICE AND CONSERVATION RESTRICTION
- BLOCK 6 JCMUA PROPERTY
- BAYFRONT TRAILERS
- GROUNDWATER TREATMENT PLANT
- DEFERRED AREAS TO BE COMPLETED AFTER BULKHEAD REPLACEMENT / ROAD WIDENING/ JCMUA FUEL ISLAND RELOCATION
- AREA SUBJECT TO DEED NOTICE
- AREA SUBJECT TO A DEED NOTICE AND CONSERVATION RESTRICTION UNDER RIVER FRONT PARK, RIVERSIDE DRIVE AND KELLOGG STREET
- AREA GETS CONSERVATION RESTRICTION

NOTES:

1. NFA = NO FURTHER ACTION
2. SITE-WIDE SHALLOW GROUNDWATER IS SUBJECT TO A CLASSIFICATION EXCEPTION AREA (CEA) FOR BOTH CHROMIUM & NON-CHROMIUM CONTAMINANTS
3. SA-6 NORTH AND SA-6 SOUTH WILL BE SUBJECT TO A DEED NOTICE FOR BOTH CHROMIUM AND NON-CHROMIUM CONTAMINANTS
4. FOR SITE BOUNDARIES SEE FIGURE 4A+4B.

DEFERRED AREA TABLE	
SA 6 NORTH EA-1	PART OF DN # 9
SA 6 NORTH EA-2/3	PART OF DN # 6 & 9
SA 6 NORTH TA 7	PART OF DN # 10
SA 6 SOUTH RT 440	PART OF DN # 2
SA 6 SOUTH BULKHEAD	PART OF DN # 4

0 150 300 600
SCALE IN FEET

REV.	DATE	STATUS	PRPD BY	CHKD BY

Amec Foster Wheeler PROJECT No. 3480170562
DRAWING: 3480170562-6100-DRA0-0003

PREPARED/DATE: STR 10/12/17
CHECKED/DATE: DEN 10/12/17

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FIGURE 5
CHROMIUM DEED NOTICE AND CONSERVATION RESTRICTION AREAS
STUDY AREAS 6 NORTH, 6 SOUTH & 7
JERSEY CITY, NEW JERSEY

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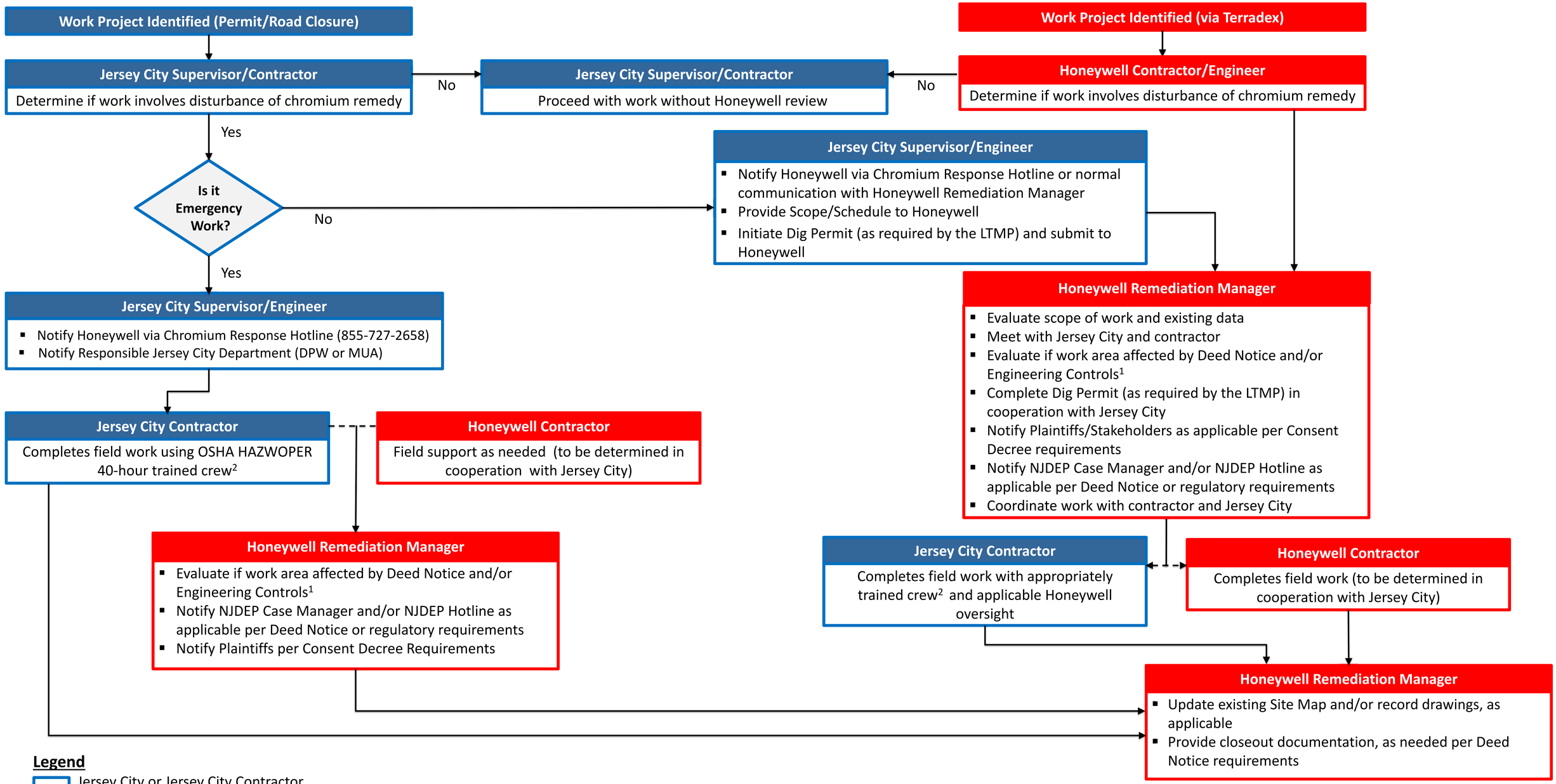
Figure 6: Notification and Response Flow Chart – SA-6 Open Space or Chromium Deed Restricted Area



Legend

Jersey City or Jersey City Contractor

Honeywell or Honeywell Contractor

1 See Deed Notice For Notification/Reporting Requirements

2 Refer to LTMP for details on coordination and requirements for health and safety, excavation and disposal of chromium soils, backfill, and site restoration.

3 The new form of Deed Notice requires disturbances to be reported in the biennial certification.

Points Of Contact:
Chromium Response Hotline: 855-727-2658 (24/7 answering service)
Honeywell Remediation Manager: Maria Kaouris 973-455-3302 (office); 862-579-8453 (cell)
Jersey City Facilities Department: *To Be Determined*

Draft 08/30/16

APPENDICES

APPENDIX A

RELEVANT REGULATORY CORRESPONDENCE

A-1: Design Change Bulletin Log
A-2: Record Drawings for Engineering Controls
A-3: Conservation Restrictions
A-4: Deed Notices
A-5: Classification Exception Area
A-6: Remedial Action Permits

APPENDIX A-1

DESIGN CHANGE BULLETIN LOG

SA-6 North/South Field Change Log					
AmecFW ID	**Changed Item Identifier**	**Description of Change**	**Comments**	**Site**	**AOC Designation[1]**
1	**DC 2013-7-29**	Surcharge Monitoring Plan modifications to match changes associated with relocation of the hydraulic barrier wall near the 72" force main. 72-Inch Force Main Monitoring Layout Plan, Details, and Notes developed. Surcharge pile layout redesign and instrumentation adjustments. The format of the Daily Report, Instrumentation Installation Forms, and Monitoring Data Forms has been modified to allow for generation using a "tablet application".	Submitted to all Parties on March 12, 2014.	SA-6 North & SA-6 South	A, C
2	**DC 2013-8-14 (HB Wall)**	Modifications to the Barrier Wall alignment and Surcharge Program to address concerns of NJDEP/PVSC/JCMUA and Honeywell regarding protection of 72 inch force main. Design drawings have been modified and design calculations revised in support of the required modifications to subgrade/liner grading and final grades.	Submitted to all Parties on September 12, 2013.	North	A
3	**DC 2013-8-14 (Grouted Angles)**	The area indicated on sheets S-201 to S-203 from Station 0+00 to 17+80 will be sealed with a cement bentonite grout in lieu of hydraulic sealant. This area will include a grouted angle.	Contingency to Expand Use of Grouted Joint Called out in 100% Design. Submitted to Contractor only as clarification or response to RFI.	South	C
4	**DC 2013-9-12**	Hydraulic barrier alignment for SA-6 South between 21+00 and 22+00 to be straightened. Stationing from 21+00 on is to be adjusted to account for the elimination of the 3-ft offset in the wall.	Minor alignment adjustment now that Boatyard Property transaction to Bayfront completed. Submitted to Contractor only as clarification or response to RFI.	South	C
5	**DC 2013-9-24**	Testing frequency for analytic parameters for imported borrow material is to be modified to 1 test/5,000 CY of borrow.	Honeywell directive to be more conservative than 100% Design. Submitted to Contractor only as clarification or response to RFI.	SA-6 North & SA-6 South	A, B, C, D, E
6	**DC 2013-12-12**	The proposed bottom of excavation elevations may be deepened as required to expose Post-Excavation Samples as reported on the revised PDI summary tables which were submitted to Parties in HON/Amec Response to Comments dated 02/06/14.	In addition to the periodic notice of excavation complete emails to the Parties, Honeywell submitted the following documents that further defined excavation extents, updated PDI Tables (converted to elevations), Colorized Area Excavation Depth Drawing, and procedures to certify those extents: 1) 2/6/14 RTC letter on 1/28/14 & 1/31/14 Plaintiff comment letters Re: Cells 17 - 29. 2) 3/3/14 SA-6 South Standard Operating Procedure, Confirmation of Excavation Limits. 3) 4/17/14 RTC letter on 4/11/14 Plaintiff comment letters Re: Cells 44 - 52. 4) 4/24/14 Revised SA-6 South Standard Operating Procedure, Confirmation of Excavation Limits.	South	D, E
7	**DC 2014-3-25**	Change Contingent GW system from wells to trench on both SA-6 S and SA-6N.	Submitted to all Parties on March 25, 2014 and April 23, 2014.	SA-6 North & SA-6 South	A, C
7.1	**DC 2014-6-10**	AmecFW documented the SA-6 Contingent Groundwater system change to a trench system. The design will be released to Entact in stages to facilitate constructability. DC 2014-6-10 includes the french drain installation, as well as pump and access station manholes for SA-6 South. Some design details, including the electrical design, will be finalized based field observations and constructability review.	Submitted to Parties as Attachment to Declaration 002 response memo on July 19, 2016	South	C
7.2	**DC 2014-11-20**	AmecFW documented the SA-6 Contingent Groundwater system change to a trench system. The design will be released to Entact in stages to facilitate constructability. DC 2014-11-20 includes the french drain installation, electrical supply and discharge piping for SA-6 North.	Submitted to Parties as Attachment to Declaration 002 response memo on July 19, 2016.	North	A
7.22	**DC 2016-6-6**	AmecFW documented the SA-6 Contingent Groundwater system change to a trench system. The design will be released to Entact in stages to facilitate constructability. DC 2016-6-10 includes the revised electrical supply and discharge piping for SA-6 North.	Submitted to Parties as Attachment to Declaration 004. (Design Change ID changed from DC 2016-6-10 to DC 2016-6-6 to reflect actual date on Design Change form).	North	A
7.3	**DC 2015-2-12**	AmecFW documented the SA-6 Contingent Groundwater system change to a trench system. The design will be released to Entact in stages to facilitate constructability. DC 2015-2-24 is a follow up to DC 2014-6-10, the SA-6 South CGWES trench design. DC 2015-2-24 includes details for electrical supply and discharge piping.	Submitted to Parties as Attachment to Declaration 002 response memo on July 19, 2016	South	C
7.4	**DC 2015-9-03**	AmecFW documented the SA-6 Contingent Groundwater system change to a trench system. The design will be released to Entact in stages to facilitate constructability. DC 2015-9-03 is a follow up to DC 2015-2-24, the SA-6 South CGWES electrical supply. DC 2015-9-03 provides a revised electrical plan.	Submitted to Parties as Attachment to Declaration 002 response memo on July 19, 2016	South	C
7.4.1	**DC 2016-5-24**	AmecFW documented the SA-6 Contingent Groundwater system change to a trench system. The design will be released to Entact in stages to facilitate constructability. DC 2016-5-24 was issued to address the elimination of a drop structure, the elimination of a flow meter, conduit sizing changes, and to clarify Entact's scope.	Submitted to Parties as Attachment to Declaration 002 response memo on July 19, 2016	South	C
7.4.2	**DC 2016-12-20**	This DCB documents a number of minor field changes that have been conveyed by the EOR to Entact during the course of the work and also includes revisions to the (E series) electrical drawings for both SA-6N and SA-6S.	Included as an attachment to Declaration 005.	SA-6 North & SA-6 South	A, C
7.5	**DC 2015-2-24**	AmecFW documented the SA-6 Contingent Groundwater system change to a trench system. The design will be released to Entact in stages to facilitate constructability. DC 2016-5-24 was issued to document the changes in the SA-6 North and South cap subgrades that resulted from the change to a trench system.	Submitted to Parties as Attachment to Declaration 002 response memo on July 19, 2016	SA-6 North & SA-6 South	A, C
8.1	**DC 2013-8-14 (Surcharge)**	Modify surcharge pile toe of slope to reduce load on the bulkhead.	Submitted to all Parties on July 10, 2014.	South	C, D
9	**DC 2014-5-6**	Excavate down to 4 ft bgs (instead of 3 ft bgs) in a portion of the Site 163 excavation area.	5/6/14 letter from Honeywell summarizing the ERFS Site Vision field testing program indicated that this portion of Site 163 would be excavated instead of treated in-situ.	South	E
10	**DC 2014-5-19**	Defer removal of concrete/asphalt berm, demolition of subsurface concrete, and excavation to design elevations in the SA-6 South excavation area adjacent the bulkhead.	Submitted to all Parties on May 19, 2014.	South	D, E
11	**DC 2014-7-28**	Update the list of monitoring wells to be abandoned / retained.	Submitted to all Parties on August 26, 2014.	SA-6 North & SA-6 South	A, B, C, D, E
12	**DC 2014-10-28**	Direction on the handling of petroleum soils under the cap.	Submitted to all Parties on November 19, 2014.	South	C, D
13	**DC 2014-8-13**	Revised hydraulic barrier wall alignment through the sedimentation basin to reduce potential conflict with existing timber piles.	Submitted to all Parties on August 19, 2014.	North	A
14	**DC 2014-9-2**	Revised hydraulic barrier wall alignment adjacent the 72" force main in order to provide a clearance of 25 ft. between the centerline of the 72" force main and the barrier wall as previously agreed with PVSC.	Submitted to all Parties on September 4, 2014.	North	A

SA-6 North/South Field Change Log					
AmecFW ID	**Changed Item Identifier**	**Description of Change**	**Comments**	**Site**	**AOC Designation[1]**
15	**DC 2014-10-31**	Revised Soil Management Plan (Appendix G - SA-6 North 100% Design Report) to indicate that any asphalt or concrete that meets NJDEP reuse requirements or is granted a variance by the NJDEP may be reused as backfill or placed underneath the cap. Contractor directed to consolidate arsenic-impacted asphalt in Cap Areas in a footprint that does not exceed 44,000 SF and to cover the asphalt with chromium-impacted soil.	Submitted to Contractor only as clarification or response to RFI.	SA-6 North & SA-6 South	A, B, C, D, E
16	**DC 2014-12-01**	The Southern limits of the Site 163 Chromium remediation extend close to the existing bulkhead. The bulkhead is in a dilapidated condition and has deteriorated subsequent to design of the remedy. During implementation of the remedy the condition of the bulkhead was visually assessed. As a result of this assessment it was determined that it was necessary to add additional protection to the backfill placed in Site 163 pending installation of the permanent replacement bulkhead. The design was modified in the field to include placement of geotextile fabrics and a sloped rip-rap facing to provide additional protection to the backfill.	Submitted to Contractor only as clarification or response to RFI.	South	E
17	**DC 2015-01-22**	In accordance with the 100% Design, the Contractor is directed to remove 0-2 feet of <20 mg/kg overburden historic fill soils from selected locations throughout the SA-6 North Open Space Area. This will create a nominal 10,000 to 12,000 cubic yards (CY) additional capacity under the SA-6 North liner without affecting final grades for the liner or cover soils. The SMP allows such soils that are confirmed to be below 20 mg/kg for hexavalent chromium, to be used as temporary surcharge in the cap areas, backfill for excavations, or to raise the grades for the Redevelopment Project outside of the cap areas. In the space created by this removal of the 0-2 feet of historic fill soils from selected locations throughout the SA-6 North Open Space Area, the Contractor will relocate an additional estimated 10,000 to 12,000 CY worth of 20-240 mg/kg hexavalent chromium soils currently staged at SA-6 South.	Submitted to Parties as Attachment to Declaration 004.	SA-6 North & SA-6 South	A, B, C, D, E
18	**DC 2014-12-23**	During shallow excavation along the cove on Site 163, unreinforced mass concrete and a steel structure were identified in direct contact with structural components of the bulkhead. The structures will be left in place and remediation will be completed with the other SA-6 South bulkhead deferral area along the river, once the permanent bulkhead is installed. The total volume of the three isolated areas left in place is estimated to be 35 cubic yards.	Submitted to all Parties on January 28, 2015.	South	E
19	**DC 2015-03-03**	Mueser Rutledge Consulting Engineers (MRCE) have revised the design for temporary excavation support in SA-6 North along Route 440. Revised drawings SN-501, SN-502, SN-503, SN-504, and SN-505 are included in this Design Change Bulletin.	Submitted to Contractor and BMUA/JCMUA. Submitted to all Parties on 5/27/15.	North	A, B
20	**DC 2015-03-30**	A pile cap was encountered during pre-trenching at the general location of the demolished Waste Management Garage. An alternatives evaluation was conducted and it was concluded that the least risk option was to re-align the wall to the south effectively resulting in a decrease in the cap area and an increase in the EA-5 Excavation.	Submitted to all Parties on 5/27/15.	North	A
21	**DC 2015-03-04**	The surcharge pile has been constructed to the design height of the barrier wall. The strip or land between the barrier wall and the property line is one of the "deferred areas" and varies in width from 0 to 12 feet. Final Development grades east of the barrier wall are at essentially the same grade as the existing grade. As such there is no additional load generated by the development grades and therefore there is no necessity of surcharge.	Submitted to Parties on July 2, 2015.	South	C
22	**DC 2015-03-09**	The utility pole relocations along Route 440 require the installation of new poles in the DOT Right of Way along Route 440. The DCB includes the pole sleeve construction details and locations.	Submitted to Contractor only as clarification or response to RFI.	North	B
23	**DC 2015-04-30**	A concrete protuberance was encountered 12-13 feet below grade, which prevented driving the sheet to full depth immediately adjacent the JCIA trash pit. The closure sheet was notched to clear the concrete, then lowered to design depth.	Submitted to Contractor only as clarification or response to RFI.	North	A
26.1	**DC 2015-05-19**	Supply and installation of specific components related to the contingent groundwater system will be deferred pending closure of the caps and stabilization of the groundwater levels and quality within the contingent groundwater system on both SA-6 North and SA-6 South.	Submitted to Parties as Attachment to Declaration 002 response memo on July 19, 2016	SA-6 North & SA-6 South	A, C
27	**DC 2015-06-18**	Bayfront Redevelopment Civil Designer has eliminated one utility corridor along the eastern portion of SA-6 South (water main and sewer line were relocated to another utility corridor). In addition, it was identified that minor increases in the Bayfront final grades of up to 0.25 feet may be made in the landscaped areas (no changes were made to the roadway grades). The difference between the adjusted Geomembrane Subgrade surface and Final Grade surface has been verified to meet the minimum and average requirements of the SA-6 South Consent Decree and the 100% Design.	Submitted to all Parties on June 18, 2015.	South	C
28	**DC 2015-05-29**	Details were revised in order to clarify cap termination beyond the SCB/VHB wall, GCL to SCB/sheetpile barriers and Geofoam Block locations above the liner.	Submitted to Parties on August 27, 2015.	South	C
29	**DC 2015-06-05**	Amec Foster Wheeler reviewed the piezometer locations shown in the IFC design with the latest road and utility designs prepared by CHA. This has resulted in minor movements of the piezometers. The movement will have no impact on the performance of the piezometers to meet their intended purpose for measurement of the hydraulic gradient across the wall.	Submitted to Parties on August 27, 2015.	South	C, D
30	**DC 2015-11-12**	Amec Foster Wheeler has provided Final Cap Grades (in CAD) to Entact. Amec Foster Wheeler and Entact developed a methodology for adapting grading of the cover soils to offsets from either subgrade or Final Development Grade. The methodology was described in the response to RFI 057. Some minor changes (0.1 to 0.2 ft.) have also been made in localized areas to improve surface drainage.	Included as an attachment to Declaration 005.	South	C, D, E
30.1	**DC 2016-04-15**	Amec Foster Wheeler has provided final restoration grades for SA-6 South Development Area. The DCB also includes the final cover types in revised Drawing C-128.	Included as an attachment to Declaration 005.	South	C, D, E

SA-6 North/South Field Change Log					
AmecFW ID	**Changed Item Identifier**	**Description of Change**	**Comments**	**Site**	**AOC Designation[1]**
30.2	**September 2016-South**	The design change documents revisions to the final grading and SESCP drawings on the SA-6 South Chromium Remedy. Minor grading changes were performed in the field to improve surface drainage. In addition, the extent of demarcation fabric, crushed stone and DGA placed over the Development Area was increased to meet historic fill regulations. SESCP changes included installation of crushed stone toe drain along SA-7, installation of erosion mat, installation of supplemental diversion berms, and installation of stone check dams.	Included as an attachment to Declaration 005.	South	C, D, E
32	**DC 2015-06-18 (South)**	Amec Foster Wheeler and ERFS performed in-situ injections of calcium polysulfide (CAPS) at SA-6 South, Site 163 in July & August 2014. 6-month performance assessment soil samples were collected and analytical results indicated that seven of the fifteen treatment areas at the Site are now <20 milligrams per kilogram (m/kg) for Cr(VI). Honeywell will implement additional CAPS injections at several of the areas that remain >20 m/kg for Cr(VI). While the specific scope of this next field phase is provided in the attachment, the work will generally be performed in accordance with Amec Foster Wheeler's approved Work Plan for In-Situ Treatment of Chromium Impacted Soil, dated September 2012.	Submitted to all Parties on 6/22/15.	South	E
33	**DC 2015-06-18 (North)**	Injections of calcium polysulfide (CAPS) will be implemented in a limited portion of TA-10, north of the northern curbline for the future Stegman Boulevard to be constructed during the Bayfront Redevelopment project. Monitoring wells installed in the injection area and between the injection area and the adjacent 72- inch force main will be used to measure sulfate conditions in shallow groundwater. If necessary, clean potable water may be injected into the monitoring wells to dilute the sulfate concentrations in the shallow groundwater adjacent to the 72-inch force main. While the specific scope of the proposed injections is provided in the attachment, the work will generally be performed in accordance with Amec Foster Wheeler's approved Revised Work Plan for In-Situ Treatment of Chromium Impacted Soil, dated February 19, 2013.	Submitted to all Parties on 6/22/15.	North	B
34	**DC 2015-06-15**	A Construction Control Grid for the SA-6 cap subgrade was developed in CAD as a Triangular Irregular Network for construction control and verification of compliance with cover thickness requirements in the Consent Decree and Open Space Design Standards.	Submitted to Parties on August 27, 2015.	South	C
35	**DC 2015-07-16**	The alignment of the gas vent system piping and trench was modified in the west portion of the SA-6 South cap to establish smooth grades in the utility corridors and avoid contingent groundwater extraction system components.	Submitted to Parties on August 27, 2015.	South	C
35.2	**DC 2015-08-18**	The Design detail (Drawing C-121, Detail AN) assembly has been modified to reflect changes resulting from collaboration between Entact and AmecFW.	Submitted to Parties on August 27, 2015.	South	C
35.3	**DC 2015-10-06**	GCL is required to be installed over the SCB wall and Barrier Wall at the locations shown in the annotated PDF of C-121 (rev 4, 8/13/15).	Submitted to Contractor only as clarification or response to RFI.	South	C
36	**DC 2015-07-22**	Detail BN has been modified to extend the LLDPE up and over the SCB Wall. The prior detail showed both the GDL and geomembrane terminating at the wall.	Submitted to Parties on August 27, 2015.	South	C
37	**DC 2015-07-28**	Drawing 304, Detail CE and associated notes regarding the "Liner Anchor to Concrete Structure" have been modified.	Submitted to Contractor only as clarification or response to RFI.	South	C
37.2	**DC 2015-08-07**	AmecFW has conducted further review of the "Liner to Concrete Structure Detail" (Drawing C-304, Detail CE) with Entact/ESI, including field review, to improve constructability.	Submitted to Contractor only as clarification or response to RFI.	South	C
38	**DC 2015-07-31**	The sheet pile pair is located at Sta. 0+50. Driving was stopped with a top elevation of +12.8 and a tip of -2.2. The top of meadow mat is at elevation +0.5. In accordance with the 100% Design Report (10.1.3 Bottom Key), the tip of the sheet shall be embedded a minimum of 2' into the Stratum D. The tip of the sheet is embedded 2.7 ft. and therefore meets the design criteria which was established in accordance with the requirements of the Consent Decree.	Submitted to Contractor only as clarification or response to RFI.	North	A
39	**DC 2015-07-30**	Entact was granted approval to install a wedge of soil in the B Street corridor against the SCB wall. There is a step up in this location from the corridor subgrade to the top of the SCB wall. The intent of the Entact request was to provide a more gradual transition between the corridor subgrade and SCB Wall. AmecFW reviewed the CHA utility drawings and determined that there were no utility structures within this location that would be impacted by the change i.e. the change has no impact on the future development. The remaining corridor to SCB wall detail will be installed as shown on the contract drawings.	Submitted to Contractor only as clarification or response to RFI.	South	C
41	**DC 2015-08-19**	Entact notified AmecFW that the vendor had experienced difficulty during set up and could not produce an acceptable quality of lettering on the orange non-woven geotextile (due to ink blurring). As an option Entact proposed installing a standard direct burial utility marking tape. AmecFW approved use of a 6 inch wide yellow PE tape with 3.5 inch bold back lettering as meeting the specified requirements for a distinctive colored high visibility marking.	Submitted to Parties on August 27, 2015.	SA-6 North & SA-6 South	A, C
42	**DC 2015-08-21**	The anchor trench section of the Specification 02372 CAP GEOMEMBRANE LINER Section 3.02 is standard industry language and part of AmecFW's standard Geomembrane Specification. During the process of finalizing development of the capping system in the 100% Design, the Engineer determined that anchor trenches were not required for either the SA-6N or SA-6S Caps. As such, Paragraph 3.02 is no longer required and therefore the following is deleted in its entirety.	Submitted to Parties on August 27, 2015.	SA-6 North & SA-6 South	A, C
43	**DC 2015-08-20**	The most easterly utility corridor was eliminated from the Development Plan, allowing for a revision to the cap subgrade and related revisions to the top of the Barrier Wall (revised Drawing S-201). Addendum: The top of the SCB wall will also be revised to reflect the elimination of the utility corridor (revised Drawing S-204).	Submitted to Parties on August 27, 2015.	South	C
45	**DC 2015-9-02**	As identified in the 100% Design, ENTACT should now remove approximately 2 ft. of historic fill from the post surcharge removal surface of Area 1N to create capacity for 20-240 mg/kg chromium impacted soils. Excavated Soils will be sampled and analyzed according to the Soil Management Plan. Should any excavated historic fill exceed the 20 mg/kg criteria, it will be placed under the cap.	Submitted to Parties as Attachment to Declaration 004.	North	A

SA-6 North/South Field Change Log					
AmecFW ID	**Changed Item Identifier**	**Description of Change**	**Comments**	**Site**	**AOC Designation[1]**
46	**DC 2015-9-17**	Extensive searching of available soil suppliers (including 6 specifically identified as potential sources/vendors by Dr. Grabosky) indicated that current sources could substantially meet the most critical, but not all, IFC specifications. In response, AmecFW submitted the provided borrow source testing data per specifications to Dr. Grabosky for his review. Dr. Grabosky selected specific blends from the list that he identified as acceptable for use within the Open Space Areas. In addition, Dr. Grabosky recommended minor revisions to the specifications that the AmecFW engineer has accepted. Dr. Grabosky's letter and specification revision recommendation are attached.	Submitted to Parties on September 23, 2015.	SA-6 North & SA-6 South	A, C
47	**DC 2015-9-04**	EA-8 boundaries have been revised to reflect additional sampling following initial excavation as defined in the 100% Design. The internal boundaries delineating the different soil disposition based on hexavalent chromium content have been revised. The revisions are minor in nature and are based on using a means of interpolation between sample points that is consistent with that used on SA-6S.	Submitted to Parties as Attachment to Declaration 003.	North	B
47.1	**DC 2015-11-18**	Drawing CN-118 has been revised to show additional excavation in EA-8 as outlined in DC 2015-09-04. In addition, review of DC 2015-09-04 indicated a small area where the 20 - 240 ppm hatch had not been carried to the outer limit of excavation. The hatch mark has been corrected in CN-118 revision 2.	Submitted to Parties as Attachment to Declaration 003.	North	B
48	**DC 2015-09-28**	Chromium-impacted soils within the residential footprint of Site 163 that remained at levels above 20 ppm hexavalent chromium after in-situ treatment will be excavated in lieu of additional in-situ treatment and further sampling.	Submitted to Parties on October 1, 2015.	South	E
48.1	**DC 2015-12-21**	Amec Foster Wheeler (AmecFW), Entact and Maser Consulting have developed alternative methods for documentation/survey of the excavation bottom in Site 163. The alternative methods were developed in light of safety considerations for surveyor access into a sheet piled excavation to elevation –8.0. The bottom of the excavation will be in very low strength Stratum O soils. These alternative survey control methods are different from those previously used in the SA-6 South Development Area.	Submitted to Contractor only as clarification or response to RFI.	South	E
50	**DC 2015-10-02**	As an additional precautionary measure, ENTACT will install warning tape directly on top of the root barrier layer. The warning tape will generally be installed perpendicular to the warning tape above the GDL. On the steep slopes into roadway/utility corridors and the tree planting areas the tape will be set running from the top of the slope to the bottom of the slope.	Submitted to Parties on October 8, 2015.	SA-6 North & SA-6 South	A, C
51	**DC 2015-10-22**	Pre-trenching on the vinyl sheetpile alignment revealed a significant number of old timber piles along the western edge of the proposed repair. Removal of the piles would create openings in the Stratum D. In lieu of removing sheetpile, the western side was relocated approximately 6 ft. further west. This will result in an expansion of the repair plan area from approximately 14,000 SF to approximately 14,500 SF. This change has no impact of the functionality of the chromium remedy or on the future site development.	Submitted to Contractor only as clarification or response to RFI.	North	B
52	**DC 2015-12-14**	Specification 02372, Sections 3.03 – Geomembrane Placement, C. Liner Boots and 3.06 – Field Quality Control, B. Nondestructive Seam Testing have been amended to include spark testing of extrusion welds that cannot be tested by other means. Spark testing will be performed in accordance with ASTM D6365 - Standard Practice for the Non Destructive Testing of Geomembrane Seams using the Spark Test. In addition, GRI-19 - Specification Seam Strength & Related Properties of Thermally Bonded Polyolefin Geomembrane was added as a reference document. The Specification also requires preparation of a Spark Testing form for each location that Spark Testing is used, to be signed by the Independent Geosynthetics QA representative. Agreement was reached between Honeywell and the Plaintiffs to implement Spark Testing on SA-6N. Specification 02372 has been revised accordingly.	Submitted to Parties on January 14, 2016.	North	A
53	**DC 2015-11-30**	EA 2&3 external boundaries remain consistent with the Issued for Construction Design. Internal waste classification boundaries required adjustment to clarify the limits in three small triangular areas within the main excavation. A complete set of EA 2&3 Drawings and AutoCAD Files have been included showing all intervals. EA-8 Issued for Construction defined excavation limits from the surface to elevation 7. Upon reaching elevation 7 supplemental sampling was conducted and excavation conducted based on those results. Observation of excavation faces revealed a suspect area that subsequent testing verified required removal. A further round of supplemental sampling established new excavation limits. A detail is shown on the Interval 6 drawing showing the extent of extra excavation required.	Submitted to Parties as Attachment to Declaration 003.	North	B
54	**DC 2016-02-02**	The interim grade in the SA-6 North landscape area has been raised by a nominal amount of 0.25' (no changes were made to the roadway grades). The difference between the adjusted Geomembrane Subgrade surface and Interim Grade surface has been verified to meet the minimum and average requirements of the SA-6 North Consent Decree and the 100% Design.	Submitted to Parties as Attachment to Declaration 004. (Design Change ID changed from DC 2016-02-03 to DC 2016-02-02 to reflect actual date on Design Change form).	North	A
54.1	**DC 2016-02-22**	AmecFW revised the SA-6 North cap subgrade in a single localized area in order to accommodate Entact's request to relocate Pump Station #1 (RFI 64). The subgrade has been lowered at the new location to accommodate the vault and piping, and raised in the original pump station location. In addition, for grading purposes, any hydraulic barrier sheets within the Sedimentation Basin that have sections below elevation 12.0 will be trimmed to a uniform elevation of 11.5.	Submitted to Parties as Attachment to Declaration 004.	North	A
54.2	**DC 2016-02-25**	This DCB has been issued to provide Entact with the latest SA-6 North HB Wall and SCB wall plan and profile drawings (SN-201 thru SN-205), which were modified to reflect changes made in DC 2016-02-22.	Submitted to Parties as Attachment to Declaration 004.	North	A
54.3	**DC 2016-5-11**	The interim grade in the SA-6 North landscape area has been raised by a nominal amount of 0.25' (no changes were made to the roadway grades). The difference between the adjusted Geomembrane Subgrade surface and Interim Grade surface has been verified to meet the minimum and average requirements of the SA-6 North Consent Decree and the 100% Design. As part of DC 2016-5-11, AmecFW issued SA-6 North Interim Grades to Entact.	Submitted to Parties as Attachment to Declaration 004.	North	A

SA-6 North/South Field Change Log					
AmecFW ID	**Changed Item Identifier**	**Description of Change**	**Comments**	**Site**	**AOC Designation[1]**
54.4	**DC 2016-5-20**	After further review, AmecFW lowered the geomembrane Pump Station #1 on the SA-6 North cap in order to provide additional separation between the geomembrane and the bottom of the vault. (Refer to DC 2016-02-22).	Submitted to Parties on June 15, 2016.	North	A
54.5	**DC 2016-7-14**	Design change documenting minor field changes needed to achieve positive drainage in the cap area.	Included as an attachment to November 2016 monthly progress report and included in the finalized Declaration 004.	North	A
54.6	**September 2016-North**	The design change documents revisions to the interim/final grading and SESCP drawings on the SA-6 North Chromium Remedy. Minor grading changes were performed in the field to improve surface drainage pending redevelopment. SESCP changes included installation of crushed stone toe drain along SA-7, installation of erosion mat, installation of supplemental diversion berms, and installation of stone check dams.	Included as an attachment to Declaration 005.	North	A
55	**DC 2016-05-03**	The laboratory results of all gradations for planting soils shall be presented in terms of the USDA classification system rather than the USCS classification system.	Submitted to Contractor only as clarification or response to RFI.	SA-6 North & SA-6 South	A, C
56	**DC 2016-03-18**	This DC 2016-03-18 documents the revised acceptable ranges of physical parameters and provides an updated specification made in consultation with Dr. Grabosky of Rutgers University. Dr. Grabosky provided his recommendations in correspondence dated 3/17/2016.	Submitted to Parties on March 22, 2016. Plaintiffs responded in a letter dated April 15, 2016. The Parties did not agree to implement this DCB as drafted. However, Plaintiffs and Honeywell subsequently held discussions and DCB 2016-4-20 was developed to document an agreement reached by all parties on the Special Master All-Hands monthly call on April 19, 2016.	SA-6 North & SA-6 South	A, C
57	**DC 2016-03-21**	Nature's Choice was identified as the source that best met the physical requirements for Horizon C soils by Dr. Grabosky; however, several samples of Nature's Choice Horizon C soils have hexavalent chromium concentration >1.0 mg/kg. Consequently, Honeywell is proposing a design change to allow the hexavalent chromium concentration in Nature's Choice Horizon C soils to be less than 1.8 mg/kg, as agreed to by the parties, as documented in the attached emails. For future sampling, hexavalent chromium soil samples will be composited from 10 grab sample locations per 5,000 CY (maximum). There are additional conditions in Attachment A that are part of this DCB and specific to Nature's Choice Horizon C soil. All other requirements specified in the 100% Design for imported soils will be met by the Nature's Choice Horizon C soils as amended in previous DC 2015-09-17.	Submitted to Parties on March 22, 2016.	SA-6 North & SA-6 South	A, C
58	**DC 2016-05-06**	To allow for traffic flow within the project site following completion of the SA-6S Cap, a road will be installed within the "B Street" corridor. The road will be constructed by continuing the "Structural Fill under Roadways to within 6 inches of final grade"	Submitted to Parties on June 30, 2016.	South	C
59	**DC 2016-04-20**	This DCB documents the approved sources of Horizon B and Horizon C materials, as agreed to by all parties on the Special Master All-Hands monthly call on April 19, 2016.	Submitted to Parties on April 21, 2016.	SA-6 North & SA-6 South	A, C
60	**DC 2016-05-31**	This DCB documents the vault sketch Drawing C-310 (Rev 5, 5/31/16)	Submitted to Contractor only as clarification or response to RFI.	South	C
61	**DC 2016-11-09**	The limits and the type of restoration north of the SA-6N cap has been modified to be integrated with the SA-6N Non Chrome Remedy.	Included as an attachment to Declaration 005.	North	B
62	**DC 2016-7-12**	DC 2016-7-12 clarifies the limit of GCL deployment and the location of the sand bentonite plug in the SA-6 North cap.	Included as an attachment to July 2016 Monthly Progress Report.	North	A

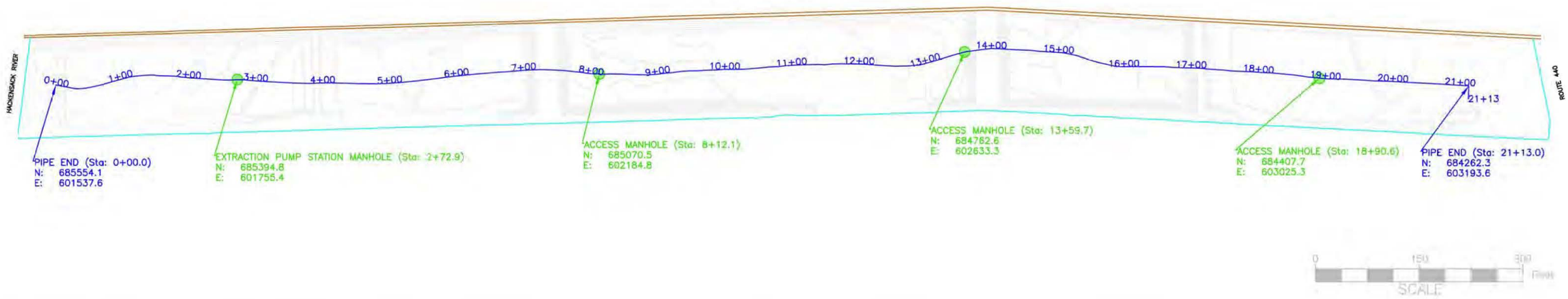
Notes: All tracked changes will be reflected in the as-built drawings and Final Record Documents as agreed to with the Parties.

1) Area of Concern (AOC) Designations:
   A = SA-6 North Open Space Area
   B = SA-6 North Development Area
   C = SA-6 South Open Space AOC
   D = SA-6 South Kellogg Street Development AOC
   E = SA-6 South Site 163 Development AOC

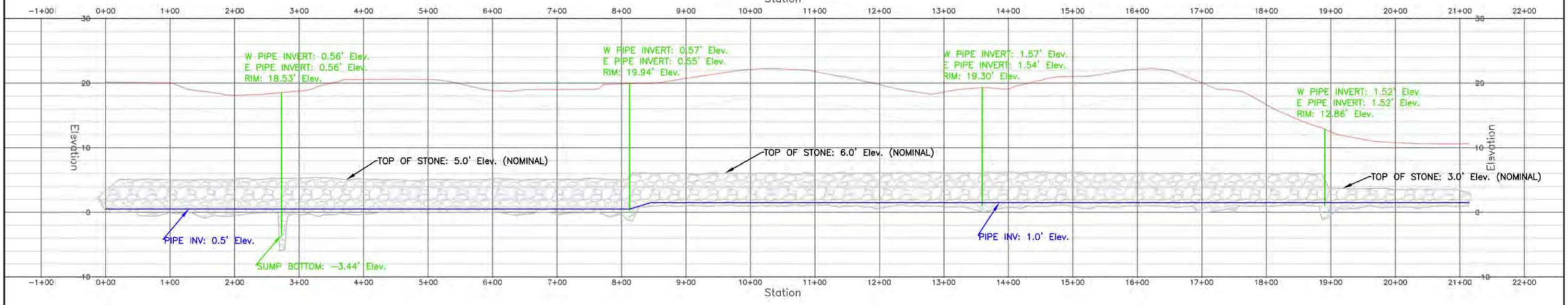
APPENDIX A-2

RECORD DRAWINGS FOR ENGINEERING CONTROLS

PLAN VIEW



PROFILE VIEW



LEGEND

- 8" PERFORATED HDPE PIPE INVER (ELEV. TYPICAL)
- 4FT DIA. MANHOLE RISER PROFILE
- SCB WALL
- HYDRAULIC BARRIER WALL
- CAP SUBGRADE CONTOUR (DESIGN)
- CAP FINAL GRADE CONTOUR (DESIGN)
- 4FT DIA. MANHOLE
- 1.5" CLEAN STONE TRENCH (WIDTH VARIES 3' TO 12')

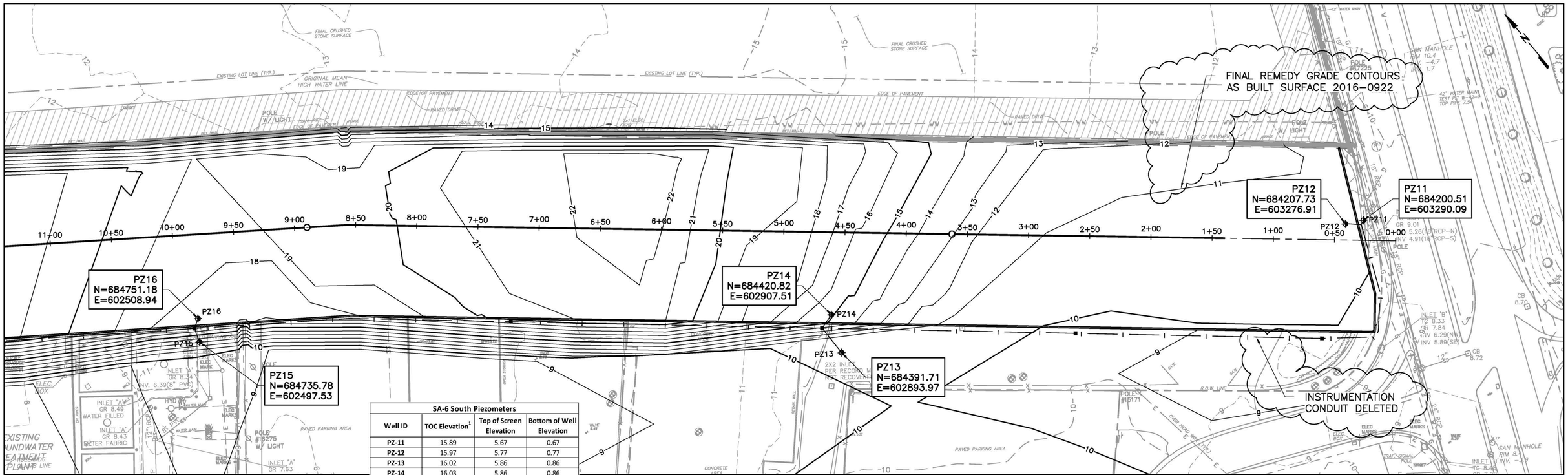
REV	DATE	BY	CHK'D	APPR'VD	DESCRIPTION
0	1/13/16	CDC	AE	AE	RECORD DRAWING
1	2/10/16	CDC	AE	AE	ADDED ANNOTATION EDITS
2	2/19/16	CDC	AE	AE	REVISED ANNOTATION EDITS AND ADJUSTED MANHOLE REFERNCES

J.H. 06/21/2016

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
SA6 SOUTH CAP
CONTINGENT GROUNDWATER COLLECTION TRENCH
RECORD DRAWING 02/19/15

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



SA-6 South Piezometers			
Well ID	TOC Elevation[1]	Top of Screen Elevation	Bottom of Well Elevation
PZ-11	15.89	5.67	0.67
PZ-12	15.97	5.77	0.77
PZ-13	16.02	5.86	0.86
PZ-14	16.03	5.86	0.86
PZ-15	14.16	3.91	-1.09
PZ-16	19.00	4.34	-0.66
PZ-17	18.07	3.13	-1.87
PZ-18	18.20	3.40	-1.60
PZ-19	17.91	3.16	-1.84
PZ-20	18.38	3.32	-1.68

Notes:
1) TOC Elevations will change after final adjustment of piezometer
2) All screens are 5 ft long.

Prepared/Date: RJR 12/20/16
Checked/Date: SGS 12/20/16

HORIZONTAL SCALE: 1" = 40'
0 20 40 80
SCALE IN FEET

Honeywell
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MORRISTOWN, NJ 07962

CHROMIUM REMEDY
STUDY AREA 6 SOUTH
JERSEY CITY, NEW JERSEY

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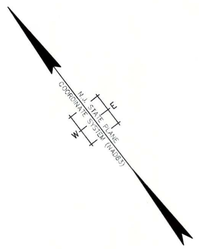
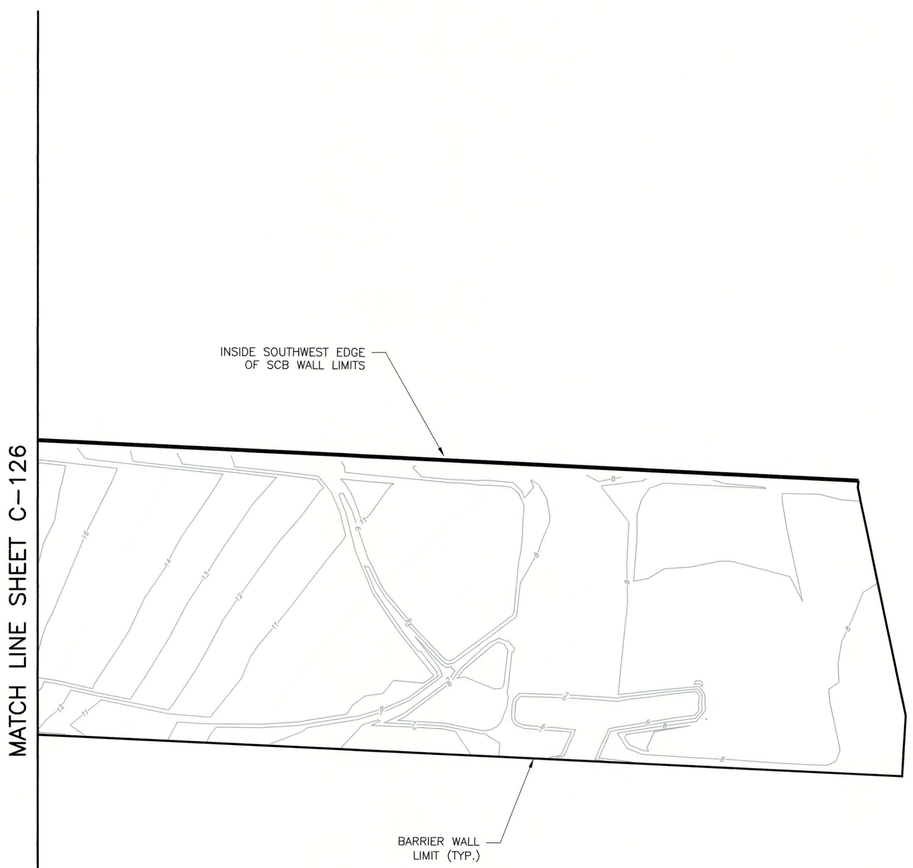
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619, (609) 689 - 2829
NJ Certificate of Authorization Number 24GA28010900

Piezometer As Built Location
Project 3480-13-0377
Figure 1

Z:\Projects\HONEYWELL\JERSEY CITY\Cap Design-SA6-C30\CAD\SA6-North-South-GW_Extraction_Trench\Figure - Piezometer Location-South.dwg Tue, 14 Feb 2017 - 2:24pm roger.riquier





MATCH LINE SHEET C-126

LEGEND:

5 MAJOR CONTOUR
4 MINOR CONTOUR

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT GDL COVER SOIL GRADING ELEVATIONS WITHIN THE SA6 SOUTH CAP AREA AT THE PROJECT SITE.*
2. *AS-BUILT SOUTH CAP GDL COVER SOIL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM OCT. 2015 THROUGH MAY 2016*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

NO.	DATE	REVISION	DR	CHK	APVD	BY	APVD
DSGN							

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Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
SOUTH CAP GDL COVER
SOIL GRADING PLAN

amec foster wheeler
Environment & Infrastructure, Inc.
200 Horizon Center Blvd, Suite 113
Hamilton, NJ. 08619
(609) 869 - 2929

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	11/17/16
PROJ	3480-10-0027
DWG	C-125
SHEET	1 OF 3

FILE NUMBER 12001511A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\SOUTH CAP GDL COVER SOIL SURVEY-11-17-16.dwg PLOT DATE: Wed, 21 Dec 2016 PLOT TIME: 4:32 PM

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT GDL COVER SOIL GRADING ELEVATIONS WITHIN THE SA6 SOUTH CAP AREA AT THE PROJECT SITE.
2. AS-BUILT SOUTH CAP GDL COVER SOIL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM OCT. 2015 THROUGH MAY 2016
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.

R. THOMAS HUGG

NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS35737

NO.	DATE	REVISION	BY	APVD
DSGN		DR	CHK	APVD

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STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
SOUTH CAP GDL COVER
SOIL GRADING PLAN

FILE NUMBER
12001511A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 08223

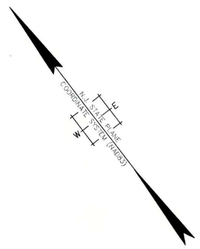
amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619
(609) 689 - 2829

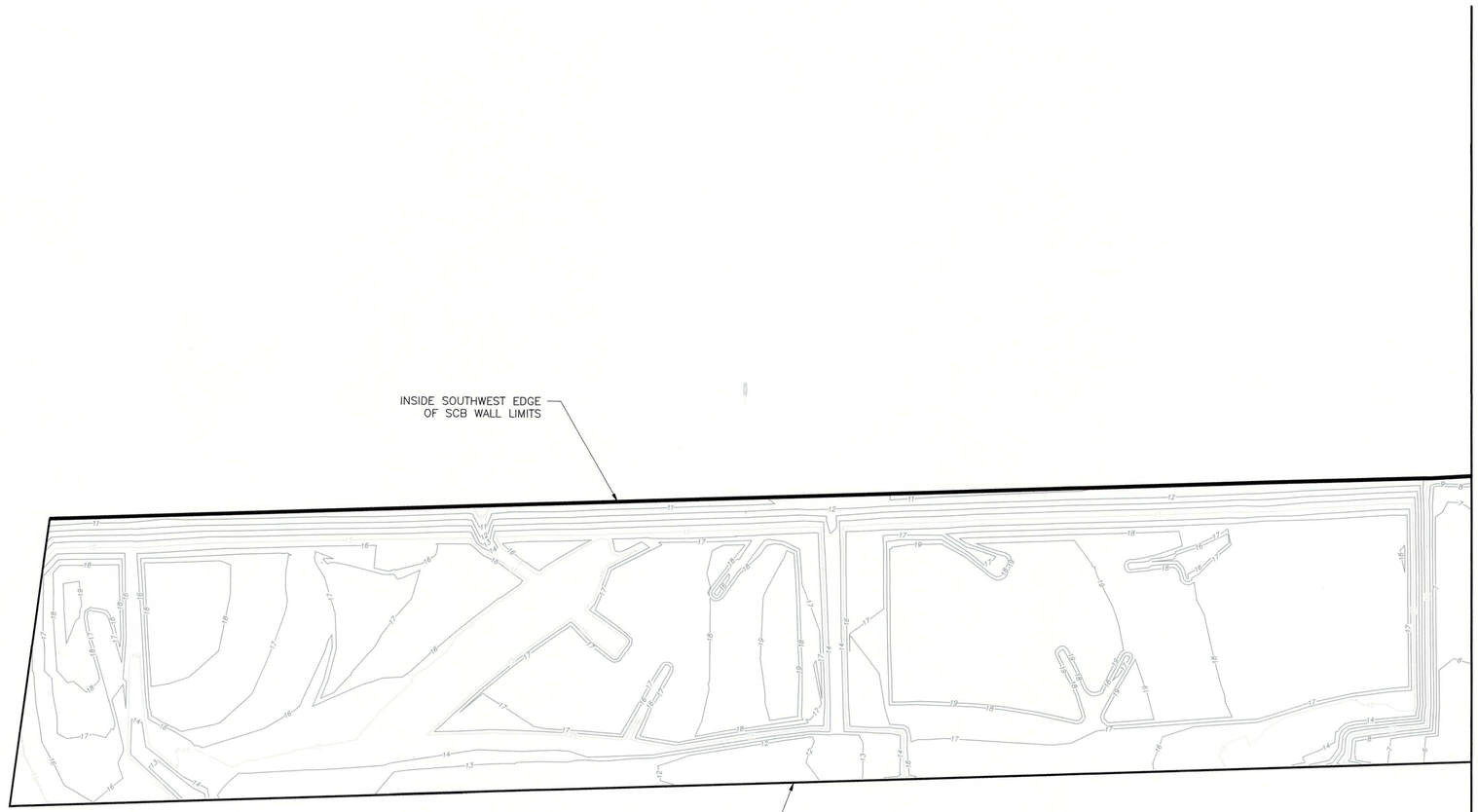
VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	11/17/16
PROJ	3480-10-0027
DWG	C-126
SHEET	2 OF 3

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\SOUTH CAP GDL COVER SOIL SURVEY-11-17-16.dwg PLOT DATE: Wed, 21 Dec 2016 PLOT TIME: 4:08 PM





LEGEND:

5 MAJOR CONTOUR

4 MINOR CONTOUR

0 20 40 80

SCALE IN FEET

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT GDL COVER SOIL GRADING ELEVATIONS WITHIN THE SA6 SOUTH CAP AREA AT THE PROJECT SITE.
2. AS-BUILT SOUTH CAP GDL COVER SOIL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM OCT. 2015 THROUGH MAY 2016
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12001511A

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
SOUTH CAP GDL COVER
SOIL GRADING PLAN

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2829

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	11/17/16
PROJ	3480-10-0027
DWG	C-127
SHEET	3 OF 3

NO.	DATE	REVISION	BY	APVD
DSGN		DR	CHK	APVD

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS38737

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

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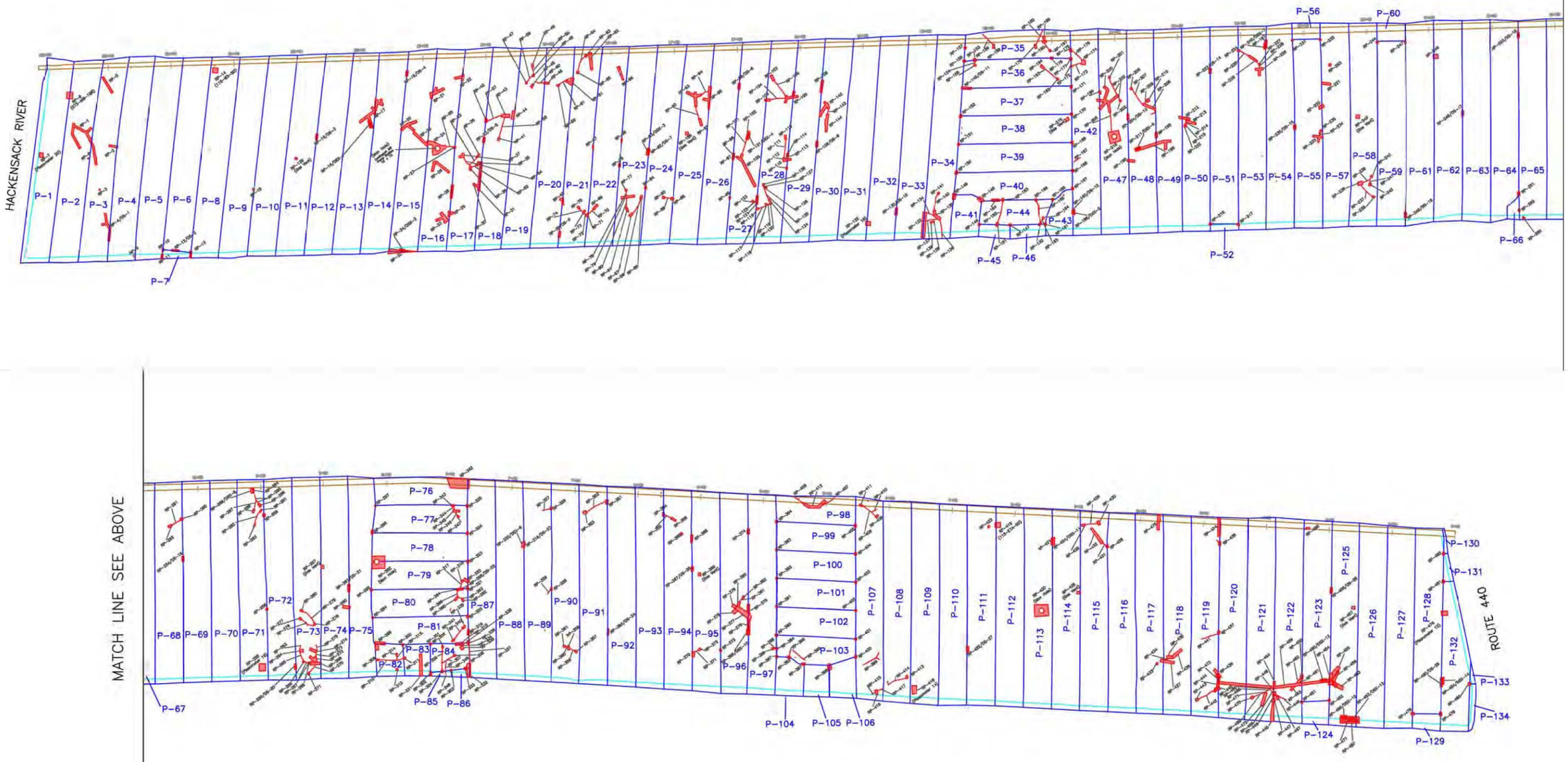
FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\SOUTH CAP GDL COVER SOIL SURVEY-11-17-16.dwg PLOT DATE: Wed, 21 Dec 2016 PLOT TIME: 4:09 PM



LEGEND

RP-1 (Repair Number)

LINER SEAM/EDGE

SCB WALL

HB WALL (Inner Edge)

RP: Repair

DSX: Destructive Extrusion Weld Test

DS: Destructive Fusion Weld Test

P: Panel

\- Bead

0 80 160 Feet

NOTE: Refer to ESI Repair Report for repair details

J.H. 01/28/2016

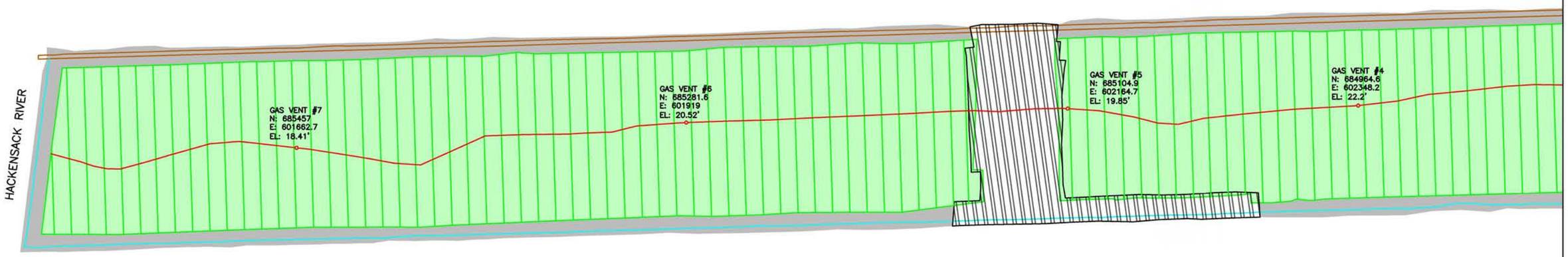
ENTACT 302 Unity Plaza Latrobe, PA 15650

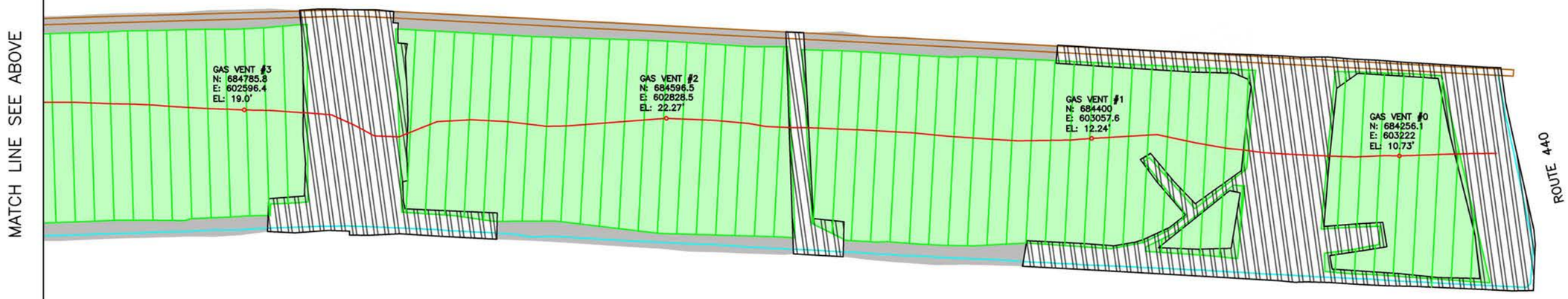
DRAWING NAME

SA6 SOUTH CAP PANEL LAYOUT
60 mil Textured LLDPE Geomembrane
01/28/16

PROJECT NAME & LOCATION

HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ





LEGEND

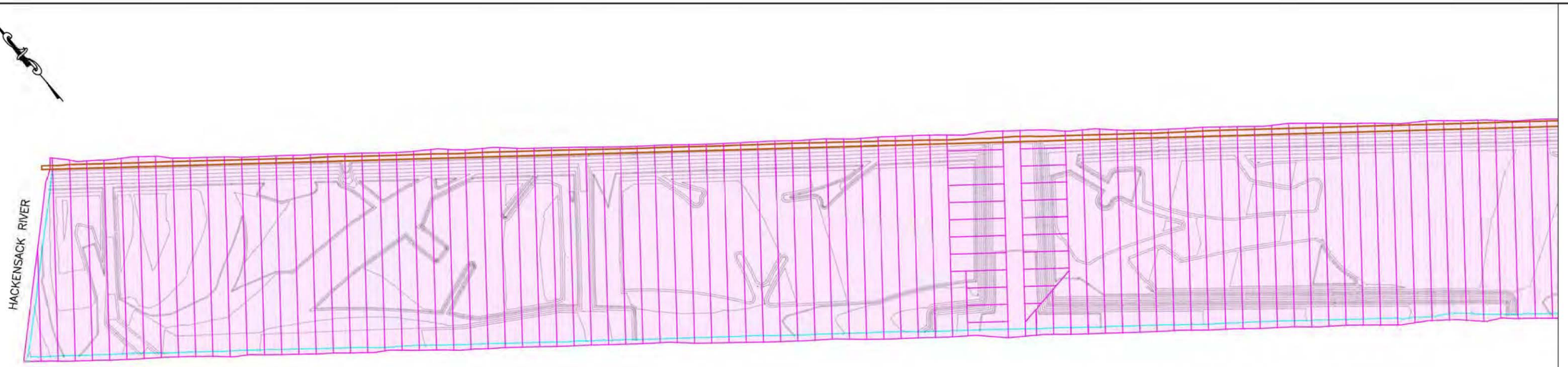
- GEOCOMPOSITE GAS VENT LAYER (GVL)
- GEOSYNTHETIC CLAY LINER (GCL)
- Class A/16 oz Geotextile
- SCB WALL
- HB WALL (Inner Edge)
- GAS VENT PIPE
- GAS VENT (NOT TO SCALE)

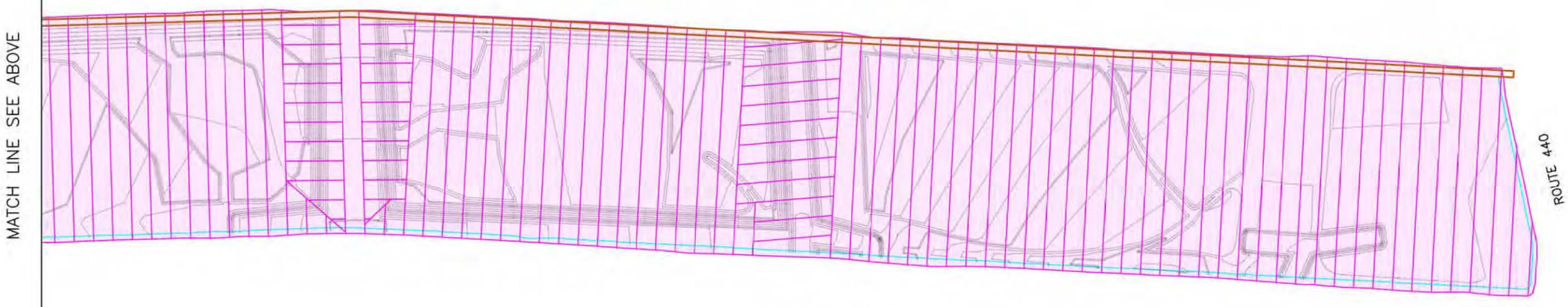
REV	DATE	BY	CHKD	APVD	DESCRIPTION
1	02/14/17	EJP	AE	AE	ADDED GAS VENT DETAIL

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: SA6 SOUTH CAP GVL/GCL LAYOUT
Class A Geotextile/Gas Vent Layer/Geosynthetic Clay Liner
02/14/17

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ





LEGEND

GEOCOMPOSITE DRAINAGE LAYER (GDL)

SCB WALL

HB WALL (Inner Edge)

0 80 160 Feet

J.H. 01/27/2016

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME

SA6 SOUTH CAP GDL LAYOUT
GEOCOMPOSITE DRAINAGE LAYER 01/27/16

PROJECT NAME & LOCATION

HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

N

RIVERSIDE DRIVE

A STREET

B STREET

C STREET

D STREET

FRONTAGE STREET

GRAND BLVD.

GRAND BLVD.

GRAND BLVD.

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

18

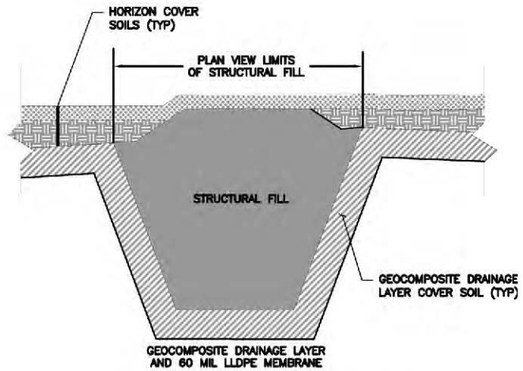
19

20

21

22

23



STRUCTURAL FILL CROSS SECTION
NTS

LEGEND

Structural Fill Under Roadways

SCB WALL

HB WALL (Inner Edge)

0 80 160 Feet

SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/7/16	EJP	AE	AE	STRUCTURAL FILL UNDER ROADWAYS – SOUTH CAP
1	12/15/16	EJP	AE	AE	ADDED FUTURE DEVELOPMENT LAYOUT & STRUCTURAL FILL X-SECTION

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: STRUCTURAL FILL UNDER ROADWAYS SOUTH CAP 12/15/16

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION JERSEY CITY, NJ

LEGEND:

5 MAJOR CONTOUR

4 MINOR CONTOUR

0 20 40 80

SCALE IN FEET

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT GEOMEMBRANE GRADING ELEVATIONS WITHIN THE SA6 SOUTH CAP AREA AT THE PROJECT SITE.*
2. *AS-BUILT GEOMEMBRANE GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM 7/2/15 THROUGH 10/7/15. GEOMEMBRANE GRADING SURFACES AND CONTOURS WERE GENERATED BY ENTACT, CHECKED BY AMEC AND CONFIRMED BY MASER CONSULTING P.A.*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

NO.	DATE	REVISION	BY	APVD
1	7/12/16	REVISED ASBUILT TOPO PER ENTACTS COMMENTS	BSB	RTH
DSGN		DR CHK		APVD

R. THOMAS HUGG

NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
GEOMEMBRANE GRADING
PLAN

FILE NUMBER
12001511A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619
(609) 889 - 2629

VERIFY SCALE

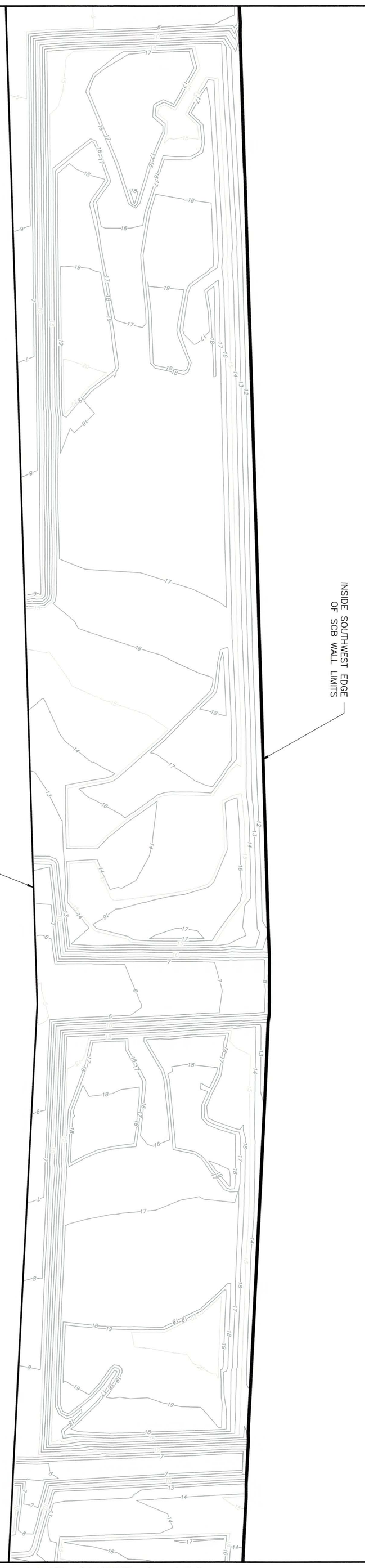
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	2/11/16
PROJ	3480-10-0027
DWG	C-122
SHEET	1 OF 3

FILE NAME: C:\Civil 3D Projects\12001511A\Survey\V-SURV-ASBT-SUBGRD-SOUTH-CAP-10-07-15.dwg PLOT DATE: Wed, 19 Oct 2016 PLOT TIME: 3:35 PM

FILE NAME: C:\Civil 3D Projects\12001511A\Survey\V-SURV-ASBT-SUBGRD-SOUTH-CAP-10-07-15.dwg PLOT DATE: Wed, 19 Oct 2016 PLOT TIME: 3:35 PM

MATCH LINE SHEET C-124



LEGEND:

5 MAJOR CONTOUR

4 MINOR CONTOUR

SCALE IN FEET: 0 20 40 80

MATCH LINE SHEET C-122

NJ STATE PLANE COORDINATE SYSTEM (NAD83) W E

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12001511A

SHEET 2 OF 3 | DWG C-123 | PROJ 3480-10-0027 | DATE 2/11/16

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

VERIFY SCALE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619
(609) 689 - 2829

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL

GEOMEMBRANE GRADING PLAN

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

NO.	DATE	REVISION	BY	APVD
1	7/12/16	REVISED ASBUILT TOPO PER ENTACT'S COMMENTS	BSB	RTH

DSGN | DR | CHK | APVD

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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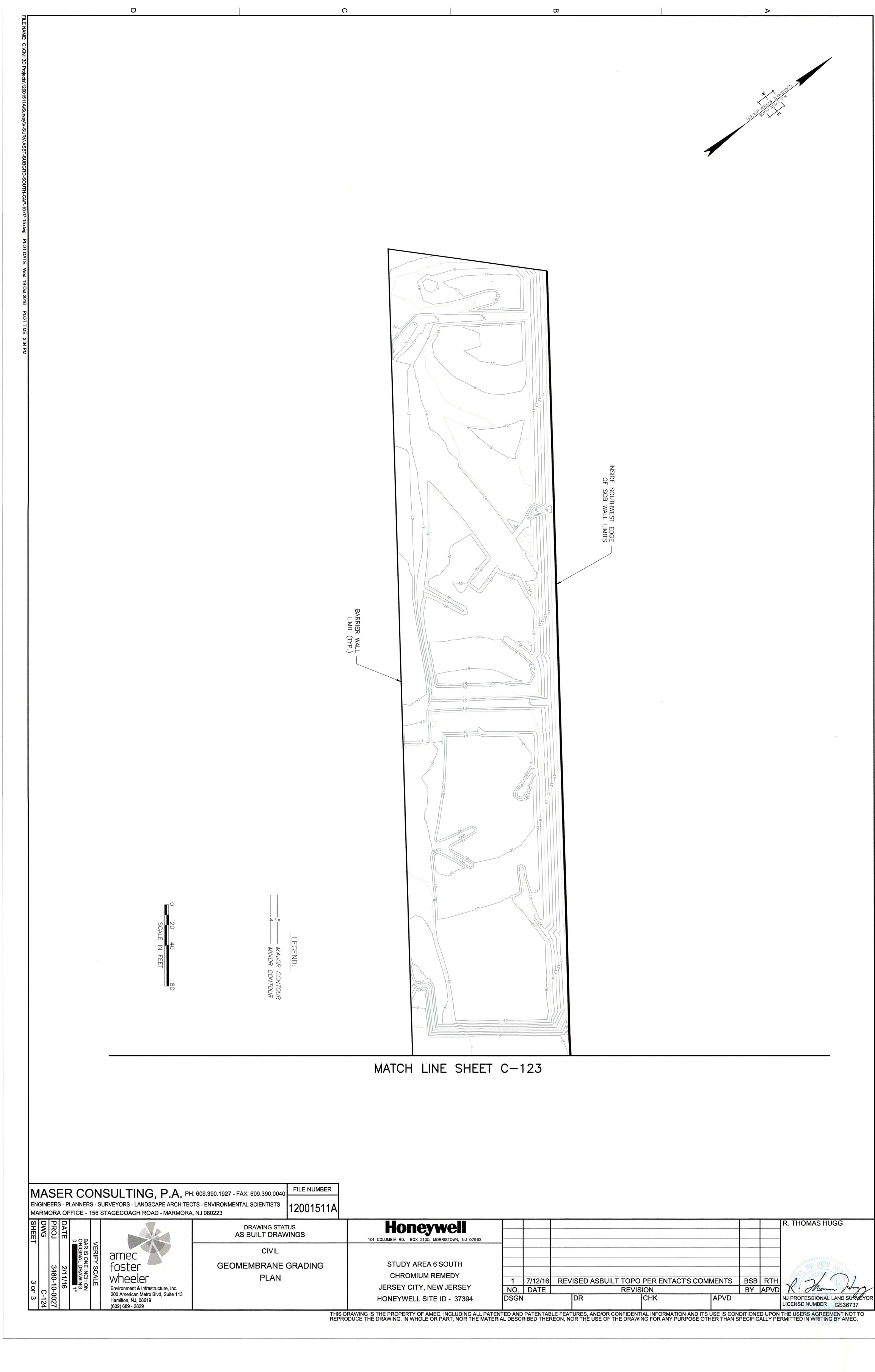

FILE NAME: C:\Civil 3D Projects\12001511A\Survey\V-SURV-ASBT-SUBGRD-SOUTH-CAP-10-07-15.dwg PLOT DATE: Wed, 19 Oct 2016 PLOT TIME: 3:34 PM

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12001511A

SHEET 3 OF 3
DWG C-124
PROJ 3480-10-0027
DATE 2/11/16
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"
VERIFY SCALE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619
(609) 689 - 2829

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL

GEOMEMBRANE GRADING PLAN

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

NO.	DATE	REVISION	BY	APVD
1	7/12/16	REVISED ASBUILT TOPO PER ENTACT'S COMMENTS	BSB	RTH

DSGN	DR	CHK	APVD

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

NOTE:
CONTOURS SHOWN HEREON REPRESENT THE CURRENT TOP OF BACKFILL AS SURVEYED BY ENTACT ON 12/29/2014.

AS BUILT BOTTOM OF EXCAVATION LIMIT

MAJOR CONTOUR

MINOR CONTOUR

0 40 80 160
SCALE IN FEET

					JH	9/15/15

ENTACT 302 UnRy Plaza Latrobe, PA 15650

DRAWING NAME
FIGURE 2.1
BACKFILL TOPOGRAPHIC PROGRESS MAP

PROJECT NAME & LOCATION
HONEYWELL SA-6 SOUTH REMEDIATION
JERSEY CITY, NJ

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

DESIGN EXCAVATION LIMIT

AS BUILT BOTTOM OF EXCAVATION LIMIT

DEFERRED EXCAVATION AREAS (DC 2014-05-19)

0 40 80 160

SCALE IN FEET

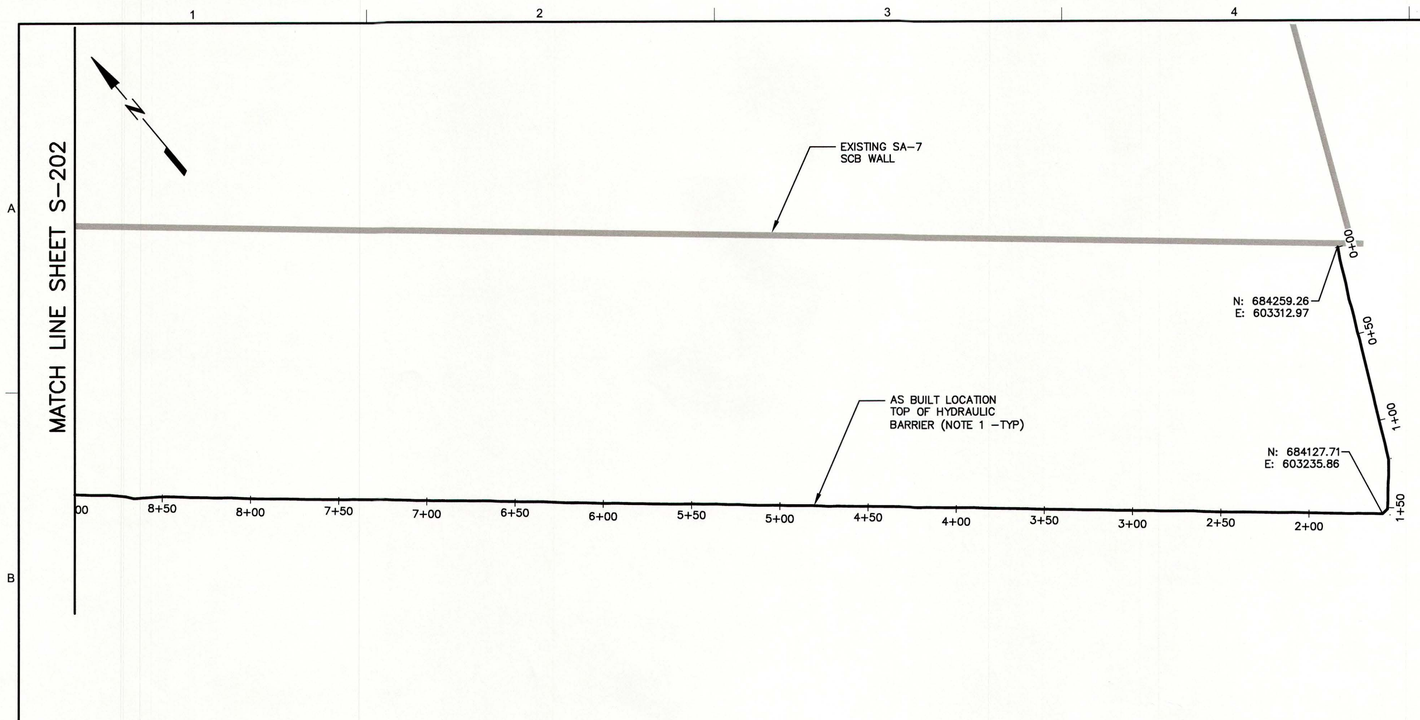
ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME

FIGURE 1.1
LIMIT OF EXCAVATION MAP

PROJECT NAME & LOCATION

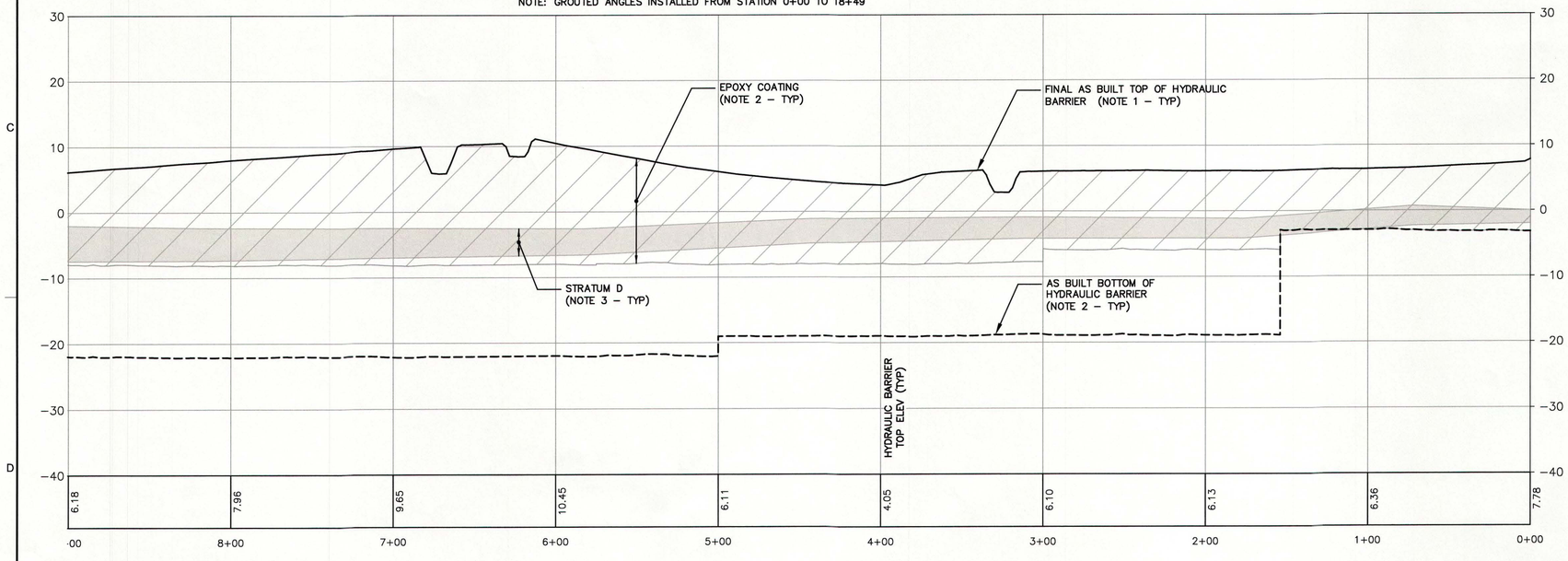
HONEYWELL SA-6 SOUTH REMEDIATION
JERSEY CITY, NJ



NOTES:

1. PLAN LOCATION AND TOP ELEVATION OF HYDRAULIC BARRIER BASED ON SURVEY COMPLETED UNDER SUPERVISON OF MASER AND REPRSENTS THE FINAL ELEVATION AFTER THE WALL WAS CUT TO MATCH DESIGN LINER GRADES.
2. BOTTOM OF HYDRAULIC BARRIER AND EXTENT OF EPOXY COATING BASED ON ENTACT TOP SURVEY AND SHEET PILE FABRICATION DRAWINGS. ALL SHEETS DELIVERED TO THE SITE WERE INSPECTED BY AMEC PERSONNEL TO VERIFY LENGTHS AND EPOXY COATING.
3. STRATUM D SHOWN FOR REFERENCE ONLY AND IS BASED ON GEOTECHNICAL BORINGS COMPLETED DURING THE PRELIMINARY DESIGN INVESTIGATION.

NOTE: GROUTED ANGLES INSTALLED FROM STATION 0+00 TO 18+49



0 5 10 20
SCALE IN FEET
VERTICAL SCALE: 1" = 10'

0 20 40 80
SCALE IN FEET
HORIZONTAL SCALE: 1" = 40'

NO.	DATE	DESIGN	DR	CHK	APVD
1	2/10/16	DECLARATION NO 2 - SA-6 SOUTH VHB AS BUILT	TDD	BY	APVD
		REVISION	TDD	RJR	TDD

NJ PROFESSIONAL ENGINEER
LICENSE NUMBER
SGS

Honeywell
101 COLUMBIA RD. BOX 2106, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
HYDRAULIC BARRIER
PLAN AND PROFILE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619
(609) 587-2929

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	2/10/16
PROJ	3480-10-0027
DWG	S-201
SHEET	OF

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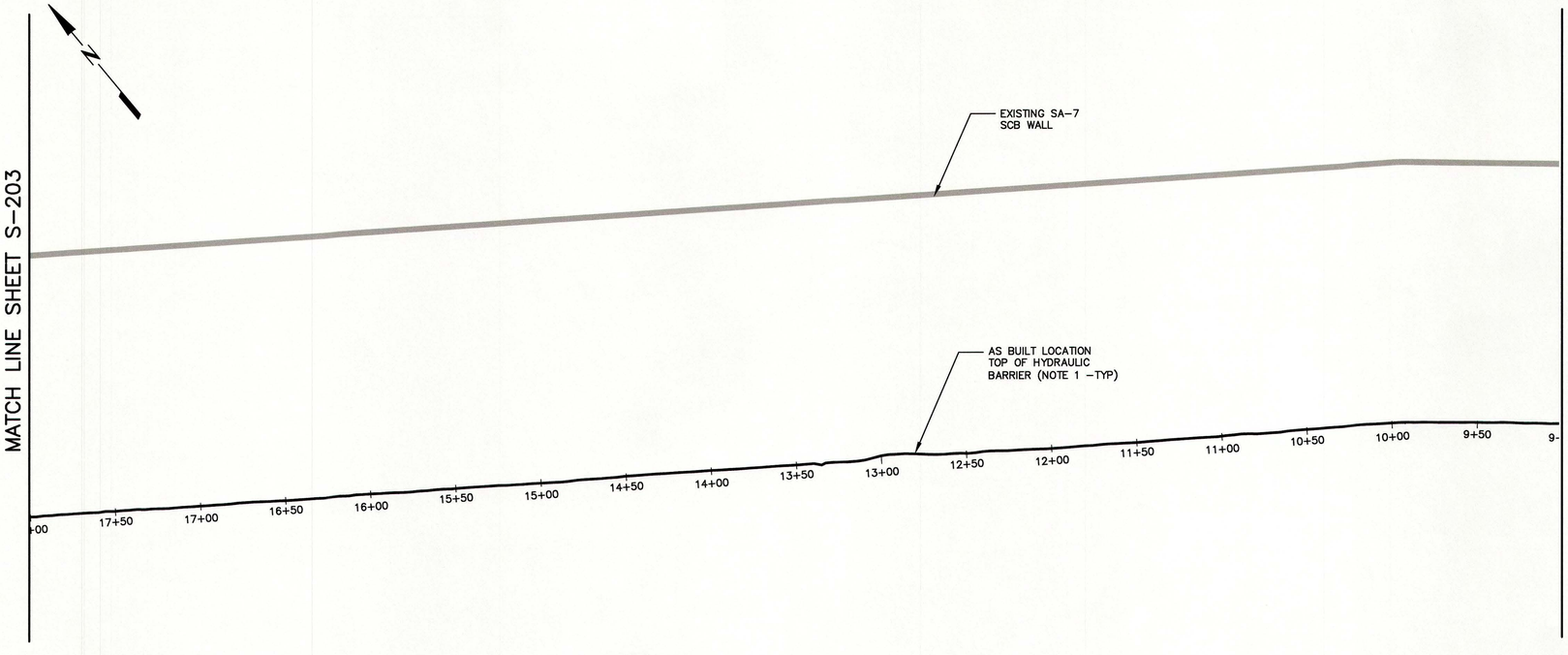
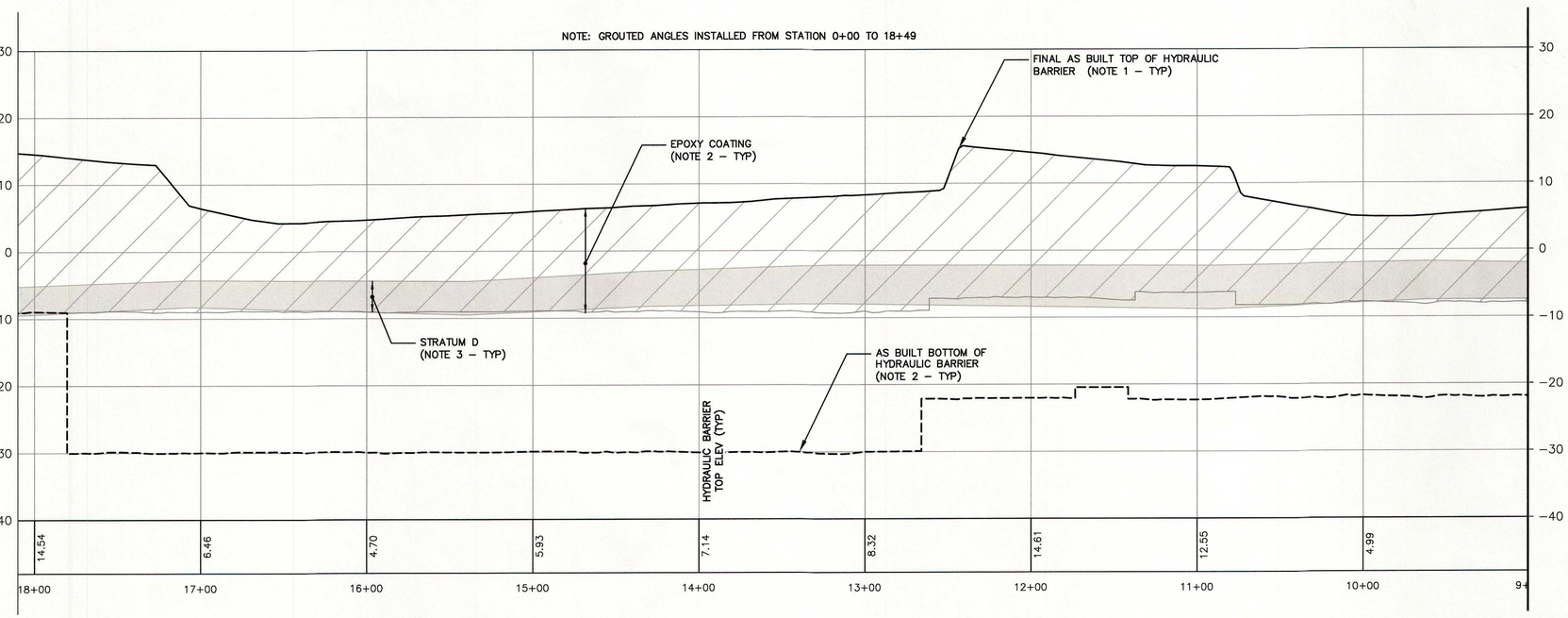
FILE NAME: C:\Donovan\SA-6 South Excavation Limits April 2012\2013 Excavation Shapes\SA-6 South Declarations\Declaration No 2\SA-6 South VHB\SA-6 South VHB Final Profile.dwg PLOT DATE: Tue, 18 Oct 2016 PLOT TIME: 7:06 PM



NOTES:

1. REFER TO NOTES 1 THRU 3 ON SHEET S-201



SCALE IN FEET
VERTICAL SCALE: 1" = 10'

SCALE IN FEET
HORIZONTAL SCALE: 1" = 40'

NO.	DATE	REVISION	BY	APVD
1	2/10/16	DECLARATION NO 2 - SA-6 SOUTH VHB AS BUILT	TDD	SGS

DSGN TDD | DR | CHK RJR | APVD TDD

SGS NJ PROFESSIONAL ENGINEER LICENSE NUMBER

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL

HYDRAULIC BARRIER
PLAN AND PROFILE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2829

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	2/10/16
PROJ	3480-10-0027
DWG	S-202
SHEET	OF

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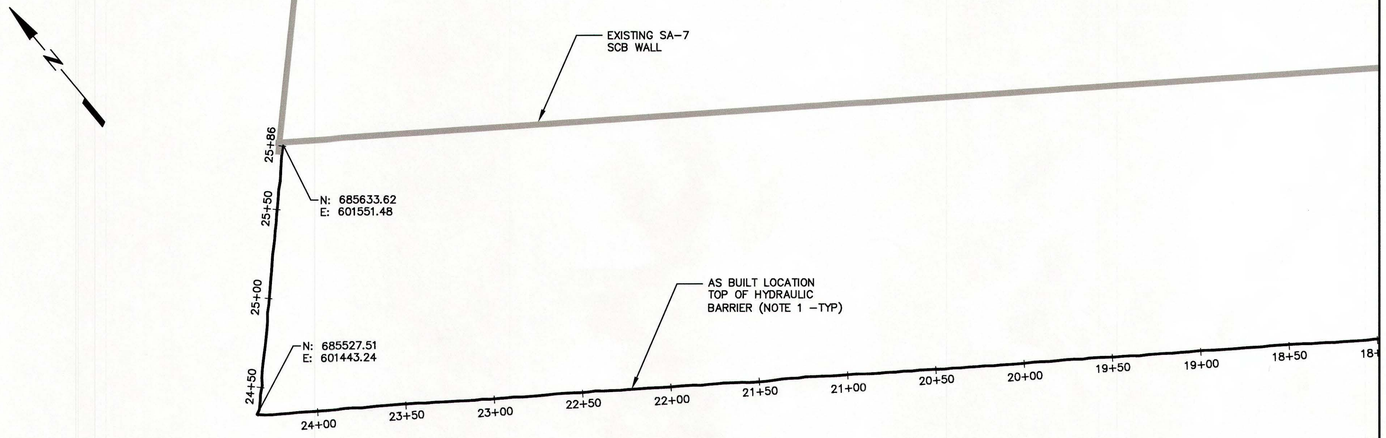
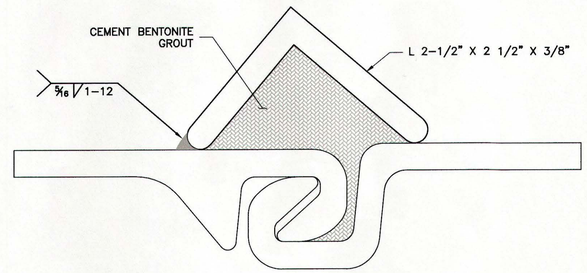
FILE NAME: C:\Donovan\SA-6 South Excavation Limits April 2012\2013 Excavation Shapes\SA-6 South Declarations\Declaration No 2\SA-6 South VHB\SA-6 South VHB Final Profile.dwg PLOT DATE: Tue, 18 Oct 2016 PLOT TIME: 7:05 PM



MATCH LINE SHEET S-202

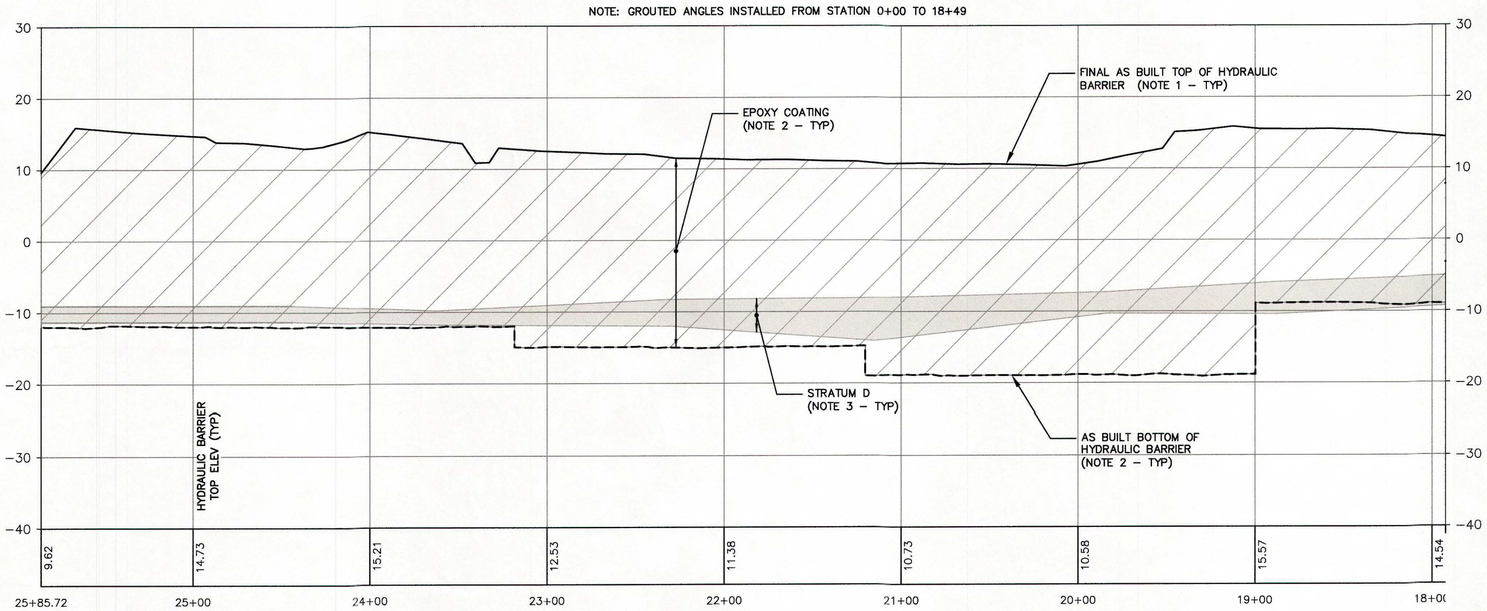
NOTES:

1. REFER TO NOTES 1 THRU 3 ON SHEET S-201



SEE NOTE HB19 ON SHEET GN-003

SHEET SEALING DETAIL
NTS
F
SN-201 | CN-301



0 5 10 20
SCALE IN FEET
VERTICAL SCALE: 1" = 10'

0 20 40 80
SCALE IN FEET
HORIZONTAL SCALE: 1" = 40'

NO.	DATE	REVISION	BY	APV'D
1	2/10/16	DECLARATION NO 2 - SA-6 SOUTH VHB AS BUILT	TDD	SGS

DSGN TDD DR RJR CHK TDD APV'D SGS

NJ PROFESSIONAL ENGINEER
LICENSE NUMBER
SGS

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
HYDRAULIC BARRIER
PLAN AND PROFILE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ. 08619
(609) 956 - 2929

VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING.
0 1"

DATE	2/10/16
PROJ	3480-10-0027
DWG	S-203
SHEET	OF

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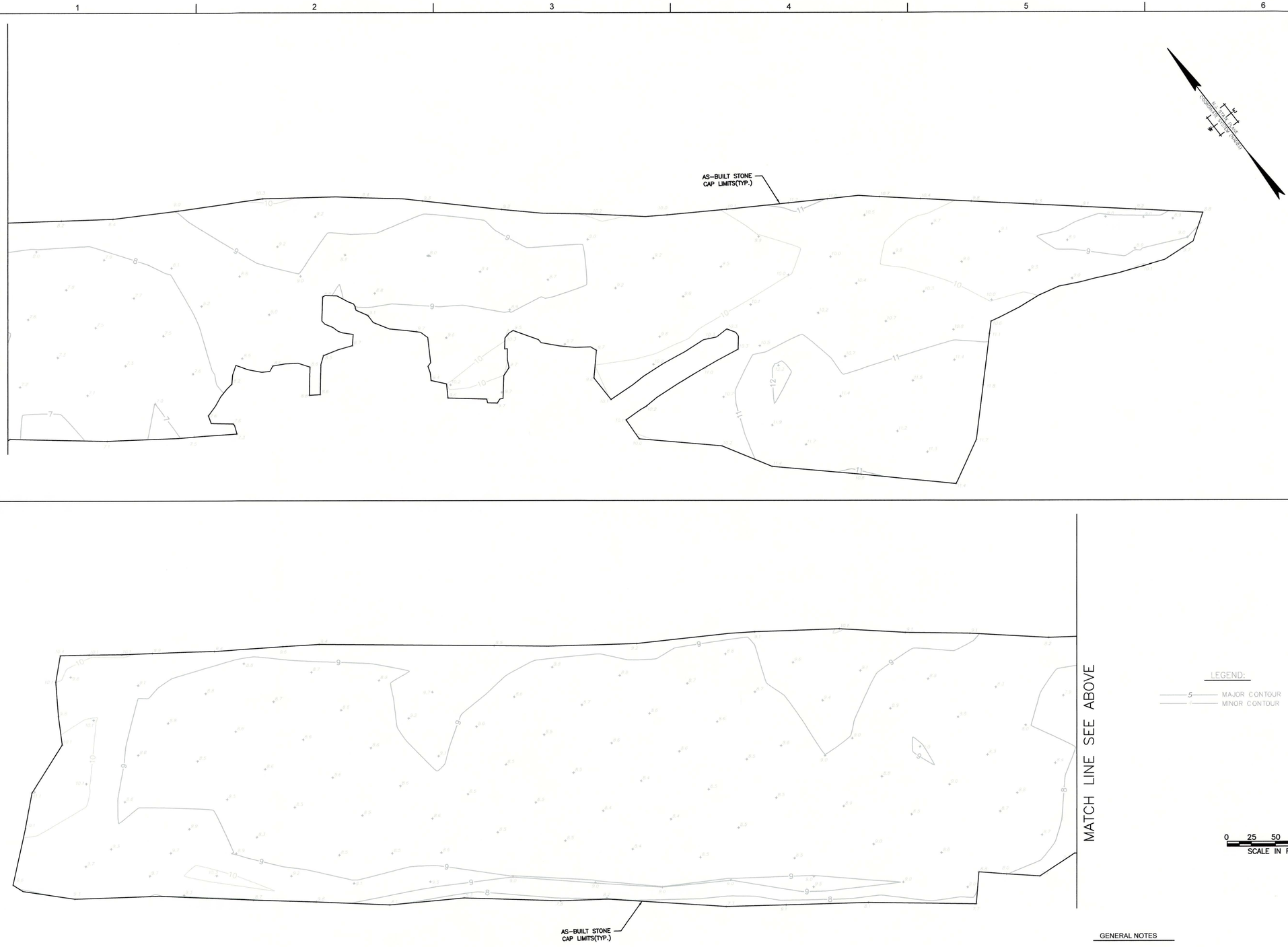

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW TOP OF STONE ELEVATIONS WITHIN THE SA6 SOUTH EXCAVATION AREAS AT THE PROJECT SITE.
2. STONE LAYER LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. AND ENTACT ON MULTIPLE FIELD VISITS FROM 10/5/16, 10/6/16, AND 10/20/16.
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 158 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12-1511A

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
SA6 SOUTH STONE LAYER

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2829

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	12/19/16
PROJ	3480-10-0027
DWG	C-113
SHEET	1 OF 1

NO.	DATE	REVISION	CHK	APVD	BY	APVD
DSGN		M.H.S.	DR	B.S.B.	BSB	R.T.H.

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER 24GS36737

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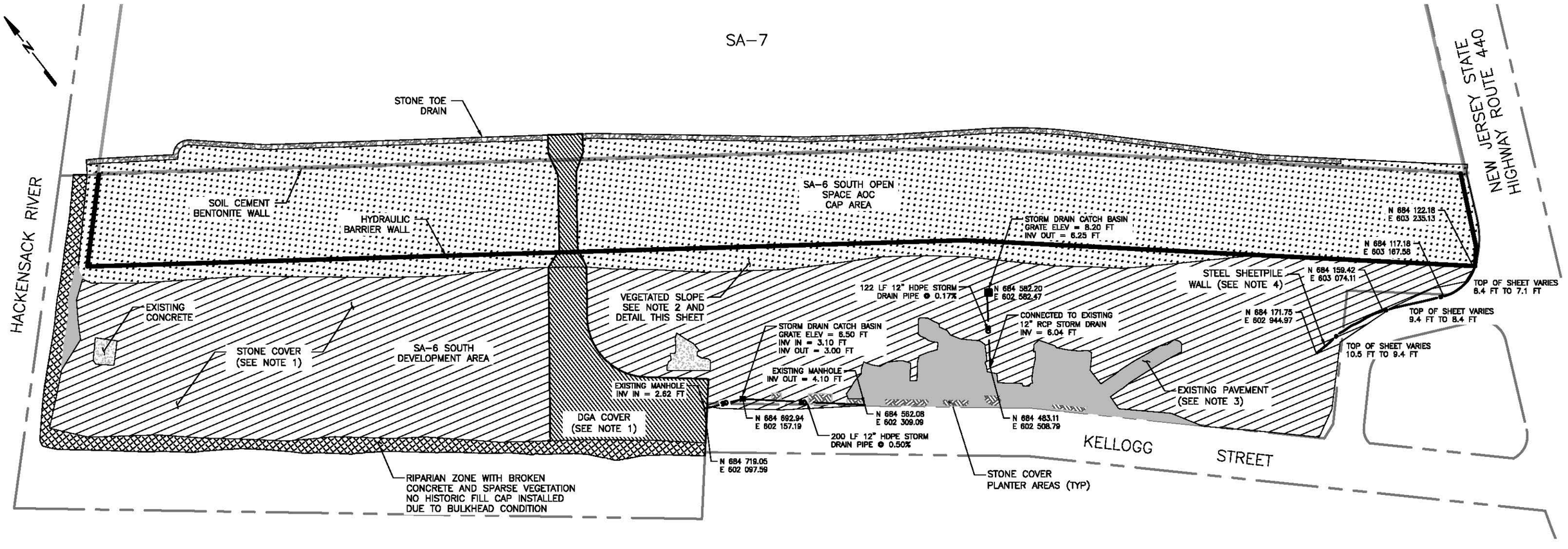
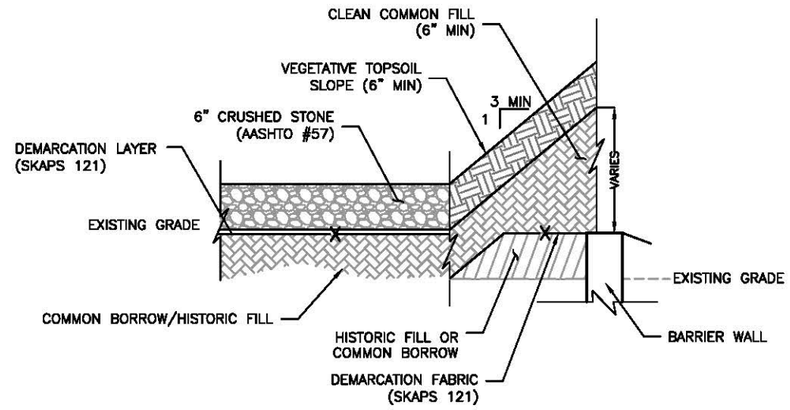




NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA–7

TYPICAL VEGETATED SLOPE
NTS

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE ON THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL AS SHOWN ON THE TYPICAL VEGETATED SLOPE DETAIL. THE VEGETATED SLOPE ALONG SA–7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. EXISTING PAVEMENT WAS FIELD INSPECTED BY LSRP AND SUBJECT TO MINOR CRACK FILLING TO SATISFY HISTORIC FILL CAP REQUIREMENTS.
4. STEEL SHEETPILE WALL WAS INSTALLED AS EXCAVATION SUPPORT ALONG THIS AREA AND THEN CUT BELOW CURRENT GRADE AND LEFT IN PLACE. THE TOP OF SHEETPILE IS GENERALLY 0.5 TO 2.0 FT BELOW CURRENT GRADES.

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

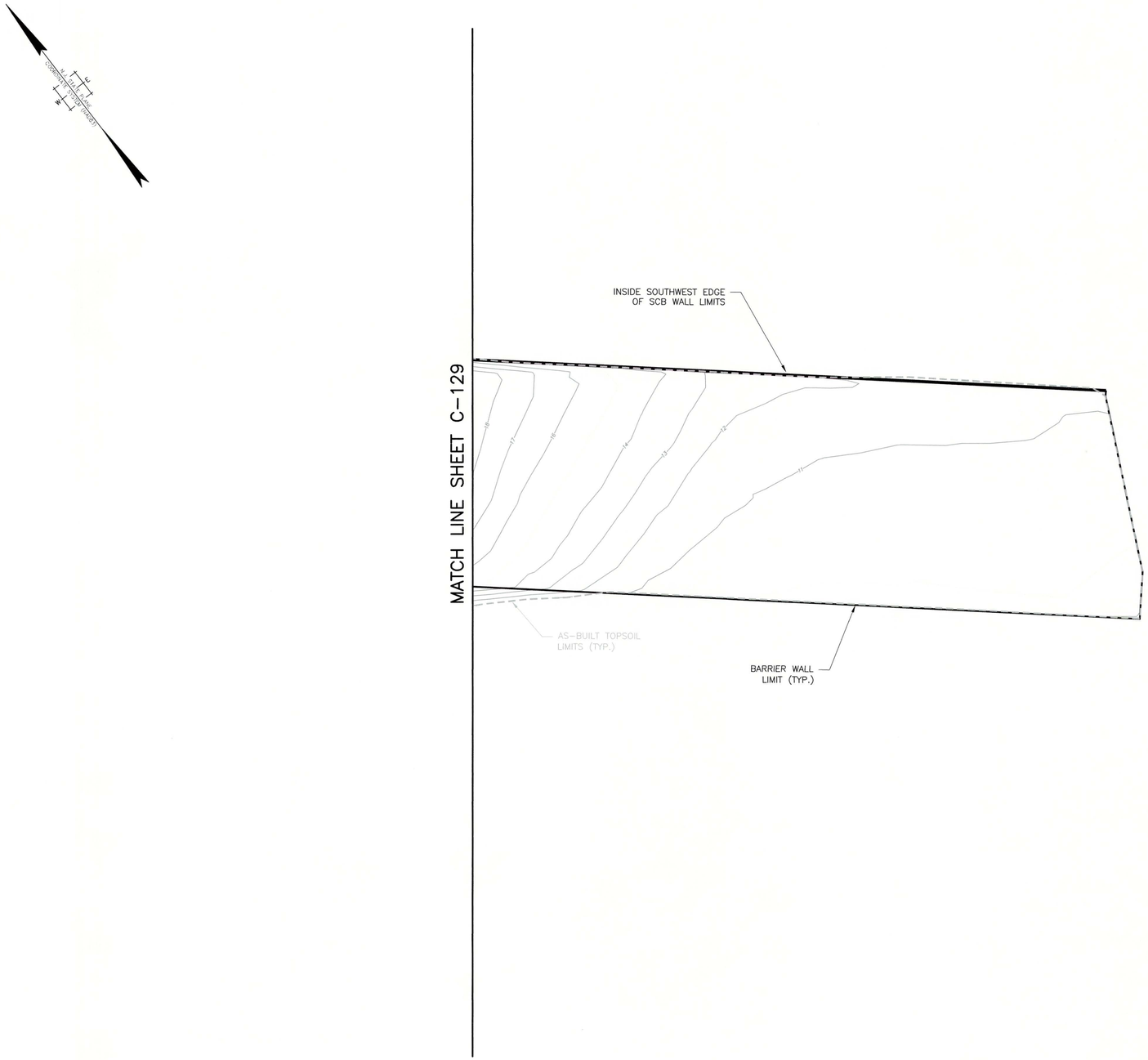
0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: AS BUILT RESTORATION PLAN SA–6 SOUTH – SHEET 001 12/12/16

PROJECT NAME & LOCATION: HONEYWELL SA–6 REMEDIATION JERSEY CITY, NJ



LEGEND:

5 MAJOR CONTOUR
4 MINOR CONTOUR

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT TOPSOIL GRADING ELEVATIONS WITHIN THE SA6 SOUTH CAP AREA AT THE PROJECT SITE.*
2. *AS-BUILT SOUTH CAP TOPSOIL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS ON JUNE 23, 2016 & FROM OCT. 3 THROUGH NOV. 3, 2016*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

NO.	DATE	REVISION	BY	APVD
DSGN		DR CHK	APVD	

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STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
SOUTH CAP TOPSOIL
GRADING PLAN

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 -2929

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	12/20/16
PROJ	3480-10-0027
DWG	C-128
SHEET	1 OF 3

FILE NUMBER 12001511A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\SA6S GDL SOUTH TOPSOIL.dwg PLOT DATE: Wed, 21 Dec 2016 PLOT TIME: 5:54 PM

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT TOPSOIL GRADING ELEVATIONS WITHIN THE SA6 SOUTH CAP AREA AT THE PROJECT SITE.
2. AS-BUILT SOUTH CAP TOPSOIL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS ON JUNE 23, 2016 & FROM OCT. 3 THROUGH NOV. 3, 2016
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.

NO.	DATE	REVISION	BY
DSGN		DR	CHK
		APVD	APVD

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
SOUTH CAP TOPSOIL
GRADING PLAN

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2829

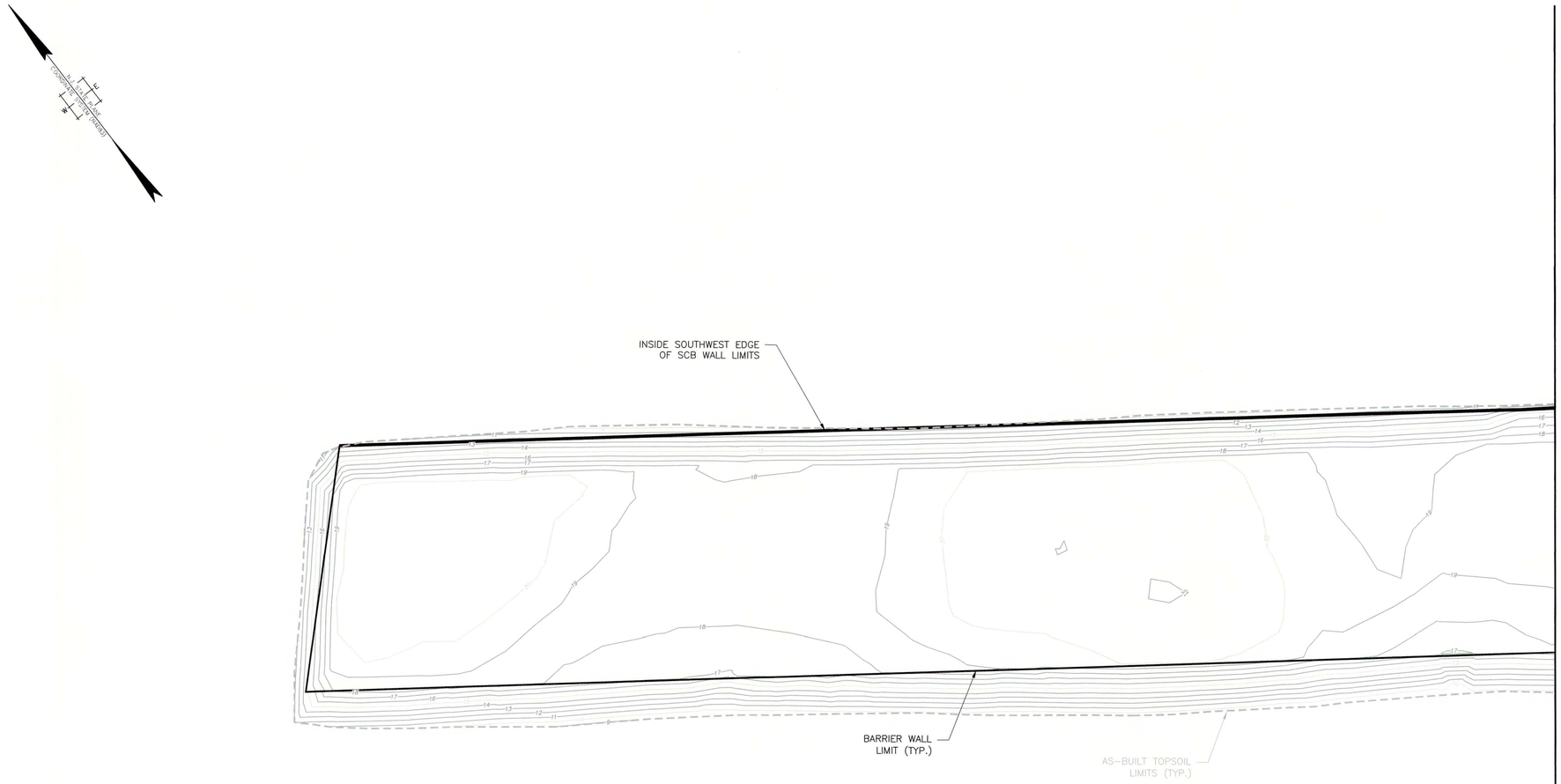
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	12/20/16
PROJ	3480-10-0027
DWG	C-129
SHEET	2 OF 3

FILE NUMBER 12001511A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\SA6S GDL SOUTH TOPSOIL.dwg PLOT DATE: Wed, 21 Dec 2016 PLOT TIME: 5:54 PM



LEGEND:

5 MAJOR CONTOUR
4 MINOR CONTOUR

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT TOPSOIL GRADING ELEVATIONS WITHIN THE SA6 SOUTH CAP AREA AT THE PROJECT SITE.
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3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12001511A

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

NO.	DATE	REVISION	BY
DSGN		DR	CHK
			APVD

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
SOUTH CAP TOPSOIL
GRADING PLAN

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2229

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	12/20/16
PROJ	3480-10-0027
DWG	C-130
SHEET	3 OF 3

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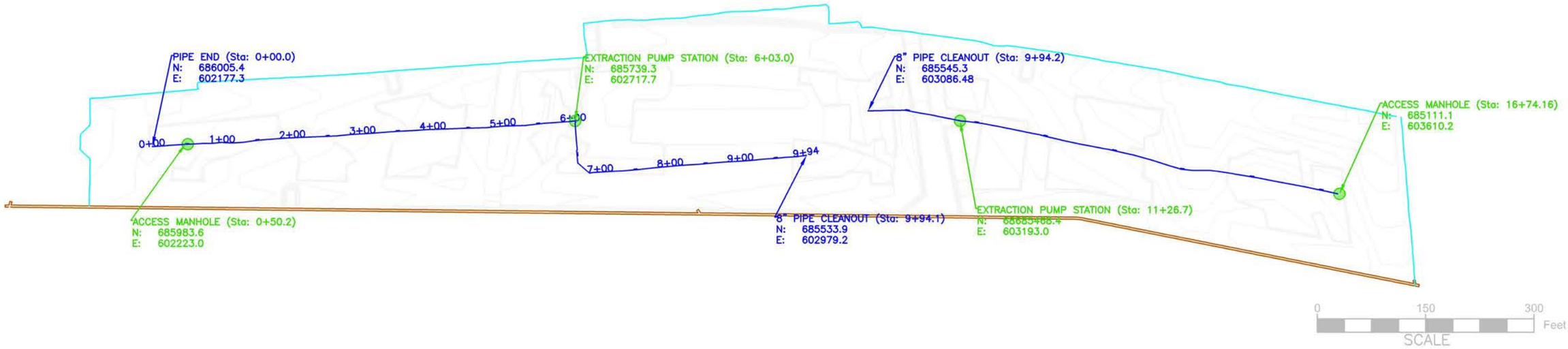
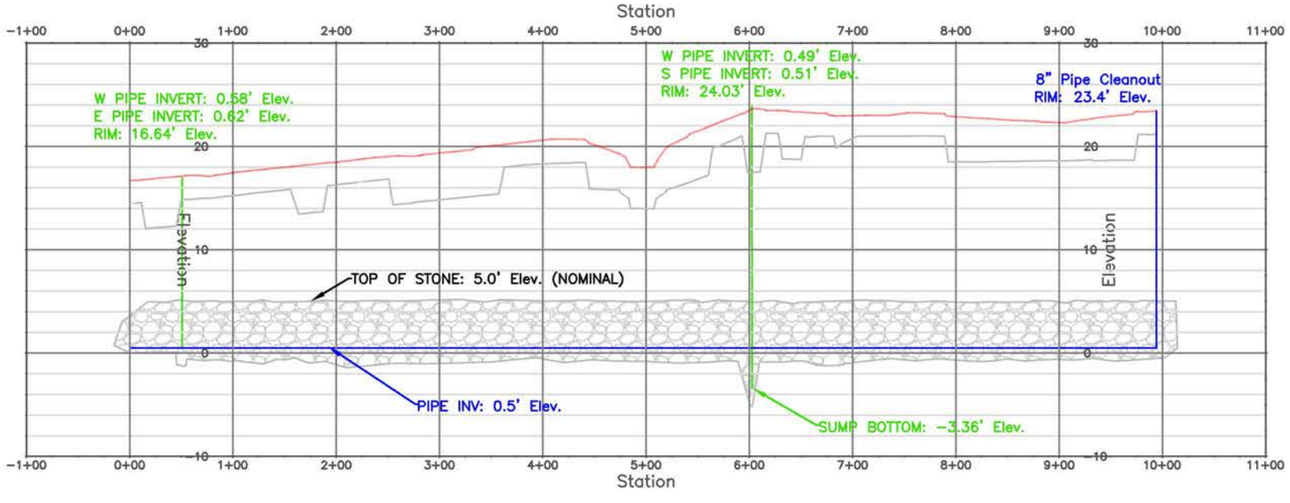
FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\SA6S GDL SOUTH TOPSOIL.dwg PLOT DATE: Wed, 21 Dec 2016 PLOT TIME: 5:54 PM

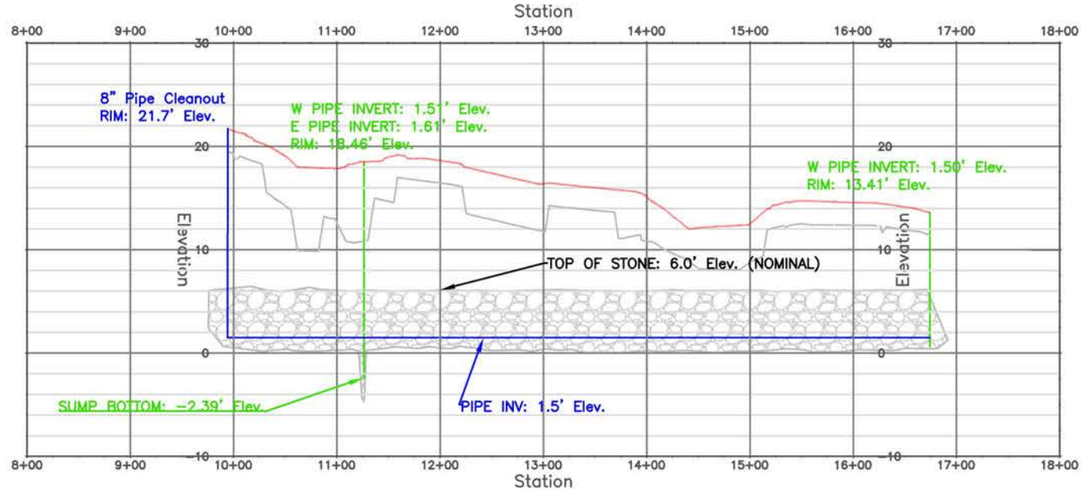
PLAN VIEW



PROFILE VIEW



PROFILE VIEW



LEGEND

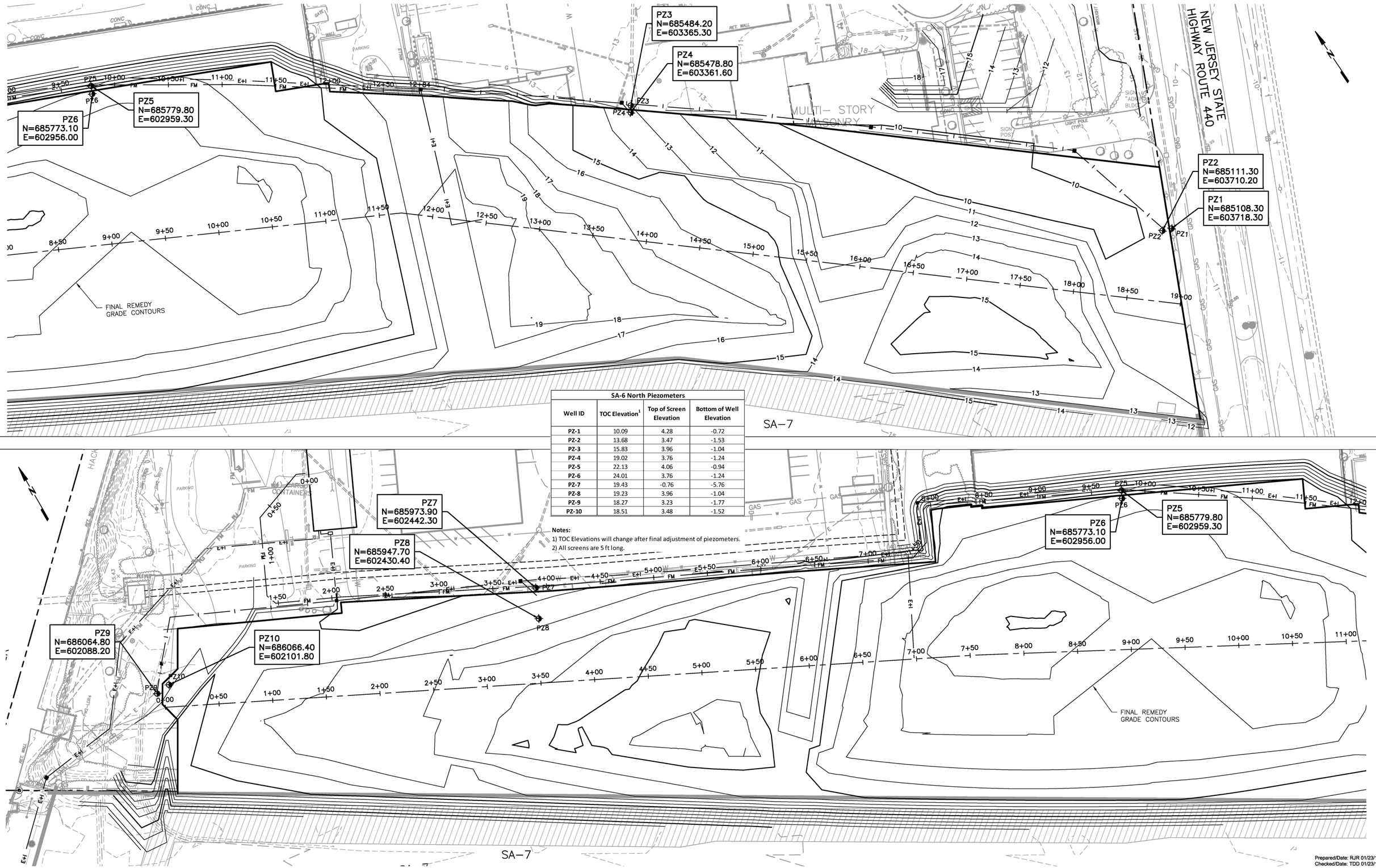
- 8" PERFORATED HDPE PIPE INVER (ELEV. TYPICAL)
- 4FT DIA. MANHOLE RISER PROFILE
- SCB WALL
- HYDRAULIC BARRIER WALL
- CAP SUBGRADE (DESIGN)
- CAP FINAL GRADE (DESIGN)
- 4FT DIA. MANHOLE
- 1.5" STONE TRENCH (WIDTH VARIES 3' MIN.)

REV	DATE	BY	CHK'D	APPR'VD	DESCRIPTION
0	5/6/16	CDC	AE	AE	RECORD DRAWING
1	10/03/16	EJP	CP	CP	RECORD DRAWING
2	11/04/16	EJP	CP	CP	RECORD DRAWING

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
SA6 NORTH CAP
CONTINGENT GROUNDWATER COLLECTION TRENCH
RECORD DRAWING 11/04/16

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



SA-6 North Piezometers			
Well ID	TOC Elevation[1]	Top of Screen Elevation	Bottom of Well Elevation
PZ-1	10.09	4.28	-0.72
PZ-2	13.68	3.47	-1.53
PZ-3	15.83	3.96	-1.04
PZ-4	19.02	3.76	-1.24
PZ-5	22.13	4.06	-0.94
PZ-6	24.01	3.76	-1.24
PZ-7	19.43	-0.76	-5.76
PZ-8	19.23	3.96	-1.04
PZ-9	18.27	3.23	-1.77
PZ-10	18.51	3.48	-1.52

Notes:
1) TOC Elevations will change after final adjustment of piezometers.
2) All screens are 5 ft long.

Prepared/Date: RJR 01/23/17
Checked/Date: TDD 01/23/17

0 20 40 80
SCALE IN FEET
HORIZONTAL SCALE

Honeywell
115 TARBOR ROAD MORRIS
PLAINS, NJ 07950

CHROMIUM REMEDY
STUDY AREA 6 NORTH
JERSEY CITY, NEW JERSEY

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619, (609) 689 - 2829
NJ Certificate of Authorization Number 24GA28010500

Piezometer As Built Location
Project 3480-13-0377
Figure 1

Z:\Projects\HONEYWELL\JERSEY CITY\Cop Design-SA6-C3D\CAD\SA6-North-South-GW_Extraction_Trench\Figure - Piezometer Location.dwg Tue, 14 Feb 2017 - 2:19pm roger.riquier

MATCH LINE SHEET CN-124A

BARRIER WALL LIMIT (TYP.)

INSIDE SOUTHWEST EDGE OF SCB WALL LIMITS

ROUTE 440

LEGEND:

5 MAJOR CONTOUR
4 MINOR CONTOUR

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT GDL COVER SOIL GRADING ELEVATIONS WITHIN THE SA6 NORTH CAP AREA AT THE PROJECT SITE.*
2. *AS-BUILT GDL COVER SOIL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM JULY 2016 THROUGH SEPT. 2016*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

NO.	DATE	REVISION	CHK	APVD	BY	APVD
DSGN		DR				

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS38737

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Honeywell
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STUDY AREA 6 NORTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

FILE NUMBER
12001511A

CIVIL
NORTH CAP GDL COVER
SOIL GRADING PLAN

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 150 STAGECOACH ROAD - MARMORA, NJ 080223

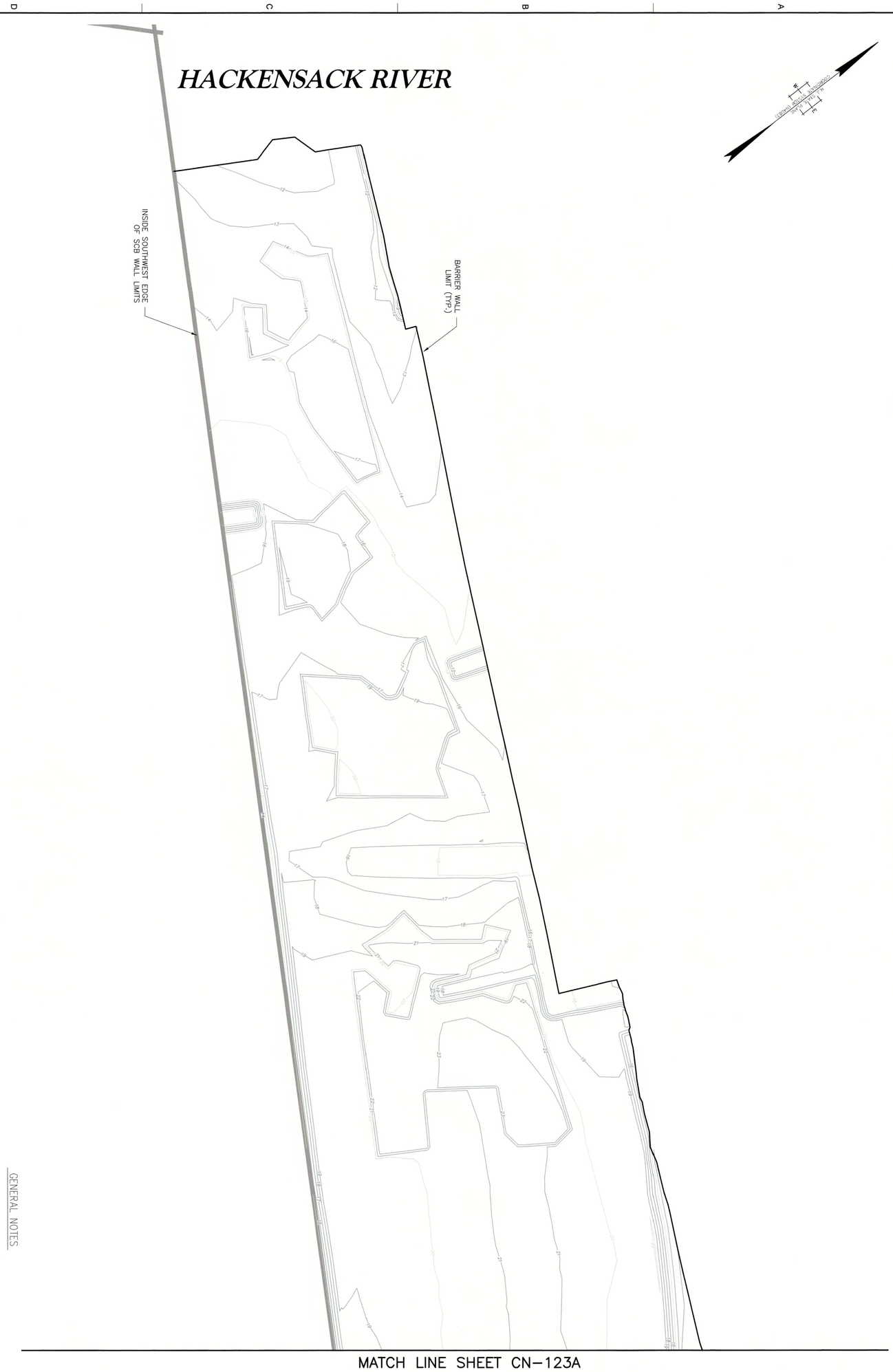
amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ. 08619
(609) 689 - 2929

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"

DATE	11/16/16
PROJ	3480-10-0027
DWG	CN-123A
SHEET	1 OF 2

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\NORTH CAP GDL COVER SOIL SURVEY-11-16-16.dwg PLOT DATE: Tue, 31 Jan 2017 PLOT TIME: 12:10 PM

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\NORTH CAP GDL COVER SOIL SURVEY-11-16-16.dwg PLOT DATE: Tue, 31 Jan 2017 PLOT TIME: 1:27 PM



MATCH LINE SHEET CN–123A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER
12001511A

SHEET 2 OF 2
DWG CN-124A
PROJ 3480-10-0027
DATE 11/16/16
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619
(609) 689 - 2829

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
NORTH CAP GDL COVER SOIL GRADING PLAN

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 NORTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

NO.	DATE	REVISION	BY	APVD

DSGN | DR | CHK | APVD

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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HACKENSACK RIVER

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

P-1 P-2 P-3 P-4 P-5 P-6 P-7 P-8 P-9 P-10 P-11 P-12 P-13 P-14 P-14A P-15 P-16 P-17 P-18 P-19 P-20 P-21 P-22 P-23 P-24 P-25 P-26 P-27 P-28 P-29 P-30 P-31 P-32 P-33 P-34 P-35 P-36 P-37 P-38 P-39 P-40 P-41 P-42 P-43 P-44 P-44A P-44B P-45 P-46 P-47 P-48 P-49 P-50 P-51 P-52 P-53

P-54 P-55 P-56 P-57 P-58 P-59 P-60 P-61 P-62 P-63 P-64 P-65 P-66 P-67 P-68 P-69 P-70 P-71 P-72 P-73 P-74 P-75 P-76 P-77 P-78 P-79 P-80 P-81 P-82 P-83 P-84 P-85 P-86 P-87 P-88 P-89 P-90 P-91 P-92 P-93 P-94 P-95 P-96 P-97 P-98 P-99 P-100 P-101 P-102 P-103 P-104 P-105 P-106 P-107 P-108 P-109 P-110 P-111 P-112 P-113 P-114 P-115 P-116 P-117 P-118 P-119

SCALE 0 40 80 Feet

LEGEND

R-1 (Repair Number)

LINER SEAM/EDGE

SCB WALL

HB WALL (Inner Edge)

R: Repair

DSX: Destructive Extrusion Weld Test

DS: Destructive Fusion Weld Test

P: Panel

NOTE: Drawing details are schematic in nature. Actual seam locations and repair dimensions may vary due to the geomembrane grading. Repair locations are recorded in the repair logs.

NOTE: Refer to ESI Repair Report for repair details

REV	DATE	BY	CHK'D	APPRV'D	DESCRIPTION
0	10/27/16	EP	CP	CP	RECORD DRAWING
1	11/04/16	EP	CP	CP	RECORD DRAWING
2	11/18/16	EP	CP	CP	RECORD DRAWING

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: SA6 NORTH CAP PANEL LAYOUT
60 mil Textured LLDPE Geomembrane
11/18/16

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

N

HACKENSACK RIVER

GAS VENT #6
N: 685983.7
E: 602246.3
EL: 17.07'

GAS VENT #5
N: 685862.9
E: 602483.9
EL: 19.87'

GAS VENT #4
N: 685785.2
E: 602766.1
EL: 24.22'

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

GAS VENT #3
N: 685570.8
E: 603027.7
EL: 23.63'

GAS VENT #2
N: 685366.8
E: 603295.2
EL: 17.31'

GAS VENT #1
N: 685187.5
E: 603530
EL: 14.49'

0 40 80 Feet
SCALE

LEGEND

- CLASS A/16 OZ GEOTEXTILE
- GEOCOMPOSITE GAS VENT LAYER (GVL)
- GEOSYNTHETIC CLAY LINER (GCL)
- GAS VENT (NOT TO SCALE)
- GAS VENT PIPE
- SCB WALL
- HB WALL (Inner Edge)

NOTE: Drawing is schematic in nature. Actual seam locations may vary due to the geomembrane grading.

REV	DATE	BY	CHK'D	APPR'VD	DESCRIPTION
0	10/27/16	EP	CP	CP	RECORD DRAWING
1	11/04/16	EP	CP	CP	RECORD DRAWING
2	11/21/16	EP	CP	CP	RECORD DRAWING
3	11/29/16	EP	CP	CP	RECORD DRAWING
4	02/14/16	EP	CP	CP	RECORD DRAWING

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
SA6 NORTH CAP GVL/GCL Layout
Class A Geotextile/Gas Vent Layer/Geosynthetic Clay Liner
02/14/16

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

HACKENSACK RIVER

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

0 40 80 Feet

SCALE

LEGEND

- GEOCOMPOSITE DRAINAGE LAYER (GDL)
- CAP SUBGRADE CONTOUR
- SCB WALL
- HB WALL (Inner Edge)

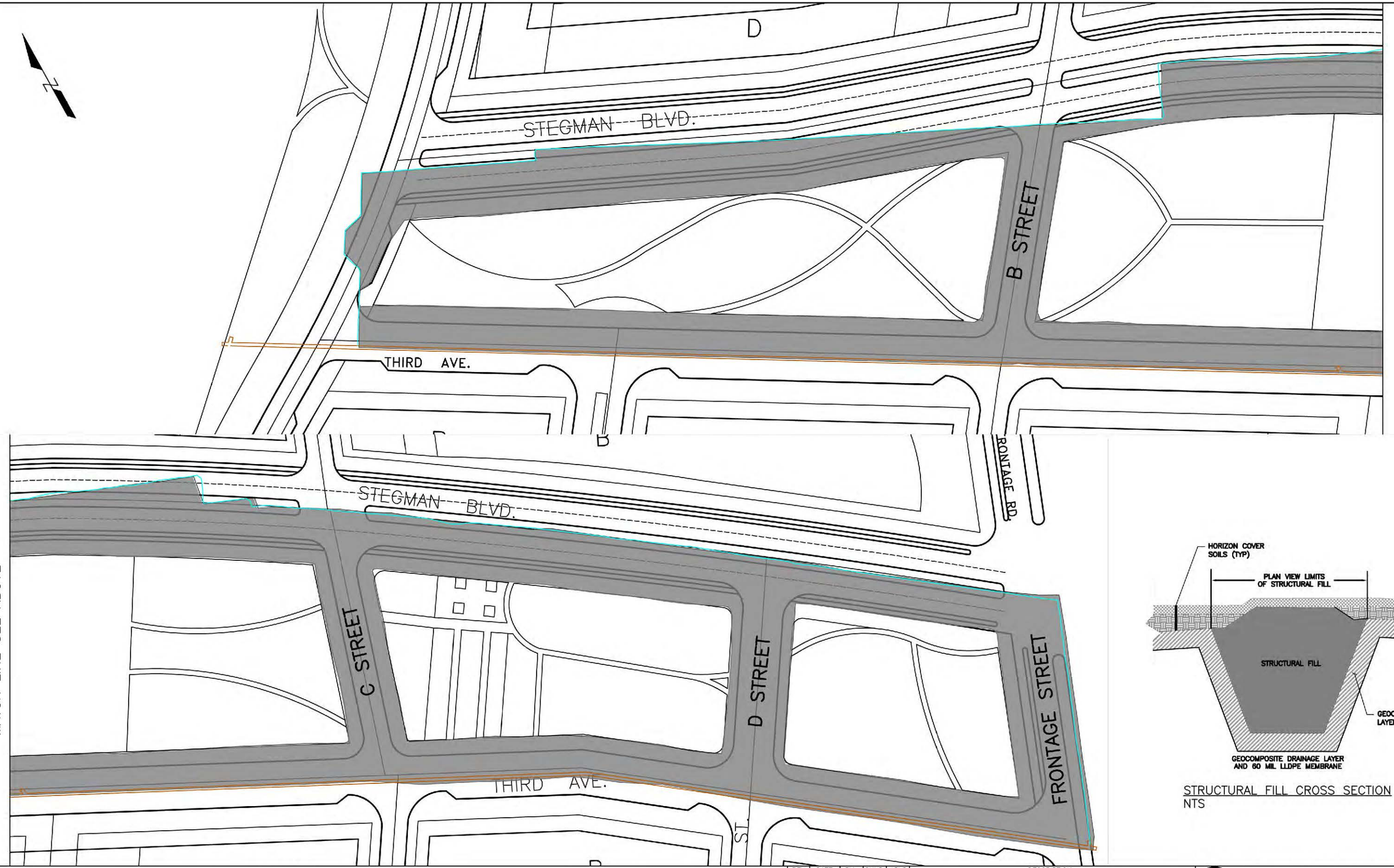
NOTE: Drawing is schematic in nature. Actual seam locations may vary due to geomembrane grading.

REV	DATE	BY	CHK'D	APPR'VD	DESCRIPTION
0	10/27/16	EP	CP	CP	RECORD DRAWING
1	11/04/16	EP	CP	CP	RECORD DRAWING

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: SA6 NORTH CAP PANEL LAYOUT GEOCOMPOSITE DRAINAGE LAYER 11/04/16

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION JERSEY CITY, NJ



STRUCTURAL FILL CROSS SECTION
NTS

LEGEND

- Structural Fill Under Roadways
- SCB WALL
- HB WALL (Inner Edge)

0 80 160 Feet

SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/7/16	EJP	AE	AE	STRUCTURAL FILL UNDER ROADWAYS – NORTH CAP
1	12/15/16	EJP	AE	AE	ADDED FUTURE DEVELOPMENT LAYOUT & STRUCTURAL FILL X-SECTION

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: Structural Fill Under Roadways NORTH CAP 12/15/16

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION JERSEY CITY, NJ

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW FINAL GRADING ELEVATIONS WITHIN THE SA6 NORTH CAP AREA AT THE PROJECT SITE.*
2. *FINAL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM NOV. 4, 2016 THROUGH NOV. 28, 2016*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER: GS35737

NO.	DATE	REVISION	BY
0.	1/24/17	SA-6 NORTH FINAL GRADING	DMS RTH
		DR CHK	APVD

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Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 NORTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
NORTH CAP FINAL GRADING PLAN

FILE NUMBER
12001511A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2829

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	12/22/16
PROJ	3480-10-0027
DWG	CN-125
SHEET	1 OF 2

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\NORTH CAP TOPSOIL GRADING PLAN-12-22-16.dwg PLOT DATE: Tue, 31 Jan 2017 PLOT TIME: 12:47 PM

LEGEND:

5 MAJOR CONTOUR
4 MINOR CONTOUR

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW FINAL GRADING ELEVATIONS WITHIN THE SA6 NORTH CAP AREA AT THE PROJECT SITE.*
2. *FINAL GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM NOV. 4, 2016 THROUGH NOV. 28, 2016*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 196 STAGECOACH ROAD - MARMORA, NJ 08223

FILE NUMBER 12001511A

NO	DATE	REVISION	BY	APVD
0	1/24/17	SA-6 NORTH FINAL GRADING	DMS	RTH
DSGN		DR CHK	APVD	

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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STUDY AREA 6 NORTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
NORTH CAP FINAL GRADING PLAN

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 890-2929

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	12/22/16
PROJ	3480-10-0027
DWG	CN-126
SHEET	2 OF 2

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\NORTH CAP TOPSOIL GRADING PLAN-12-22-16.dwg PLOT DATE: Tue, 31 Jan 2017 PLOT TIME: 12:46 PM

MATCH LINE SHEET CN-124

BARRIER WALL LIMIT (TYP.)

INSIDE SOUTHWEST EDGE OF SCB WALL LIMITS

ROUTE 440

LEGEND:

5 MAJOR CONTOUR
1 MINOR CONTOUR

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT GEOMEMBRANE GRADING ELEVATIONS WITHIN THE SA6 NORTH CAP AREA AT THE PROJECT SITE.*
2. *AS-BUILT GEOMEMBRANE GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM JUNE 2016 THROUGH AUG. 2016. GEOMEMBRANE GRADING SURFACES AND CONTOURS WERE GENERATED BY ENTACT, CHECKED BY AMEC AND CONFIRMED BY MASER CONSULTING P.A.*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

R. THOMAS HUGG

NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

NO	DATE	REVISION	BY	APVD
DSGN		DR CHK	APVD	

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STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
NORTH CAP GEOMEMBRANE GRADING PLAN

FILE NUMBER
12001511A

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2829

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	11/16/16
PROJ	3480-10-0027
DWG	CN-123
SHEET	1 OF 2

FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\NORTH CAP GEOMEMBRANE GRADING PLAN 11-7-16.dwg PLOT DATE: Tue, 31 Jan 2017 PLOT TIME: 12:22 PM

LEGEND:

5 MAJOR CONTOUR
4 MINOR CONTOUR

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. *THE SOLE PURPOSE OF THIS PLAN IS TO SHOW AS-BUILT GEOMEMBRANE GRADING ELEVATIONS WITHIN THE SA6 NORTH CAP AREA AT THE PROJECT SITE.*
2. *AS-BUILT GEOMEMBRANE GRADING LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON MULTIPLE FIELD VISITS FROM JUNE 2016 THROUGH AUG. 2016. GEOMEMBRANE GRADING SURFACES AND CONTOURS WERE GENERATED BY ENTACT, CHECKED BY AMEC AND CONFIRMED BY MASER CONSULTING P.A.*
3. *HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.*

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12001511A

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL
NORTH CAP GEOMEMBRANE
GRADING PLAN

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ. 08619
(609) 895 - 2929

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	11/16/16
PROJ	3480-10-0027
DWG	CN-124
SHEET	2 OF 2

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STUDY AREA 6 SOUTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

NO.	DATE	REVISION	BY	APVD
DSGN		DR CHK	APVD	

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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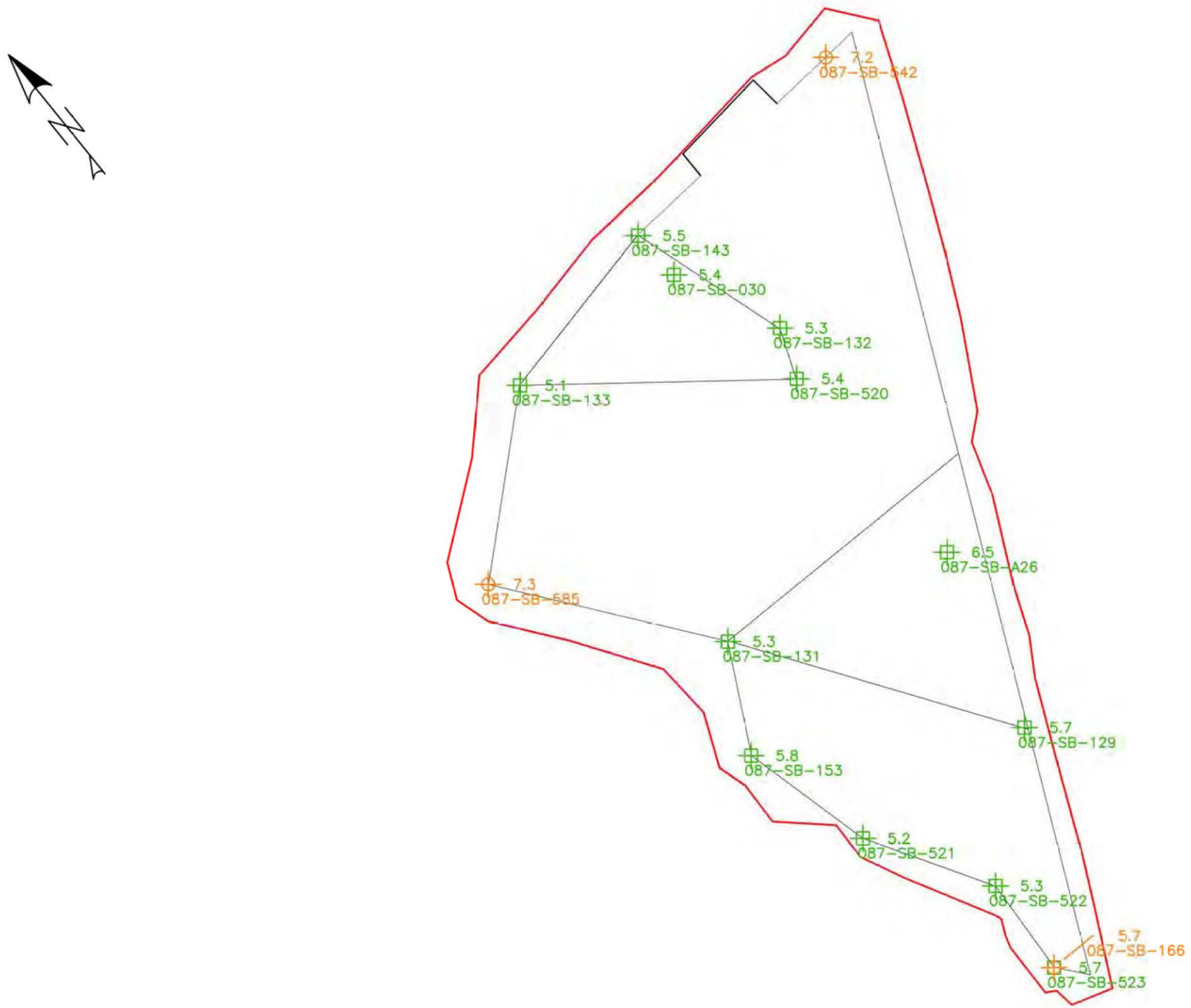
FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\NORTH CAP GEOMEMBRANE GRADING PLAN 11-7-16.dwg PLOT DATE: Tue, 31 Jan 2017 PLOT TIME: 12:22 PM



LEGEND

- CONFIRMATORY BOTTOM SAMPLE ELEVATION
- CONFIRMATORY SIDEWALL SAMPLE ELEVATION
- 0.0 POINT ELEVATION
  POINT POINT DESCRIPTION
- PREVIOUSLY SUBMITTED DATA
- EXCAVATION TO STRATUM D
- LIMIT OF GCL INSTALLATION
- LIMIT OF EXCAVATION AREA
- TOP OF EXCAVATION SLOPE

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
EXCAVATION BOTTOM ELEVATIONS EA1
03-15-16

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



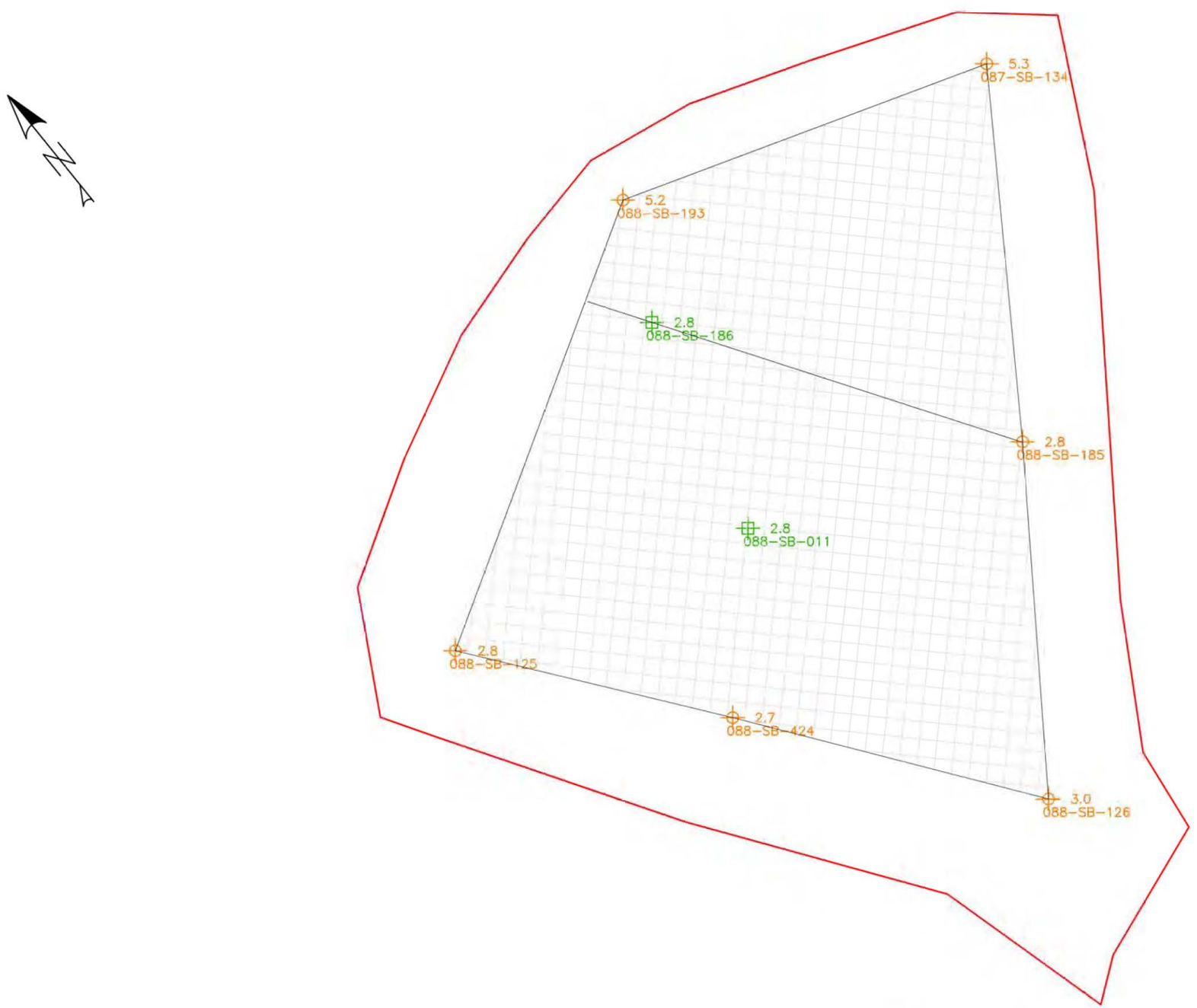
LEGEND

- CONFIRMATORY BOTTOM SAMPLE ELEVATION
- CONFIRMATORY SIDEWALL SAMPLE ELEVATION
- 0.0 POINT ELEVATION
- POINT POINT DESCRIPTION
- PREVIOUSLY SUBMITTED DATA
- EXCAVATION TO STRATUM D
- LIMIT OF GCL INSTALLATION
- LIMIT OF EXCAVATION AREA
- TOP OF EXCAVATION SLOPE

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
EXCAVATION BOTTOM ELEVATIONS EA2/3
03-03-16

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



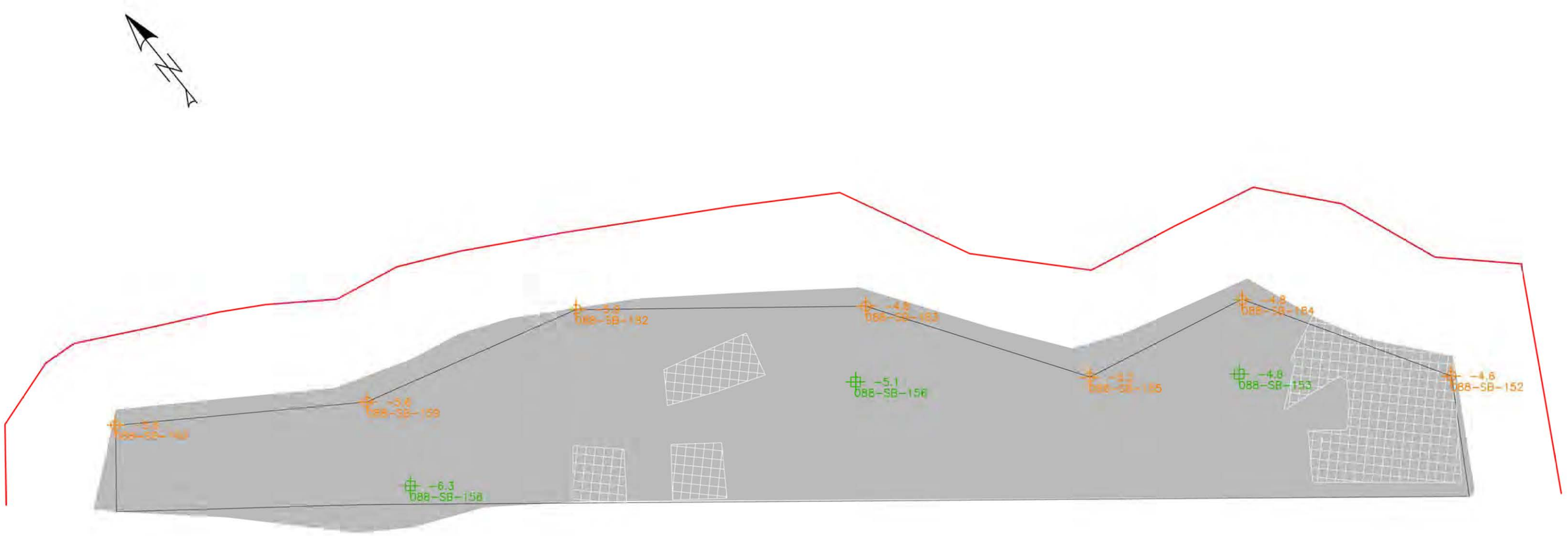
LEGEND

- CONFIRMATORY BOTTOM SAMPLE ELEVATION
- CONFIRMATORY SIDEWALL SAMPLE ELEVATION
- 0.0 POINT ELEVATION
- POINT POINT DESCRIPTION
- PREVIOUSLY SUBMITTED DATA
- CURRENT EXCAVATION TO STRATUM D
- CURRENT EXCAVATION TO <20 PPM
- LIMIT OF EXCAVATION AREA
- TOP OF EXCAVATION SLOPE

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
EXCAVATION BOTTOM ELEVATIONS EA4
08-26-15

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



LEGEND

- CONFIRMATORY BOTTOM SAMPLE ELEVATION
- CONFIRMATORY SIDEWALL SAMPLE ELEVATION
- 0.0 POINT ELEVATION
- POINT POINT DESCRIPTION
- PREVIOUSLY SUBMITTED DATA
- CURRENT EXCAVATION TO STRATUM D
- LIMIT OF GCL INSTALLATION
- LIMIT OF EXCAVATION AREA
- TOP OF EXCAVATION SLOPE

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
EXCAVATION BOTTOM ELEVATIONS EA5
09-24-15

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



LEGEND

- CONFIRMATORY BOTTOM SAMPLE ELEVATION
- CONFIRMATORY SIDEWALL SAMPLE ELEVATION
- 0.0 POINT ELEVATION
- POINT POINT DESCRIPTION
- PREVIOUSLY SUBMITTED DATA
- CURRENT EXCAVATION TO STRATUM D
- CURRENT EXCAVATION TO <20 PPM
- LIMIT OF EXCAVATION AREA
- TOP OF EXCAVATION SLOPE

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
EXCAVATION BOTTOM ELEVATIONS EA7
06-30-15

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



LEGEND

- CONFIRMATORY BOTTOM SAMPLE ELEVATION
- CONFIRMATORY SIDEWALL SAMPLE ELEVATION
- 0.0 POINT ELEVATION
  POINT POINT DESCRIPTION
- PREVIOUSLY SUBMITTED DATA
- CURRENT EXCAVATION TO STRATUM D
- LIMIT OF GCL INSTALLATION
- LIMIT OF EXCAVATION AREA
- TOP OF EXCAVATION SLOPE

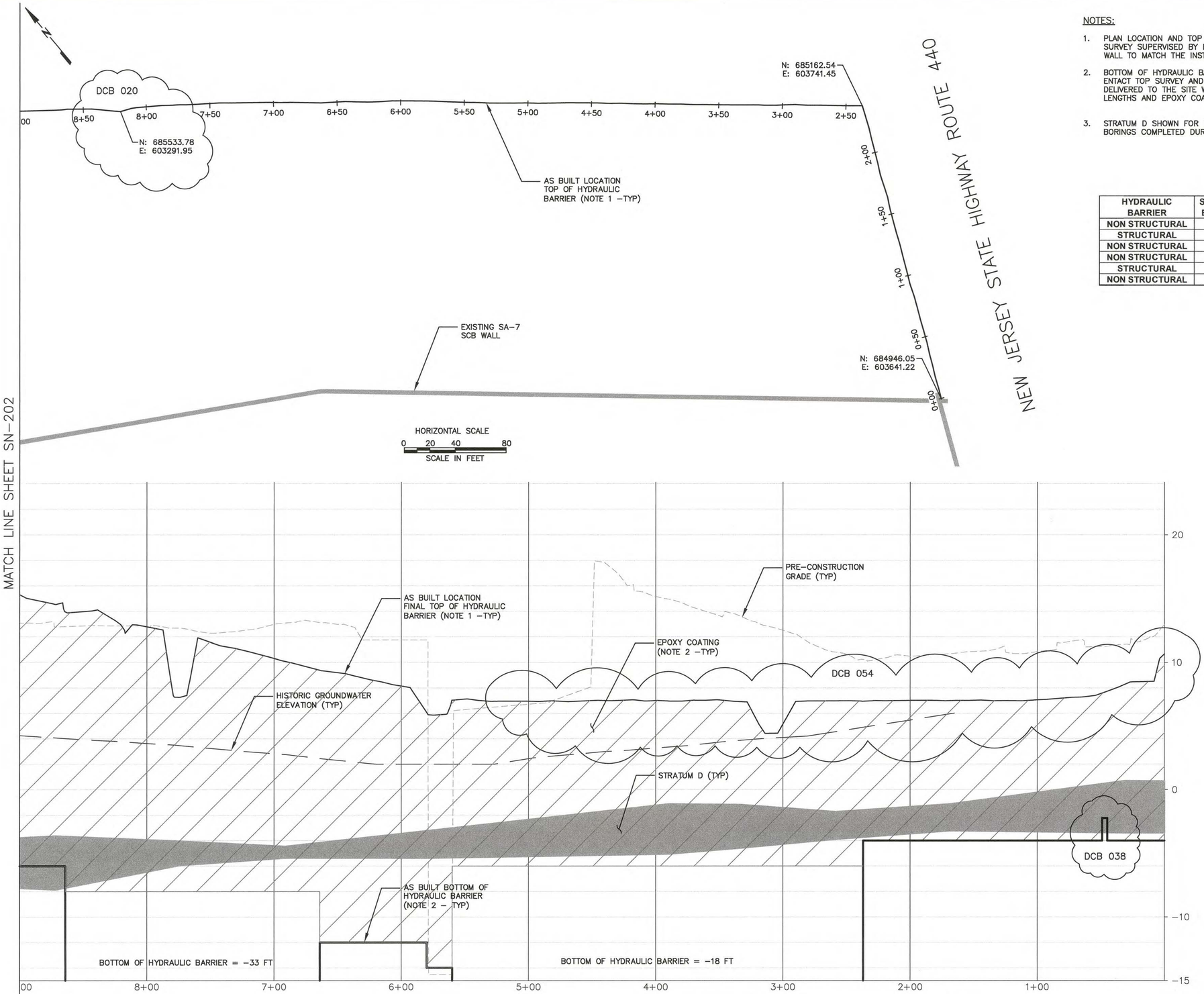
ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME

EXCAVATION BOTTOM ELEVATIONS EA8
12-17-15

PROJECT NAME & LOCATION

HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ



NOTES:

1. PLAN LOCATION AND TOP ELEVATION OF HYDRAULIC BARRIER BASED ON SURVEY SUPERVISED BY MASER CONSULTING AND UPON CUTTING OF THE WALL TO MATCH THE INSTALLED LINER GRADE.
2. BOTTOM OF HYDRAULIC BARRIER AND EXTENT OF EPOXY COATING BASED ON ENTACT TOP SURVEY AND SHEET PILE FABRICATION DRAWINGS. ALL SHEETS DELIVERED TO THE SITE WERE INSPECTED BY AMEC PERSONNEL TO VERIFY LENGTHS AND EPOXY COATING.
3. STRATUM D SHOWN FOR REFERENCE ONLY AND IS BASED ON GEOTECHNICAL BORINGS COMPLETED DURING THE PRELIMINARY DESIGN INVESTIGATION.

HYDRAULIC BARRIER	STATION BEGINS	STATION ENDS	TOE ELEVATION	SHEET PILE
NON STRUCTURAL	0+00	2+37	-4	AZ 19-700
STRUCTURAL	2+37	5+60	-18	AZ 19-700
NON STRUCTURAL	5+60	5+80	-14	AZ 19-700
NON STRUCTURAL	5+80	6+64	-12	AZ 19-700
STRUCTURAL	6+64	8+64	-33	AZ 38-700N
NON STRUCTURAL	8+64	9+85	-6	AZ 19-700

NOTE: GROUTED ANGLES INSTALLED FROM STATION 0+00 TO 5+00
SEE SHEET CN–203 FOR SEALING DETAIL

SAMUEL G. SHALLARD
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 43507

NO.	DATE	DSGN	DR	CHK	APVD	BY
2	12/8/16	DECLARATION NO 3 - SA-6 NORTH VHB AS BUILT	TDD	RJR	TDD	SGS
1	8/25/16	DECLARATION NO 3 - ISSUED FOR CLIENT REVIEW	TDD	RJR	TDD	SGS

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Honeywell
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CHROMIUM REMEDY
STUDY AREA 6 NORTH
SITES 087 AND 088
JERSEY CITY, NEW JERSEY

DRAWING STATUS
AS BUILT DRAWINGS

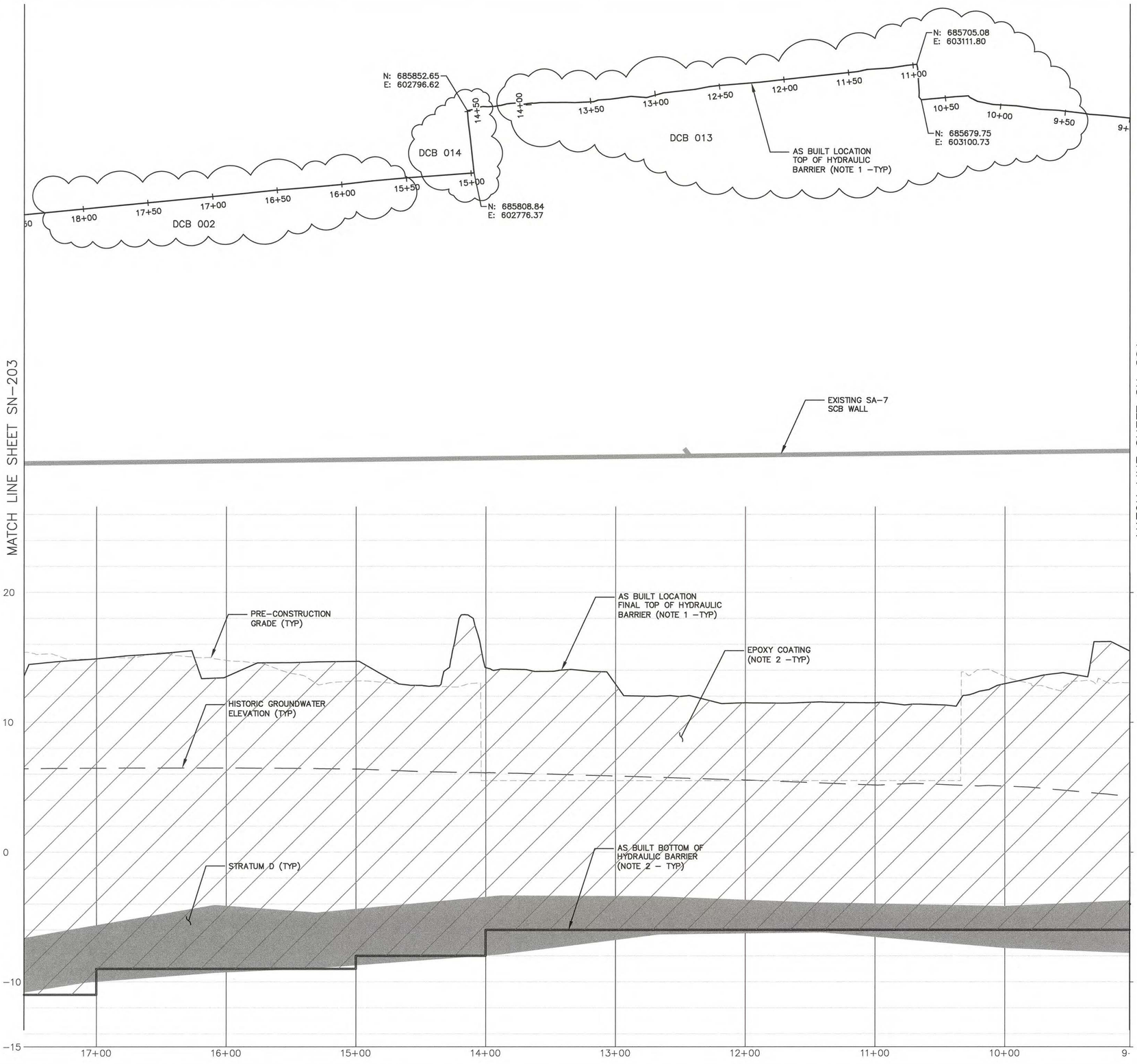
HYDRAULIC BARRIER
PLAN AND PROFILE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619, (609) 689 - 2829
NJ Cert of Authorization 24GA28010900

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"

DATE	6/7/13
PROJ	3480-12-0317
DWG	SN-201
SHEET	54 OF 70

FILE NAME: C:\Donovan\SA-6 North\2013 Excavation Surfaces\SA-6 North VHB\SA-6 North VHB As Built.dwg PLOT DATE: Wed, 28 Dec 2016 PLOT TIME: 9:36 AM



NOTES:

1. REFER TO NOTES 1 THRU 3 ON SHEET SN–201

HYDRAULIC BARRIER	STATION BEGINS	STATION ENDS	TOE ELEVATION	SHEET PILE
NON STRUCTURAL	8+64	9+85	-6	AZ 19-700
NON STRUCTURAL	9+85	14+00	-6	AZ 19-700
STRUCTURAL	14+00	19+00	SEE NOTE 4	AZ 19-700

HORIZONTAL SCALE
0 20 40 80
SCALE IN FEET

VERTICAL SCALE
0 2 4 8
SCALE IN FEET

SAMUEL G. SHALLARD
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 43507

NO.	DATE	DESIGN	DR	CHK	APVD
2	12/8/16	DECLARATION NO 3 - SA-6 NORTH VHB AS BUILT	TDD	RJR	TDD
1	8/25/16	DECLARATION NO 3 - ISSUED FOR CLIENT REVIEW	TDD	SGS	SGS
NO.	DATE	REVISION	BY	APVD	SGS

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

CHROMIUM REMEDY
STUDY AREA 6 NORTH
SITES 087 AND 088
JERSEY CITY, NEW JERSEY

DRAWING STATUS
AS BUILT DRAWINGS

HYDRAULIC BARRIER
PLAN AND PROFILE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619, (609) 889 - 2629
NJ Cert of Authorization 24GA28019500

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"

DATE	6/7/13
PROJ	3480-12-0317
DWG	SN-202
SHEET	55 OF 70

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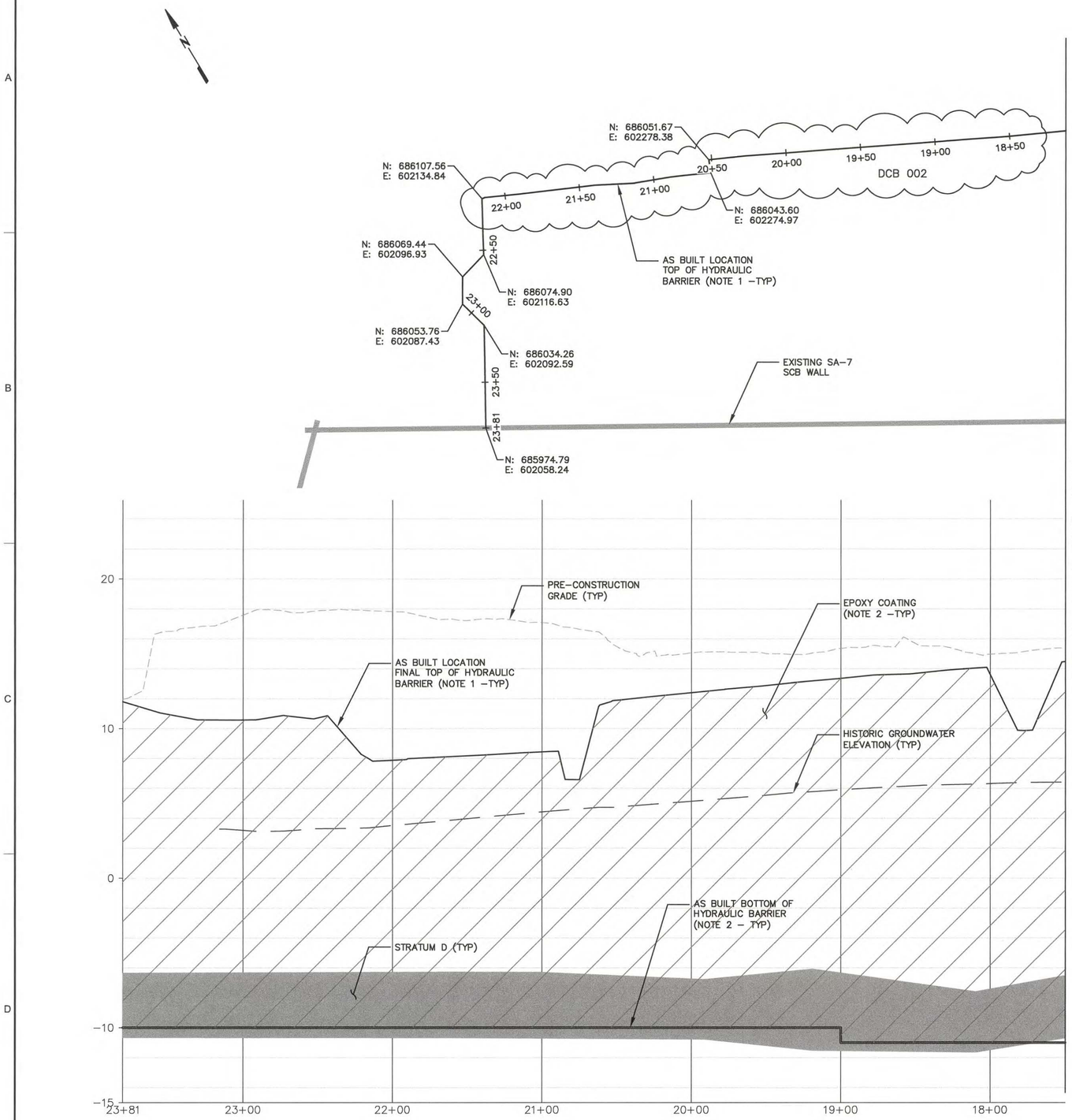
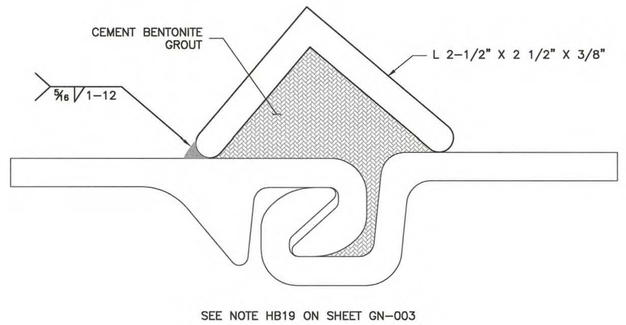


NOTES:

1. REFER TO NOTES 1 THRU 3 ON SHEET SN–201.

HYDRAULIC BARRIER	STATION BEGINS	STATION ENDS	TOE ELEVATION	SHEET PILE
STRUCTURAL	14+00	19+00	SEE NOTE 4	AZ 19-700
NON STRUCTURAL	19+00	23+38	-10	AZ 19-700



SEE NOTE HB19 ON SHEET GN–003

SHEET SEALING DETAIL F
NTS SN–201 CN–301

HORIZONTAL SCALE
0 20 40 80
SCALE IN FEET

VERTICAL SCALE
0 2 4 8
SCALE IN FEET

SAMUEL G. SHALLARD
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 43507

NO.	DATE	DSGN	DR	CHK	APVD
2	12/8/16	TDD	TDD	RJR	TDD
1	8/25/16	TDD	TDD	BY	APVD

DECLARATION NO 3 - SA-6 NORTH VHB AS BUILT
DECLARATION NO 3 - ISSUED FOR CLIENT REVIEW
REVISION

SGS
SGS
SGS

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

CHROMIUM REMEDY
STUDY AREA 6 NORTH
SITES 087 AND 088
JERSEY CITY, NEW JERSEY

DRAWING STATUS
AS BUILT DRAWINGS

HYDRAULIC BARRIER
PLAN AND PROFILE

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619, (609) 689 - 2929
NJ Cert of Authorization 24GA28010900

VERIFY SCALE
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0 1"

DATE	6/7/13
PROJ	3480-12-0317
DWG	SN-203
SHEET	56 OF 70

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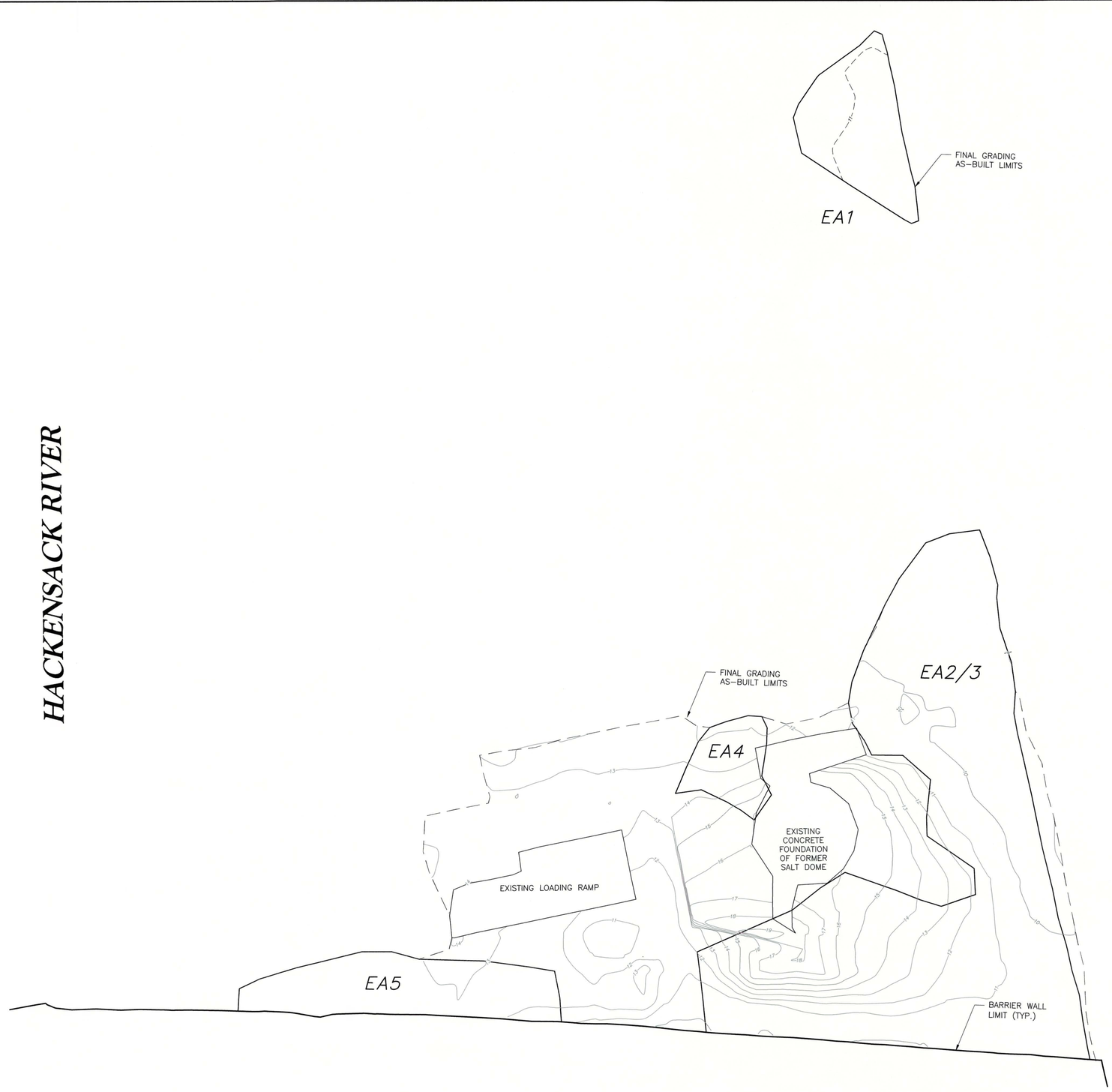
HACKENSACK RIVER

ROUTE 440



LEGEND:

- —5— MAJOR CONTOUR
- —4— MINOR CONTOUR
- —3— POSITIVE ELEVATION
- —(-2)— NEGATIVE ELEVATION

0 20 40 80
SCALE IN FEET

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW FINAL GRADE ELEVATIONS WITHIN THE SA6 NORTH EXCAVATION AREAS AT THE PROJECT SITE.
2. FINAL GRADE LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. AND ENTACT ON MULTIPLE FIELD VISITS FROM 8/21/15 THROUGH 4/28/16.
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12001511A

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL

FINAL GRADING PLAN FOR EXCAVATION AREAS 1, 2/3, 4 AND 5

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 NORTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ, 08619
(609)689 - 2629

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	8/23/16
PROJ	3480-10-0027
DWG	CN-114A
SHEET	1 OF 2

NO.	DATE	REVISION	BY	APVD
0	01/26/17	SA-6 NORTH FINAL GRADING	BSB	RTH

DSGN GE DR CHK BSB RTH

R. THOMAS HUGG
N.J. PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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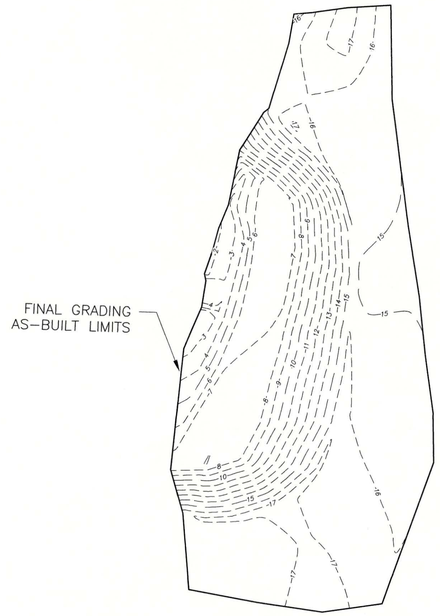
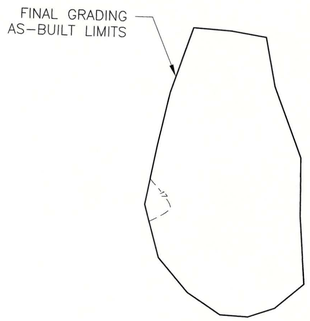
FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\V-SURV-SA6N-BACK-FILL EA1-EA5.dwg PLOT DATE: Tue, 31 Jan 2017 PLOT TIME: 1:02 PM

HACKENSACK RIVER



EA8



EA7

ROUTE 440

LEGEND:

- MAJOR CONTOUR
- MINOR CONTOUR
- POSITIVE ELEVATION
- NEGATIVE ELEVATION

0 15 30 60
SCALE IN FEET

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW FINAL GRADE ELEVATIONS WITHIN THE SA6 NORTH EXCAVATION AREAS AT THE PROJECT SITE.
2. FINAL GRADE LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. AND ENTACT ON MULTIPLE FIELD VISITS FROM 8/21/15 THROUGH 4/28/16.
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NGVD29.

MASER CONSULTING, P.A. PH: 609.390.1927 - FAX: 609.390.0040
ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL SCIENTISTS
MARMORA OFFICE - 156 STAGECOACH ROAD - MARMORA, NJ 080223

FILE NUMBER 12001511A

DRAWING STATUS
AS BUILT DRAWINGS

CIVIL

FINAL GRADING PLAN
FOR EXCAVATION
AREAS 7 AND 8

Honeywell
101 COLUMBIA RD. BOX 2105, MORRISTOWN, NJ 07962

STUDY AREA 6 NORTH
CHROMIUM REMEDY
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37394

amec foster wheeler
Environment & Infrastructure, Inc.
200 American Metro Blvd, Suite 113
Hamilton, NJ 08619
(609) 689 - 2929

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	8/23/16
PROJ	3480-10-0027
DWG	CN-115A
SHEET	2 OF 2

NO.	DATE	REVISION	BY	APVD
0	01/26/17	SA-6 NORTH FINAL GRADING	BSB	RTH

DSGN	DR	CHK	APVD
GE		BSB	RTH

R. THOMAS HUGG
NJ PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS36737

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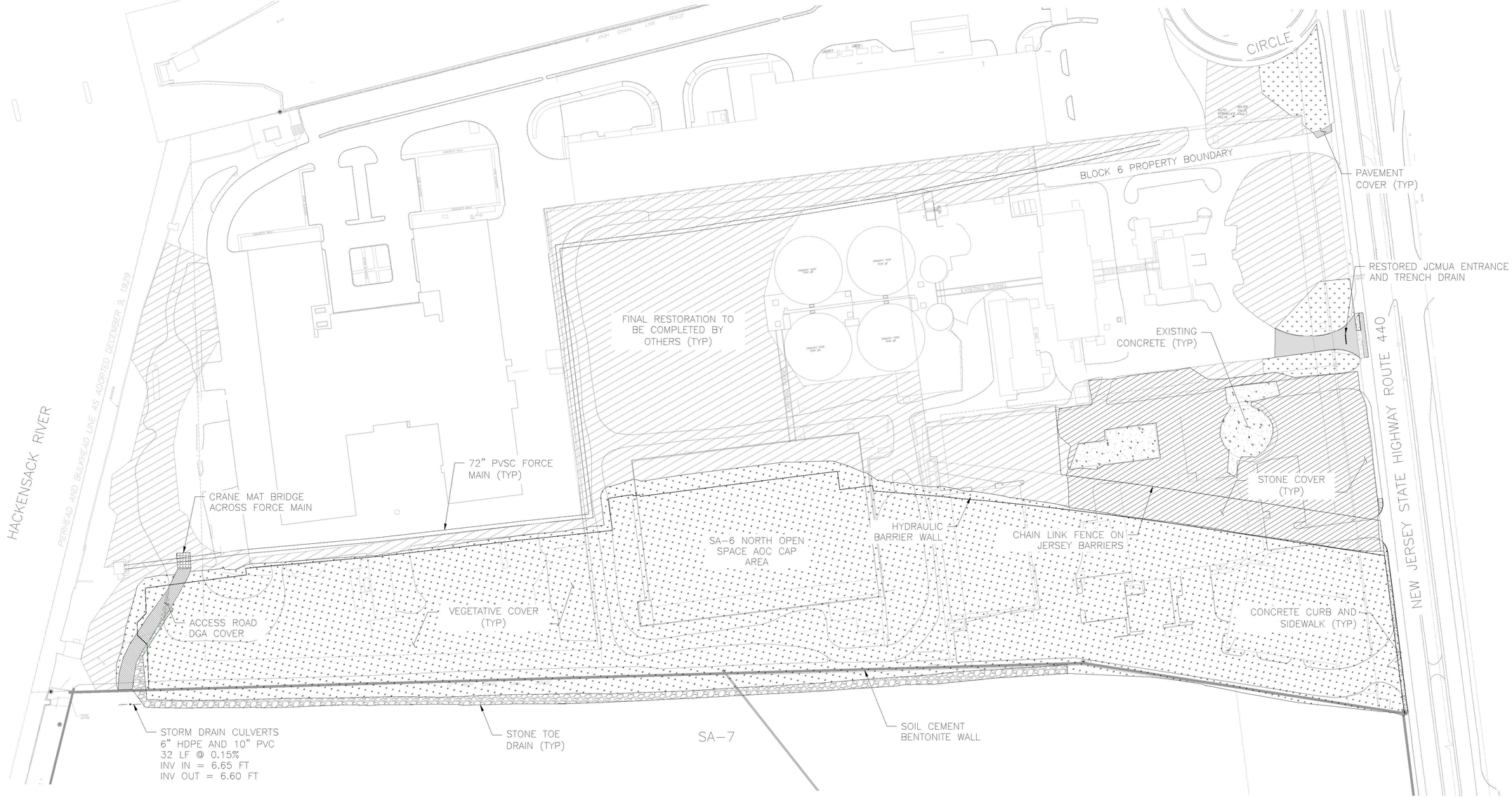
FILE NAME: C:\Civil 3D Projects\2012\12001511A\Survey\V-SURV-SA6N-BACK-FILL-EA7-8.dwg PLOT DATE: Thu, 26 Jan 2017 PLOT TIME: 2:57 PM



NOTE:

1. REFER TO CONSTRUCTION CONTROL GRID FIGURE AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE WITHIN THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. REMAINING RESTORATION AREAS IDENTIFIED ON THE CHROMIUM REMEDY 100% DESIGN DRAWINGS WILL BE ADDRESSED AS PART OF THE NON CHROMIUM REMEDIATION WORK CURRENTLY BEING COMPLETED. FINAL RESTORATION OF ALL AREAS IS SCHEDULED TO BE COMPLETE IN MARCH 2017.

STONE COVER
DGA COVER
VEGETATED COVER
RESTORATION BY OTHERS
PAVEMENT COVER
STONE TOE DRAIN
CONCRETE COVER
SD — STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH – SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

APPENDIX A-3

CONSERVATION RESTRICTIONS

APRIL 2009 SA-6 SOUTH

20090421010028340 1/30
04/21/2009 12:49:08 PM DEED
Bk: 8660 Pg: 314
Willie L.Flood
Hudson County, Register of Deeds
Receipt No. 95225

20100325010022320 1/34
03/25/2010 12:41:45 PM DEED
Bk: 8722 Pg: 105
Willie L.Flood
Hudson County, Register of Deeds
Receipt No. 304970

CONSERVATION RESTRICTION

This **CONSERVATION RESTRICTION** ("Conservation Restriction"), made on this 16th day of APRIL, 2009, between BAYFRONT REDEVELOPMENT LLC, a limited liability company, having an address at c/o Honeywell International Inc., 101 Columbia Turnpike, Morristown, New Jersey 07962 (hereafter the "Grantor"), HONEYWELL INTERNATIONAL INC., a corporation of the State of Delaware, having an address at 101 Columbia Turnpike, Morristown, New Jersey 07962, and THE HACKENSACK WATERSHED LAND TRUST, a non-profit Corporation of the State of New Jersey with offices at 231 Main Street, Hackensack, New Jersey 07061 (hereafter "Grantee").

WHEREAS, the Grantee, is a non-profit corporation incorporated under the laws of the State of New Jersey as a tax exempt public charity under Section 501(c)(3) and 509(a)(1) of the Internal Revenue Code; is qualified under section 170(h) of the Internal Revenue Code to receive conservation contributions; is a charitable conservancy within the meaning of N.J.S.A. 13:8B-2(a); is qualified to do business in the State of New Jersey; and whose purpose is to preserve natural areas for scientific, charitable, educational, and aesthetic purposes; and

WHEREAS, Grantor is the owner in fee simple of certain Open Space AOC Property consisting of approximately 8 acres and now known and designated as a portion of Block 1290.1, Lots 11W, 11Y, 11H, 17, 18, 19, and 20 on the Tax Map of the City of Jersey City, as described in Schedule A and Exhibit A attached hereto (the "Open Space AOC Property"); and

THIS INSTRUMENT IS BEING RE-RECORDED BECAUSE THE COPY ORIGINALLY RECORDED DID NOT HAVE A LEGAL DESCRIPTION ATTACHED. THE PROPER LEGAL DESCRIPTION HAS BEEN ATTACHED HERETO.

WHEREAS, the Open Space AOC Property is subject to a certain Option to Purchase in favor of the City of Jersey City which may be exercised upon the occurrence of certain conditions, which is being recorded simultaneously with this Conservation Restriction, and which provides for purchase subject to this Conservation Restriction; and

WHEREAS, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property then-owned by JCMUA; and

WHEREAS, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property then-owned by JCIA; and

WHEREAS, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with various properties collectively designated by NJDEP as Study Areas 5, 6 North, and 6 South; and

WHEREAS, Study Area 6 North includes the properties previously owned by JCMUA, JCIA, and the City of Jersey City; and

WHEREAS, Study Area 6 South includes the properties owned by Bayfront Redevelopment LLC and includes the Open Space AOC Property; and

WHEREAS, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the United States District Court for the District of New Jersey (hereinafter the "Consolidated Litigation"); and

WHEREAS, the Consolidated Litigation was resolved, in part, by the "Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South" (hereinafter the "Consent Decree"), which decree is being recorded simultaneously with this Conservation Restriction; and

WHEREAS, the Open Space AOC Property is being remediated for chromium contamination and following the remediation, development of the Open Space AOC Property is prohibited except in the limited circumstances set forth in the Consent Decree and this Conservation Restriction; and

WHEREAS, subject to certain roadway and utility improvements affecting portions of the Open Space AOC Property, and consistent with the terms of the Consent Decree and this Conservation Restriction, the Open Space AOC Property will, following implementation of the Chromium Remedy as defined in the Consent Decree, be re-developed from commercial/industrial purposes to open space/public park purposes. Following the remediation, the Open Space AOC Property will be established as a predominantly green open space with associated pedestrian walkways and outdoor

recreation facilities for the use and enjoyment of the public, while serving to protect the long-term integrity of the Chromium Remedy; and

WHEREAS, pursuant to the Bayfront I Redevelopment Plan, adopted by Jersey City on March 12, 2008, the Open Space AOC Property has been zoned for open space and park use and certain roadways and utility improvements; and

WHEREAS, the Open Space AOC Property is subject to certain provisions in the Consent Decree; and

WHEREAS, paragraph 74(b) of the Consent Decree provides that Bayfront Redevelopment LLC shall grant an open space conservation restriction over the Open Space AOC Property; and

WHEREAS, the parties hereto wish to set forth certain terms and conditions that will restrict future uses of, and activities on, the Open Space AOC Property and assure appropriate monitoring and enforcement of the conservation, open space, parks, and recreation purposes of this Conservation Restriction.

NOW THEREFORE, WITNESSETH: For and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration paid by Grantee to Grantor, the receipt and sufficiency of which is acknowledged by Grantor, and in consideration of the covenants hereinafter contained, the parties to this Conservation Restriction, intending to be legally bound, do

HEREBY AGREE AS FOLLOWS:

1. **Purpose**. It is the purpose of this Conservation Restriction to protect and preserve the Open Space AOC Property; to permit Honeywell to implement, monitor, maintain, repair, and replace the Chromium Remedy; to prevent any use of the Open

Space AOC Property that will significantly impair or interfere with the purposes of the Consent Decree; and to preserve the Open Space AOC Property as predominantly green open space with associated pedestrian walkways and outdoor recreation facilities for the use and enjoyment of the public. However, nothing in this Conservation Restriction shall grant a public right of access to enter upon, or use, the Open Space AOC Property, or any portion thereof, during the time that the Chromium Remedy required by the Consent Decree is being implemented. Thereafter, Grantor and Grantee intend that this Conservation Restriction will confine the use of the Open Space AOC Property to such activities as are consistent with the purpose of the Consent Decree. In the event of any conflict between the Consent Decree and this Conservation Restriction, the Consent Decree shall control.

2. **Title**. Grantor covenants and represents that Grantor is the sole owner and is seized of the Open Space AOC Property in fee simple and has good right to grant and convey this Conservation Restriction and that Grantee(s) shall have the use of, and enjoyment of, the benefits derived from and existing out of this Conservation Restriction.

3. **Definitions**.

3.1 Capitalized terms in this Conservation Restriction which are not defined herein shall have the meaning ascribed to them in the Consent Decree.

3.2 Open Space AOC Property shall mean the property consisting of approximately 8 acres and now known and designated as a portion of Block 1290.1, Lots 11W, 11Y, 17, 18, 19, and 20 on the Tax Map of the City of Jersey City, as described more fully in Schedule A and Exhibit A attached hereto. The Open Space

AOC Property is the same property as the Open Space AOC Area in the Consent Decree.

3.3 Bayfront Redevelopment LLC shall mean the limited liability company created by Honeywell for the purposes described in paragraph 4.1 of the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc., entered on April 21, 2008 in the Consolidated Litigation.

3.4 Consent Decree shall mean the Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South, entered in the Consolidated Litigation and being recorded simultaneously with this Conservation Restriction.

3.5 Consolidated Litigation shall mean *Jersey City Municipal Utilities Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC).

3.6 The Court shall mean the United States District Court for the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

3.7 Hackensack River Watershed Land Trust shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

3.8 Holders of this Conservation Restriction shall mean Grantee and its successors and assigns and, in the event a Secondary Grantee is designated pursuant to paragraph 7.3, its successors and assigns.

3.9 Honeywell shall mean Honeywell International Inc.

3.10 Grantee shall mean Hackensack Watershed Land Trust and/or its designated successors and assigns. Grantee shall also mean the Secondary Grantee, in the event that the Secondary Grantee is designated pursuant to paragraph 7.3, and must fill the role of Grantee pursuant to paragraph 7.4.

3.11 Grantor shall mean Bayfront Redevelopment LLC as the current holder of the fee simple title to the Open Space AOC Property and any subsequent holder of the fee simple title to the Open Space AOC Property, including Jersey City.

3.12 Jersey City shall mean the City of Jersey City, New Jersey.

3.13 The Jersey City Entities shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

3.14 Party or Parties shall mean any one or all of the signatories to the Consent Decree.

3.15 Qualified Holder shall mean (a) an organization exempt from federal income taxation under Section 501(c)(3) of the Internal Revenue Code that satisfies the requirements to be a qualified organization within the meaning of Section 170(h)(3) of the Internal Revenue Code, or under any substantially similar provision of any successor tax code, and that is authorized to hold a conservation restriction with respect to property located within the State of New Jersey, (b) any trust or other entity

created by the legislature of the State of New Jersey or by Hudson County for substantially similar purposes, or (c) the State of New Jersey, Hudson County, or any other public body in New Jersey that is empowered to hold and administer a conservation restriction.

3.16 Riverkeeper shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

3.17 Secondary Grantee shall mean a qualified holder designated by Grantee pursuant to paragraph 7.3.

3.18 The Special Master shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

4. **Conservation Restriction**.

4.1 Grant. Grantor hereby grants and conveys to Grantee, a non-public conservation restriction on, over and across the Open Space AOC Property as is depicted on the recorded Plat, which area is described in Schedule A and Exhibit A attached hereto and made a part hereof.

4.2 Grantor's Retained Responsibilities. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership of the Open Space AOC Property, including the payment of taxes. Grantor shall keep Grantee's interest in the Open Space AOC Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor.

Honeywell shall be solely responsible for the implementation, monitoring, maintenance, repair, and replacement of the Chromium Remedy in the Open Space AOC Property as provided for under the Consent Decree. Neither Grantee nor Secondary Grantee, if such a grantee is designated pursuant to paragraph 7.3, shall have any responsibility whatsoever with respect to the implementation, monitoring, maintenance, repair, and/or replacement of the Chromium Remedy in the Open Space AOC Property.

4.3 Recordation, Notice in Future Instruments. This Conservation Restriction shall be recorded in the office of the Hudson County Register and a conspicuous reference to this Conservation Restriction shall be included in all instruments concerning title to the Open Space AOC Property. Any Party to the Consent Decree and Grantee shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Conservation Restriction in the real estate records related to the Open Space AOC Property. This right of recordation shall be exercised in conjunction with the right of recordation provided in paragraph 74(d) of the Consent Decree.

4.4 Notice of Future Transfers. Grantor shall give written notice to Grantee(s) of any sale, lease, or other transfer of any interest in the Property not later than ten days following the date of such sale, lease, or transfer, which notice shall include the name and address of each party to whom an interest was sold, leased, or transferred. However, sales, leases, or transfers other than in accordance with the terms of paragraph 74 of the Consent Decree are prohibited.

5. **Permitted Activities.**

5.1 Remediation and Redevelopment as Open Space/Public Park. Grantor and/or Honeywell shall be permitted to undertake all activities reasonably required in connection with: (i) the implementation, maintenance, monitoring, repair, and replacement of the Chromium Remedy consistent with the Consent Decree, (ii) the construction of roads and associated utilities at the Open Space AOC Property as permitted by the Consent Decree, and (iii) such further development of the Open Space AOC Property into an open space/public park as is consistent with paragraphs 74(j) and 74(k) of the Consent Decree and paragraphs 5.2 and 5.3 of this Conservation Restriction. In addition, commercial, industrial, and remediation/construction uses of the Open Space AOC Property by Grantor and its tenants shall be permitted to continue until such time as those operations and uses are relocated prior to implementation of the Chromium Remedy pursuant to the Consent Decree.

5.2 Prohibited Development in the Open Space AOC Property. Only development satisfying the requirements of this paragraph, paragraph 5.3 of this Conservation Restriction, and the requirements of paragraphs 74(j) and 74(k) of the Consent Decree shall be permitted in the Open Space AOC Property. All other development in the Open Space AOC Property shall be prohibited.

(a) Honeywell shall establish Open Space Design Standards that shall govern all development in the Open Space AOC Property, regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 74(j)(v) of the Consent Decree and paragraph 5.2(e) of this Conservation Restriction, and shall

set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy, installed pursuant to the Consent Decree.

(b) The Initial Development in the Open Space AOC Property shall be the development undertaken following the completion of the Chromium Remedy in the Open Space AOC Property, pursuant to the Consent Decree. The Initial Development may occur in one or more phases. Honeywell and Bayfront Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 74(j)(viii) of the Consent Decree and paragraph 5.2(h) of this Conservation Restriction.

(c) The Special Master, appointed in the Consolidated Litigation pursuant to the Consent Decree, shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with the Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the Open Space AOC Property shall run through the Initial Development Period for each phase.

(d) Honeywell shall ensure that the requirements of this paragraph, paragraph 5.3 of this Conservation Restriction, and of paragraphs 74(j) and 74(k) of the Consent Decree are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any

development undertaken within the Initial Development Period is designed and installed in a manner consistent with the requirements of the Consent Decree and with protection of the integrity of the Chromium Remedy installed pursuant to the Consent Decree.

(e) Any development undertaken in the Open Space AOC Property, regardless of when undertaken, shall satisfy each of the following requirements:

(i) It shall not jeopardize the integrity of the Chromium Remedy installed pursuant to the Consent Decree;

(ii) It shall be limited to the types of development permitted under paragraph 74(k) of the Consent Decree and paragraph 5.3 of this Conservation Restriction;

(iii) It shall be consistent with this Conservation Restriction, the Consent Decree, and the Redevelopment Plan; however, in the event of any conflict or inconsistency between this Conservation Restriction, the Consent Decree, and the Redevelopment Plan, the Consent Decree shall govern;

(iv) In total, at least 75% of the Open Space AOC Property, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 74(k)(xi) of the Consent Decree and paragraph 5.3(k) of this Conservation Restriction;

(v) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy, which is

subject to review and approval pursuant to the terms of the Consent Decree;

(vi) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(vii) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(viii) No permanent concession facilities shall be permitted.

(f) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 86(c) of the Consent Decree, except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 86(d), 86(e), and 86(f) of the Consent Decree shall apply, except that the Special Master need not provide notice to NJDEP.

(g) During the Initial Development Period, any development in the Open Space AOC Property shall require the preparation and submission of a Development Plan pursuant to paragraph 74(j)(vi) of the Consent Decree and paragraph 5.2(f) of this Conservation Restriction, and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 74(j)(iii) of the Consent Decree and paragraph 5.2(c) of this Conservation Restriction.

(h) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the

Special Master, Riverkeeper, and Jersey City. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and Jersey City for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(i) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, paragraphs 74(j)(v) and 74(j)(x)(3)(notice requirement) of the Consent Decree and paragraphs 5.2(e) and 5.2(j)(iii) of this Conservation Restriction.

(j) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(i) The Open Space AOC Property has been remediated such that no hexavalent or total chromium contamination remains in the Open Space AOC Property, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(ii) The development is a replacement in-kind and such

replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, paragraph 74(j)(v) of the Consent Decree and paragraph 5.2(e) of this Conservation Restriction; or

(iii) The development meets the requirements of paragraphs 74(j)(v) and 74(j)(xi) of the Consent Decree and paragraphs 5.2(e) and 5.2(k) of this Conservation Restriction, and Jersey City provides notice of its intention to alter or add to the development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of this Conservation Restriction at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of this Conservation Restriction shall have the right to move the Court to prohibit such alteration or addition.

(k) If any of the development features or facilities that Jersey City seeks to add, pursuant to paragraph 74(j)(x) of the Consent Decree and paragraph 5.2(j) of this Conservation Restriction, require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(l) Jersey City shall provide Honeywell, Riverkeeper, and the holders of this Conservation Restriction with an annual report that describes any alterations or additions, including those activities under paragraph 74(j)(x)(2) of the Consent Decree and 5.2(j)(ii) of this Conservation Restriction, to the development undertaken during the Initial Development Period.

(m) All development features or facilities, whether included in the

Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy required by the Consent Decree.

5.3 The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 74(j)(v) of the Consent Decree and paragraph 5.2(e) of this Conservation Restriction:

(a) Roads and the pedestrian thoroughfare -- both crossing and running along the Open Space AOC Property, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(b) Curbing and fences;

(c) Sidewalks, paths, walkways, and nature trails;

(d) Utilities and utility corridors, lighting, and restrooms;

(e) Irrigation or sprinkler components or systems;

(f) Water features;

(g) Above-ground storm water cisterns;

(h) Signs, including the signs or display required by paragraph 74(l) of the Consent Decree;

(i) Benches, trash receptacles, and bicycle racks;

(j) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(k) Landscaping, including natural grasses, small trees,

shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 74(j)(v)(4) of the Consent Decree and paragraph 5.2(e)(iv) of this Conservation Restriction.

5.4 Easement for Monitoring, Maintenance, Repair, and Replacement: As between Grantor and Grantee, Honeywell shall remain solely responsible for monitoring, maintenance, repair, and replacement of the Chromium Remedy in accordance with the Consent Decree and shall reserve, or obtain a grant of, an easement for the purpose of such monitoring, maintenance, repair, and replacement. Neither Grantee nor Secondary Grantee, if such grantee is designated pursuant to paragraph 7.3, shall have any responsibility whatsoever with respect to the implementation, monitoring, maintenance, repair, and/or replacement of the Chromium Remedy in the Open Space AOC Property. Honeywell shall be entitled to promptly record such reservation and/or easement and Grantee agrees that the terms, conditions, and restrictions and purposes of such reservation and/or easement, or reference thereto, will be inserted in any subsequent deed or other legal instrument by which the City of Jersey City, Grantor, or Grantee divests either a real property or other recordable interest in the Open Space AOC Property.

6. **Prohibited Activities.** Development at the Open Space AOC Property is prohibited, except insofar as it meets the requirements of the Consent Decree and of paragraph 5 of this Conservation Restriction.

7. **Grantee's Rights.** To accomplish the purpose of this Conservation Restriction, the following rights are conveyed to Grantee:

7.1 Right of Entry. The right to enter the Open Space AOC Property during the implementation of the Chromium Remedy pursuant to the Consent Decree at reasonable times and with prior notice for the purpose of: (a) inspecting the Open Space AOC Property to determine if Grantor is complying with the covenants and purposes of this Conservation Restriction; (b) enforcing the terms of this Conservation Restriction; and (c) taking any and all actions with respect to the Open Space AOC Property as may be legal, necessary and appropriate, to remedy or abate any material violations hereof. After the Chromium Remedy has been implemented, Grantee shall have the right to enter the Open Space AOC Property at reasonable times for the purposes above without the need for prior notice.

7.2 Enforcement. The right to prevent any improvement, activity on, or use of, the Open Space AOC Property that is inconsistent with the purpose of this Conservation Restriction and to require the restoration of such areas or features of the Open Space AOC Property that may be damaged by any inconsistent improvement or use. For purposes of the enforcement of this Conservation Restriction, Grantee agrees to pursue such enforcement solely before the Court in the Consolidated Litigation and to submit to the jurisdiction of that Court.

7.3 Designation of Secondary Grantee. Grantee has the right to designate a Qualified Holder as a Secondary Grantee with the written consent of Grantor, which consent will not be unreasonably withheld. Within 60 days of such

designation, this Conservation Restriction shall be modified by the Parties and duly recorded.

7.4 Allocation of Responsibilities between Grantee and Secondary Grantee. In the event a Secondary Grantee is designated pursuant to paragraph 7.3, then the following shall apply: for so long as Grantee, or any successor in interest to Grantee, remains a holder of this Conservation Restriction, and unless and until Grantee and Secondary Grantee or their respective successors or assigns shall otherwise agree in a writing executed by them in recordable form and delivered to Grantor, Grantee shall be delegated the primary responsibility for monitoring and enforcing compliance with the terms of this Conservation Restriction. In connection therewith, Grantee, or its successors and assigns, shall have sole power and authority, as between Grantee and Secondary Grantee of this Conservation Restriction, to grant or withhold any and all other consents or approvals that may be required to be obtained by Grantor under the terms of this Conservation Restriction. Notwithstanding the foregoing, Secondary Grantee shall be entitled to receive a copy of all notices required to be given to Grantee, and shall be provided with a copy of all requests for approval submitted by Grantor and all written approvals, or denials thereof, given pursuant to this Conservation Restriction. Secondary Grantee's right to exercise rights and remedies conferred by this Conservation Restriction upon Grantee, other than as provided in this paragraph, shall become effective upon Grantee's dissolution, in the event that Grantee has failed to name a successor.

8. **Grantee's Remedies**.

8.1 Proceedings upon Violation. In the event that Grantee becomes aware of a violation of the terms of this Conservation Restriction, Grantee shall promptly give notice to Grantor, Honeywell, Jersey City, and Riverkeeper of such violation via certified mail, return receipt requested, and request corrective action sufficient to abate such violation and restore the Open Space AOC Property as closely as possible to the condition that would have existed had there been no violation. Failure by Grantor or Honeywell to cause discontinuance, abatement, or initiate such other corrective action as may be required by the Consent Decree within 90 days after receipt of such notice, or such longer period as may be necessary if the violation cannot reasonably be cured within 90 days, shall entitle Grantee to move the Court to enforce the terms of this Conservation Restriction; to require the restoration of the Open Space AOC Property to its previous condition; and/or to enjoin compliance. If Grantee believes that circumstances are such that immediate action is required to prevent or mitigate significant additional harm or damage to the Open Space AOC Property, Grantee may pursue its remedies without waiting for any period provided for cure to expire and without prior notice.

8.2 Proceedings upon Alteration or Addition to Development. Grantee shall have the right to participate in proceedings under paragraph 5.2(j)(iii) of this Conservation Restriction and paragraph 74(j)(x)(3) of the Consent Decree to prohibit any alterations or additions to the development in the Open Space AOC Property.

8.3 Forbearance. Any forbearance by Grantee to exercise its rights under this Conservation Restriction in the event of any breach of any term of this

Conservation Restriction by Grantor shall not be deemed or construed to be a waiver by Grantee of such term or of any subsequent breach of the same or any other term of this Conservation Restriction or of any of Grantee's rights under this Conservation Restriction. No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver. Grantor shall not be entitled to assert any defense based upon laches, estoppel, or prescription with respect to any violation of this Conservation Restriction as to which Grantee was not specifically notified by Grantor in writing.

9. **Parties Subject to Conservation Restriction**. The covenants agreed to and the terms, conditions, and restrictions imposed by this grant shall be binding upon Grantor, its lessees, agents, personal representatives, successors, assigns, and all other successors in interest to Grantor. The covenants agreed to and the terms, conditions, and restrictions imposed by this grant shall be binding upon Grantee(s), their lessees, agents, personal representatives, successors, assigns, and all other successors in interest to Grantee(s).

10. **Termination**.

10.1 This Conservation Restriction is intended to be of unlimited duration, subject only to termination as provided in paragraph 10.2 of this Conservation Restriction, and therefore may not be terminated solely by mutual agreement of Grantor and Grantee.

10.2 This Conservation Restriction may be terminated upon application to the Court of any Party to the Consent Decree when no hexavalent or total chromium contamination remains in Open Space AOC Property, whether in soils or in

groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon Court approval of termination of this Conservation Restriction, Grantor shall conduct a public hearing in accordance with N.J.S.A 13:8B-5 and Grantee(s) shall release the Conservation Restriction and shall execute, at the request of Grantor, a release of this Conservation Restriction and any other instrument to that effect deemed necessary or desirable.

11. **Assignment.**

11.1 Right to Assign. Grantee, and any future assignee of this Conservation Restriction, may with the prior written consent of Grantor, which consent will not be unreasonably withheld, transfer and assign this Conservation Restriction and the rights and obligations created hereby, in whole or in part, to one or more Qualified Holders as defined in paragraph 3.15 The assignee shall simultaneously with such assignment assume the obligation to carry out the conservation purposes for which this Conservation Restriction is granted.

11.2 Executory Limitation. In the event that a Secondary Grantee has been designated pursuant to paragraph 7.3 and the Grantee dissolves without having assigned all of it rights and interest in the Property and delegated all of its responsibilities under this Conservation Restriction to one or more Qualified Holders, such rights and responsibilities shall be vested in the Secondary Grantee pursuant to paragraph 7.4. In the event that a Secondary Grantee is not designated pursuant to paragraph 7.3 and the Grantee dissolves without having assigned all of its rights and interest in the Property and delegated all of its responsibilities under this Conservation

Restriction to one or more Qualified Holders, such rights and responsibilities shall be vested in another Qualified Holder pursuant to a *cy pres* proceeding in the Court. Grantor and Honeywell shall have the right to appear in any such proceeding as interested parties. In the event that a Secondary Grantee is designated pursuant to paragraph 7.3, and such Secondary Grantee dissolves without having assigned all of its rights and interest in the Property and delegated all of its responsibilities under this Conservation Restriction to one or more Qualified Holders, Grantee may designate another Secondary Grantee pursuant to paragraph 7.3.

11.3 Release of Grantee's Further Obligations. The holder or holders of this Conservation Restriction immediately before any assignment or judicial re-vesting pursuant to paragraph 11.2 shall thereafter have no further obligation to monitor compliance with, or enforce the provisions of, this Conservation Restriction, provided that the assignee meets the requirements set forth above and has assumed the obligation to monitor and enforce this Conservation Restriction.

12. **Miscellaneous Provisions.**

12.1 Severability. If any provision of this Conservation Restriction or the application thereof to any person or circumstances is found to be invalid, the remaining provisions of this Conservation Restriction, and the application of such provisions to persons or circumstances other than those as to which it is found to be invalid, shall not be affected.

12.2 Successors and Assigns. The term "Grantor" shall include Grantor and Grantor's heirs, executors, administrators, successors, and assigns. The term

"Grantor" shall also mean the masculine, feminine, corporate, singular, or plural of the word as needed in the context of its use.

12.3 No Third-Party Beneficiaries. The parties hereto intend that there be no third-party beneficiaries to this Conservation Restriction, except the Parties to the Consent Decree.

12.4 Captions. The captions herein have been inserted solely for convenience of reference and are not a part of this Conservation Restriction and shall have no effect upon construction or interpretation.

12.5 Notices. Any notices required in this Conservation Restriction shall be sent by registered or certified mail to the persons at the following addresses. Any party listed below may change the recipient or location for receipt of such notice by sending written notice of such change to the other Parties listed below:

(a) If to Grantor:

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

(b) With copy to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

(c) If to Grantee Hackensack River Watershed Land Trust:

William Sheehan
231 Main Street
Hackensack, NJ 07601

(d) If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

12.6 Amendment. This Conservation Restriction may be amended only with the written consent of Grantee and Grantor and of the Parties to the Consent Decree. Any such amendment shall be consistent with the purpose of the Consent Decree and this Conservation Restriction and shall comply with any applicable requirements of N.J.S.A. 13:8B-1 et seq.

12.7 No Extinguishment through Merger. If Grantee comes to own all or any portion of the fee interest in the Open Space AOC Property, (a) Grantee, as successor in title to Grantor, shall observe and be bound by the obligations of Grantor and the restrictions imposed upon the Open Space AOC Property by this Conservation Restriction, (b) in view of the public interest in its enforcement, this Conservation Restriction shall survive such simultaneous ownership of fee and Conservation Restriction interests in the Open Space AOC Property, and shall not be extinguished notwithstanding any otherwise applicable legal doctrine under which such property interests would or might be merged, and (c) Grantee shall, as promptly as practicable, either assign its interests in this Conservation Restriction to another Qualified Holder in conformity with the requirements of this paragraph or divest itself of its fee interest in the Open Space AOC Property. Any instrument of assignment of this Conservation Restriction or the rights conveyed herein shall refer to the provisions of this paragraph, and shall contain language necessary to continue it in force.

IN WITNESS WHEREOF, the parties hereunto set their hands and seals the day and year first above written.

By: Richard J. Kriva
Title: VP Global Real Estate
Bayfront Redevelopment LLC

By: Richard J. Kriva
Title: VP Global Real Estate
Honeywell International Inc.

By:
Title: RIVERKEEPER
Hackensack Watershed Land Trust

STATE OF ILLINOIS)
) SS:
COUNTY OF MC HENRY)

I CERTIFY that on 4/16, 2009, Richard J. Kriva, personally came before me and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Vice President, Global Real Estate for Honeywell International Inc, which is the sole member of Bayfront Redevelopment LLC, the limited liability company named in the attached document;

(b) this document was signed and made by the limited liability company as its voluntary act and deed and was duly authorized by the sole member of the limited liability company; and

(c) this person delivered the attached document as the voluntary act and deed of the limited liability company.

Sworn to and Subscribed before me
this 16 day of April, 2009.

Barbara A Amato
A Notary Public

BARBARA A AMATO
NOTARY PUBLIC OF N.J.
MY COMMISSION EXPIRES
AUGUST 04, 2011

STATE OF ILLINOIS)
) SS:
COUNTY OF MC HENRY)

I CERTIFY that on 4/16, 2009, Richard J. Kriva, personally came before me and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Vice President, Global Real Estate of Honeywell International Inc., the corporation named in the attached document;

(b) this document was signed and made by the corporation as its voluntary act and deed and was duly authorized by the corporation; and

(c) this person delivered the attached document as the voluntary act and deed of the corporation.

Sworn to and Subscribed before me
this 16 day of April, 2009.

Barbara A Amato
A Notary Public

BARBARA A AMATO
NOTARY PUBLIC OF N.J.
MY COMMISSION EXPIRES
AUGUST 04, 2011

STATE OF NEW JERSEY)
) SS:
COUNTY OF)

I CERTIFY that on 3-24, 2009, William Sheehan, personally came before me and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Riverkeeper of the Hackensack Watershed Land Trust, the trust named in the attached document;

(b) this document was signed and made by the trust as its voluntary act and deed and was duly authorized by the trust; and

(c) this person delivered the attached document as the voluntary act and deed of the trust.

Sworn to and Subscribed before me
this 24th day of March 2009.

KELLY G. PALAZZI
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES ~~APRIL 24,~~ May 6, 2009

Schedule A
MAXIMUM LEGAL DESCRIPTION
PRE-REMEDIATION OPEN SPACE AOC PROPERTY
BLOCK 1290.1 Lots 11W, 11Y, 11H, 17, 18, 19, and 20
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

The Open Space AOC Property that is the subject of this Conservation Restriction is intended to consist of a parcel of land which will be bounded by underground Hydraulic Barrier Walls that have not been fully constructed as of the date of this instrument. Accordingly, the parties agree that until such time as construction of the Hydraulic Barrier Walls is completed and an Amended Conservation Restriction is approved by the Court as provided below, the legal description of the Open Space AOC Property shall be as set forth in the metes and bounds description and diagram attached hereto as Exhibit A. The parties further agree that such legal description is subject to revision as provided herein.

Upon completion of construction of the Hydraulic Barrier Walls, Grantor will cause the Open Space AOC Property to be re-surveyed (the "As-Built Survey") with the perimeter of the Open Space AOC Property to be the outer facing wall of the Hydraulic Barrier Walls, as constructed. Grantor shall further cause a metes and bounds description (the "As-Built Description") to be prepared based on the As-Built Survey. Following preparation of the As-Built Description, Grantor shall request that the Court amend the order which, pursuant to paragraph 74(b)(i) of the Consent Decree, embodies this Conservation Restriction ("the Conservation Restriction Order"), by substituting the As-Built Description for the metes and bounds description set forth in Exhibit A and thereby creating an Amended Conservation Restriction. Once the Conservation Restriction Order is so amended by the Court, Grantor shall record the Amended Conservation Restriction in the office of the Hudson County Register, without the need for execution or consent, written or otherwise, by Grantee.

Upon recording the Amended Conservation Restriction, the As-Built Description shall supersede, replace and make null and void the legal description set forth in Exhibit A to this Conservation Restriction.

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NUMBER OF PAGES : 30
TCALLENDER

March 05 2009

Project No. 030117508

LEGAL DESCRIPTION
PROPOSED OPEN SPACE AREA
BLOCK 1290.1, LOTS 11H, 11Y, 11W, 17, 18, 19 and 20
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

A parcel of land described herein located Block 1290.1, Lots 11H, 11Y, 11W, 17, 18, 19 and 20, in the City of Jersey City, Hudson County, New Jersey, and being more particularly described as follows:

Beginning at the intersection of the westerly sideline of New Jersey State Highway Route 440 and the southerly line of Block 1290.1 Lot 14J, and running; thence,

Along said westerly sideline the following three (3) courses:

1. South 24 degrees 46 minutes 55 seconds West, 72.64 feet to a point of curvature; thence,

2. Along a curve to the right having a radius of 152.00 feet, a central angle of 31 degrees 40 minutes 06 seconds and an arc length of 84.01 feet to a point of compound curvature; thence,

3. Along a curve to the right having a radius of 72.00 feet, a central angle of 20 degrees 45 minutes 41 seconds and an arc length of 26.09 feet to a point in the easterly projection of the proposed southerly curb line of a proposed road to be known as Grand Boulevard, as shown on exhibit 7 of the 'Bayfront I Development Plan' prepared for the City of Jersey City by A. Nelessen Associates, Inc., dated February 13, 2008; thence,

4. Along said proposed southerly curb line, and the projection thereof, North 48 degrees 18 minutes 36 seconds West, 823.95 feet; thence,

5. Along the same, North 53 degrees 28 minutes 19 seconds West, 950.09 feet more or less to the outside line of Block 1290.1 Lot 9L; thence,

Along the outside line of said Lot 9L the following three (3) courses:

6. North 38 degrees 53 minutes 15 seconds East, 7.17 feet; thence,

7. North 51 degrees 06 minutes 45 seconds West, 159.00 feet; thence,

8. South 38 degrees 53 minutes 15 seconds West, 13.72 feet more or less to the intersection of the same with the aforementioned proposed southerly curb line; thence,

9. Along said proposed southerly curb line, and the westerly projection thereof, North 53 degrees 28 minutes 19 seconds West, 400.81 feet to the westerly line of Lot 11W; thence,

10. Along said westerly line, North 45 degrees 52 minutes 45 seconds East, 160.73 feet to the aforementioned Lot 14J southerly line; thence,

20 WATERVIEW BOULEVARD | PO BOX 5245 | PARSIPPANY, NJ 07054-6245
TEL 973.299.7970 | FAX 973.334.5588 | WWW.CMXENGINEERING.COM

ARIZONA FLORIDA MARYLAND NEVADA NEW JERSEY NEW YORK PENNSYLVANIA MEXICO

Along said southerly line the following two (2) courses:

11. South 53 degrees 42 minutes 45 seconds East, 1488.26 feet; thence,

12. South 49 degrees 06 minutes 05 seconds East, 822.89 feet to the point and place of beginning.

Containing 8.8 acres of land more or less as described herein.

Subject to a field survey of the proposed hydraulic barrier walls upon completion of their installation.

Subject to all existing easements, rights-of-way and reservations of record.

The above described premises being also depicted on the diagram included as part of this Exhibit A.

Glen J. Lloyd, P.L.S.
N.J. Professional Land Surveyor
New Jersey License No. GS37598

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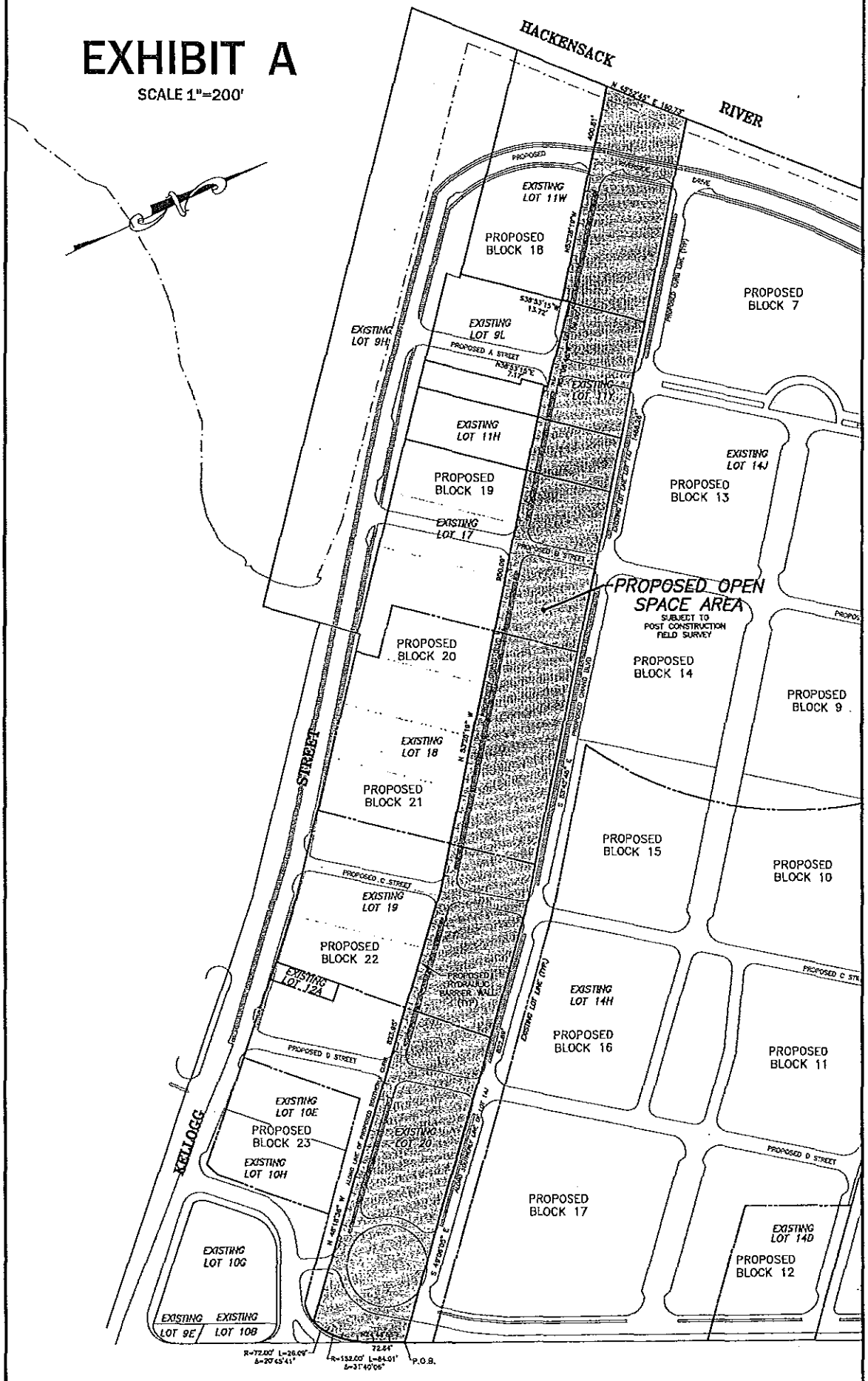
EXHIBIT A

SCALE 1"=200'



RECORD & RETURN TO:
Perry Florio, Esq.
Waters, McPherson, McNeill, P.C.
300 Lighting Way
Secaucus, New Jersey 07096

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NUMBER OF PAGES : 34
JWALLER

DECEMBER 2008 SA-6 NORTH

RECORD AND RETURN TO:

E. NEAL ZIMMERMANN, ESQ.
Waters, McPherson, McNeill, P.C.
300 Lighting Way
Secaucus, New Jersey 07096

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Bk: 8644 Pg: 662
Willie L.Flood
Hudson County, Register of Deeds
Receipt No. 55414

CONSERVATION RESTRICTION

This **CONSERVATION RESTRICTION** ("Conservation Restriction"), made on this 12th day of December, 2008, between BAYFRONT REDEVELOPMENT LLC, a limited liability company, having an address at c/o Honeywell International Inc., 101 Columbia Turnpike, Morristown, New Jersey 07962 (hereafter the "Grantor"), HONEYWELL INTERNATIONAL INC., a corporation of the State of Delaware, having an address at 101 Columbia Turnpike, Morristown, New Jersey 07962, and THE HACKENSACK WATERSHED LAND TRUST, a non-profit Corporation of the State of New Jersey with offices at 231 Main Street, Hackensack, New Jersey 07061 (hereafter "Grantee").

WHEREAS, the Grantee, is a non-profit corporation incorporated under the laws of the State of New Jersey as a tax exempt public charity under Section 501(c)(3) and 509(a)(1) of the Internal Revenue Code; is qualified under section 170(h) of the Internal Revenue Code to receive conservation contributions; is a charitable conservancy within the meaning of N.J.S.A. 13:8B-2(a); is qualified to do business in the State of New Jersey; and whose purpose is to preserve natural areas for scientific, charitable, educational, and aesthetic purposes; and

WHEREAS, Grantor is the owner in fee simple of certain AOC 1 Open Space Property consisting of approximately 11 acres and now known and designated as a portion of Block 1290.1, Lots 2D and 2E and Block 1290.1, Lot 16A.99 on the Tax Map of the City of Jersey City, as described in Schedule A and Exhibit A attached hereto (the "AOC 1 Open Space Property"); and

WHEREAS, the AOC 1 Open Space Property is subject to a certain Option to Purchase in favor of the City of Jersey City which may be exercised upon the occurrence of certain conditions, which is being recorded simultaneously with this Conservation Restriction, and which provides for purchase subject to this Conservation Restriction; and

WHEREAS, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property then-owned by JCMUA, which included the area known as the AOC 1 Open Space Property; and

WHEREAS, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property then-owned by JCIA, which included the area known as the AOC 1 Open Space Property; and

WHEREAS, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater,

surface waters, and sediments associated with various properties collectively designated by NJDEP as Study Areas 5, 6 North, and 6 South;

WHEREAS, Study Area 6 North includes the properties previously owned by JCMUA, JCIA, and the City of Jersey City and includes the AOC 1 Open Space Property.

WHEREAS, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the United States District Court for the District of New Jersey (hereinafter the "Consolidated Litigation"); and

WHEREAS, the Consolidated Litigation was resolved, in part, by the "Consent Decree Regarding Remediation and Redevelopment of Study Area 6 North" (hereinafter the "Consent Decree"), which decree is being recorded simultaneously with this Conservation Restriction; and

WHEREAS, the AOC 1 Open Space Property is being remediated for chromium contamination and following the remediation, development of the AOC 1 Open Space Property is prohibited except in the limited circumstances set forth in the Consent Decree and this Conservation Restriction; and

WHEREAS, subject to certain roadway and utility improvements affecting portions of the AOC 1 Open Space Property, and consistent with the terms of the Consent Decree and this Conservation Restriction, the AOC 1 Open Space Property will, following implementation of the Chromium Remedy as defined in the Consent Decree, be re-developed from commercial/industrial purposes to open space/public park purposes. Following the remediation, the AOC 1 Open Space Property will be established as a predominantly green open space with associated pedestrian walkways

and outdoor recreation facilities for the use and enjoyment of the public, while serving to protect the long-term integrity of the Chromium Remedy; and

WHEREAS, pursuant to the Bayfront I Redevelopment Plan, adopted by Jersey City on March 12, 2008, the AOC 1 Open Space Property has been zoned for open space and park use and certain roadways and utility improvements; and

WHEREAS, the AOC 1 Open Space Property is subject to certain provisions in the Consent Decree; and

WHEREAS, paragraph 60(b) of the Consent Decree provides that Bayfront Redevelopment LLC shall grant an open space conservation restriction over the AOC 1 Open Space Property; and

WHEREAS, the parties hereto wish to set forth certain terms and conditions that will restrict future uses of, and activities on, the AOC 1 Open Space Property and assure appropriate monitoring and enforcement of the conservation, open space, parks, and recreation purposes of this Conservation Restriction.

NOW THEREFORE, WITNESSETH: For and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration paid by Grantee to Grantor, the receipt and sufficiency of which is acknowledged by Grantor, and in consideration of the covenants hereinafter contained, the parties to this Conservation Restriction, intending to be legally bound, do

HEREBY AGREE AS FOLLOWS:

1. **Purpose**. It is the purpose of this Conservation Restriction to protect and preserve the AOC 1 Open Space Property; to permit Honeywell to implement, monitor, maintain, repair, and replace the Chromium Remedy; to prevent any use of the AOC 1

Open Space Property that will significantly impair or interfere with the purposes of the Consent Decree; and to preserve the AOC 1 Open Space Property as predominantly green open space with associated pedestrian walkways and outdoor recreation facilities for the use and enjoyment of the public. However, nothing in this Conservation Restriction shall grant a public right of access to enter upon, or use, the AOC 1 Open Space Property, or any portion thereof, during the time that the Chromium Remedy required by the Consent Decree is being implemented. Thereafter, Grantor and Grantee intend that this Conservation Restriction will confine the use of the AOC 1 Open Space Property to such activities as are consistent with the purpose of the Consent Decree. In the event of any conflict between the Consent Decree and this Conservation Restriction, the Consent Decree shall control.

2. **Title**. Grantor covenants and represents that Grantor is the sole owner and is seized of the AOC 1 Open Space Property in fee simple and has good right to grant and convey this Conservation Restriction and that Grantee(s) shall have the use of, and enjoyment of, the benefits derived from and existing out of this Conservation Restriction.

3. **Definitions**.

3.1 Capitalized terms in this Conservation Restriction which are not defined herein shall have the meaning ascribed to them in the Consent Decree.

3.2 AOC 1 Open Space Property shall mean the property consisting of approximately 11 acres and now known and designated as a portion of Block 1290.1, Lots 2D, 2E, and Block 1290.1, Lot 16A.99 on the Tax Map of the City of Jersey City, as described more fully in Schedule A and Exhibit A attached hereto. The AOC 1 Open

Space Property is the same property as the AOC 1 Open Space Area in the Consent Decree.

3.3 Bayfront Redevelopment LLC shall mean the limited liability company created by Honeywell for the purposes described in paragraph 4.1 of the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc., filed simultaneously with the Consent Decree in the Consolidated Litigation.

3.4 Consent Decree shall mean the Consent Decree Regarding Remediation and Redevelopment of Study Area 6 North, entered in the Consolidated Litigation and being recorded simultaneously with this Conservation Restriction.

3.5 Consolidated Litigation shall mean *Jersey City Municipal Utilities Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC).

3.6 The Court shall mean the United States District Court for the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

3.7 Hackensack River Watershed Land Trust shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

3.8 Holders of this Conservation Restriction shall mean Grantee and its successors and assigns and, in the event a Secondary Grantee is designated pursuant to paragraph 7.3, its successors and assigns.

3.9 Honeywell shall mean Honeywell International Inc.

3.10 Grantee shall mean Hackensack Watershed Land Trust and/or its designated successors and assigns. Grantee shall also mean the Secondary Grantee, in the event that the Secondary Grantee is designated pursuant to paragraph 7.3, and must fill the role of Grantee pursuant to paragraph 7.4.

3.11 Grantor shall mean Bayfront Redevelopment LLC as the current holder of the fee simple title to the AOC 1 Open Space Property and any subsequent holder of the fee simple title to the AOC 1 Open Space Property, including Jersey City.

3.12 Jersey City shall mean the City of Jersey City, New Jersey.

3.13 The Jersey City Entities shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

3.14 Party or Parties shall mean any one or all of the signatories to the Consent Decree.

3.15 Qualified Holder shall mean (a) an organization exempt from federal income taxation under Section 501(c)(3) of the Internal Revenue Code that satisfies the requirements to be a qualified organization within the meaning of Section 170(h)(3) of the Internal Revenue Code, or under any substantially similar provision of any successor tax code, and that is authorized to hold a conservation restriction with respect to property located within the State of New Jersey, (b) any trust or other entity

created by the legislature of the State of New Jersey or by Hudson County for substantially similar purposes, or (c) the State of New Jersey, Hudson County, or any other public body in New Jersey that is empowered to hold and administer a conservation restriction.

3.16 Riverkeeper shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

3.17 Secondary Grantee shall mean a qualified holder designated by Grantee pursuant to paragraph 7.3.

3.18 The Special Master shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

4. **Conservation Restriction**.

4.1 Grant. Grantor hereby grants and conveys to Grantee, a non-public conservation restriction on, over and across the AOC 1 Open Space Property as is depicted on the recorded Plat, which area is described in Schedule A and Exhibit A attached hereto and made a part hereof.

4.2 Grantor's Retained Responsibilities. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership of the AOC 1 Open Space Property, including the payment of taxes. Grantor shall keep Grantee's interest in the AOC 1 Open Space Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by

Grantor. Honeywell shall be solely responsible for the implementation, monitoring, maintenance, repair, and replacement of the Chromium Remedy in the AOC 1 Open Space Property as provided for under the Consent Decree. Neither Grantee nor Secondary Grantee, if such a grantee is designated pursuant to paragraph 7.3, shall have any responsibility whatsoever with respect to the implementation, monitoring, maintenance, repair, and/or replacement of the Chromium Remedy in the AOC 1 Open Space Property.

4.3 Recordation, Notice in Future Instruments. This Conservation Restriction shall be recorded in the office of the Hudson County Register and a conspicuous reference to this Conservation Restriction shall be included in all instruments concerning title to the AOC 1 Open Space Property. Any Party to the Consent Decree and Grantee shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Conservation Restriction in the real estate records related to the AOC 1 Open Space Property. This right of recordation shall be exercised in conjunction with the right of recordation provided in paragraph 60(d) of the Consent Decree.

4.4 Notice of Future Transfers. Grantor shall give written notice to Grantee(s) of any sale, lease, or other transfer of any interest in the Property not later than ten days following the date of such sale, lease, or transfer, which notice shall include the name and address of each party to whom an interest was sold, leased, or transferred. However, sales, leases, or transfers other than in accordance with the terms of paragraph 60 of the Consent Decree are prohibited.

5. **Permitted Activities.**

5.1 Remediation and Redevelopment as Open Space/Public Park. Grantor and/or Honeywell shall be permitted to undertake all activities reasonably required in connection with: (i) the implementation, maintenance, monitoring, repair, and replacement of the Chromium Remedy consistent with the Consent Decree, (ii) the construction of roads and associated utilities at the AOC 1 Open Space Property as permitted by the Consent Decree, and (iii) such further development of the AOC 1 Open Space Property into an open space/public park as is consistent with paragraphs 60(j) and 60(k) of the Consent Decree and paragraphs 5.2 and 5.3 of this Conservation Restriction. In addition, the Jersey City Entity Study Area 6 North Operations (as defined in the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. attached as Exhibit A to the Consent Decree) shall be allowed to continue on the AOC 1 Open Space Property until such time as those Operations are relocated prior to implementation of the Chromium Remedy pursuant to the Consent Decree.

5.2 Prohibited Development in the AOC 1 Open Space Property. Only development satisfying the requirements of this paragraph, paragraph 5.3 of this Conservation Restriction, and the requirements of paragraphs 60(j) and 60(k) of the Consent Decree shall be permitted in the AOC 1 Open Space Area. All other development in the AOC 1 Open Space Area shall be prohibited.

(a) Honeywell shall establish Open Space Design Standards that shall govern all development in the AOC 1 Open Space Property, regardless of when the construction or installation of permissible development occurs. The Open

Space Design Standards shall satisfy each of the requirements set forth in paragraph 60(j)(v) of the Consent Decree and paragraph 5.2(e) of this Conservation Restriction, and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy, installed pursuant to the Consent Decree.

(b) The Initial Development in the AOC 1 Open Space Property shall be the development undertaken following the completion of the Chromium Remedy in the AOC 1 Open Space Property, pursuant to the Consent Decree. The Initial Development may occur in one or more phases. Honeywell and Bayfront Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 60(j)(viii) of the Consent Decree and paragraph 5.2(h) of this Conservation Restriction.

(c) The Special Master, appointed in the Consolidated Litigation pursuant to the Consent Decree, shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with the Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the AOC 1 Open Space Area shall run through the Initial Development Period for each phase.

(d) Honeywell shall ensure that the requirements of this

paragraph, paragraph 5.3 of this Conservation Restriction, and of paragraphs 60(j) and 60(k) of the Consent Decree are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with the requirements of the Consent Decree and with protection of the integrity of the Chromium Remedy installed pursuant to the Consent Decree.

(e) Any development undertaken in the AOC 1 Open Space Property, regardless of when undertaken, shall satisfy each of the following requirements:

(i) It shall not jeopardize the integrity of the Chromium Remedy installed pursuant to the Consent Decree;

(ii) It shall be limited to the types of development permitted under paragraph 60(k) of the Consent Decree and paragraph 5.3 of this Conservation Restriction;

(iii) It shall be consistent with this Conservation Restriction, the Consent Decree, and the Redevelopment Plan; however, in the event of any conflict or inconsistency between this Conservation Restriction, the Consent Decree, and the Redevelopment Plan, the Consent Decree shall govern;

(iv) In total, at least 75% of the AOC 1 Open Space Property, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 60(k)(xi) of the Consent Decree and paragraph 5.3(k) of this Conservation Restriction;

(v) The portion of the Open Space Design Standards

necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy, which is subject to review and approval pursuant to the terms of the Consent Decree;

(vi) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(vii) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(viii) No permanent concession facilities shall be permitted.

(f) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 72(c) of the Consent Decree, except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 72(d) and 72(e) of the Consent Decree shall apply, except that the Special Master need not provide notice to NJDEP.

(g) During the Initial Development Period, any development in the AOC 1 Open Space Area shall require the preparation and submission of a Development Plan pursuant to paragraph 60(j)(vi) of the Consent Decree and paragraph 5.2(f) of this Conservation Restriction, and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 60(j)(iii) of the Consent

Decree and paragraph 5.2(c) of this Conservation Restriction.

(h) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and the Jersey City Entities. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and the Jersey City Entities for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(i) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, paragraphs 60(j)(v) and 60(j)(x)(3)(notice requirement) of the Consent Decree and paragraphs 5.2(e) and 5.2(j)(iii) of this Conservation Restriction.

(j) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(i) The AOC 1 Open Space Property has been remediated such that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Property, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive

standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(ii) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, paragraph 60(j)(v) of the Consent Decree and paragraph 5.2(e) of this Conservation Restriction; or

(iii) The development meets the requirements of paragraphs 60(j)(v) and 60(j)(xi) of the Consent Decree and paragraphs 5.2(e) and 5.2(k) of this Conservation Restriction, and Jersey City provides notice of its intention to alter or add to the development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of this Conservation Restriction at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of this Conservation Restriction shall have the right to move the Court to prohibit such alteration or addition.

(k) If any of the development features or facilities that Jersey City seeks to add, pursuant to paragraph 60(j)(x) of the Consent Decree and paragraph 5.2(j) of this Conservation Restriction, require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(l) Jersey City shall provide Honeywell, Riverkeeper, and the

holders of this Conservation Restriction with an annual report that describes any alterations or additions, including those activities under paragraph 60(j)(x)(2) of the Consent Decree and 5.2(j)(ii) of this Conservation Restriction, to the development undertaken during the Initial Development Period.

(m) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy required by the Consent Decree.

5.3 The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 60(j)(v) of the Consent Decree and paragraph 5.2(e) of this Conservation Restriction:

(a) Roads and the pedestrian thoroughfare -- both crossing and running along the AOC 1 Open Space Property, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(b) Curbing and fences;

(c) Sidewalks, paths, walkways, and nature trails;

(d) Utilities and utility corridors, lighting, and restrooms;

(e) Irrigation or sprinkler components or systems;

(f) Water features;

(g) Above-ground storm water cisterns;

(h) Signs, including the signs or display required by paragraph

60(l) of the Consent Decree;

(i) Benches, trash receptacles, and bicycle racks;

(j) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(k) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 60(j)(v)(4) of the Consent Decree and paragraph 5.2(e)(iv) of this Conservation Restriction.

5.4 Easement for Monitoring, Maintenance, Repair, and Replacement: As between Grantor and Grantee, Honeywell shall remain solely responsible for monitoring, maintenance, repair, and replacement of the Chromium Remedy in accordance with the Consent Decree and shall reserve, or obtain a grant of, an easement for the purpose of such monitoring, maintenance, repair, and replacement. Neither Grantee nor Secondary Grantee, if such grantee is designated pursuant to paragraph 7.3, shall have any responsibility whatsoever with respect to the implementation, monitoring, maintenance, repair, and/or replacement of the Chromium Remedy in the AOC 1 Open Space Property. Honeywell shall be entitled to promptly record such reservation and/or easement and Grantee agrees that the terms, conditions, and restrictions and purposes of such reservation and/or easement, or reference thereto, will be inserted in any subsequent deed or other legal instrument by

which the City of Jersey City, Grantor, or Grantee divests either a real property or other recordable interest in the AOC 1 Open Space Property.

6. **Prohibited Activities.** Development at the AOC 1 Open Space Property is prohibited, except insofar as it meets the requirements of the Consent Decree and of paragraph 5 of this Conservation Restriction.

7. **Grantee's Rights.** To accomplish the purpose of this Conservation Restriction, the following rights are conveyed to Grantee:

7.1 Right of Entry. The right to enter the AOC 1 Open Space Property during the implementation of the Chromium Remedy pursuant to the Consent Decree at reasonable times and with prior notice for the purpose of: (a) inspecting the AOC 1 Open Space Property to determine if Grantor is complying with the covenants and purposes of this Conservation Restriction; (b) enforcing the terms of this Conservation Restriction; and (c) taking any and all actions with respect to the AOC 1 Open Space Property as may be legal, necessary and appropriate, to remedy or abate any material violations hereof. After the Chromium Remedy has been implemented, Grantee shall have the right to enter the AOC 1 Open Space Property at reasonable times for the purposes above without the need for prior notice.

7.2 Enforcement. The right to prevent any improvement, activity on, or use of, the AOC 1 Open Space Property that is inconsistent with the purpose of this Conservation Restriction and to require the restoration of such areas or features of the AOC 1 Open Space Property that may be damaged by any inconsistent improvement or use. For purposes of the enforcement of this Conservation Restriction, Grantee agrees

to pursue such enforcement solely before the Court in the Consolidated Litigation and to submit to the jurisdiction of that Court.

7.3 Designation of Secondary Grantee. Grantee has the right to designate a Qualified Holder as a Secondary Grantee with the written consent of Grantor, which consent will not be unreasonably withheld. Within 60 days of such designation, this Conservation Restriction shall be modified by the Parties and duly recorded.

7.4 Allocation of Responsibilities between Grantee and Secondary Grantee. In the event a Secondary Grantee is designated pursuant to paragraph 7.3, then the following shall apply: for so long as Grantee, or any successor in interest to Grantee, remains a holder of this Conservation Restriction, and unless and until Grantee and Secondary Grantee or their respective successors or assigns shall otherwise agree in a writing executed by them in recordable form and delivered to Grantor, Grantee shall be delegated the primary responsibility for monitoring and enforcing compliance with the terms of this Conservation Restriction. In connection therewith, Grantee, or its successors and assigns, shall have sole power and authority, as between Grantee and Secondary Grantee of this Conservation Restriction, to grant or withhold any and all other consents or approvals that may be required to be obtained by Grantor under the terms of this Conservation Restriction. Notwithstanding the foregoing, Secondary Grantee shall be entitled to receive a copy of all notices required to be given to Grantee, and shall be provided with a copy of all requests for approval submitted by Grantor and all written approvals, or denials thereof, given pursuant to this Conservation Restriction. Secondary Grantee's right to exercise rights and remedies

conferred by this Conservation Restriction upon Grantee, other than as provided in this paragraph, shall become effective upon Grantee's dissolution, in the event that Grantee has failed to name a successor.

8. **Grantee's Remedies**.

8.1 Proceedings upon Violation. In the event that Grantee becomes aware of a violation of the terms of this Conservation Restriction, Grantee shall promptly give notice to Grantor, Honeywell, the Jersey City Entities, and Riverkeeper of such violation via certified mail, return receipt requested, and request corrective action sufficient to abate such violation and restore the AOC 1 Open Space Property as closely as possible to the condition that would have existed had there been no violation. Failure by Grantor or Honeywell to cause discontinuance, abatement, or initiate such other corrective action as may be required by the Consent Decree within 90 days after receipt of such notice, or such longer period as may be necessary if the violation cannot reasonably be cured within 90 days, shall entitle Grantee to move the Court to enforce the terms of this Conservation Restriction; to require the restoration of the AOC 1 Open Space Property to its previous condition; and/or to enjoin compliance. If Grantee believes that circumstances are such that immediate action is required to prevent or mitigate significant additional harm or damage to the AOC 1 Open Space Property, Grantee may pursue its remedies without waiting for any period provided for cure to expire and without prior notice.

8.2 Proceedings upon Alteration or Addition to Development. Grantee shall have the right to participate in proceedings under paragraph 5.2(j)(iii) of this

Conservation Restriction and paragraph 60(j)(x)(3) of the Consent Decree to prohibit any alterations or additions to the development in the AOC 1 Open Space Property.

8.3 Forbearance. Any forbearance by Grantee to exercise its rights under this Conservation Restriction in the event of any breach of any term of this Conservation Restriction by Grantor shall not be deemed or construed to be a waiver by Grantee of such term or of any subsequent breach of the same or any other term of this Conservation Restriction or of any of Grantee's rights under this Conservation Restriction. No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver. Grantor shall not be entitled to assert any defense based upon laches, estoppel, or prescription with respect to any violation of this Conservation Restriction as to which Grantee was not specifically notified by Grantor in writing.

9. **Parties Subject to Conservation Restriction**. The covenants agreed to and the terms, conditions, and restrictions imposed by this grant shall be binding upon Grantor, its lessees, agents, personal representatives, successors, assigns, and all other successors in interest to Grantor. The covenants agreed to and the terms, conditions, and restrictions imposed by this grant shall be binding upon Grantee(s), their lessees, agents, personal representatives, successors, assigns, and all other successors in interest to Grantee(s).

10. **Termination**.

10.1 This Conservation Restriction is intended to be of unlimited duration, subject only to termination as provided in paragraph 10.2 of this Conservation

Restriction, and therefore may not be terminated solely by mutual agreement of Grantor and Grantee.

10.2 This Conservation Restriction may be terminated upon application to the Court of any Party to the Consent Decree when no hexavalent or total chromium contamination remains in AOC 1 Open Space Property, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon Court approval of termination of this Conservation Restriction, Grantor shall conduct a public hearing in accordance with N.J.S.A 13:8B-5 and Grantee(s) shall release the Conservation Restriction and shall execute, at the request of Grantor, a release of this Conservation Restriction and any other instrument to that effect deemed necessary or desirable.

11. **Assignment.**

11.1 Right to Assign. Grantee, and any future assignee of this Conservation Restriction, may with the prior written consent of Grantor, which consent will not be unreasonably withheld, transfer and assign this Conservation Restriction and the rights and obligations created hereby, in whole or in part, to one or more Qualified Holders as defined in paragraph 3.15 The assignee shall simultaneously with such assignment assume the obligation to carry out the conservation purposes for which this Conservation Restriction is granted.

11.2 Executory Limitation. In the event that a Secondary Grantee has been designated pursuant to paragraph 7.3 and the Grantee dissolves without having assigned all of it rights and interest in the Property and delegated all of its

responsibilities under this Conservation Restriction to one or more Qualified Holders, such rights and responsibilities shall be vested in the Secondary Grantee pursuant to paragraph 7.4. In the event that a Secondary Grantee is not designated pursuant to paragraph 7.3 and the Grantee dissolves without having assigned all of its rights and interest in the Property and delegated all of its responsibilities under this Conservation Restriction to one or more Qualified Holders, such rights and responsibilities shall be vested in another Qualified Holder pursuant to a *cy pres* proceeding in the Court. Grantor and Honeywell shall have the right to appear in any such proceeding as interested parties. In the event that a Secondary Grantee is designated pursuant to paragraph 7.3, and such Secondary Grantee dissolves without having assigned all of its rights and interest in the Property and delegated all of its responsibilities under this Conservation Restriction to one or more Qualified Holders, Grantee may designate another Secondary Grantee pursuant to paragraph 7.3.

11.3 Release of Grantee's Further Obligations. The holder or holders of this Conservation Restriction immediately before any assignment or judicial re-vesting pursuant to paragraph 11.2 shall thereafter have no further obligation to monitor compliance with, or enforce the provisions of, this Conservation Restriction, provided that the assignee meets the requirements set forth above and has assumed the obligation to monitor and enforce this Conservation Restriction.

12. **Miscellaneous Provisions.**

12.1 Severability. If any provision of this Conservation Restriction or the application thereof to any person or circumstances is found to be invalid, the remaining provisions of this Conservation Restriction, and the application of such provisions to

persons or circumstances other than those as to which it is found to be invalid, shall not be affected.

12.2 Successors and Assigns. The term "Grantor" shall include Grantor and Grantor's heirs, executors, administrators, successors, and assigns. The term "Grantor" shall also mean the masculine, feminine, corporate, singular, or plural of the word as needed in the context of its use.

12.3 No Third-Party Beneficiaries. The parties hereto intend that there be no third-party beneficiaries to this Conservation Restriction, except the Parties to the Consent Decree.

12.4 Captions. The captions herein have been inserted solely for convenience of reference and are not a part of this Conservation Restriction and shall have no effect upon construction or interpretation.

12.5 Notices. Any notices required in this Conservation Restriction shall be sent by registered or certified mail to the persons at the following addresses. Any party listed below may change the recipient or location for receipt of such notice by sending written notice of such change to the other Parties listed below:

(a) If to Grantor:

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

(b) With copy to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962

(973) 455-4003

(c) If to Grantee Hackensack River Watershed Land Trust:

William Sheehan
231 Main Street
Hackensack, NJ 07601

(d) If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

12.6 Amendment. This Conservation Restriction may be amended only with the written consent of Grantee and Grantor and of the Parties to the Consent Decree. Any such amendment shall be consistent with the purpose of the Consent Decree and this Conservation Restriction and shall comply with any applicable requirements of N.J.S.A. 13:8B-1 et seq.

12.7 No Extinguishment through Merger. If Grantee comes to own all or any portion of the fee interest in the AOC 1 Open Space Property, (a) Grantee, as successor in title to Grantor, shall observe and be bound by the obligations of Grantor and the restrictions imposed upon the AOC 1 Open Space Property by this Conservation Restriction, (b) in view of the public interest in its enforcement, this Conservation Restriction shall survive such simultaneous ownership of fee and Conservation Restriction interests in the AOC 1 Open Space Property, and shall not be extinguished notwithstanding any otherwise applicable legal doctrine under which such property interests would or might be merged, and (c) Grantee shall, as promptly as practicable, either assign its interests in this Conservation Restriction to another

Qualified Holder in conformity with the requirements of this paragraph or divest itself of its fee interest in the AOC 1 Open Space Property. Any instrument of assignment of this Conservation Restriction or the rights conveyed herein shall refer to the provisions of this paragraph, and shall contain language necessary to continue it in force.

IN WITNESS WHEREOF, the parties hereunto set their hands and seals the day and year first above written.

By: Richard J. Kriva
Title: Vice President, Global Real Estate
Bayfront Redevelopment LLC

This 12th day of December, 2008

By: Richard J. Kriva
Title: Vice President, Global Real Estate
Honeywell International Inc.

"OFFICIAL SEAL"
Jennifer Scaletta
Notary Public, State of Illinois
Commission Expires 2/26/2011

By: [signature]
Title: RIVERKEEPER
Hackensack Watershed Land Trust

This 25th day of November, 2008

KELLY G. PALAZZI
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES ~~APRIL 24,~~ May 6th, 2009

STATE OF ILLINOIS)
) SS:
COUNTY OF MC HENRY)

I CERTIFY that on December 12th, 2008, Richard J. Kriva, personally came before me and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Vice President, Global Real Estate of Honeywell International Inc., the corporation named in the attached document;

(b) this document was signed and made by the corporation as its voluntary act and deed and was duly authorized by the corporation; and

(c) this person delivered the attached document as the voluntary act and deed of the corporation.

Sworn to and Subscribed before me
this 12th day of December, 2008.

"OFFICIAL SEAL"
Jennifer Scaletta
Notary Public, State of Illinois
Commission Expires 2/26/2011

Jennifer Scaletta
A Notary Public

STATE OF ILLINOIS)
)
COUNTY OF MC HENRY) SS:

I CERTIFY that on December 12th, 2008, Richard J. Kriva, personally came before me and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Vice President, Global Real Estate for Honeywell International Inc, which is the sole member of Bayfront Redevelopment LLC, the limited liability company named in the attached document;

(b) this document was signed and made by the limited liability company as its voluntary act and deed and was duly authorized by the sole member of the limited liability company; and

(c) this person delivered the attached document as the voluntary act and deed of the limited liability company.

Sworn to and Subscribed before me
this 12th day of December, 2008.

"OFFICIAL SEAL"
Jennifer Scaletta
Notary Public, State of Illinois
Commission Expires 2/26/2011

Jennifer Scaletta
A Notary Public

STATE OF NEW JERSEY)
) SS:
COUNTY OF)

I CERTIFY that on November 25, 2008, William Sheehan, personally came before me and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Riverkeeper of the Hackensack Watershed Land Trust, the trust named in the attached document;

(b) this document was signed and made by the trust as its voluntary act and deed and was duly authorized by the trust; and

(c) this person delivered the attached document as the voluntary act and deed of the trust.

Sworn to and Subscribed before me
this 12th day of December, 2008.

A Notary Public

KELLY G. PALAZZI
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES ~~APRIL 24,~~ May 6, 2009

598375.1

Schedule A
MAXIMUM LEGAL DESCRIPTION
PRE-REMEDIATION AOC 1 OPEN SPACE PROPERTY
BLOCK 1290.1 Lots 2D, 2E, 14H, 14J, 15B, 15D and 16A.99
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

The AOC 1 Open Space Property that is the subject of this Conservation Restriction is intended to consist of a parcel of land which will be bounded by underground Hydraulic Barrier Walls that have not been fully constructed as of the date of this instrument. Accordingly, the parties agree that until such time as construction of the Hydraulic Barrier Walls is completed and an Amended Conservation Restriction is approved by the Court as provided below, the legal description of the AOC 1 Open Space Property shall be as set forth in the survey and diagram attached hereto as Exhibit A. The parties further agree that such legal description is subject to revision as provided herein.

Upon completion of construction of the Hydraulic Barrier Walls, Grantor will cause the AOC 1 Open Space Property to be re-surveyed (the "As-Built Survey") with the perimeter of the AOC 1 Open Space Property to be the outer facing wall of the Hydraulic Barrier Walls, as constructed. Grantor shall further cause a metes and bounds description (the "As-Built Description") to be prepared based on the As-Built Survey. Following preparation of the As-Built Description, Grantor shall request that the Court amend the order which, pursuant to paragraph 60(b)(i) of the Consent Decree, embodies this Conservation Restriction ("the Conservation Restriction Order"), by substituting the As-Built Description for the metes and bounds description set forth in Exhibit A and thereby creating an Amended Conservation Restriction. Once the Conservation Restriction Order is so amended by the Court, Grantor shall record the Amended Conservation Restriction in the office of the Hudson County Register, without the need for execution or consent, written or otherwise, by Grantee.

Upon recording the Amended Conservation Restriction, the As-Built Description shall supersede, replace and make null and void the legal description set forth in Exhibit A to this Conservation Restriction.

Exhibit
A

CMX

July 2, 2008
Revised July 3, 2008
Revised July 29, 2008
Revised August 13, 2008
Revised October 3, 2008

Project No. 030117508

LEGAL DESCRIPTION
PROPOSED OPEN SPACE AREA
BLOCK 1290.1 LOTS 2D, 2E, 14H, 14J and 16A.99
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

A Parcel of land described herein located in Block 1290.1, Lots 2D, 2E, 14H, 14J and 16A.99, City of Jersey City, Hudson County, New Jersey, and being more particularly described as follows:

Beginning at the intersection of the westerly sideline of New Jersey State Highway Route 440 and the division line between Block 1290.1, Lots 14D and 16A.99, and running; thence,

1. Along said division line, North 49 degrees 06 minutes 05 seconds West, 257.00 feet to the division line between Lots 14D and 14H; thence,

2. Along said division line, South 24 degrees 46 minutes 55 seconds West 6 feet more or less to the southerly face of an existing Hydraulic Barrier Wall; thence,

Running through Lots 14H and 14J in Block 1290.1, along said southerly wall face, the following two (2) courses:

3. North 49 degrees 06 minutes 05 seconds West, 232.64 feet; thence,

4. North 59 degrees 39 minutes 05 seconds West, 1584.08 feet to the westerly line of said Lot 14J; thence,

5. Along said westerly line, and along the westerly line of Lot 2D in Block 1290.1, North 45 degrees 52 minutes 45 seconds East, 70.6 feet more or less to the intersection of the same with the southerly building line as extended, of an outfall structure building; thence,

6. Running through Lot 2D along said line, South 45 degrees 40 minutes 26 seconds East, 60.73 feet; thence,

7. Along the same, North 44 degrees 19 minutes 34 seconds East, 22.58 feet; thence,

8. Along the same, North 45 degrees 40 minutes 26 seconds West, 7.05 feet; thence,

9. Along the same, North 44 degrees 19 minutes 34 seconds East, 5.38 feet; thence,

10. Along the same, North 45 degrees 40 minutes 26 seconds West, 1.44 feet; thence,

20 WATERVIEW BOULEVARD | PO BOX 5245 | PARSIPPANY, NJ 07054-6245
TEL 973.299.7970 | FAX 973.334.5588 | WWW.CMXENGINEERING.COM

ARIZONA FLORIDA MARYLAND NEVADA NEW JERSEY NEW YORK PENNSYLVANIA MEXICO

11. Along the same, North 44 degrees 19 minutes 34 seconds East, 5.24 feet to the intersection of the same with the outer wall of an existing JCMUA 72" underground sanitary sewer force main pipe (being the side facing the herein described open space lands); thence,

12. Along said outer pipe wall, North 68 degrees 14 minutes 24 seconds East, 110.05 feet; thence,

13. Along the same, North 26 degrees 00 minutes 52 seconds East, 5.35 feet to the southerly building line of another outfall structure building; thence,

14. Along said building line, South 63 degrees 59 minutes 08 seconds East, 3.40 feet; thence,

15. Along the same, North 26 degrees 00 minutes 52 seconds East, 5.26 feet to the aforementioned outer wall of an existing JCMUA 72" underground sanitary sewer force main pipe; thence,

16. Along said outer pipe wall, South 64 degrees 15 minutes 52 seconds East, 298.76 feet; thence,

17. Along the same, South 63 degrees 39 minutes 08 seconds East, 195.65 feet; thence

18. Along the same, South 65 degrees 19 minutes 16 seconds East, 113.04 feet; thence,

19. Along the same, South 67 degrees 09 minutes 18 seconds East, 103.49 feet; thence,

20. Along the same, North 23 degrees 08 minutes 40 seconds East, 53.16 feet to a point of non-tangent curvature in the northerly curb line of a proposed road to be known as Stegman Boulevard, as shown on Exhibit 7 of the "Bayfront I Development Plan" prepared for the City of Jersey City by A. Nelessen Associates, Inc, dated February 13, 2008; thence,

Running through Lots 2D, 2E, and 16A.99, along said proposed northerly curb line the following five (5) courses:

20. Along a non-tangent curve to the right having a radius of 1036.00 feet, a central angle of 06 degrees 49 minutes 53 seconds and an arc length of 123.52 feet and a chord bearing of South 66 degrees 53 minutes 53 seconds East, a chord distance of 123.45 feet to a point of compound curvature; thence,

21. Along a curve to the right having a radius of 1458.00 feet, a central angle of 09 degrees 39 minutes 52 seconds and an arc length of 245.93 feet to a point of tangency; thence,

22. South 53 degrees 49 minutes 05 seconds East, 74.81 feet to a point of curvature; thence,

23. Along a curve to the right having a radius of 6213.00 feet, a central angle of 04 degrees 27 minutes 15.8 seconds and an arc length of 483.02 feet to a point of tangency; thence,

24. South 49 degrees 21 minutes 50 seconds East, 272.98 feet to the aforementioned Route 440 westerly sideline; thence,

25. Along said westerly sideline, South 24 degrees 46 minutes 55 seconds West, 274.45 feet to the point and place of beginning.

Containing 11.8 acres of land more or less as described herein.

Subject to a field survey of the proposed hydraulic barrier walls upon completion of their installation.

Subject to all existing easements, rights-of-way and reservations of record.

The above described premises being also depicted on the diagram included as part of this Exhibit A.

Glen J. Lloyd, P.L.S.
N.J. Professional Land Surveyor
New Jersey License No. GS37598

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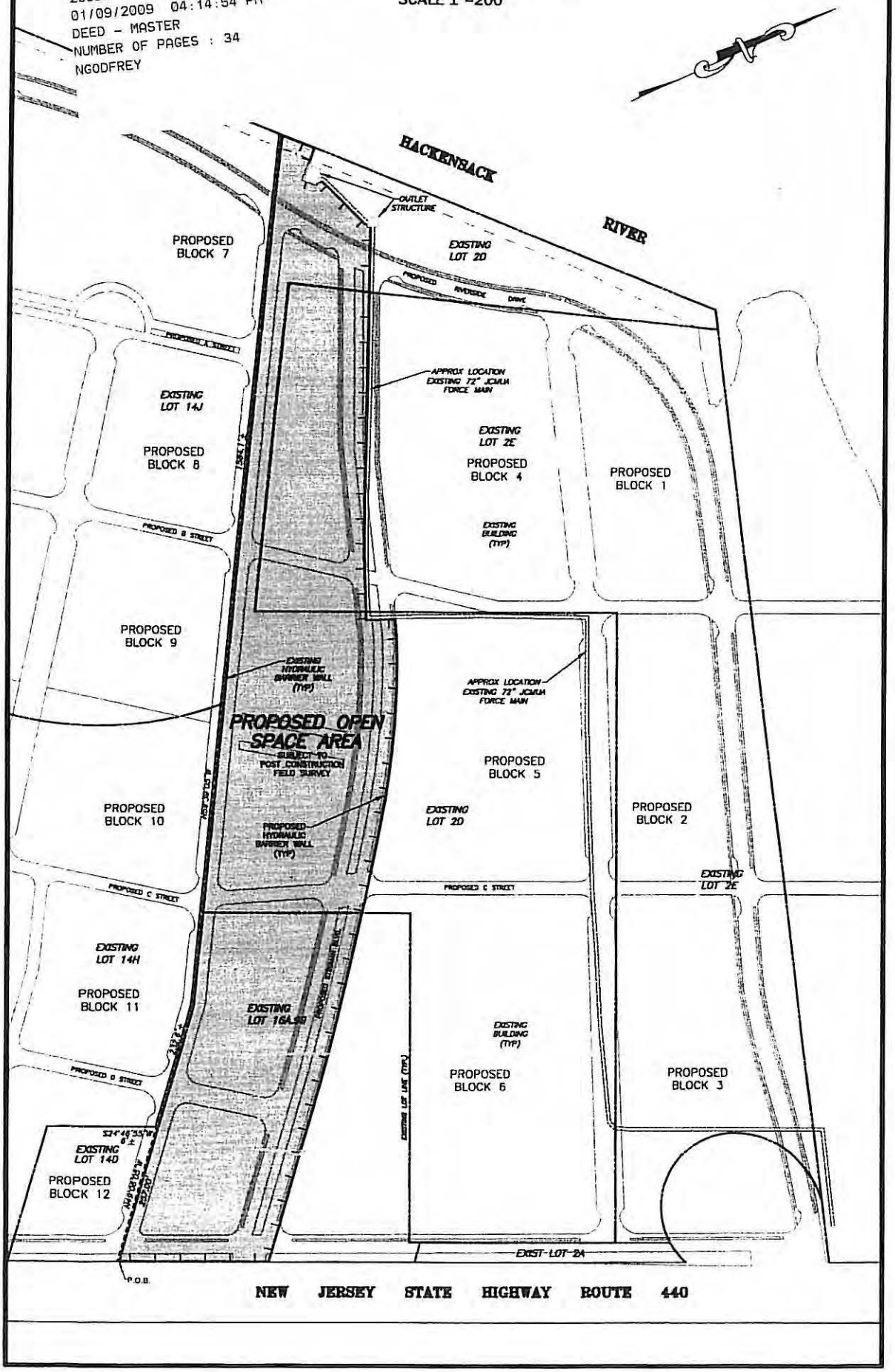
DEED - MASTER
NUMBER OF PAGES : 34
NGODFREY

(HIBIT A

SCALE 1"=200'



APPENDIX A-4

DEED NOTICES

DEED NOTICE #1
SA-6 SOUTH OPEN SPACE

Hudson County Recording Data Page Honorable Diane Coleman Hudson County Register	*Official Use Only – Barcode* 20171130010138840 1/133 11/30/2017 09:36:32 AM DEED Bk: 9258 Pg: 700 Diane Coleman Hudson County, Register of Deeds Receipt No. 1307794
Official Use Only – Record & Return	*Official Use Only – Realty Transfer Fee*
Date of Document: November 16, 2017	Type of Document: Deed Notice
First Party Name: Bayfront Redevelopment, LLC	Second Party Name:
Additional Parties:	

THE FOLLOWING SECTION IS REQUIRED FOR DEEDS ONLY	
Block:	Lot:
Municipality:	
Consideration:	
Mailing Address of Grantee:	

THE FOLLOWING SECTION IS FOR ORIGINAL MORTGAGE BOOKING & PAGING INFORMATION FOR ASSIGNMENTS, RELEASES, SATISFACTIONS, DISCHARGES & OTHER ORIGINAL MORTGAGE AGREEMENTS ONLY	
Original Book:	Original Page:

HUDSON COUNTY RECORDING DATA PAGE

Please do not detach this page from the original document as it contains important recording information and is part of the permanent record

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature] William J. Hague, Global Director - Remediation Design and Construction
[Bayfront Redevelopment LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

DEED NOTICE CONCERNING CONTROLS INSTALLED TO CONTAIN CHROMIUM AND HISTORIC FILL CONTAMINATION UNDERLYING THE PROMENADE

This Deed Notice is made as of the 16th day of November, 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950***. Owner shall mean Bayfront Redevelopment LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The Property (also referenced herein as the "Restricted Areas") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. Bayfront Redevelopment LLC is the current owner in fee simple of certain real property designated as those portions of ***Block 24601, Lots 1 through 8*** and portions of ***Block 21901 Lot 8 on the tax map of the City of Jersey City, Hudson County*, New Jersey**[1]; the New Jersey Department of Environmental Protection ("the Department") Program Interest ("PI") Numbers for the contaminated site which includes this property are ***Hudson County Chromate Site***

[1] All references to Block 24601 Lots 1 through 8 and Block 21901 Lot 8 in this Deed Notice shall mean the applicable portions of Block 24601 Lots 1 through 8 and portions of Block 21901 Lot 8 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

No. 073 PI #G00000927, Hudson County Chromate Site No. 124 PI# G000008741, Hudson County Chromate Site No. 125 PI# G000008742, Hudson County Chromate Site No. 134 PI# 033312, Hudson County Chromate Site No. 140 PI# 003846 (NJDEP PI# for non-chromium-related contaminants at the Property is #745719), and known as the Open Space AOC pursuant to the First Amended Consent Decree Regarding the Remediation and Redevelopment of Study Area 6 South ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.*, D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.*, D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.*, D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The approximate location of the Open Space AOC is also referred to as the Promenade in the Bayfront I Redevelopment Plan adopted by Jersey City on March 12, 2008. The Consent Decree restricts transfer, use and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management (BCM) is the entity within the Department that is responsible for the oversight of the chromium remediation of the Property. The matter was Hudson County Chromate Site No. 073 PI# G000000927, Hudson County Chromate Site No. 124 PI# G000008471, Hudson County Chromate Site No. 125 PI# G000008742, Hudson County Chromate Site No. 134 PI# 033312, and Hudson County Chromate Site No. 140 PI# 003846. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 South to address chromium-related and non-chromium soil and shallow groundwater contamination, except for the Open Space Area Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") for chromium remedial actions was approved by the Department on March 24, 2009 for Hudson County Chromate Site Nos. 073, 124, 125, 134, and 140, which include the Property for chromium. The RAWP for non-chromium remedial actions was approved by the Department on June 28, 2013 for Hudson County Site Nos. 073, 124, 125, 134, and 140. Remedial actions for chromium were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP, soil and groundwater contamination remain in the Property at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 South was submitted to the Department on February 8, 2017. The Department approved the RAR on March 30, 2017. A Construction Completion Report

("CCR") for SA-6 South to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 South was entered by the Court on November 20, 2017, Docket Nos 1520 to 1525.

The Property encompasses approximately 8 acres. The horizontal extents of the Property include an existing soil-cement bentonite ("SCB") wall along the northern boundary with SA-7 and the hydraulic barrier walls installed on the other three sides as part of the Chromium Remedy. The engineered barrier in the Property consists of the hydraulic barrier walls and an engineered Resource Conservation and Recovery Act ("RCRA") cap that includes a gas collection system, base protective layer, geomembrane liner, geocomposite drainage layer, filter fabric, warning layer, and cover soils. This Deed Notice includes the hydraulic barrier walls. The Property includes chromium, xylenes, and historic fill. Honeywell will restrict, or will cause Bayfront Redevelopment LLC to restrict, the future use of this area by implementing a conservation restriction, which has been recorded at the Office of the Hudson County Register, and transfer, or cause Bayfront Redevelopment LLC to transfer, title to the City of Jersey City (as called for in Paragraph 61(c)(ii)(3) of the Consent Decree). The provisions of the Long Term Monitoring Plan ("LTMP") and the Open Space Design Standards ("OSDS"), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater within the property remains contaminated. Groundwater contaminant concentrations and restrictions for SA-6 South in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater. As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil and groundwater remediation for the Property in perpetuity.

4. CONSIDERATION. In accordance with the Department's approval of the chromium and non-chromium RAWPs for the remediation for the Hudson County Chromate Site Nos. 073, 124, 125, 134, and 140 which includes the Property, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions

which will be maintained at either the onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single family residence or a child care facility without the Department's prior written approval;

iii. The Consent Decree, paragraph 74, prohibits development in the Property except as allowed by paragraphs 74(j) and (k) of the Consent Decree; and

iv. The Conservation Restriction, recorded with the Hudson County Register of Deeds at Book 8722, page 105, restricts the use and development of the Property.[2]

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls within the Property. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, the LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has prepared an LTMP which sets forth requirements for monitoring, maintaining, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5E. OPEN SPACE DESIGN STANDARDS. Pursuant to the Consent Decree, Honeywell has prepared the OSDS which set forth the standards that must be met to ensure the protection of the Chromium Remedy during all development and other intrusive work conducted within the Property.

---

[2] In the future, after the remediation of the area known as the Bulkhead Deferred Area is completed and approved by the Special Master, the boundary of the existing conservation restriction recorded on the Property will be amended to conform to the location of the as-built hydraulic barrier walls.

5F. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of known contamination in the Property, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and Conservation Restriction, (b) as is consistent with the OSDS, and (c) without first obtaining a Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(c), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree, the OSDS, and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree, and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of

any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 80 and 83 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that

any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description of Property - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Maps (Exhibits A-3A and A-3B) - Scaled maps of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1 and B-2 (Exhibits B-1A, B-1B, B-2A, B-2B, and B-2C): Restricted Area Maps - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system including trenches and pumps;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-3 (Table B-3): Restricted Area Data Tables - A separate table for each restricted area that includes either (A) or (B) through (F):

(A) Only for historic fill extending over the entire site or a portion of the site and for which analytical data are limited or do not exist, a narrative that states that historic fill is present at the site, a description of the fill material (e.g., ash, cinders, brick, dredge material), and a statement that such material may include, but is not limited to, contaminants such as PAHs and metals;

(B) Sample location designation from Restricted Area map (Exhibit B-1);

(C) Sample elevation based upon mean sea level;

(D) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(E) The restricted and unrestricted use standards for each contaminant in the table; and

(F) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C-1D. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; Exhibit C-1D: Conservation Restriction as Institutional Control (recorded at Hudson County Register of Deeds as indicated in Paragraph 3): Exhibit C-1 includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:

(1) Description and estimated size of the Restricted Areas as described above;

(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and

(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;

(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and

(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2A through C-2C. Exhibit C-2A: Engineering Controls: Clean Fill and Soil Capping System; Exhibit C-2B: Engineering Controls: Underground Containment Walls; Exhibit C-2C: Engineering Controls: Shallow Groundwater Collection and Treatment System.

Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:
(1) Description of the engineering control;
(2) The objective of the engineering control; and
(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:
(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;
(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;
(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;
(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;
(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and
(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;
(2) The engineering control continues to operate as designed; and
(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 28, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 28th day of November, 2017.

Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #1 Property

A-1 Vicinity Map

A-2 Metes and Bounds Description of the Property and Tax Map

A-3 Property Maps portions of Block 24601, Lots 1 through 8 and a portion of Block 21901 Lot 8, City of Jersey City, New Jersey

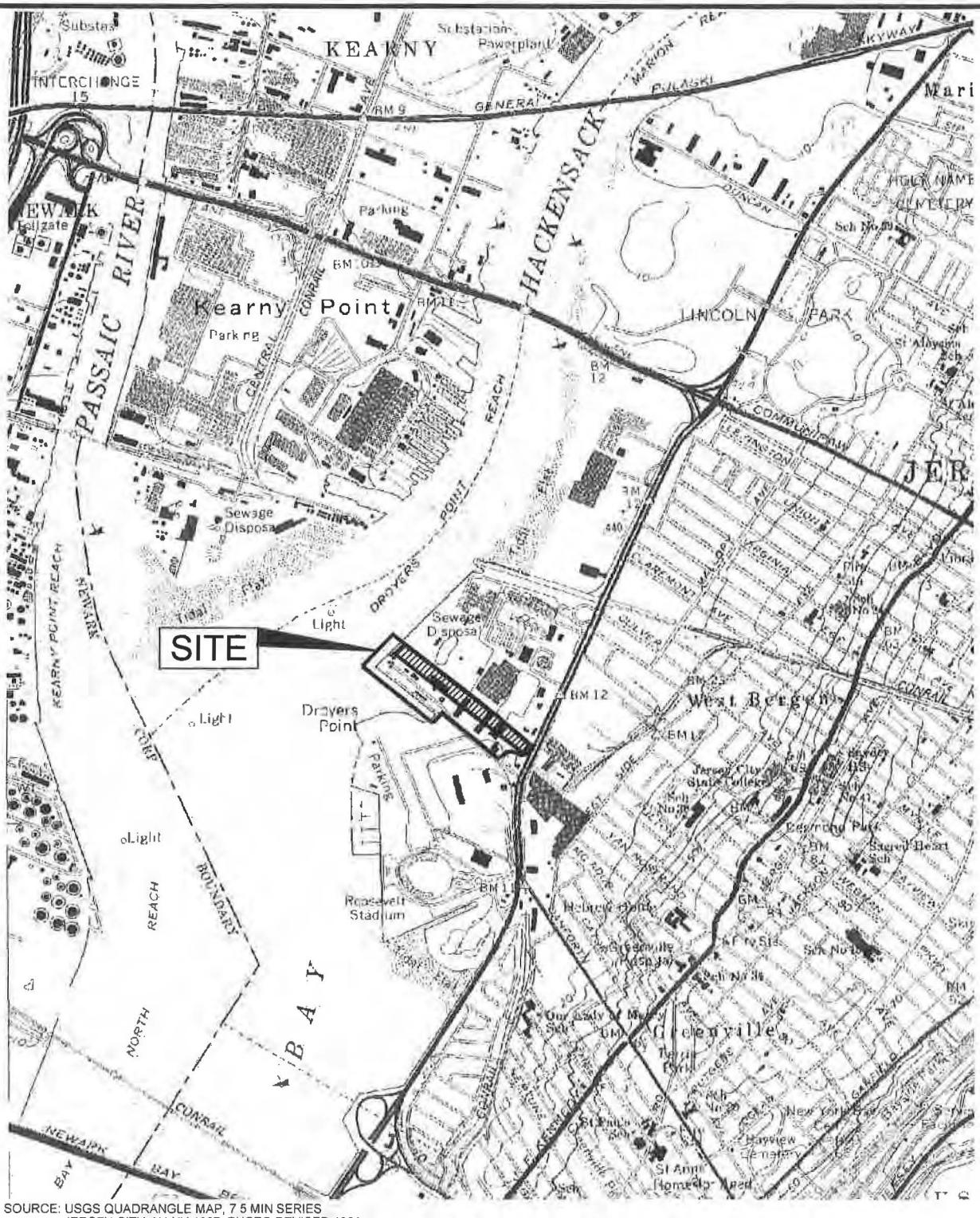
Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of the metes and bounds and a tax map for the Property.

Exhibit A-3A and A-3B Property Maps consist of figures indicating major surface features and engineering control for the Property. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

Exhibit A-1
Site Vicinity Map

EXHIBIT A-1
SITE VICINITY MAP
STUDY AREA 6 SOUTH SITES 073, 124, 125, 134, and 140
JERSEY CITY, NEW JERSEY



SOURCE: USGS QUADRANGLE MAP, 7 5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

OPEN SPACE AOC
RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150450–5100–A100–1000		amec foster wheeler	**EXHIBIT A-1** VICINITY MAP BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	*CHECKED/DATE:* NW 01/31/17	ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	

Exhibit A-2
Deed Notice #1 Property
Metes and Bounds Description
and Tax Map

A-2 Metes and Bounds Description of Property **portions of** Block 24601, Lots 1 through 8 and a **portion of** Block 21901 Lot 8 City of Jersey City, New Jersey (see attached).

If there is any discrepancy between the Metes and Bounds and the tax map or any other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as portions of Block 24601, Lots 1 through 8 and a portion of Block 21901 Lot 8 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment LLC. A copy of the current tax map which includes the general location of the Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 ▪ Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q

DEED NOTICE AREA 1
SA-6 SOUTH OPEN SPACE AREA
LOTS 1 THROUGH 8, BLOCK 24601
& LOT 8, BLOCK 21901
DECEMBER 4, 2015
REVISED: FEBRUARY 2, 2017

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lots 1 through 8, Block 24601 and a portion of Lot 8 Block 21901, designated as Deed Notice Area 1 as shown on an exhibit entitled, "Deed Notice Area 1, SA6 South, Block 24601, Lots 1-8 & Block 21901, Lot 8, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated April 6, 2016, revised February 2, 2017 and being more particularly bounded and described as follows, to wit:

COMMENCING at the intersection of the westerly line of New Jersey State Highway Route 440, and the division line between Lot 8 Block 21901, and Lot 8 Block 24601; thence-

A. **N 49°06'05" W, 9.97 feet**, along said division line to the intersection of the same with the easterly face of the hydraulic barrier wall, and **True** point of **BEGINNING**, and running; thence-

Running along said easterly hydraulic barrier wall face, the following two (2) courses:

1. **S 26°06'25" W, 122.87 feet,** thence-

2. **S 41°25'15" W, 32.00 feet,** to the southeasterly corner of said hydraulic barrier wall; thence-

Running along the southerly face of said hydraulic barrier wall, the following four (4) courses:

3. **N 49°11'45" W, 460.77 feet,** thence-

4. **N 48°55'10" W, 366.00 feet,** thence -

5. **N 53°42'49" W, 718.00 feet,** thence -

6. **N 53°41'21" W, 737.00 feet,** to the southwesterly corner thereof; thence –

7. **N 45°54'51" E, 157.25 feet,** along the westerly face of said hydraulic barrier wall, to the northwesterly corner thereof; thence-

Running along the northerly face of said hydraulic barrier wall, the following five (5) courses:

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q

DEED NOTICE AREA 1
SA-6 SOUTH OPEN SPACE AREA
LOTS 1 THROUGH 8, BLOCK 24601
& LOT 8, BLOCK 21901
DECEMBER 4, 2015
REVISED: FEBRUARY 2, 2017

8. **S 49°21'28" E, 12.20 feet,** thence -

9. **S 53°44'48" E, 647.00 feet,** thence -

10. **S 53°47'16" E, 668.00 feet,** thence –

11. **S 53°59'54" E, 57.20 feet,** thence –

12. **S 51°14'03" E, 54.20 feet,** thence –

13. **S 49°01'05" E, 313.00 feet,** thence-

14. **S 49°10'40" E, 485.50 feet,** to the northeasterly corner thereof; thence-

15. **S 44°21'39" W, 3.70 feet,** along the aforesaid easterly wall face, to the point and place of **BEGINNING**.

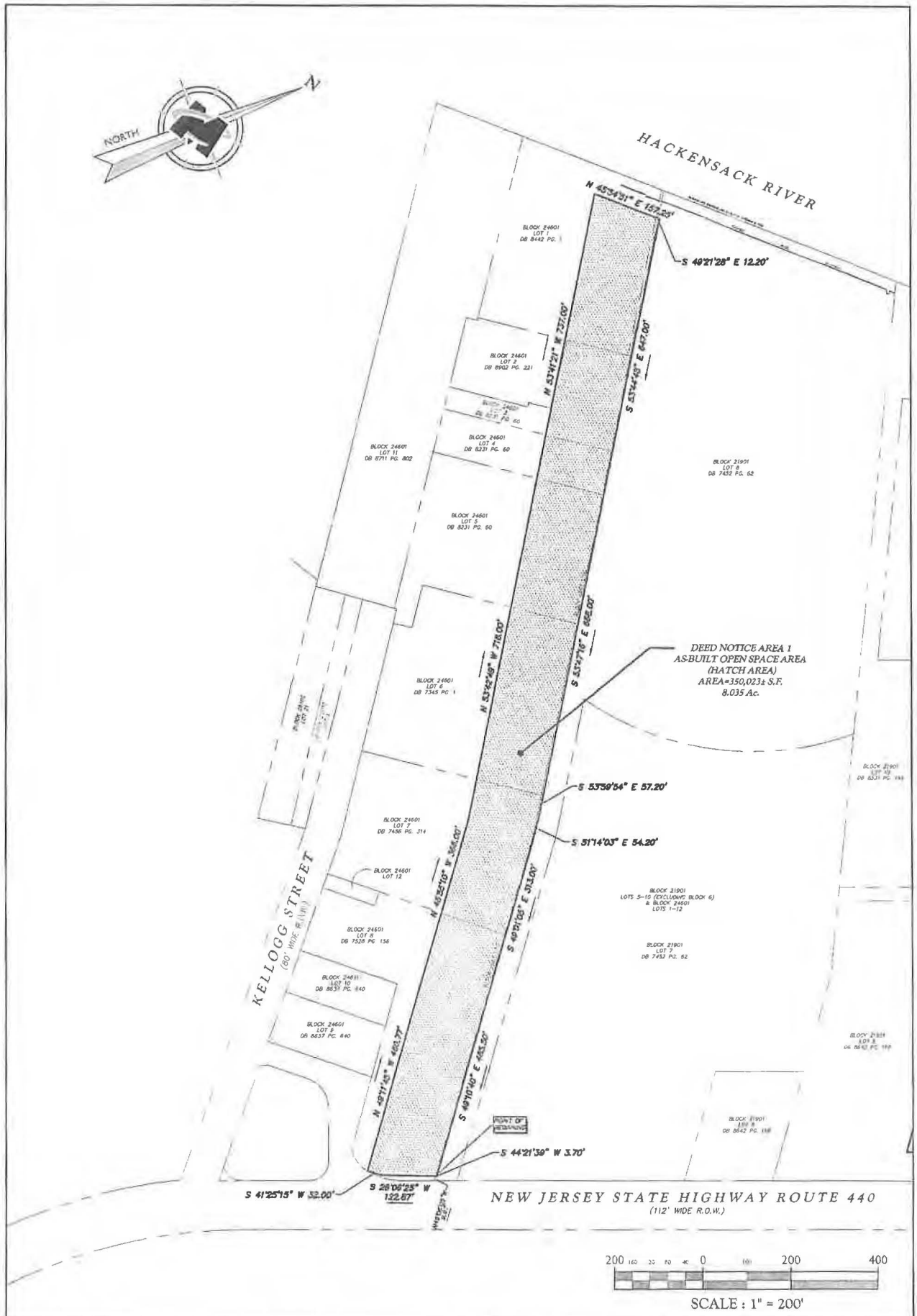
CONTAINING: 350,023 S.F. of land more or less or 8.035 acres of land more or less.

02/02/17

GLEN J. LLOYD, P.L.S.
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

DATE SIGNED

\\HQFAS1\General\Projects\2010\10000292Q\Survey\Description\Metes & Bounds, Deed Notice 1_REV_2-2-17.docx



MASER CONSULTING P.A.

Engineers • Planners • Surveyors
Landscape Architects • Environmental Scientists

Office Locations:
- Red Bank, NJ
- Clinton, NJ
- Mamaroneck, NJ
- Mt. Arlington, NJ
- Mt. Laurel, NJ
- Sterling, VA
- Norfolk, VA
- Albuquerque, NM
- Albany, NY
- Cleveland Ridge, NY
- Newburgh, NY
- Pittsburgh, NY
- Lehigh Valley, PA
- Exeter, PA
- Philadelphia, PA
- Columbia, MD
- Tampa, FL

REV	DATE	DRAWN BY	DESCRIPTION
	2/9/16	BSB	REMOVED LOT 7 REFERENCE IN BLOCK 21901
2	4/8/16	CJK	REVISED BOUNDARY ALONG ROAD FRONTAGE
3	2/2/17	KAN	ADD "DEED NOTICE AREA"

DEED NOTICE AREA 1
SA6 SOUTH

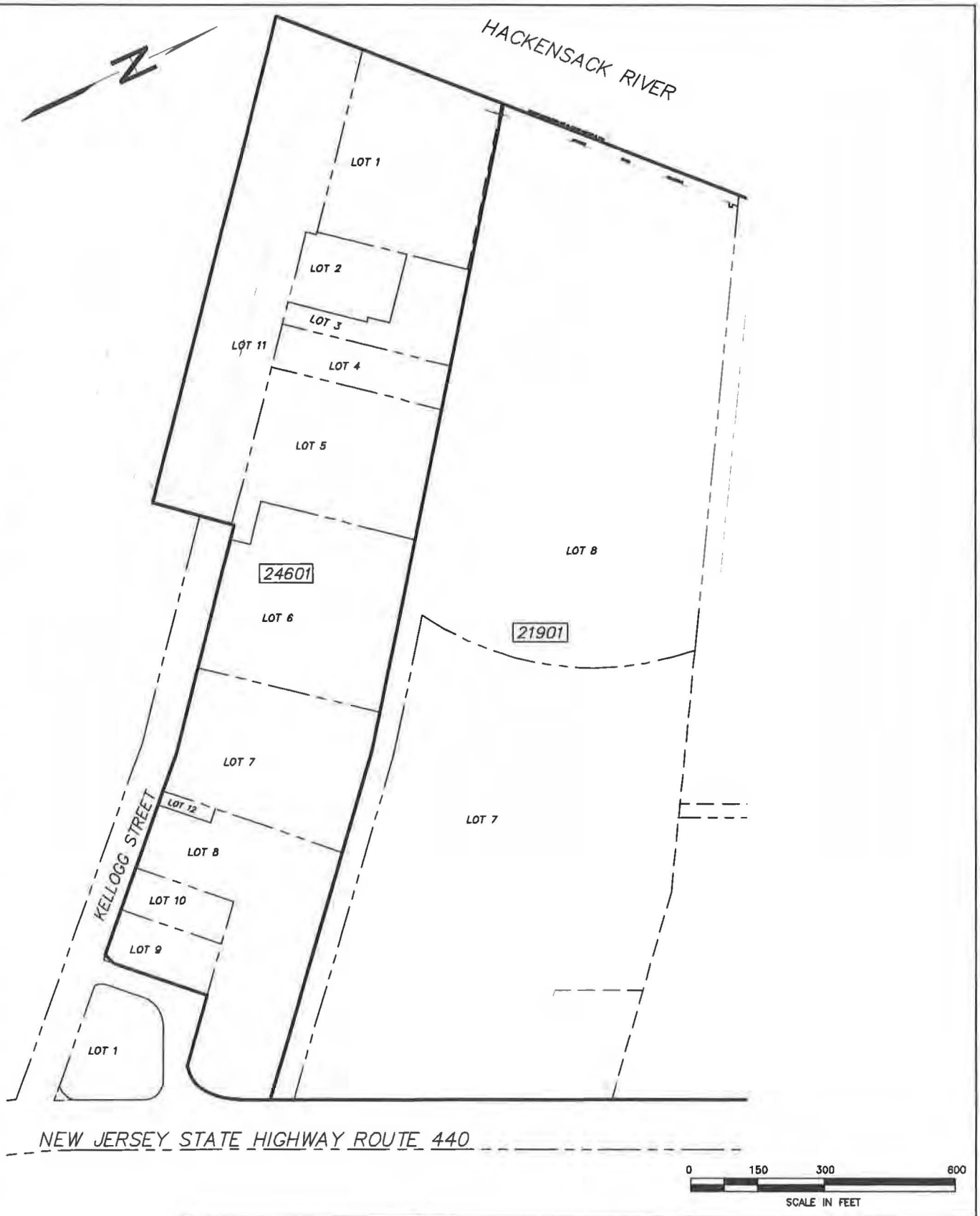
BLOCK 24601, LOTS 1-8 &
BLOCK 21901, LOT 8

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

811 PROTECT YOURSELF
ALL UTILITIES REQUIRE NOTIFICATION OF DIGGING, BLASTING OR ANY PERSON PREPARING TO OPERATE THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Mississippi Cellular Service
NEW JERSEY PROTECTED PROPERTY INCLUDES PROPERTY WITH WARNING SIGNS, 811 CODE

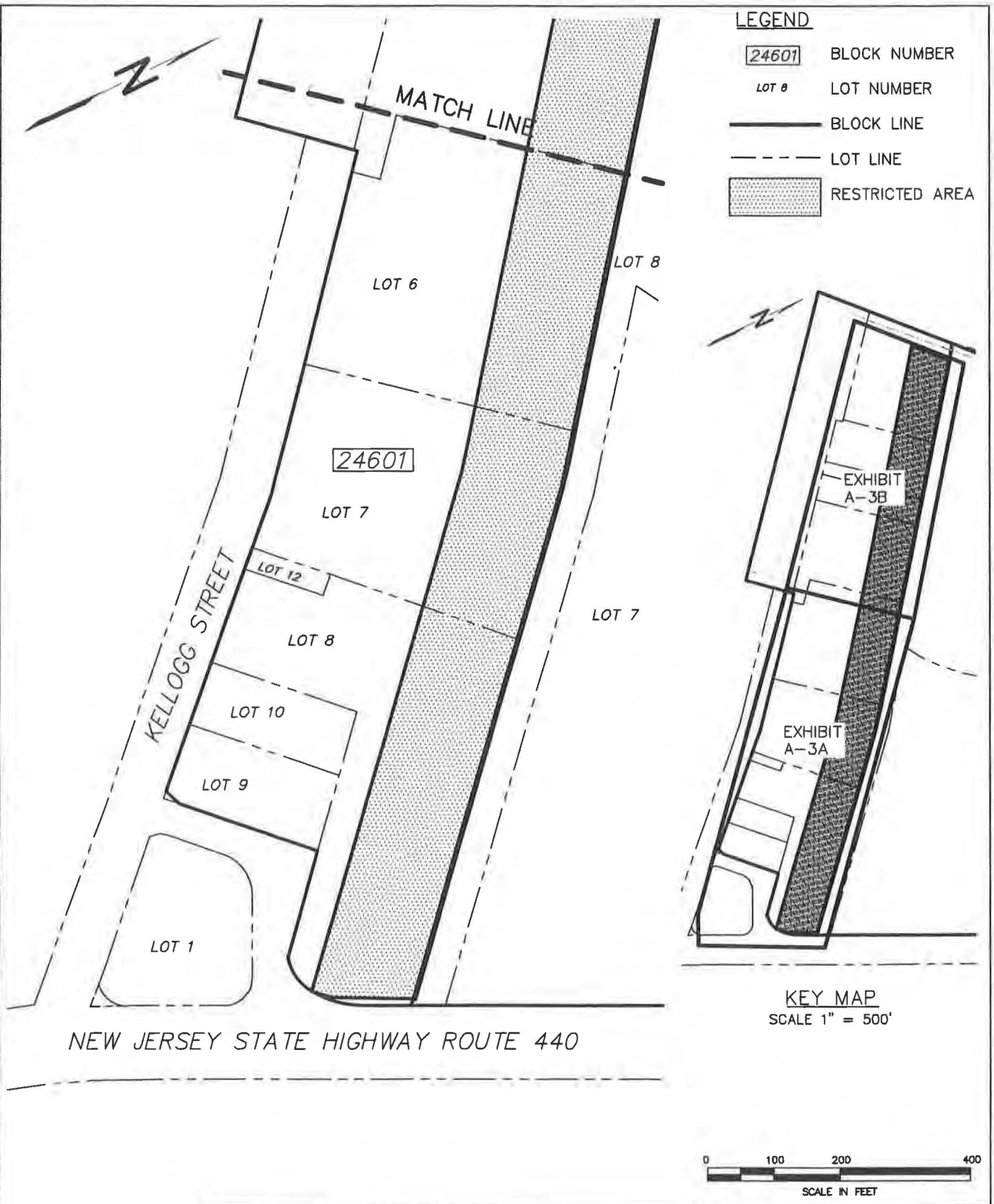
DEED NOTICE EXHIBIT

1 of 1

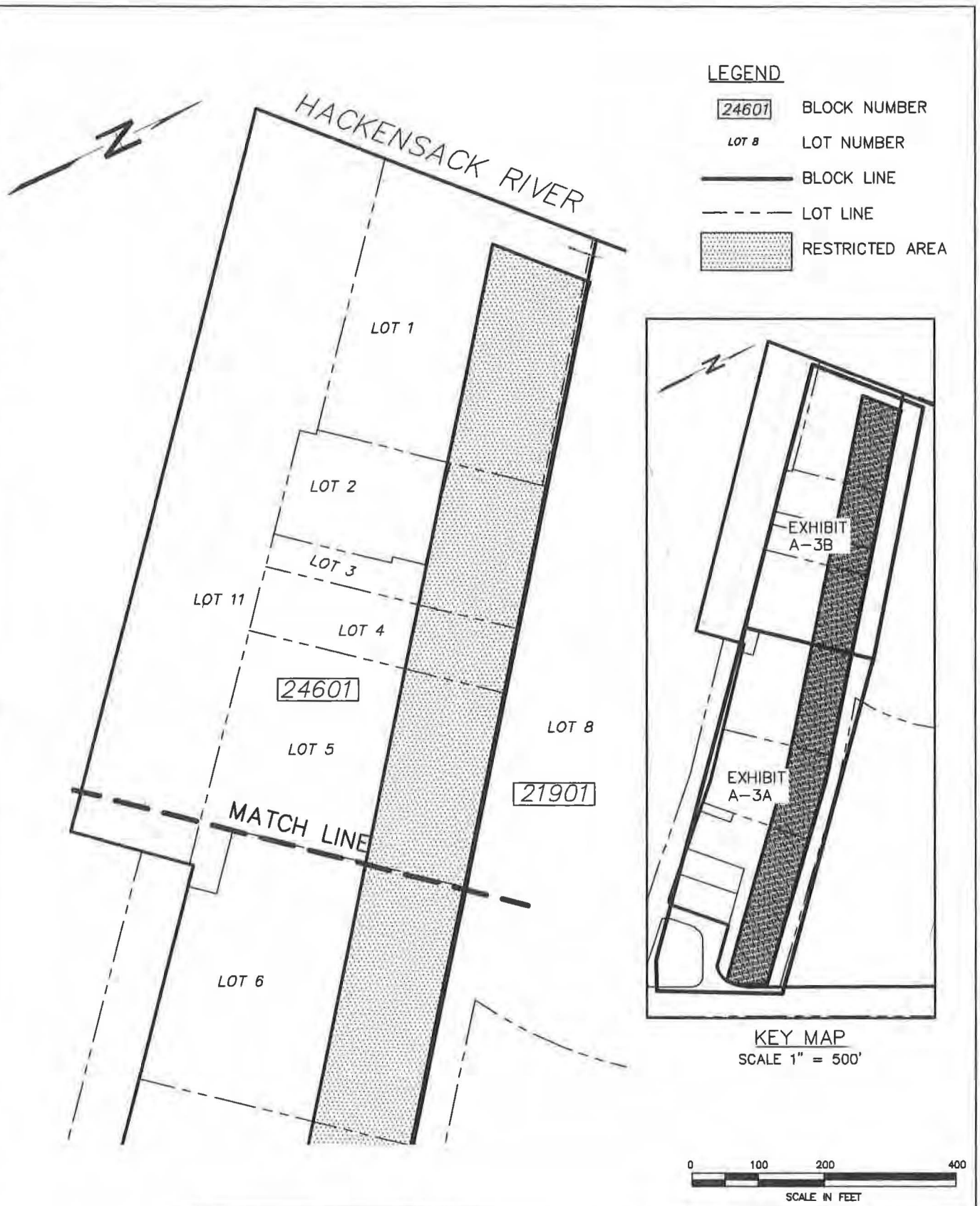


Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A200-1000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 209 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-2** TAX MAP BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

Exhibit A-3A and A-3B
Property Maps



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A300-1000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 390 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-3A** PROPERTY AREA MAP BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		



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P:\CDD\HONEYWELL_JERSEY CITY\SA 8 SOUTH\3480150448\5100\5710\5710DN\dwg nodes\dwg nodes 5100\Exhibit DRAWINGS\3480150450-5100-A300-0000.dwg Tue, 14 Nov 2017 - 1:53pm smith.nadia

Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A300-1000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619
PREPARED/DATE: STR 01/28/16 | CHECKED/DATE: NW 01/31/17	**EXHIBIT A-3B** PROPERTY AREA MAP BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY

EXHIBIT B
Deed Notice #1 Property
B-1A and B-1B Restricted Area Maps
B-2A and B-2B Chromium Remedy Components
B-3 Restricted Area Data Table
Portions of Block 24601, Lots 1 through 8 and a portion of Block 21901 Lot 8
City of Jersey City, New Jersey

Exhibit B-1 Restricted Area Maps includes Exhibit B-1A and Exhibit B-1B (Restricted Area Soil Sample Locations).

Exhibit B-2 Chromium Remedy Components includes Exhibit B-2A (Chromium Remedy Components), Exhibit B-2B (Cap System Detail), and Exhibit B-2C (As-Built Restoration Plan).

Exhibit B-3 is a Restricted Area Data Table indicating soil sample locations with concentrations of contaminants remaining above the level established in the New Jersey Department of Environmental Protection (NJDEP) Chromium Policy and/or other applicable NJDEP Soil Quality Standards as described below.

Restricted Area Map Notes:

Exhibits B-1A and B-1B indicate engineering controls. The engineering controls include (1) underground containment walls, and (2) a capping system consisting of: a warning layer, impervious geo-membrane liner; geo-composite drainage layer; and clean soil cover with minimum 12 inches thickness in areas where pavement is proposed; and an average of 36-inches and a minimum 24-inches thickness in areas where landscaping is proposed.

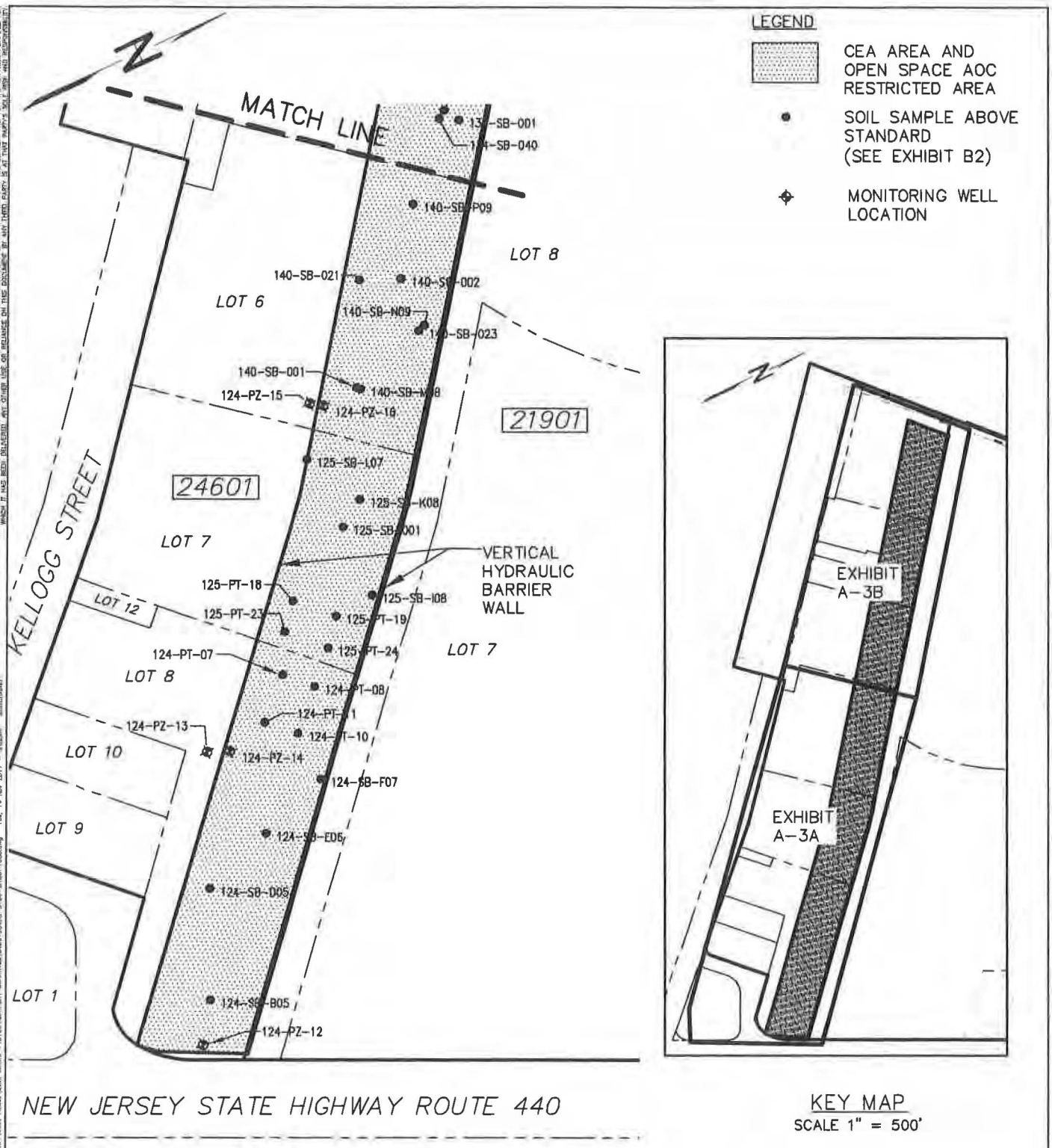
Exhibit B-2B indicates engineering controls cap system detail.

Exhibits B-1A and B-1B indicate the restricted area for soil containing contaminants of concern, including hexavalent chromium above 20 milligrams per kilogram (mg/kg) pursuant to the Chromium Policy, total xylenes above the NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) of 12,000 mg/kg, and soils that are consistent with NJDEP's definition of "historic fill material" found at N.J.A.C. 7:26E-1.8, as shown on Exhibit B-3.

Analytical results and soil borings indicate that historic fill is present onsite and extends over the entire Restricted Area. Historic fill onsite typically consists of the following: metals, PAHs, and miscellaneous debris (including but not limited to coal fragments, brick, timber, and other construction materials).

A table summarizing maximum concentrations of typical contaminants found in the historic fill material in the Restricted Area is included as Exhibit B-3.

Exhibit B-1A and B-1B
Restricted Area Maps



KEY MAP
SCALE 1" = 500'

0 100 200 400
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-B100-1000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1A** RESTRICTED AREA MAP BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

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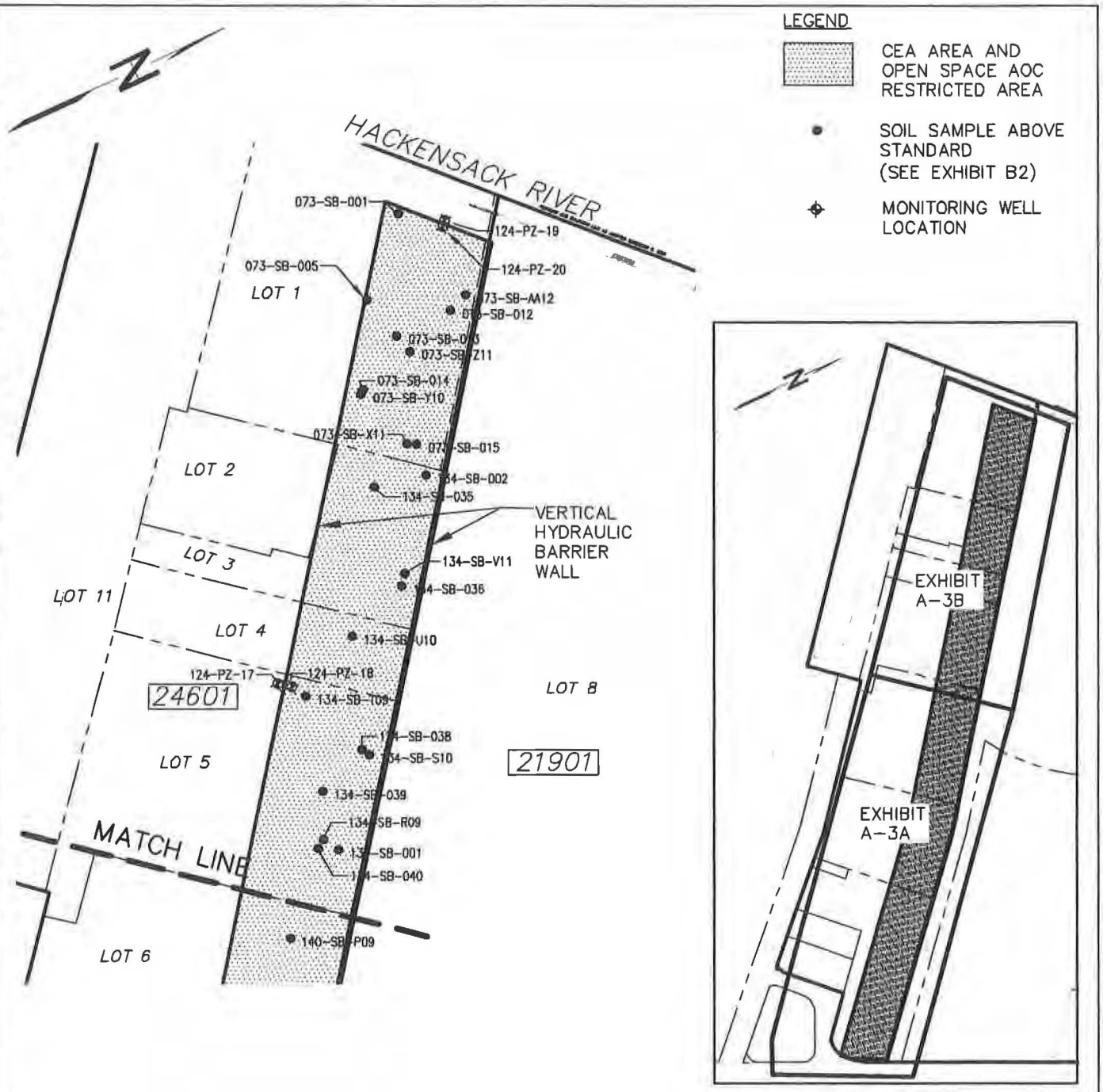
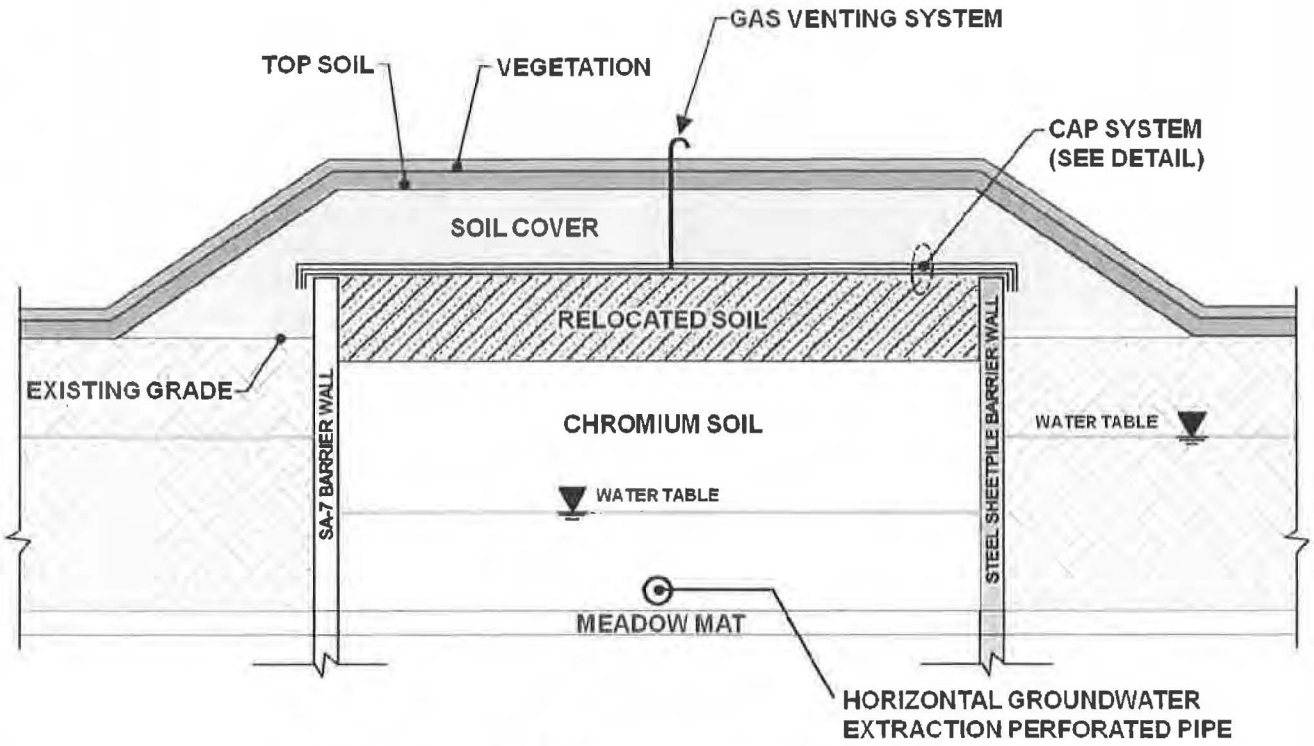


KEY MAP
SCALE 1" = 500'

0 100 200 400
SCALE IN FEET

Amec Foster Wheeler PROJECT No 3480150450 DRAWING: 3480150450-5100-B100-1000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08610	EXHIBIT B-1B RESTRICTED AREA MAP BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

Exhibits B-2A, B-2B and B-2C
Chromium Remedy Components, Cap System Details, and As-Built Restoration Plan



CHROMIUM REMEDY COMPONENTS

NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150438-5710-CPCS-1000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-2A** CHROMIUM REMEDY COMPONENTS BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE #1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 03/10/16	*CHECKED/DATE:* DEN 03/10/16		

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\571004\deed notice\deed notice 1\5100\CURRENT DRAWINGS\3480150438-5710-CPCS-1000.dwg Tue, 14 Nov 2017 - 1:46:08 PM

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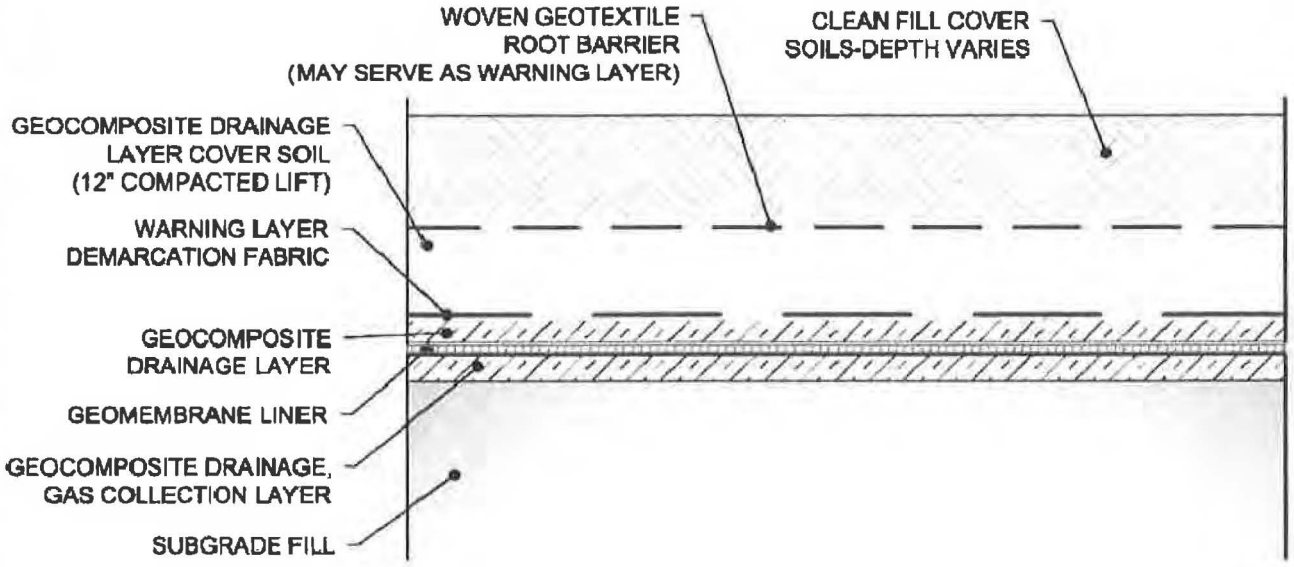
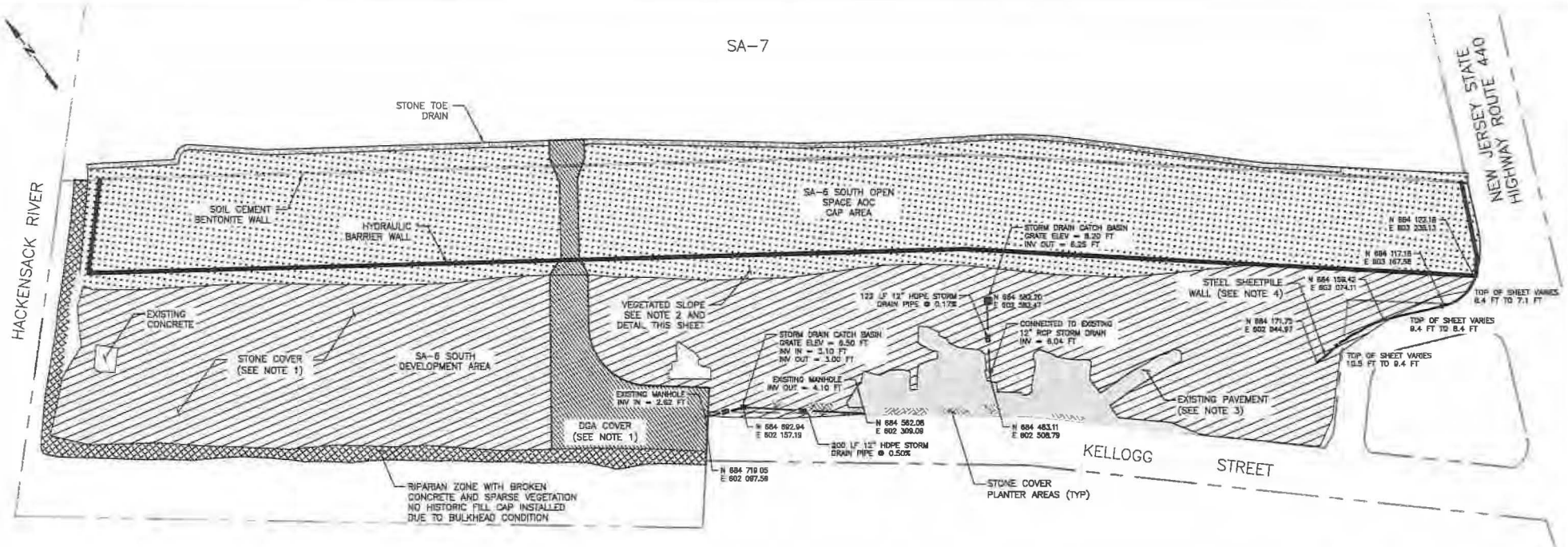
P:\CADD\HONEYWELL\JERSEY CITY\SA & SOUTH\3480150488\5710\5710D4\deed notice\deed notice 11\5100\CURRENT DRAWINGS\3480150438-5710-CSD0-1000.dwg Tue, 14 Nov 2017

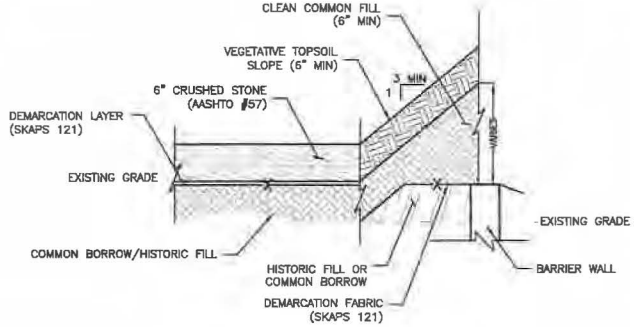


CAP SYSTEM DETAIL

NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150438-5710-CSD0-1000		amec foster wheeler	**EXHIBIT B-2B** CAP SYSTEM DETAIL BLOCK 21601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 NORTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 03/10/16	*CHECKED/DATE:* DEN 01/31/17	ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	





NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA-7

TYPICAL VEGETATED SLOPE
NTS

EXHIBIT B-2C

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE ON THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL AS SHOWN ON THE TYPICAL VEGETATED SLOPE DETAIL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. EXISTING PAVEMENT WAS FIELD INSPECTED BY LSRP AND SUBJECT TO MINOR CRACK FILLING TO SATISFY HISTORIC FILL CAP REQUIREMENTS
4. STEEL SHEETPILE WALL WAS INSTALLED AS EXCAVATION SUPPORT ALONG THIS AREA AND THEN CUT BELOW CURRENT GRADE AND LEFT IN PLACE. THE TOP OF SHEETPILE IS GENERALLY 0.5 TO 2.0 FT BELOW CURRENT GRADES.

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING TITLE: AS BUILT RESTORATION PLAN SA-6 SOUTH – SHEET 001 12/12/16

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION JERSEY CITY, NJ

Exhibit B-3: Table B-3
Soil Sample Data Table

EXHIBIT B-3

RESTRICTED AREA DATA TABLE

Deed Notice #1 SA-6 South Open Space AOC Property

Portions of Block 24601 Lots 1-8 a portion of Block 21901 Lot 8

Jersey City, New Jersey

Location ID	Sample Date	Start Depth (feet bgs)	End Depth (feet bgs)	Sample Depth (feet bgs)	Sample Elevation (NAVD88)	Northing	Easting	Hexavalent Chromium	Q
073-SB-001	07/14/2008	4.5	5	4.5 - 5	-0.52	685535.00	601464.00	63.7	J
073-SB-001	07/14/2008	9	9.5	9 - 9.5	-5.02	685535.00	601464.00	100	J
073-SB-001	07/14/2008	11.5	12	11.5 - 12	-7.52	685535.00	601464.00	63.3	J
073-SB-001	07/14/2008	13	13.5	13 - 13.5	-9.02	685535.00	601464.00	296	J
073-SB-005	07/31/2008	2.5	3	2.5 - 3	4.36	685448.00	601552.00	26.3	
073-SB-005	07/31/2008	5.5	6	5.5 - 6	1.36	685448.00	601552.00	2190	
073-SB-012	07/31/2008	3	3.5	3 - 3.5	5.15	685545.00	601613.00	420	
073-SB-012	07/31/2008	4	4.5	4 - 4.5	4.15	685545.00	601613.00	6360	
073-SB-013	07/31/2008	4.5	5	4.5 - 5	2.82	685464.00	601613.00	237	
073-SB-014	08/01/2008	0.5	1	0.5 - 1	6.54	685392.00	601661.00	37.2	
073-SB-014	08/01/2008	2	2.5	2 - 2.5	5.04	685392.00	601661.00	201	
073-SB-014	08/01/2008	4.5	5	4.5 - 5	2.54	685392.00	601661.00	54.2	
073-SB-015	08/01/2008	4.5	5	4.5 - 5	4.29	685427.00	601758.00	142	
073-SB-AA12	07/28/1997	0	2	0 - 2	8.47	685572.70	601602.30	99.6	J
073-SB-AA12	07/28/1997	4	6	4 - 6	4.47	685572.70	601602.30	1720	J
073-SB-AA12	07/28/1997	6	8	6 - 8	2.47	685572.70	601602.30	8140	J
073-SB-AA12	07/28/1997	8	10	8 - 10	0.47	685572.70	601602.30	5030	J
073-SB-AA12	07/28/1997	10	12	10 - 12	-1.53	685572.70	601602.30	287	J
073-SB-AA12	07/28/1997	12	14	12 - 14	-3.53	685572.70	601602.30	1830	J
073-SB-AA12	07/28/1997	14	16	14 - 16	-5.53	685572.70	601602.30	489	J
073-SB-AA12	07/28/1997	18	20	18 - 20	-9.53	685572.70	601602.30	578	J
073-SB-AA12	07/28/1997	20	22	20 - 22	-11.53	685572.70	601602.30	25.3	J
073-SB-X11	07/28/1997	0	2	0 - 2	8.55	685415.77	601752.10	24.1	J
073-SB-X11	07/28/1997	4	6	4 - 6	4.55	685415.77	601752.10	394	J
073-SB-X11	07/28/1997	6	8	6 - 8	2.55	685415.77	601752.10	8830	J
073-SB-X11	07/28/1997	8	10	8 - 10	0.55	685415.77	601752.10	4580	J
073-SB-X11	07/28/1997	10	12	10 - 12	-1.45	685415.77	601752.10	222	J
073-SB-X11	07/28/1997	20	22	20 - 22	-11.45	685415.77	601752.10	118	J
073-SB-Y10	07/29/1997	0	2	0 - 2	7.03	685387.55	601665.39	21.4	J
073-SB-Y10	07/29/1997	2	4	2 - 4	5.03	685387.55	601665.39	202	J
073-SB-Y10	07/29/1997	4	6	4 - 6	3.03	685387.55	601665.39	371	J
073-SB-Y10	07/29/1997	6	8	6 - 8	1.03	685387.55	601665.39	92.4	J
073-SB-Y10	07/29/1997	8	10	8 - 10	-0.97	685387.55	601665.39	70.6	J
073-SB-Y10	07/29/1997	14	16	14 - 16	-6.97	685387.55	601665.39	89.7	J
073-SB-Z11	07/28/1997	0	2	0 - 2	7.56	685471.66	601639.93	20.3	
073-SB-Z11	07/28/1997	4	6	4 - 6	3.56	685471.66	601639.93	51.1	
073-SB-Z11	07/28/1997	6	8	6 - 8	1.56	685471.66	601639.93	3740	
073-SB-Z11	07/28/1997	8	10	8 - 10	-0.44	685471.66	601639.93	227	
073-SB-Z11	07/28/1997	16	18	16 - 18	-8.44	685471.66	601639.93	156	
124-PT-07	03/12/2008	6	8	6 - 8	4	684534.00	602838.00	2420	
124-PT-07	03/12/2008	8	10	8 - 10	2	684534.00	602838.00	554	J
124-PT-07	03/12/2008	10	12	10 - 12	0	684534.00	602838.00	4740	
124-PT-08	03/13/2008	10	12	10 - 12	0	684570.00	602873.00	2470	
124-PT-10	03/14/2008	10	12	10 - 12	1	684520.00	602925.00	4420	
124-PT-10	03/14/2008	12	14	12 - 14	-1	684520.00	602925.00	3320	
124-PT-11	03/14/2008	8	10	8 - 10	2.99	684483.00	602890.00	7190	
124-PT-11	03/14/2008	10	12	10 - 12	0.99	684483.00	602890.00	103	
124-SB-B05	05/08/1997	0	2	0 - 2	10.63	684244.29	603222.22	3210	J
124-SB-B05	05/08/1997	2	4	2 - 4	8.63	684244.29	603222.22	9970	J
124-SB-B05	05/08/1997	4	6	4 - 6	6.63	684244.29	603222.22	7480	J
124-SB-B05	05/08/1997	6	8	6 - 8	4.63	684244.29	603222.22	6980	J
124-SB-B05	05/08/1997	8	10	8 - 10	2.63	684244.29	603222.22	5160	J
124-SB-B05	05/08/1997	12	14	12 - 14	-1.37	684244.29	603222.22	49	J
124-SB-D05	05/07/1997	0	2	0 - 2	10	684310.89	603076.37	9350	
124-SB-D05	05/07/1997	2	4	2 - 4	8	684310.89	603076.37	7450	
124-SB-D05	05/07/1997	4	6	4 - 6	6	684310.89	603076.37	8430	
124-SB-D05	05/07/1997	6	8	6 - 8	4	684310.89	603076.37	8350	
124-SB-D05	05/07/1997	8	10	8 - 10	2	684310.89	603076.37	9020	
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124-SB-E06	05/07/1997	0	2	0 - 2	10	684416.69	603037.14	213	
124-SB-E06	11/16/1998	2	4	2 - 4	8	684416.69	603037.14	15300	J
124-SB-E06	05/07/1997	4	6	4 - 6	6	684416.69	603037.14	6870	
124-SB-E06	05/07/1997	6	8	6 - 8	4	684416.69	603037.14	8600	
124-SB-E06	05/07/1997	8	10	8 - 10	2	684416.69	603037.14	7910	
124-SB-E06	05/07/1997	10	12	10 - 12	0	684416.69	603037.14	7780	
124-SB-E06	05/07/1997	16	18	16 - 18	-6	684416.69	603037.14	2680	
124-SB-F07	05/07/1997	0	2	0 - 2	12.39	684521.78	602997.96	68.6	J
124-SB-F07	05/07/1997	2	4	2 - 4	10.39	684521.78	602997.96	8900	J
124-SB-F07	05/07/1997	4	6	4 - 6	8.39	684521.78	602997.96	3120	J
124-SB-F07	05/07/1997	6	8	6 - 8	6.39	684521.78	602997.96	3510	J
124-SB-F07	05/07/1997	8	10	8 - 10	4.39	684521.78	602997.96	2480	J

EXHIBIT B-3
RESTRICTED AREA DATA TABLE
Deed Notice #1 SA-6 South Open Space AOC Property
Portions of Block 24601 Lots 1-8 a portion of Block 21901 Lot 8
Jersey City, New Jersey

Location ID	Sample Date	Start Depth (feet bgs)	End Depth (feet bgs)	Sample Depth (feet bgs)	Sample Elevation (NAVD88)	Northing	Easting	Hexavalent Chromium	Q
124-SB-F07	05/07/1997	10	12	10 - 12	2.39	684521.78	602997.96	**1350**	
125-PT-18	04/16/2008	6.5	7	6.5 - 7	2.87	684593.00	602747.00	**8740**	
125-PT-19	04/16/2008	6	6.5	6 - 6.5	3.74	684641.00	602793.00	**5270**	J
125-PT-19	04/16/2008	8.5	9	8.5 - 9	1.24	684641.00	602793.00	**24.1**	J
125-PT-19	04/16/2008	10.5	11	10.5 - 11	-0.76	684641.00	602793.00	**5190**	J
125-PT-23	04/17/2008	6.5	7	6.5 - 7	2.5	684563.00	602783.00	**10600**	J
125-PT-23	04/17/2008	9	9.5	9 - 9.5	0	684563.00	602783.00	**88.6**	J
125-PT-23	04/17/2008	11	11.5	11 - 11.5	-2	684563.00	602783.00	**2270**	J
125-PT-24	04/17/2008	6	6.5	6 - 6.5	3.59	684611.00	602830.00	**7280**	J
125-PT-24	04/17/2008	10.5	11	10.5 - 11	-0.91	684611.00	602830.00	**4530**	
125-SB-001	06/16/2005	11.5	12	11.5 - 12	-1.49	684704.00	602680.00	**6800**	
125-SB-011	07/30/2008	1.5	2	1.5 - 2	8.51	684711.00	602569.00	**31.1**	
125-SB-011	07/30/2008	3	3.5	3 - 3.5	7.01	684711.00	602569.00	**4460**	
125-SB-011	07/30/2008	5.5	6	5.5 - 6	4.51	684711.00	602569.00	**7860**	
125-SB-I08	07/30/1997	0	2	0 - 2	12	684700.57	602787.09	**52.1**	J
125-SB-I08	07/30/1997	2	4	2 - 4	10	684700.57	602787.09	**297**	
125-SB-I08	07/30/1997	4	6	4 - 6	8	684700.57	602787.09	**7550**	
125-SB-I08	07/30/1997	6	8	6 - 8	6	684700.57	602787.09	**6760**	
125-SB-I08	07/30/1997	10	12	10 - 12	2	684700.57	602787.09	**247**	
125-SB-K08	07/30/1997	6	8	6 - 8	4	684743.16	602654.14	**419**	
125-SB-K08	07/30/1997	10	12	10 - 12	0	684743.16	602654.14	**8170**	J
125-SB-L07	11/16/1998	2	4	2 - 4	7.64	684697.16	602569.04	**7140**	J
125-SB-L07	07/30/1997	8	10	8 - 10	1.64	684697.16	602569.04	**208**	
125-SB-L07	07/30/1997	10	12	10 - 12	-0.36	684697.16	602569.04	**93.4**	
134-SB-001	06/17/2005	15.5	16	15.5 - 16	-5.81	685100.00	602217.00	**5490**	
134-SB-002	06/17/2005	3.5	4	3.5 - 4	4.58	685421.00	601802.00	**9810**	
134-SB-002	06/17/2005	6.5	7	6.5 - 7	1.58	685421.00	601802.00	**10700**	
134-SB-002	06/17/2005	10.5	11	10.5 - 11	-2.42	685421.00	601802.00	**23.2**	
134-SB-035	06/24/2008	4	4.5	4 - 4.5	3.36	685351.00	601787.00	**32.8**	
134-SB-036	06/24/2008	2.5	3	2.5 - 3	5.5	685328.00	601925.00	**4100**	
134-SB-036	06/24/2008	4	4.5	4 - 4.5	4	685328.00	601925.00	**10500**	
134-SB-038	06/20/2008	2.5	3	2.5 - 3	6.5	685185.00	602106.00	**1650**	
134-SB-038	06/20/2008	5.5	6	5.5 - 6	3.5	685185.00	602106.00	**3090**	
134-SB-039	06/24/2008	3	3.5	3 - 3.5	6	685114.00	602136.00	**4770**	
134-SB-039	06/24/2008	5	5.5	5 - 5.5	4	685114.00	602136.00	**6080**	
134-SB-040	06/20/2008	1.5	2	1.5 - 2	7.5	685076.00	602204.00	**4210**	
134-SB-040	06/20/2008	3	3.5	3 - 3.5	6	685076.00	602204.00	**8200**	
134-SB-R09	11/18/1998	0	2	0 - 2	9	685087.33	602195.84	**6970**	J
134-SB-R09	05/29/1997	2	4	2 - 4	7	685087.33	602195.84	**73.7**	J
134-SB-R09	05/29/1997	4	6	4 - 6	5	685087.33	602195.84	**289**	J
134-SB-R09	05/29/1997	10	12	10 - 12	-1	685087.33	602195.84	**247**	J
134-SB-S10	05/29/1997	6	8	6 - 8	3	685191.70	602116.15	**9540**	J
134-SB-S10	05/29/1997	10	12	10 - 12	-1	685191.70	602116.15	**425**	J
134-SB-T09	05/29/1997	2	4	2 - 4	6.91	685148.41	602008.19	**8350**	J
134-SB-T09	05/29/1997	4	6	4 - 6	4.91	685148.41	602008.19	**547**	J
134-SB-T09	05/29/1997	6	8	6 - 8	2.91	685148.41	602008.19	**342**	J
134-SB-T09	05/29/1997	8	10	8 - 10	0.91	685148.41	602008.19	**181**	J
134-SB-T09	05/29/1997	10	12	10 - 12	-1.09	685148.41	602008.19	**58.9**	J
134-SB-T09	05/29/1997	14	16	14 - 16	-5.09	685148.41	602008.19	**25.3**	J
134-SB-U10	05/29/1997	4	6	4 - 6	4.4	685238.85	601960.33	**427**	J
134-SB-U10	05/29/1997	6	8	6 - 8	2.4	685238.85	601960.33	**3820**	J
134-SB-U10	05/29/1997	8	10	8 - 10	0.4	685238.85	601960.33	**393**	J
134-SB-U10	05/29/1997	10	12	10 - 12	-1.6	685238.85	601960.33	**157**	J
134-SB-V11	06/03/1997	8	10	8 - 10	0	685338.22	601910.84	**858**	J
134-SB-V11	06/03/1997	4	6	4 - 6	4	685338.22	601910.84	**9770**	J
140-SB-001	06/20/2005	18	18.5	18 - 18.5	-9	684806.00	602505.00	**81.4**	J
140-SB-002	06/20/2005	11.5	12	11.5 - 12	1.28	684930.00	602390.00	**9810**	J
140-SB-002	06/20/2005	15.5	16	15.5 - 16	-2.72	684930.00	602390.00	**248**	J
140-SB-021	07/30/2008	5	5.5	5 - 5.5	6.53	684875.00	602366.00	**42.6**	J
140-SB-023	07/30/2008	1.5	2	1.5 - 2	8.61	684921.00	602468.00	**295**	J
140-SB-023	07/30/2008	2.5	3	2.5 - 3	7.61	684921.00	602468.00	**337**	
140-SB-023	07/30/2008	5	5.5	5 - 5.5	5.11	684921.00	602468.00	**79.2**	J
140-SB-M08	08/22/1997	2	4	2 - 4	7	684811.01	602509.83	**40.1**	J
140-SB-M08	08/22/1997	4	6	4 - 6	5	684811.01	602509.83	**1070**	J
140-SB-M08	08/22/1997	6	8	6 - 8	3	684811.01	602509.83	**3890**	J
140-SB-M08	08/22/1997	8	10	8 - 10	1	684811.01	602509.83	**27.7**	J
140-SB-M08	08/22/1997	10	12	10 - 12	-1	684811.01	602509.83	**382**	J
140-SB-M08	08/22/1997	12	14	12 - 14	-3	684811.01	602509.83	**1040**	J
140-SB-M08	08/22/1997	14	16	14 - 16	-5	684811.01	602509.83	**347**	J
140-SB-N09	08/21/1997	0	2	0 - 2	10.52	684932.12	602464.54	**49.1**	
140-SB-N09	08/21/1997	4	6	4 - 6	6.52	684932.12	602464.54	**227**	

EXHIBIT B-3
RESTRICTED AREA DATA TABLE
Deed Notice #1 SA-6 South Open Space AOC Property
Portions of Block 24601 Lots 1-8 a portion of Block 21901 Lot 8
Jersey City, New Jersey

Location ID	Sample Date	Start Depth (feet bgs)	End Depth (feet bgs)	Sample Depth (feet bgs)	Sample Elevation (NAVD88)	Northing	Easting	Hexavalent Chromium	Q
140-SB-N09	08/21/1997	6	8	6 - 8	4.52	684932.12	602464.54	**9930**	
140-SB-N09	08/21/1997	10	12	10 - 12	0.52	684932.12	602464.54	**7610**	
140-SB-N09	08/21/1997	14	16	14 - 16	-3.48	684932.12	602464.54	**2920**	
140-SB-P09	08/21/1997	10	12	10 - 12	0	684990.54	602300.01	**91.9**	
140-SB-P09	08/21/1997	14	16	14 - 16	-4	684990.54	602300.01	**113**	
140-SB-P09	08/21/1997	6	8	6 - 8	4	684990.54	602300.01	**6030**	

Notes:
Results reported in mg/kg.

Q -Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010
NJDEP RDC - New Jersey Department of Environmental Protection Residential Direct Contact Soil Standard, revised 2012

Contaminant	CAS No.	NJDEP RDC (mg/kg)
Hexavalent Chromium	18540-29-9	20

EXHIBIT B-3
RESTRICTED AREA DATA TABLE
Deed Notice #1 SA-6 South Open Space AOC Property
Portions of Block 24601 Lots 1-8 a portion of Block 21901 Lot 8
Jersey City, New Jersey

Location ID	Elevation	Depth (ft bgs)	Compounds	CASR #	NJ 2012 RDCSRS (mg/kg)	Concentration (mg/kg)
073-SB-326	5.86	1-1.5	Total Xylenes	1330-20-7	12,000	**33,900**

Notes:
Results reported in milligrams per kilogram (mg/kg).
Deed Notice includes chromium and non-chromium contaminants in soil exceeding applicable NJDEP standards.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP RDCSRS - New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standard, 2012
CASR# - Chemical Abstract Service Number

Prepared By: NW 03/07/2017

EXHIBIT B-3
RESTRICTED AREA DATA TABLE-HISTORIC FILL
Deed Notice #1 SA-6 South Open Space AOC Property
Portions of Block 24601 Lots 1-8 a portion of Block 21901 Lot 8
Jersey City, New Jersey

Compound>RDC	RDC	# of Samples >RDC	Maximum Conc.
ANTIMONY	**31**	1	32.5
ARSENIC	**19**	1	126
BENZO(A)ANTHRACENE	**5**	12	9.2
BENZO(A)PYRENE	**0.5**	18	7.2
BENZO(B)FLUORANTHENE	**5**	12	7.1
DIBENZO(A,H)ANTHRACENE	**0.5**	8	1.73
LEAD	**400**	2	508
NAPHTHALENE	**6**	5	100
VANADIUM	**78**	15	1120

Notes:
RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 5/7/2012].
CONC: Concentration reported in milligrams per kilogram (mg/kg)
Historic fill is present throughout the Site consisting of PAH and metals.
R or N: Rejected or negated by laboratory or data validator

EXHIBIT C
Deed Notice #1 Property

C-1 Institutional Controls
C-2 Engineering Controls
Portions of Block 24601, Lots 1 through 8 and a Portion of Block 21901 Lot 8 City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree, Zoning, and Conservation Restriction as Institutional Controls: Exhibit C-1 (A through D) for that portion of Block 24601, Lots 1 through 8 and Block 21901 Lot 8, City of Jersey City, New Jersey known as the Property.

Exhibits C-1A through D. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; Exhibit C-1D: Conservation Restriction as Institutional Control (recorded at the Office of Hudson County Register as indicated in Paragraph 3): Exhibits C-1A through C-1D include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property encompasses approximately 8 acres. The horizontal extent of the Property includes an existing soil-cement bentonite (SCB) wall along the northern boundary of the Property with SA-7 and the hydraulic barrier walls installed on the other three sides as part of the Chromium Remedy. The engineered barrier covering the contamination in the Property consists of an engineered Resource Conservation and Recovery Act (RCRA) cap that includes a gas collection system, base protective layer, geomembrane liner, geocomposite drainage layer, filter fabric, warning layer, and cover soils. The Property includes chromium, xylenes and historic fill. Honeywell has restricted the future use of this area by implementing a conservation restriction, which has been recorded at the Office of the Hudson County Register, and Honeywell will transfer, or cause Bayfront Redevelopment LLC to transfer, title to Jersey City (as called for in Paragraph 61(c)(ii)(3) of the Consent Decree). The provisions of the LTMP and the OSDS, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes portions of Block 24601, Lots 1 through and 8 and a portion of Block 21901 Lot 8. The estimated size of the Property containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) as identified on Exhibit B-1 is estimated at approximately 8 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, including, but not limited to, Paragraphs 74(j) and 74 (k) of the Consent Decree, the applicable zoning standards, and the Conservation Restriction. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the terms of the Consent Decree and the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B, Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg, soils containing xylenes above the NJDEP RDCSRS of 12,000 mg/kg for xylenes, and soils that are historic fill.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and LTMP established thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the Property.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the OSDS, the applicable zoning standards and the Conservation Restriction; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice, the OSDS, the applicable zoning standards and the Conservation Restriction.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Portion of Block 24601, Lots 1 through 8 and Block 21901 Lot 8
City of Jersey City, New Jersey

Exhibits C-2A through C: Narrative description of the Engineering Controls including (A) the Clean Fill and Soil Capping System; (B) Underground Containment Walls; (C) Shallow Groundwater Collection and Treatment System as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Controls consist of the following: (A) a capping system consisting of: a root barrier, a warning layer, impervious geo-membrane liner; geo-composite drainage layer; and clean soil cover with minimum 12 inches thickness in areas where pavement is proposed; and an average of 36-inches and a minimum 24-inches thickness in areas where landscaping is proposed. For the purposes of this deed notice, the engineering controls exclude cover soils that are within 12 inches of the root barrier. (B) Engineering controls will also include underground containment walls around the perimeter of the Property. The Engineering Controls are more fully set forth in the Consent Decree. (C) Engineering controls will also include a system of wells, sumps, french drains, or other collection trenches and associated piping for the collection and treatment of shallow groundwater from the Property.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg, soils containing xylenes above the NJDEP RDCSRS of 12,000 mg/kg, and soils that are historic fill material, and to contain shallow groundwater above the NJDEP groundwater quality standard for total chromium.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent impacted soils as defined above. The groundwater engineering controls are intended to restrict the flow of shallow groundwater, and to collect and treat contaminated groundwater within the Property. Monitoring requirements for the engineering controls are set forth in the LTMP.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and the Deed Notice for additional information: subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Should the activities carried out in conformance with the LTMP developed pursuant to the Consent Decree indicate that other activities are necessary, those activities will be listed and executed.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***
- ***A report to determine whether or not the engineering controls continue to operate as designed.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.***

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Docket No. 05-5955(DMC) Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 SOUTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey (hereafter "the Court") issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property then-owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property then-owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with

various properties collectively designated by NJDEP as Study Areas 5, 6 North, which includes the properties formerly owned by JCMUA and JCIA, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* owners of the properties comprising Study Areas 5, 6 South, and 6 North;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the Court (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, Riverkeeper has alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 South property;

Whereas, on April 21, 2008, the Court entered the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North (hereafter "the Study Area 6 North Consent Decree") resolving issues between Honeywell, Riverkeeper, and the Jersey City Entities related to chromium contamination at Study Area 6 North;

Whereas, on April 21, 2008, the district court for the District of New Jersey entered the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with the Study Area 6 North Decree, which resolved claims and cross-claims between Honeywell and the Jersey City Entities;

Whereas, on May 28, 2008, the Court entered the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, on September 3, 2008, the Court entered the Deep Overburden and Bedrock Groundwater Remedies Consent Order (hereafter "the Deep Groundwater Consent Order") resolving all issues related to the remediation of deep overburden and bedrock groundwater in both *ICO v. Honeywell* and the Consolidated Litigation;

Whereas, on May 13, 2011, Plaintiffs sent Honeywell a RCRA citizen action suit notice letter with respect to Site 163, and the Parties agree that the incorporation of Site 163 into this Consent Decree resolves any claims asserted, or that could have been asserted, in the RCRA notice letter or in any RCRA citizen suit with respect to Site 163;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 South that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq.*, as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, Study Area 6 and Study Area 7 consist of parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in

need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 South and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City; and

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Honeywell, the Riverkeeper, and Jersey City as a means to accomplish the aforesaid purposes of this settlement:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **"20 to 1000 Soils"** shall mean those soils containing less than 1000 mg/kg of hexavalent chromium, but greater than 20 mg/kg. **"20 to 240 Soils"** shall mean those soils containing less than 240 mg/kg of hexavalent chromium, but greater than 20 mg/kg.

2. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

3. **COPR** shall mean Chromite Ore Processing Residue.

4. **Chromium Remedy or Chromium Remediation** shall mean the remedy set forth in Article III.

5. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator*

Authority v. Honeywell International Inc., D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC).

6. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

7. **Deep Groundwater Consent Order** shall mean the Deep Overburden and Bedrock Groundwater Remedies Consent Order entered by the Court on September 3, 2008, in both *ICO v. Honeywell* and the Consolidated Litigation.

8. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, entered on August 15, 2008, in *ICO v. Honeywell,* and the remedies required under the Deep Groundwater Consent Order.

9. **Development Area of Concern** ("AOC") shall mean those portions of Study Area 6 South in which the hexavalent chromium concentration in the top 20 feet of soil below ground surfaces exceeds a concentration of 20 mg/kg, and for which future uses of the property may include commercial or residential development. The Open Space AOC shall not be part of the Development AOC and vice versa. The Development AOC consists of two parts: the Kellogg Street Development AOC and the Site 163 Development AOC. Collectively, the two parts shall be referred to as the "Development AOC." The approximate boundaries of the Development AOC as a whole and its two parts are shown on Exhibit A, but the boundaries may be further defined in the implementation of the Chromium Remedy. For the Kellogg Street Development AOC, remedial measures shall assume only a residential use. For the Site 163 Development AOC, remedial measures shall be implemented with the goal of unrestricted use, but limitations

on future uses (including prohibiting residential use) in some or all of the Site 163 Development AOC may be part of the remedy as set forth in paragraph 61.

10. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

11. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including 425-445 Route 440 Property LLC, Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

12. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

13. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

14. **Including** shall mean including, but not limited to.

15. **JCIA** shall mean the Jersey City Incinerator Authority.

16. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

17. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

18. **Jersey City/Honeywell Consent Order** shall mean the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. entered in the Consolidated Litigation on April 21, 2008.

19. **"L-Well Groundwater"** shall mean the groundwater found at the depth of the "L" wells on and near the former bowling alley property, NJDEP Site 124, located at 427 Route 440. The L-Well Groundwater is located within what has been referred to as the plume diversion area.

20. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

21. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit B.

22. **Open Space AOC** shall mean the portion of Study Area 6 South that is identified as The Promenade park and Grand Boulevard extending from Route 440 to the Hackensack River on page 39 of the Redevelopment Plan and for which the future uses of the property shall be restricted pursuant to paragraph 74, following remediation pursuant to paragraph 65. The Development AOC shall not be part of the Open Space AOC and vice versa. The approximate boundaries of the Open Space AOC are shown on Exhibit A, and the boundaries may be further defined in the implementation of the Chromium Remedy.

23. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

24. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.*, as amended.

25. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

26. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. § 40A:12A1, *et seq.*, as amended and supplemented.

27. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

28. **Remedial Investigation Work Plan Addendum or RIWP Addendum** shall mean the "Remedial Investigation Work Plan Addendum Study Area 6 South" submitted to NJDEP on June 27, 2008.

29. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

30. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation on May 28, 2008.

31. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

32. **Site** shall mean Study Area 6 South.

33. **Site Preparation Activities** shall mean those activities necessary to begin implementation of the Chromium Remedy in Article III of this Consent Decree, including, if appropriate, the temporary or permanent relocation of current activities and operations conducted on Study Area 6 South.

34. **Soil** shall mean soils, historic fill, and/or COPR.

35. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

36. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

37. **Study Area 5** shall mean that property comprising Sites 79, 90, 117, 153, and 184 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 42 acres and including (a) all such property owned by Bob Ciasulli consisting of Block 1291, Lot 76, and Block 1292, Lots 1F, 47, 48, 53, and 54PL, located at 540 Route 440, Jersey City, New Jersey, (b) all such property owned by Elisabeth and Rafael Rosario consisting of Block 1292, Lot 49, located at 93 Fisk Street, Jersey City, New Jersey, (c) all such property owned by Michael Vo consisting of Block 1292, Lot 50, located at 95 Fisk Street, Jersey City, New Jersey, (d) all such property owned by NJCU consisting of Block 1286, Lots 5 and 6D and Block 1286.5, Lots 1 and 2, Jersey City, New Jersey, (e) all such property owned by Inland Southeast Jersey City LLC consisting of Lot 1, Block 1285.5 located at 440 Route 440, Jersey City, New Jersey, and (f) all such property owned by 425/445 Route 440 Property LLC, consisting of Block 1289.5, Lot E, Jersey City, New Jersey.

38. **Study Area 6 North** shall mean the property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, which is subject to the Study Area 6 North Consent Decree.

39. **Study Area 6 North Consent Decree** shall mean the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North, entered by the Court on April 21, 2008, in the Consolidated Litigation.

40. **Study Area 6 South** shall mean (a) that property currently owned by Bayfront Redevelopment Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Bayfront Redevelopment LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Bayfront Redevelopment LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Bayfront Redevelopment LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Bayfront Redevelopment LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Bayfront Redevelopment LLC located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey; (h) that property currently owned by Bayfront Redevelopment LLC located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey; and (i) that property currently owned by Bayfront Redevelopment LLC, consisting of Site 163, formerly the Colonial Concrete Company, located at 75 Kellogg Street in Jersey City, Hudson County, New Jersey.

41. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

42. **Study Area 7** shall mean (a) that property currently owned by Bayfront Redevelopment LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that

property currently owned by Bayfront Redevelopment LLC located at 465 Route 440, Jersey City, Hudson County, New Jersey.

43. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

44. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

45. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

46. For purposes of this Consent Decree, the Riverkeeper Complaint in the Consolidated Litigation states claims upon which relief may be granted against Honeywell.

47. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 113, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils, shallow groundwater and L-Well groundwater at Study Area 6 South. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 5 or property owned by Regnal Realty consisting of Block 1288.2, lot 1, located at 420 Route 440, Jersey City, New Jersey.

48. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

49. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. General Terms and Requirements

50. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 South at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 South shall be undertaken in accordance with the terms of this Consent Decree.

51. **Designation of Chromium Areas of Concern.** For the purposes of remediation, Study Area 6 South shall consist of two AOC's, designated as the Open Space AOC and the Development AOC as shown approximately on Exhibit A. The exact boundaries of the two AOC's shall be subject to further delineation during the design and implementation of the Chromium Remedy.

52. **Consistency of the Chromium Remedy with NJDEP Guidance and Remedial Action Work Plan.** The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and any Remedial Action Work Plan, including any modifications or addenda approved by NJDEP. Prior to submitting any Remedial Action Work Plan, Honeywell shall take all reasonable steps to ensure that the plan is consistent with the Chromium Remedy. However, this Consent Decree shall have precedence over any Remedial Action Work Plan in the event of any inconsistency. The approved Remedial Action Work Plan is a minimum standard, and the Chromium Remedy may be more protective than the remedy NJDEP approves.

53. **General Scope of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and L-Well groundwater containing total chromium concentrations of 70 µg/l or greater and soil containing hexavalent chromium at concentrations of 20 mg/kg or greater within the top 20 feet of soil below the ground surface, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow and L-Well levels of groundwater (see paragraphs 69 - 72). The deep overburden and bedrock groundwater remediation, including source control, is addressed in the Deep Groundwater Consent Order.

54. **Development of a Schedule for the Chromium Remedy.** The Chromium Remedy shall be carried out diligently, and the development and implementation of any remedy required by NJDEP for non-chromium contamination shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Within 90 days of entry of this Consent Decree, Honeywell shall propose a Master Schedule for the implementation of the Chromium Remedy .

(a) The Master Schedule shall incorporate the following dates:

(i) No later than August 15, 2008, Honeywell shall submit a Chromium Impacted Soils Pilot Test Work Plan to NJDEP and Riverkeeper;

(ii) No later than September 15, 2008, Honeywell shall complete field work in accordance with the RIWP Addendum;

(iii)No later than December 31, 2008, Honeywell shall submit an Initial Treatment Study Report and Remedial Action Work Plan pursuant to paragraph 86(c);

(iv) No later than July 31, 2012, Honeywell shall submit the soil and groundwater data from its 2010 and 2011 supplemental investigation of Site 163, a brief summary report, and

a designation of the boundaries of the Site 163 Development AOC to the Special Master pursuant to paragraph 86(c);

(v) No later than October 1, 2012, Honeywell shall submit an addendum to the Study Area 6 South 100% Design setting forth the 100% Design for the Site 163 Development AOC portion of the Study Area 6 South Chromium Remedy; and

(vi) Honeywell shall undertake, in good faith, to begin implementation of the Chromium Remedy by March 1, 2013.

(b) In addition, the Master Schedule shall propose deadlines for the following milestones:

(i) Submission of all documents subject to submission and review pursuant to paragraph 86(c);

(ii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy;

(iii)Submission, following implementation of the soil components of the Chromium Remedy for the Development AOC, of the groundwater plans and reports required by paragraphs 70 and 72;

(iv)Completion of additional sampling for shallow groundwater delineation pursuant to paragraph 71 and a proposal for a remedy pursuant to paragraph 71, if needed;

(v) The submission of a 50% Design Report for the Chromium Remedy;

(vi) The submission of a 100% Design Report for the Chromium Remedy;

(vii) The date for completion of the installation of the Chromium Remedy;

(viii)Implementation of the long-term protections of the Open Space AOC established pursuant to paragraph 74; and

(ix) Transfer of the Open Space AOC to Jersey City pursuant to paragraph 74(a)(iii).

B. Initial Chromium Remedy Steps: Delineation, Treatment Study, and Remedial Action Work Plan

55. **Delineation of Development AOC.** Honeywell shall conduct further soil sampling on Study Area 6 South in accordance with the RIWP Addendum. In addition to the locations set forth in the RIWP Addendum, Honeywell shall conduct further soil sampling pursuant to the provisions of the RIWP Addendum at the boring locations set forth in Exhibit E. Upon completion of the soil sampling required by this paragraph, Honeywell shall submit a Second Supplemental Remedial Investigation Report that sets forth the results of the sampling and Honeywell's proposal as to the delineation of the Development AOC. In conjunction with its proposal, Honeywell shall set forth its rationale as to whether prior sampling data should be included or excluded in the proposed delineation. The soil sampling and submission of a Second Supplemental Remedial Investigation Report shall be completed in accordance with the Schedule set forth in paragraph 54. Honeywell shall submit the Second Supplemental Remedial Investigation Report pursuant to paragraph 86(c). The Site 163 Development AOC shall be exempt from the requirements of paragraphs 55-58.

56. **Conduct of a Treatment Study in the Development AOC.** Honeywell shall conduct a field study of the efficacy of *in situ* treatment of 20 to 1000 Soils in accordance with the Chromium Impacted Soil Pilot Test Work Plan. The purpose of the pilot test shall be to evaluate whether *in situ* chemical treatment of 20 to 1000 Soils with one or more reductants can result in the permanent establishment of hexavalent chromium concentrations below 20 mg/kg under conditions in those areas of the Development AOC that may be subject to treatment as a remedy. Honeywell shall provide the raw data from the pilot test to NJDEP and Riverkeeper in scientifically useable electronic form as soon as the data become available. Honeywell shall

submit an Initial Treatment Study Report setting forth the initial results of the pilot test pursuant to paragraph 86(c) .

57. **Continued Monitoring of the Treatment Study.** As the result of the need to complete Study Area 7 remediation, to maintain Study Area 7 remediation support operations currently located on Study Area 6 South, and to conduct Site Preparation activities including the relocation of operating businesses on Study Area 6 South in advance of implementation of the Chromium Remedy, the Parties do not anticipate that implementation of field work for the Chromium Remedy will begin until March 1, 2013. Honeywell shall continue to monitor the performance of the pilot test and shall submit a Final Treatment Study Monitoring Report assessing the long term effectiveness of treatment for 20 to 1000 Soils in the Development AOC pursuant to paragraph 86(c) no later than December 31, 2011.

58. **Submission of a Remedial Action Work Plan.** On or before December 31, 2008, Honeywell shall submit a Remedial Action Work Plan for the Chromium Remedy pursuant to paragraph 86(c). The Remedial Action Work Plan shall be consistent with the Chromium Remedy set forth in this Consent Decree.

C. Development AOC Soil Remedy

59. **Remedial Components.** In the Development AOC, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be remediated as follows:

(a) Soils with a concentration greater than 1000 mg/kg shall be:

(i) Excavated and disposed of off-site at a waste disposal facility licensed to accept such waste; or

(ii) Treated *ex situ* and consolidated under the cap in the Open Space AOC provided the requirements of paragraphs 60 and 63 are satisfied and provided that such soils do not

require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a).

(b) 20 to 1000 Soils shall be:

(i) Excavated and consolidated within the Open Space AOC provided that such soils do not require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a); or

(ii) Excavated and disposed of off-site pursuant to the requirements of paragraph 59(a); or

(iii) Remediated pursuant to paragraphs 59(c) or 59(d) provided that such soils are also 20 to 240 soils and meet the requirements of paragraphs 59(c) or 59(d).

(c) 20 to 240 Soils may be remediated by excavation and consolidation within the Study Area 6 North AOC 1 Open Space Area, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy.

(d) 20 to 240 Soils within the Site 163 Development AOC may be remediated by *in situ* treatment, provided the requirements of paragraph 61 are satisfied.

60. **Treatment and Consolidation of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** *Ex situ* treatment and consolidation under the Open Space AOC cap may be used as a remedial component for soils containing greater than 1000 mg/kg hexavalent chromium provided that the requirements of this paragraph are satisfied:

(a) Honeywell demonstrates in the Final Treatment Study Monitoring Report that the proposed treatment will likely result in the reduction of the hexavalent chromium concentration of the treated soils such that the post-treatment total chromium concentration shown by Toxicity

Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C);

(b) Following a review of the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d), NJDEP agrees that Honeywell has made the demonstration required by paragraph 60(a).

(c) Plaintiffs have had an opportunity to review and comment on the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d)and pursuant to the Special Master review process set forth in paragraphs 86(e)-86(f); and

(d) Following review of the demonstration required by paragraph 60(a) pursuant to the Special Master review process set forth in paragraph 86(f), the Special Master issues a recommendation finding that Honeywell has made the demonstration required by paragraph 60(a) or the Court finds that Honeywell has made the demonstration required by paragraph 60(a) in the event that any Party seeks the Court's review of the Special Master's recommendations under this paragraph.

61. **Treatment as a Remedial Component for 20 to 240 Soils.** *In situ* treatment may be used as a remedial component for the 20 to 240 Soils in the Site 163 Development ACO, provided that such soils are 3 feet or more below ground surface and the requirements of this paragraph are satisfied:

(a) If Honeywell elects to treat *in situ* 20 to 240 Soils in the Site 163 Development AOC, Honeywell shall include in the 100% Design Addendum for Site 163 a plan for such treatment. Such treatment plan shall be comparable in detail and approach to the pipeline treatability plan which is Appendix F to the Study Area 6 North 100% Design. The goal of such *in situ* treatment

shall be to reduce hexavalent chromium soil concentrations to less than 20 mg/kg in soils 20 feet or less below ground surface;

(b) Three years after conducting the treatment set forth in subparagraph (a), Honeywell shall collect additional soil samples in the treated areas to evaluate the success of the treatment. These soil samples shall be analyzed for EH, pH, hexavalent chromium (using EPA/NJDEP Methods 3060A/7199), and sulfides (using EPA Method 9030B). Within 60 days of its receipt of the final data from such sampling, Honeywell shall submit a report with such data to the Special Master pursuant to paragraph 86(c);

(c) In the event that the sampling pursuant to subparagraph (b) shows that soils with greater than 20 mg/kg hexavalent chromium remain or that excess treatment reductant remains present, Honeywell may elect to pursue one or more of the following approaches after providing notice to the Special Master, Riverkeeper and the Jersey City Entities;

(i) In the case of excess treatment reductant remaining in the soil, continue to monitor such areas pursuant to subparagraph (b) until the excess reductant is no longer present;

(ii) In the case of soils with greater than 20 mg/kg hexavalent chromium:

(1) Excavate such soils and consolidate them under the cap in the Open Space AOC, consolidate them under the cap in the Study Area 6 North AOC 1 Open Space Area, and/or dispose of them off-site provided that in each instance the applicable requirements of paragraph 59 are satisfied;

(2) Conduct further *in situ* treatment using additional treatment reductant and submit a monitoring plan pursuant to paragraph 64; or

(3) In the event that the soils are within the areas depicted as River Front Park, Riverfront Drive or Kellogg Street on page 39 of the Redevelopment Plan, cover the affected

soils with a road, walkway, and/or other hardscape and restrict the use of that area through each of the following institutional controls:

(a) Issuance and recording of a conservation restriction comparable to that required under paragraphs 74(b) and 74(d);

(b) Transfer of title to that area to Jersey City pursuant to paragraphs 74(a)(iii) through 74(a)(iv)(2); and

(c) Issuance and recording of a deed notice comparable to that required under paragraphs 74(c) and 74(d).

62. **Submissions Related to Site 163.** Pursuant to the Schedule, Honeywell shall prepare and submit the following with regard to Site 163:

(a) A summary report of all chromium soil and groundwater data collected during site investigations in 2010 and 2011; and

(b) An addendum incorporating Site 163 into the 100% Design.

63. **Post-Treatment Analysis of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** In the event that *ex situ* treatment is used as a final remedy for any portion of the soils containing greater than 1000 mg/kg pursuant to paragraph 59(a)(ii), Honeywell shall conduct post-treatment analysis of each treated batch of soil to demonstrate that the treatment has resulted in the reduction of the hexavalent chromium concentration such that the post-treatment total chromium concentration shown by Toxicity Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C). Such monitoring and demonstration shall be made prior to consolidation of the treated soils under the Open Space AOC cap pursuant to paragraph 59(a)(ii). In the event that Honeywell fails to make the demonstration required by this paragraph,

Honeywell shall dispose of the soils off-site at a waste disposal facility licensed to accept such waste.

64. **Post-Treatment Monitoring for 20 to 1000 Soils.** In the event that *in situ* treatment is used as a final remedy for any portion of the 20 to 1000 Soils, Honeywell shall conduct post-treatment monitoring to demonstrate that the treatment has resulted in permanent hexavalent chromium concentrations of less than 20 mg/kg in the treated area. Honeywell shall propose a program of post-treatment monitoring in a document that is submitted pursuant to paragraph 86(c). In the event that Honeywell fails to make the demonstration required by this paragraph, Honeywell shall propose further remedial actions pursuant to paragraph 59 in a document that is submitted pursuant to paragraph 86(c).

D. Open Space AOC Components of the Chromium Remedy

65. **Open Space AOC Soil Remedy.** In the Open Space AOC, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, pursuant to paragraph 59(b)(i), shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of a gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the Open Space AOC. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the Open Space AOC shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the

two feet of clean fill required by paragraph 65(c). Excavated 20 to 1000 Soils from the Development AOC shall be placed and spread in the Open Space AOC under the cap. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

E. Demolition, Grading, and Backfill Requirements

66. **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community from airborne dusts and exposures to contaminated soils.

67. **Backfill Requirements.** Soils excavated from the Development AOC shall be replaced with backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

68. **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

F. Groundwater Components of the Chromium Remedy

69. **Shallow Groundwater Remedy for the Open Space AOC.** The Open Space AOC shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing

above the meadow mat in the Open Space AOC to the extent that such groundwater contains total chromium in concentrations in excess of 70 µg/l. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 South and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the southern, eastern and western sides of the Open Space AOC and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that shall consist of (i) one or more shallow extraction wells, sumps, or french drains within the Open Space AOC; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater within the Open Space AOC;

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP regulations.

70. **The Shallow Groundwater Remedy for the Development AOC.** Following implementation of the Development AOC soil components of the Chromium Remedy, Honeywell shall submit a report to (a) determine whether shallow groundwater remaining in the

Development AOC exceeds 70 µg/l total chromium and, (b) if so, evaluate the need for further remedial measures to address any such shallow groundwater remaining in the Development AOC with total chromium concentrations in excess of 70 µg/l. This evaluation shall be subject to review and comment by the Parties and approval by the Special Master.

(a) In the event that the evaluation demonstrates that further remedial measures are necessary, Honeywell shall propose such measures subject to review and comment by the Parties and approval by the Special Master;

(b) The capture zone of any remedy shall include at least the entire area of contaminated shallow groundwater except for shallow groundwater that is captured and subject to the shallow groundwater remedy for the Open Space AOC pursuant to paragraph 69;

(c) In the event that a pump-and-treat system is selected as a contingency measure for shallow groundwater in the Development AOC, all infrastructure for the pump-and-treat contingency system that is needed to ensure that the contingency system is fully operational, as required by paragraph 70(d), shall be installed prior to or in conjunction to any development of the Site. This includes at least one shallow extraction well, sump, or french drain, and the piping to convey any extracted groundwater to Honeywell's water treatment plant;

(d) If it is determined that the pump-and-treat contingency system must be activated, the pump-and-treat system shall be operational no later than six months after the date of the determination.

71. **Off-Site Shallow Groundwater Remedy.** Honeywell shall propose additional sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site. Honeywell shall submit a report of the results of such sampling and, in the event that contaminated shallow groundwater is found to extend off-site, a proposal for a remedy based on

such results. The report and the proposal for a remedy shall be subject to review and comment by the Parties and approval by the Special Master.

72. **L-Well Groundwater Remedy.** At the time this Decree is entered, the L-Well Groundwater is contained and not contributing to further contamination of surrounding waters and/or soils. However, in order to verify that this status continues following implementation of the Chromium Remedy, including any groundwater remedial measures pursuant to paragraphs 70 and 71, Honeywell shall propose a plan for one round of monitoring designed to evaluate whether the L-Well Groundwater remains contained. The plan shall include monitoring for total and hexavalent chromium and major ion chemistry to determine whether there has been movement in the L-Well Groundwater.

(a) In the event that no substantial change is detected in the major ion chemistry, no further action is required unless paragraph 72(c) is applicable.

(b) In the event that substantial changes are detected in the major ion chemistry, Honeywell shall propose a plan for further monitoring of the L-Well Groundwater. Such a plan shall be subject to review and comment by the Parties and approval by the Special Master.

(c) In the event that the initial monitoring or monitoring conducted pursuant to paragraph 72(b) demonstrates that proximate waters have total chromium concentrations in excess of 70 µg/l, regardless of whether there is a change in the major ion chemistry, Honeywell shall propose a remediation plan for the L-Well Groundwater. Such remediation plan shall be subject to review and comment by the Parties and approval by the Special Master.

G. Permits and Authorizations

73. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article.

H. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

74. **Protection of the Open Space AOC.** Except as provided in paragraphs 74(j) and 74(k), development in the Open Space AOC shall be prohibited. The Open Space AOC shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the Open Space AOC pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54:

(a) **Ownership of and Access to the Open Space AOC.** Ownership of and access to the Open Space AOC shall be in accordance with the following:

(i) Bayfront Redevelopment LLC, as the current owner in fee simple absolute of all property that comprises the Open Space AOC, shall not convey any rights or interests in any parcel that comprises the Open Space AOC property except as provided in this Decree. Within 90 days of entry of this decree, Bayfront Redevelopment LLC shall give Jersey City an option to buy all of the Open Space AOC property prior to the planned transfer pursuant to paragraph 74(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall exercise the option to buy the Open Space AOC in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 98(c) or 98(d) are met;

(ii) Within 90 days of the entry of this Consent Decree, Bayfront Redevelopment LLC shall grant a conservation restriction for the Open Space AOC pursuant to the requirements of paragraph 74(b);

(iii) Upon the final construction of all roads and utility corridors within the Open Space AOC, Bayfront Development LLC shall donate good and marketable title to all the land comprising the Open Space AOC to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 South to create a new parcel(s) comprising the Open Space AOC. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the Open Space AOC by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the Open Space AOC unless and until it shall have complied with the requirements of paragraph 74(a)(iv);

(iv) After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the Open Space AOC to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the Open Space AOC to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the Open Space AOC and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the Open Space AOC pursuant to this paragraph

and routine maintenance of the permissible development in the Open Space AOC pursuant to paragraph 78(d); or

(2) The Open Space AOC has been remediated such that no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** Prior to the grant of the option to buy pursuant to paragraph 74(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the Open Space AOC substantially in the form set forth in Exhibit C. Exhibit C is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 74(j) and 74(k), including the construction and placement of roads and utilities. The Conservation Restriction shall also allow for current uses of the Open Space AOC to continue until such time as construction of the Chromium Remedy begins. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the Open Space AOC as set forth in paragraphs 74(j) and 74(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph 74(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the Open Space AOC shall be subjected to the deed notice substantially in the form set forth in Exhibit D that restricts

future activities on the Open Space AOC. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the Open Space AOC pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 74(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 74(b), and the deed notice imposed pursuant to paragraph 74(c) shall be recorded, pursuant to N.J.S.A. §§ 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the Open Space AOC. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the Open Space AOC in the real estate records related to the Open Space AOC.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the Open Space AOC is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 74(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the Open Space AOC, Jersey City shall add those portions of the Open Space AOC not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. § 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor,

maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 74(j) and 74(k); and (iv) the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the Open Space AOC have been added to its ROSI, such that those portions of the Open Space AOC shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the Open Space AOC is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 74(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the Open Space AOC subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the Open Space AOC under the statute. If the Parties are unable to reach agreement on establishment of an environmental covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the Open Space AOC without

unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the Open Space AOC. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the Open Space AOC if they would provide substantial additional protection for the Open Space AOC without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in Open Space AOC.** Only development satisfying the requirements of this paragraph and paragraph 74(k) shall be permitted in the Open Space AOC. All other development in the Open Space AOC shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the Open Space AOC regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 74(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the Open Space AOC shall be the development undertaken following the completion of the Chromium Remedy in the Open Space AOC. The Initial Development may occur in one or more phases. Honeywell and Bayfront

Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 74(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the Open Space AOC shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 74(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the Open Space AOC, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 74(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 74(b), and the Redevelopment Plan; however, in the

event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the Open Space AOC, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 74(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 86(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 86(e) and 86(f) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the Open Space AOC shall require the preparation and submission of a Development Plan pursuant to

paragraph 74(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 74(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and Jersey City. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and Jersey City for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix)During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 74(j)(v) and 74(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 74(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 74(j)(v); or

(3) The development meets the requirements of paragraphs 74(j)(v) and 74(j)(xi), and Jersey City provides notice of its intention to alter or add to the development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 74(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 74(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holder(s) of the conservation restriction established pursuant to paragraph 74(b) with an annual report that describes any alterations or additions, including those activities under paragraph 74(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the Open Space AOC.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 74(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the Open Space AOC, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 74(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 74(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the Open Space AOC of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

75. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

76. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 65, 69, 68, 69, 72, and 77. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

77. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the Open Space AOC.

78. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 77. Honeywell shall provide Riverkeeper, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the Open Space AOC to ensure that it is not being put to any use that is inconsistent with paragraphs 74(j) and 74(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 74 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the Open Space AOC is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the Open Space AOC grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii)Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the Open Space AOC such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv) A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the Open Space AOC has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 65(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and

the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the Open Space AOC to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii)Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 69(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the Open Space AOC.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed

subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by the Court.

(c) **Contingency Plan**. As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance**. The title owner of the Open Space AOC shall conduct maintenance of the Open Space AOC features or facilities that are permissible under paragraphs 74(j) and 74(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the Open Space AOC or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of Open Space AOC shall annually provide to the other Parties and

the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the Open Space AOC shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the Open Space AOC identified by its workers during routine maintenance.

(e) **Recordkeeping.** Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring Plan. Such logs shall be provided to Riverkeeper on a quarterly basis.

79. **Monitoring and Reporting to Riverkeeper.** Riverkeeper shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 86(c).

80. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the Open Space AOC; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 78 and annual reports on changes to the Initial Development as required by paragraph 74(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The public provision of the maps and documents referred to in paragraph 80(b)(ii) via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

81. **Annual Letter to Riverkeeper on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 80, Honeywell shall provide a letter to the Riverkeeper documenting its compliance with paragraph 80.

82. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

83. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

I. Oversight and Enforcement by the Special Master and NJDEP

84. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.I.

85. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the Open Space AOC. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of any non-chromium related remedy, any site preparation activities, and any site redevelopment activities do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

86. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority.** Nothing in or pursuant to this Consent Decree shall limit NJDEP's full statutory and regulatory authority with respect to the Study Area 6 South site, including (i) permitting authority; (ii) authority to review and approve the Treatment Study reports, the Remedial Action Work Plan, the 100% Design, and final Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities.** The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting bi-monthly progress reports to the Court pursuant to the schedule for the submission of such reports established in *ICO v. Honeywell*;

(vi) Overseeing the financial assurances established pursuant to paragraphs 91 through 100, and, until the expiration of his term pursuant to paragraph 90, overseeing the financial assurances established pursuant to paragraphs 101 through 112;

(vii) Coordinating review of the documents as provided in paragraphs 86(c) through 86(g);

(viii) Overseeing all development undertaken in the Open Space AOC during the Initial Development Period pursuant to paragraph 74(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell**. Honeywell shall submit the following documents to Riverkeeper, Jersey City, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule") consistent with paragraph 54 above;

(ii) A Second Supplemental Remedial Investigation Report reporting the results of the field work conducted pursuant to paragraph 55;

(iii)A Chromium Impacted Soils Pilot Test Work Plan and Analytical Protocol for conduct of the treatment study pursuant to paragraph 56, unless such documents are agreed to by NJDEP and Riverkeeper before the entry of this Consent Decree;

(iv)An Initial Treatment Study Report for the Development AOC;

(v) A Final Treatment Study Monitoring Report;

(vi) The documents for Site 163 submitted pursuant to paragraphs 54(a)(iv), 54(a)(v), 61, and 62;

(vii) A report to evaluate the need for remediation of any potentially remaining contaminated shallow groundwater in the Development AOC after implementation of the Development AOC Soils Remedy and, based on such an evaluation, a proposal;

(viii) A report of the results of the sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site pursuant to paragraph 71 and, based on the results, a proposal for a remedy;

(ix) A plan for one round of monitoring to evaluate whether the L-Well Groundwater remains contained pursuant to paragraph 72;

(x) A proposal for a remedy of the L-Well Groundwater, in the event L-Well Groundwater monitoring indicates the contaminated groundwater is no longer contained, pursuant to paragraph 72;

(xi) A Remedial Action Work Plan;

(xii) A 50% Design Report (which may include the Development AOC Conceptual Design Plan as a component) as well as design drawings and specifications at the 50% level for other components of the Chromium Remedy (hereinafter the 50% Design);

(xiii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(xiv) The data validation plan, including quality control and quality assurance protocols;

(xv) The site-wide master health and safety plan;

(xvi) The Long-Term Monitoring Plan;

(xvii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(xviii) A program for post-treatment monitoring pursuant to paragraph 63, and, depending on such results, a proposal for further remedial actions;

(xix) A report reviewing measured groundwater levels for the groundwater remedy;

(xx) Documents required during the Initial Development Period pursuant to paragraphs 74(j)(vi), 74(j)(vii), and 74(j)(viii); and

(xxi) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Initial Review of Documents by NJDEP.** The Parties and Special Master shall allow the period of time set forth below for NJDEP to conduct its review of a submission (hereinafter "NJDEP Review Period") before the document is subject to the Special Master review and approval process. During the NJDEP Review Period, any Party may submit comments to NJDEP. For the Second Supplemental Remedial Investigation Report, the Remedial Action Work Plan, the Initial Treatment Study, and the Final Treatment Study Monitoring Report, the NJDEP Review Period shall be 90 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. For any other documents identified in paragraph 86(c), the NJDEP Review Period shall be 30 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. The NJDEP review period shall be extended an additional 30 days for any document for which NJDEP provides the Parties and the Special Master with notice that its review will require an additional 30 days. At the conclusion of the NJDEP Review Period, the comment and review process provided for in paragraphs 86(e) and 86(f) shall commence. In the event that any document has been revised during the NJDEP Review Period, Honeywell shall resubmit the applicable document for purposes of the comment and review provided for in paragraphs 86(e) and 86(f).

(e) **Comment on Submitted Documents**. For each of the documents submitted by Honeywell pursuant to paragraph 86(c), and following conclusion of the NJDEP Review Period as described in paragraph 86(d), the Special Master shall establish a schedule for the submission

of comments and responses to comments. For each of the documents submitted, Riverkeeper, Jersey City, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all comments received and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, Jersey City, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 86(f), unless the Parties agree both on the revised document and that further review and approval pursuant to paragraph 86(f) is unnecessary. In that event, the Parties shall inform the Special Master that review under paragraph 82(f) is unnecessary and Honeywell shall proceed to implement the revised document.

(f) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review**. Subject to the limitations in paragraph 82(e), all documents submitted by Honeywell, pursuant to paragraph 86(c) and 86(e), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 86(g). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure**. Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within

the timeframe established by the Special Master in the schedule for comments pursuant to paragraph 86(e). NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review**. If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(g) **Schedule and 100% Design Documents**. As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(h) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The

Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(i) **Changes to the Schedule.** The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54; and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

87. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 89.

88. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Sediment Consent Order. The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

89. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

90. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 74(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 74(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, the Study Area 6 North Consent Decree, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities

shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

J. Initial Financial Assurances

91. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy calculated using factors, including inflation and discount rates, determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process;

(ii) The costs of monitoring and maintenance activities for five years, as required by the Long-Term Monitoring Plan, calculated using factors including inflation and discount rates determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 91(a)(i) and 91(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

92. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than December 31, 2008, Honeywell shall submit to Riverkeeper and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If Riverkeeper does not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

93. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 94, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.J, the Special Master shall direct the cancellation of the prior Chromium Remedy

Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

94. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 91(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.K. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and

in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such terms. If Honeywell is not otherwise in default as provided in Article III.J and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

95. **Bankruptcy Protection**. Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

96. **Exclusive Court Jurisdiction**. The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

97. **Application of New York Law.** The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Chromium Remedy Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

98. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 85, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 93 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from

drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 98(c), and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

99. **Placement of Proceeds in Court Registry Investment System Account**. In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The

Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 103(b)(v).

100. **Termination of Chromium Remedy Letter of Credit.** The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.K.

K. Long-Term Financial Assurances

101. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 102(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

102. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater remedies pursuant to paragraphs 69, 70, and 71;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) The perpetual administration of the trust fund regardless of whether such trust fund is selected by Honeywell pursuant to paragraph 103(a) or is established from the Long-Term Letter of Credit pursuant to paragraphs 103(b)(ii), 103(b)(v), or 109.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 102(a)(i) through 102(a)(v) plus a 25% contingency when the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of the estimated future costs of the activities specified in paragraphs 102(a)(i) through 102(a)(v), plus a 25% contingency on those costs.

103. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution managing the

trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 102(a)(i) through 102(a)(iv).

(b) **Long-Term Letter of Credit**. In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 103(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 106.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of

Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(iii) The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits) as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Long-Term Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 98. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a). After the Special Master's appointment expires pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 103(b)(ii), 103(b)(v), or 109 and Honeywell has also selected a trust fund pursuant to paragraph 103(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(c) **Combination**. Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 103(a) and 103(b).

104. **Procedures for Review of the Proposed Long-Term Financial Assurances.** No later than June 1, 2009, Honeywell shall submit to Riverkeeper and the Special Master, for their review (a) the amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper agrees to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances.

105. **Temporary Maintenance of Chromium Remedy Letter of Credit**. Until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 91 in an amount equal to at least $20,000,000 in 2008 dollars. In the event of any default by Honeywell pursuant to paragraph 98 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 103(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under

paragraph 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), shall apply.

106. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 103, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to

long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 103(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 103(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 103(b).

107. **Exclusive Court Jurisdiction**. The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 103(a), 103(b)(ii), 103(b)(v), or 109.

108. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 103(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 108(c), if Honeywell fails to provide assurance to Riverkeeper, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

109. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or pursuant to paragraph 108 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be

paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

110. **Use of the Trust Fund in the Event of Honeywell's Default.** In the event of Honeywell's default, as defined in paragraphs 108(a) through 108(d), the money in the trust fund established pursuant to paragraph 103(a) shall be available to meet the obligations of paragraph 102(a), as well as for payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

111. **Use of a Trust Fund Established Pursuant to Paragraph 99, 103(b)(ii), 103(b)(v), or 109.** In the event that a trust fund is established pursuant to paragraph 99, 103(b)(ii), 103(b)(v), or 109, the money in the trust fund shall be available to meet the obligations of paragraph 102(a), as well as for the payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

112. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations under Article III.K shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the Open Space AOC or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive

standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: TERMINATION

113. **Termination of this Consent Decree**. This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 118:

(a) The Court fails to enter this Consent Decree or this Consent Decree is determined to be invalid on appeal; or

(b) NJDEP takes one of the following actions with respect to the Remedial Action Work Plan:

(i) Rejects or fails to approve the Remedial Action Work Plan for the Chromium Remedy within 180 days of submission of the plan;

(ii) Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in more than a 50% increase in the estimated costs of the Chromium Remedy as set forth in Article III; or

(iii)Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in a substantial reduction of the protection of human health and/or the environment.

114. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 113 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 113 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

115. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 113.

116. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 113, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 113, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: TRANSFER OF TITLE TO BAYFRONT REDEVELOPMENT LLC

117. **Transfer of Title of Study Areas 6 South and 7 to and from Bayfront Redevelopment LLC.** The transfer of title of Study Area 6 South and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of

Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 South and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 South or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 South and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 South under this Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell*.

ARTICLE VI: NOTICE

118. **Notice.** Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE VII: RIVERKEEPER'S ATTORNEYS' FEES

119. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $813,000.00 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 South portion of *Riverkeeper v. Honeywell* through August 31, 2008; and

(b) $353,746.67 in out-of-pocket expenses representing a portion of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses paid pursuant to the Sediment Consent Order, the Deep Groundwater Consent Order, and the Study Area 6 North Consent Decree.

(c) Payment of the sum of $813,000.00 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $879,317.92 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

120. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after August 31, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell*. In the event that Riverkeeper and Honeywell are unable to reach a settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to

Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order. In the event of Honeywell's default, Riverkeeper may seek attorneys' fees from any trust fund or court registry funds established pursuant to the financial assurances provisions of this Consent Decree.

ARTICLE VIII: MISCELLANEOUS PROVISIONS

121. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

122. **Bayfront Redevelopment LLC as a Party.** As a signatory to this Consent Decree, Bayfront Redevelopment LLC subjects itself to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agrees to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against Bayfront Redevelopment LLC.

123. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

124. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

125. **Reservation of Rights and Claims.** Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

126. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

127. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

128. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

129. **Measures to Effectuate This Consent Decree.** Jersey City shall take all appropriate steps to ensure that commitments it has agreed to with regard to the Open Space AOC have been duly considered, ratified, and approved. Such steps include consideration of such commitments and an effectuating ordinance at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the commitments made by Jersey City..

130. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

131. **Severability.** Each of the provisions in paragraph 74 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

132. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Remedial AOC's and Remedial Approach Map

Exhibit B: NJDEP Chromium Policy

Exhibit C: Conservation Restriction

Exhibit D: Deed Notice

Exhibit E: Additional Boring Locations

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11/30/2017 09:36:32 AM
DEED
NUMBER OF PAGES : 133
LHIGHSMITH

Deed Notice

Dated: _____, 2017

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: Perry Florio, Esq

DEED NOTICE #2
SA-6 SOUTH RT 440 DEFERRED AREA

20171130010138870 1/123
11/30/2017 09:47:19 AM DEED
Bk: 9258 Pg: 844
Diane Coleman
Hudson County, Register of Deeds
Receipt No. 1307810

Hudson County Recording Data Page Honorable Diane Coleman Hudson County Register	*Official Use Only – Barcode*
Official Use Only – Record & Return	*Official Use Only – Realty Transfer Fee*
Date of Document: November 16, 2017	Type of Document: Deed Notice
First Party Name: Bayfront Redevelopment, LLC	Second Party Name:
Additional Parties:	

THE FOLLOWING SECTION IS REQUIRED FOR DEEDS ONLY	
Block:	Lot:
Municipality:	
Consideration:	
Mailing Address of Grantee:	

THE FOLLOWING SECTION IS FOR ORIGINAL MORTGAGE BOOKING & PAGING INFORMATION FOR ASSIGNMENTS, RELEASES, SATISFACTIONS, DISCHARGES & OTHER ORIGINAL MORTGAGE AGREEMENTS ONLY	
Original Book:	Original Page:

HUDSON COUNTY RECORDING DATA PAGE

Please do not detach this page from the original document as it contains important recording information and is part of the permanent record.

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature] William J. Hague, Global Director-Remediation Design and Construction
[Bayfront Redevelopment LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

DEED NOTICE CONCERNING CONTROLS INSTALLED FOR CHROMIUM CONTAMINATION UNDERLYING THE PROPERTY

This Deed Notice is made as of the 16th day of November, 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950***. Owner shall mean Bayfront Redevelopment LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The "Property" (also referenced herein as the "Restricted Area(s)" and the "Deferred Area") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. Bayfront Redevelopment LLC is the current owner in fee simple of certain real property designated as a portion of ***Block 24601, Lot 8 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]; the New Jersey Department of Environmental Protection Program Interest Number for the contaminated site which includes this property is ***Hudson County Chromate Site No. 124 Program Interest ("PI") # G000008741*** (NJDEP PI# for non-chromium-related contaminants at the Property is #745719). Site 124 is part of Study Area 6 South ("SA-6

[1] All references to Block 24601 Lot 8 in this Deed Notice shall mean the applicable portion of Block 24601 Lot 8 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

South"). The Property is located adjacent to and along Route 440 as shown on Exhibit B-1 attached hereto. The Property shall constitute a "Deferred Area" as defined in Paragraph 3 that will be remediated for hexavalent chromium contamination pursuant to the First Amended Consent Decree Regarding the Remediation and Redevelopment of Study Area 6 South ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.,* D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The Consent Decree restricts transfer, use and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management (BCM) is the entity within the Department that is responsible for the oversight of the chromium remediation of SA-6 South and the Property. The matter was Hudson County Chromate Site No. 124 PI# G000008741. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell") to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 South to address chromium-related soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") for chromium remedial actions was approved by the Department on March 24, 2009 for Hudson County Chromate Site Nos. 073, 124, 125, 134, and 140, which includes the Property. Remedial actions were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP, soil contamination remains in the Property at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 South was submitted to the Department on February 8, 2017. The Department approved the RAR on March 30, 2017. A Construction Completion Report ("CCR") for SA-6 South to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 South was entered by the Court on November 20, 2017, Docket Nos 1520 to 1525.

The Property, also known as the Deferred Area, is an approximately 15-foot wide by 88-foot long, 1,315 square foot area on SA-6 South between the Route 440 Right of Way ("ROW") and the hydraulic barrier along the eastern edge of the SA-6 South Open Space AOC. Public Service

Electric & Gas ("PSE&G") owns and operates a gas main on the Property, thus, excavation of chromium-impacted soil from the Property was not possible. Excavation of residual chromium contamination proximate to the gas line on the Property will be deferred by Honeywell until the gas line is relocated as part of the Route 440 Road Widening Project. Once the chromium-impacted soils on the Property are removed consistent with Article III of the Consent Decree, this deed notice will be terminated consistent with the requirements of paragraph 13 below. The provisions of the Long Term Monitoring Plan ("LTMP"), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater contaminant concentrations and restrictions for SA-6 South in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater (recent groundwater samples for the Property do not indicate shallow groundwater contamination). As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil remediation for the Property in perpetuity or until remediation is implemented that renders this Deed Notice unnecessary.

4. CONSIDERATION. In accordance with the Department's approval of the chromium RAWP for the remediation for the Hudson County Chromate Site Nos. 073, 124, 125, 134, and 140 which includes the Property, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained either at onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single family residence or a child care facility without the Department's prior written approval; and

iii. The Consent Decree, paragraph 9, prohibits the unrestricted use of the Property until the Chromium Remedy set forth in Article III of the Consent Decree is implemented.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls on the Property. The engineering controls include clean cover materials to a depth of approximately 6-inches below ground surface A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, the LMTP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has developed an LTMP which sets forth requirements for monitoring, maintaining, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5E. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the engineering controls. Workers shall be trained using material developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after

the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of known contamination in the Property, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and (b) without first obtaining Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(b), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring

Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree, and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to

the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program

P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 80 and 83 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system;

(B) As-built diagrams of any buildings, roads, parking lots and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Restricted Area Data Tables - Table for the Property that includes:

(A) Sample location designation from Restricted Area maps (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C-1C. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; Exhibit C-1 includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
(1) Description and estimated size of the Restricted Areas as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:
(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;
(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and
(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of

the remedial action that includes this Deed Notice and the other Institutional Controls;

(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and

(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2. Exhibit C-2: Engineering Controls: Asphalt Cover; Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:

(1) Description of the engineering control;

(2) The objective of the engineering control; and

(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;

(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering control continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 28, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 28th day of November, 2017.

Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #2 SA-6 South Deferred Area Adjacent to Route 440 ROW

A-1 Vicinity Map

A-2 Metes and Bounds Description and Tax Map

A-3 Property Map Portion of Block 24601, Lot 8, City of Jersey City, New Jersey

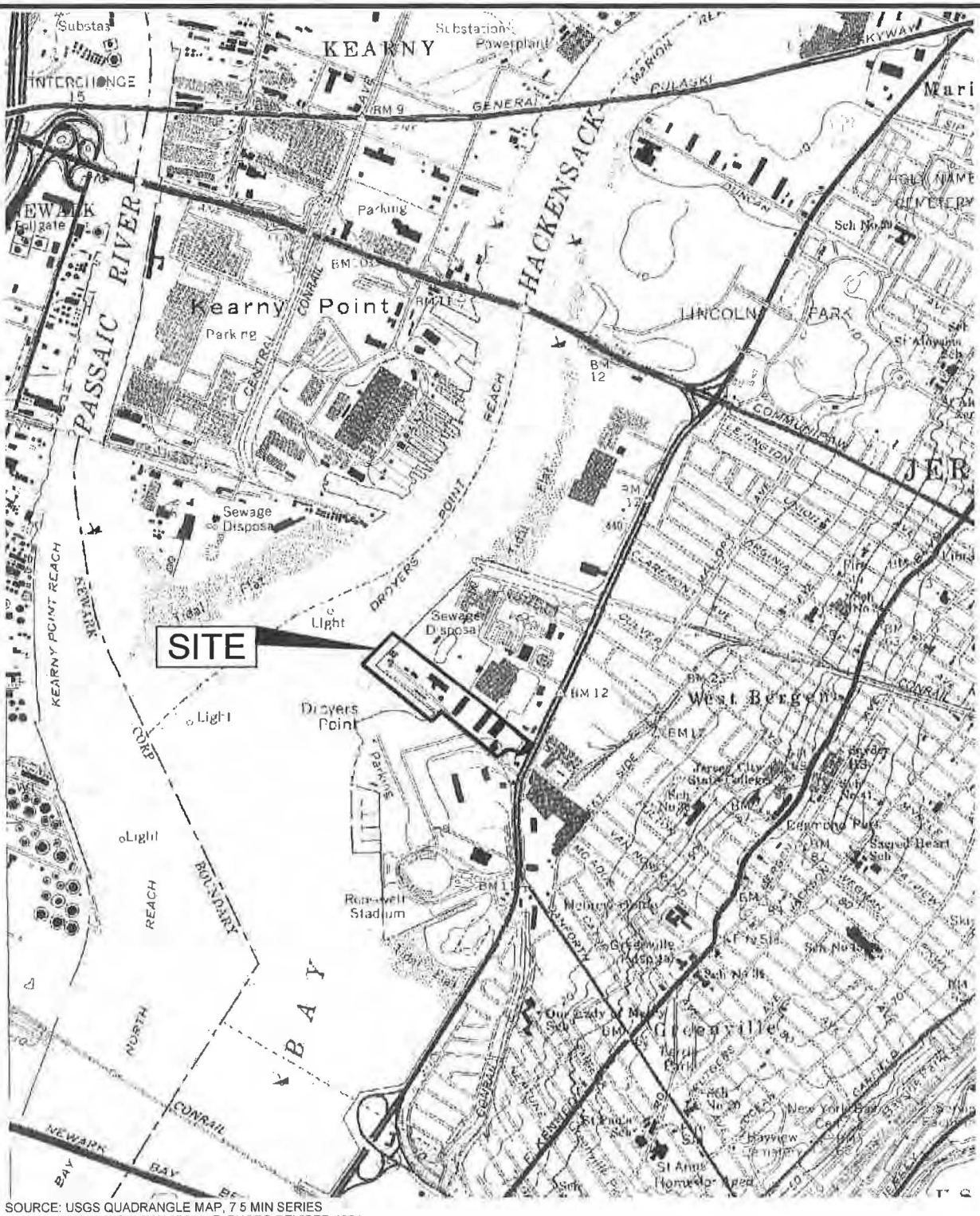
Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of metes and bounds and tax map for the Property.

Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering control for the Property. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as roads, walkways and other hardscape.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 6 SOUTH SITE 124
JERSEY CITY, NEW JERSEY



SOURCE: USGS QUADRANGLE MAP, 7 5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

SITE 124 ROUTE 440
UTILITY AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150450-5100-A100-2000		amec foster wheeler	**EXHIBIT A-1** VICINITY MAP BLOCK 24601 LOT 8 DEED NOTICE #2 SA-6 SOUTH DEFERED AREA ADJACENT TO ROUTE 440 R O W JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	*CHECKED/DATE:* NW 01/31/17	ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	

Exhibit A-2
Deed Notice #2 SA-6 South Deferred Area Adjacent to Route 440 ROW

Metes and Bounds Description of Property: See Attached
Tax Map: See Attached

A-2 Metes and Bounds Description of Property Portion of Block 24601, Lot 8
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map, or any other maps attached thereto, the Metes and Bounds prevails.

The Property is identified as a portion of Block 24601, Lot 8 on the City of Jersey City tax maps. A copy of the current tax map which includes the SA-6 South Deferred Area Adjacent to Route 440 ROW is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 ▪ Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q

DEED NOTICE AREA 2
BLOCK 24601 LOT 8
APRIL 6, 2016

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 8 Block 24601, designated as Deed Notice Area 2 as shown on an exhibit entitled, "Deed Notice Area 2, SA6 South, Block 24601, Lot 8, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated April 6, 2016 and being more particularly bounded and described as follows, to wit:

BEGINNING at the intersection of the westerly line of New Jersey State Highway Route 440 (112 foot wide right of way), and the division line between Lot 8 Block 21901, and Lot 8 Block 24601; thence-

1. **S 24°46'55" W, 72.64 feet,** along the westerly line of New Jersey State Highway route 440 to a point of curvature; thence-

2. **SOUTHWESTWARDLY,** on an arc to the right having a radius of **152.00 feet,** and arc length of **82.00 feet** (central angle of **30°54'31"**), said arc being connected by a chord bearing **S 40° 14'10" W,** a chord distance of **81.01 feet,** along the same, to the intersection of the same with the easterly face of a hydraulic barrier wall; thence-

   Running through said Lot 8 Block 24601, along said easterly wall face the following two (2) courses:

3. **N 41°25'15" E, 32.00 feet,** thence-

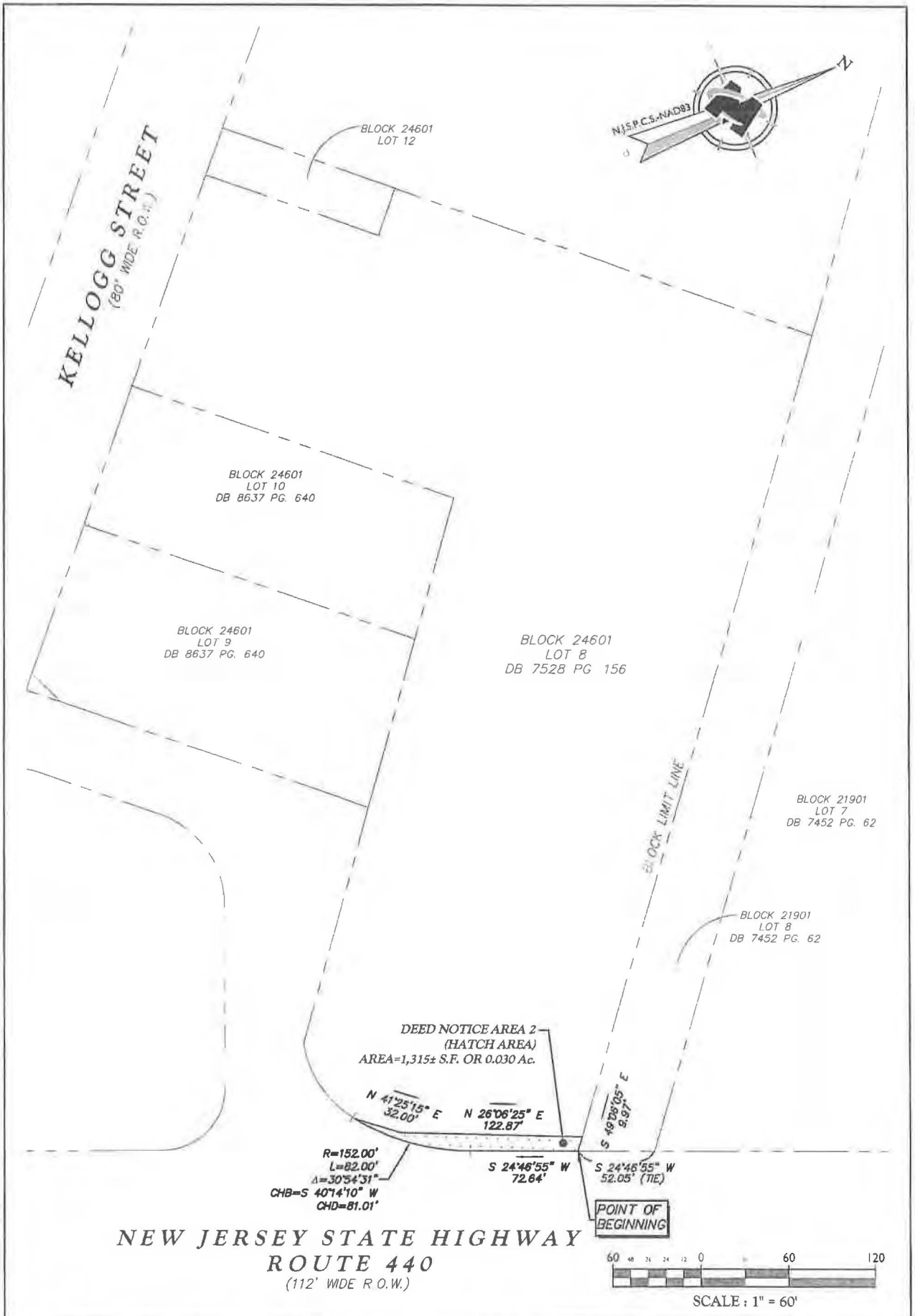
4. **N 26°06'25" E, 122.87 feet** to the point and place of **BEGINNING**.

CONTAINING: 1,315 S.F. of land more or less or 0.030 acres of land more or less.

04/06/16

GLEN J. LLOYD, P.L.S. — DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

R:\General\Projects\2010\10000292C\Descriptions\Metes & Bounds-Deed Notice 2.docx



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REV	DATE	DRAWN BY	DESCRIPTION

DEED NOTICE AREA 2
SA6 SOUTH

BLOCK 24601
LOT 8

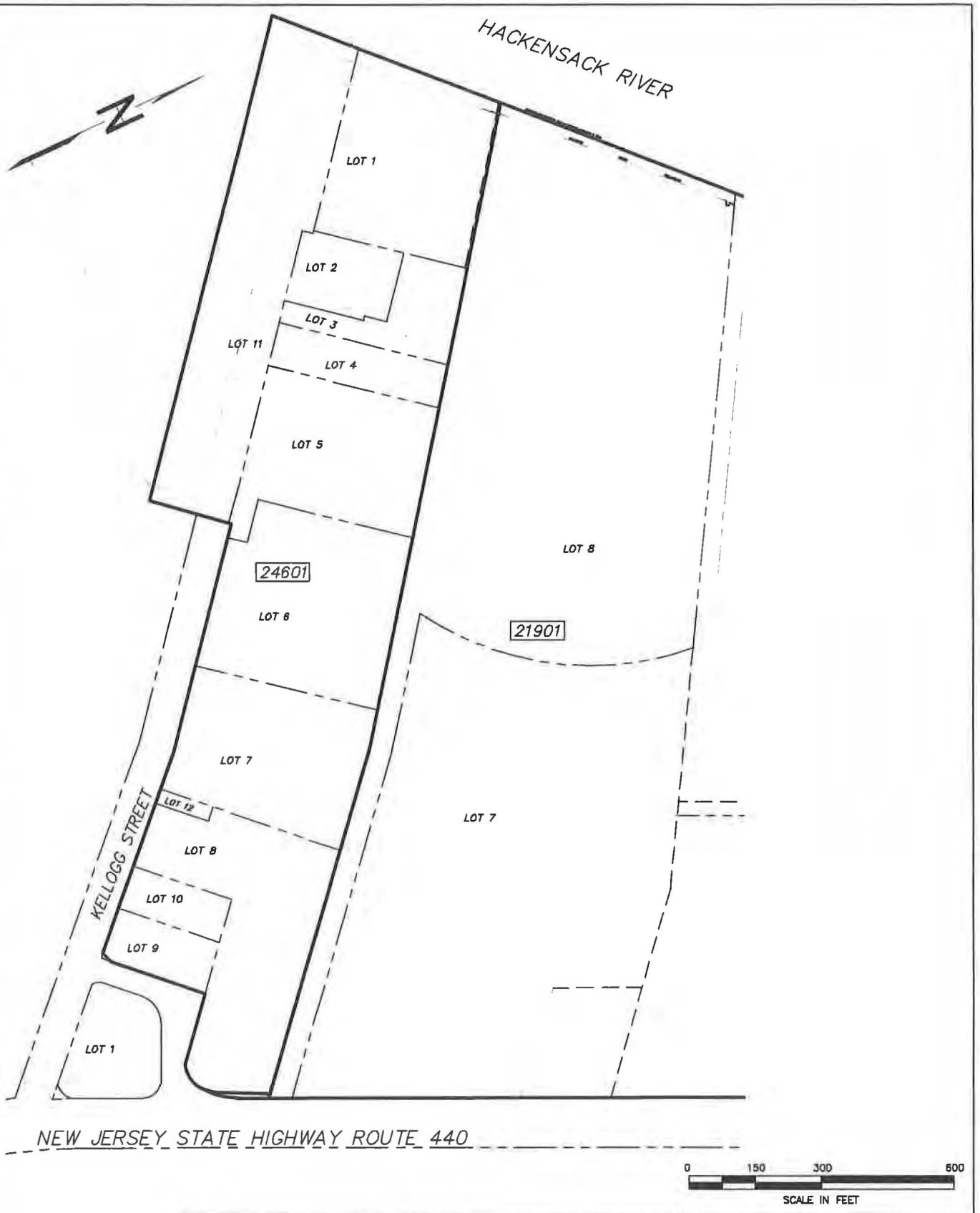
CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

811 Know what's below. Call before you dig.

RED BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1954

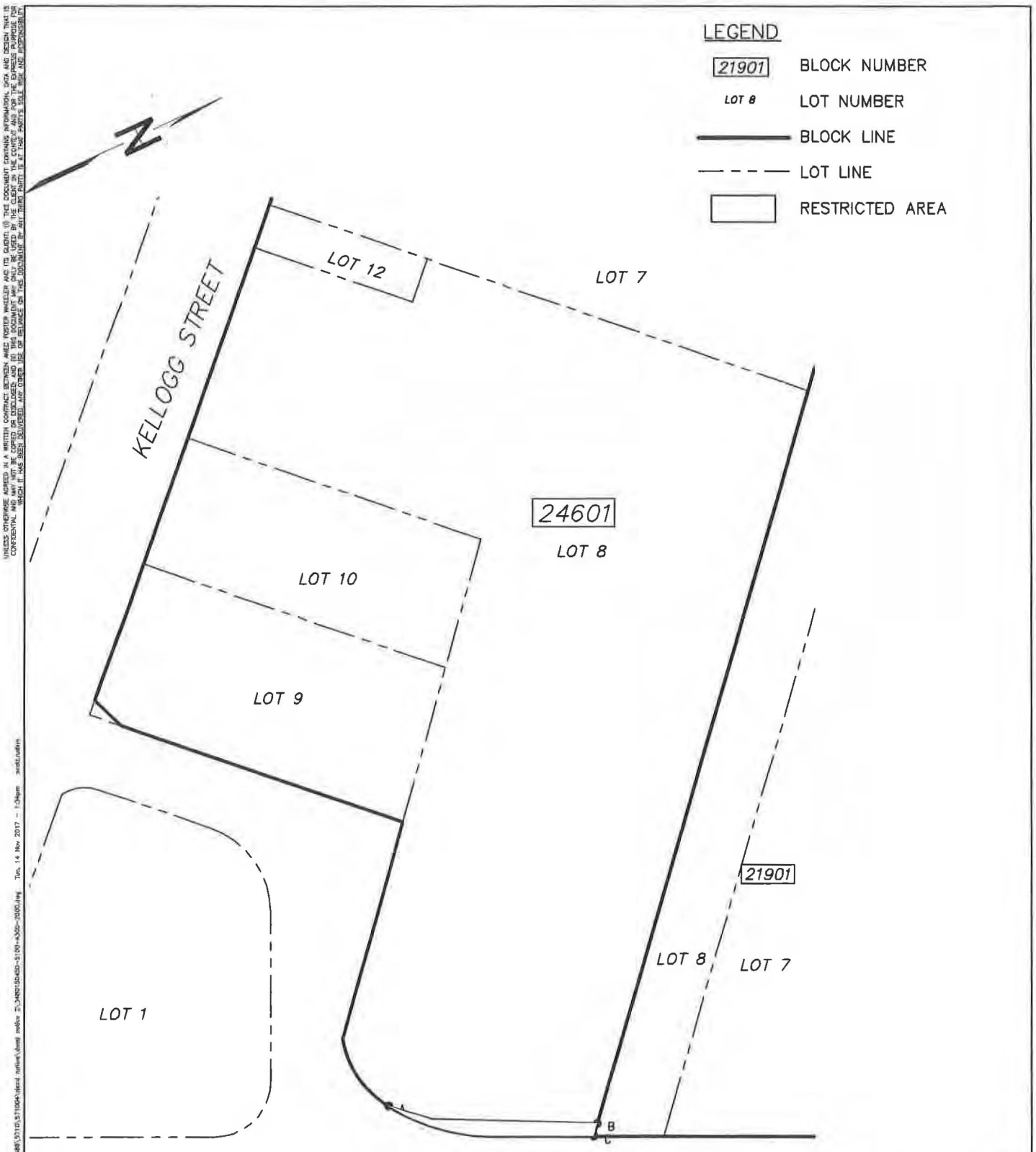
DEED NOTICE EXHIBIT

1 of 1



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A200-2000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	EXHIBIT A-2 TAX MAP BLOCK 24601, LOT 8 DEED NOTICE #2 SA-6 SOUTH DEFERRED AREA ADJACENT TO ROUTE 440 R O W JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

Exhibit A-3
Property Map



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A300-2000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-3** PROPERTY AREA MAP BLOCK 24601 LOT 8 DEED NOTICE #2 SA-6 SOUTH DEFERRED AREA ADJACENT TO ROUTE 440 R O W JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 02/01/16		

EXHIBIT B
Deed Notice #2 SA-6 South Deferred Area Adjacent to Route 440 ROW

B-1 Restricted Area Maps
B-2 Restricted Area Data Table
Portion of Block 24601, Lot 8
City of Jersey City, New Jersey

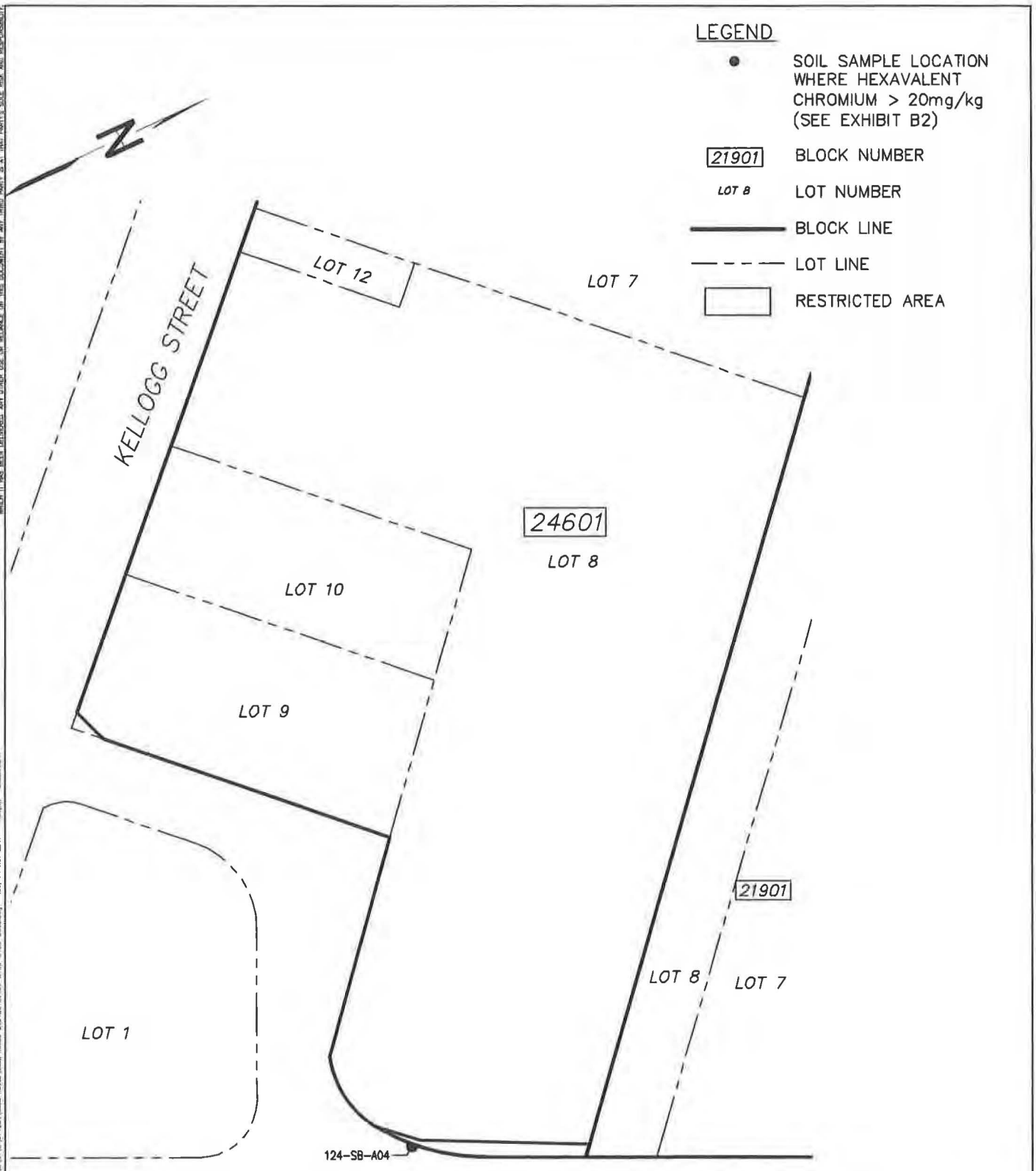
Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area and Soil Sample Locations), Exhibit B-1B (Cap System Detail), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of hexavalent chromium remaining above the level established in the New Jersey Department of Environmental Protection (NJDEP) Chromium Policy of 20 milligrams per kilogram (mg/kg).

Restricted Area Map Notes:

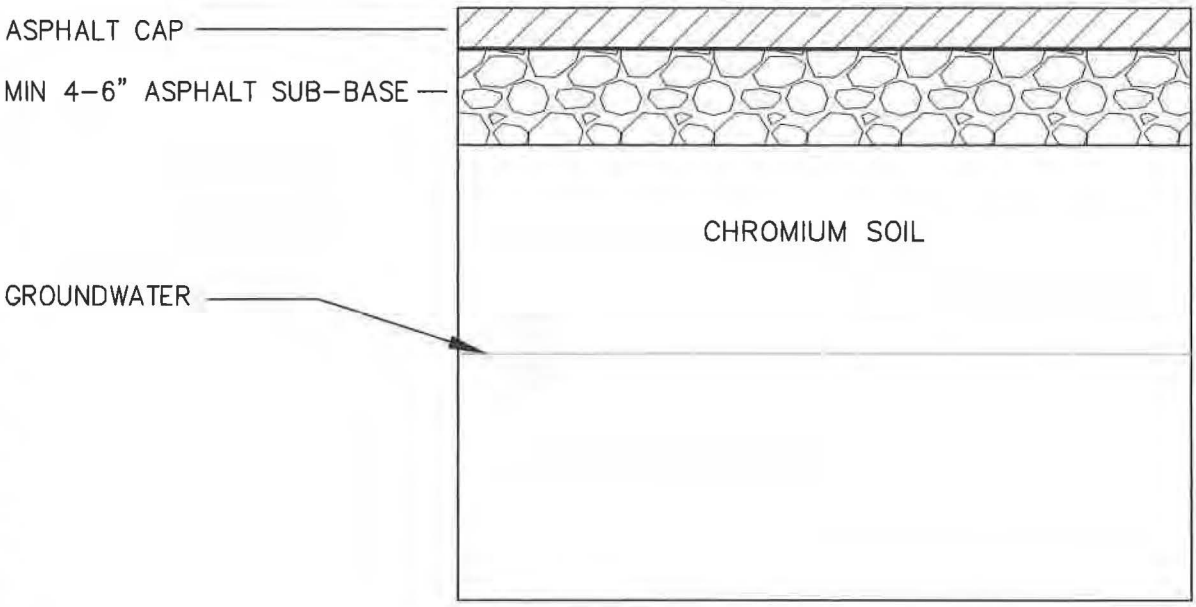
Exhibit B-1 indicates engineering controls. For soils with hexavalent chromium concentrations above 20 mg/kg, the engineering control includes an asphalt cap.

Exhibit B-1
Restricted Area Maps



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-B100-2000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1A** RESTRICTED AREA MAP BLOCK 24601 LOT 8 DEED NOTICE #2 SA-6 SOUTH DEFERRED AREA ADJACENT TO ROUTE 440 R O W. JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (1) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED, AND (2) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DEVELOPED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.



CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150450-5100-B200-2000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 24601 LOT 8 DEED NOTICE #2 SA-6 SOUTH DEFERRED AREA ADJACENT TO ROUTE 440 R.O W JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17		

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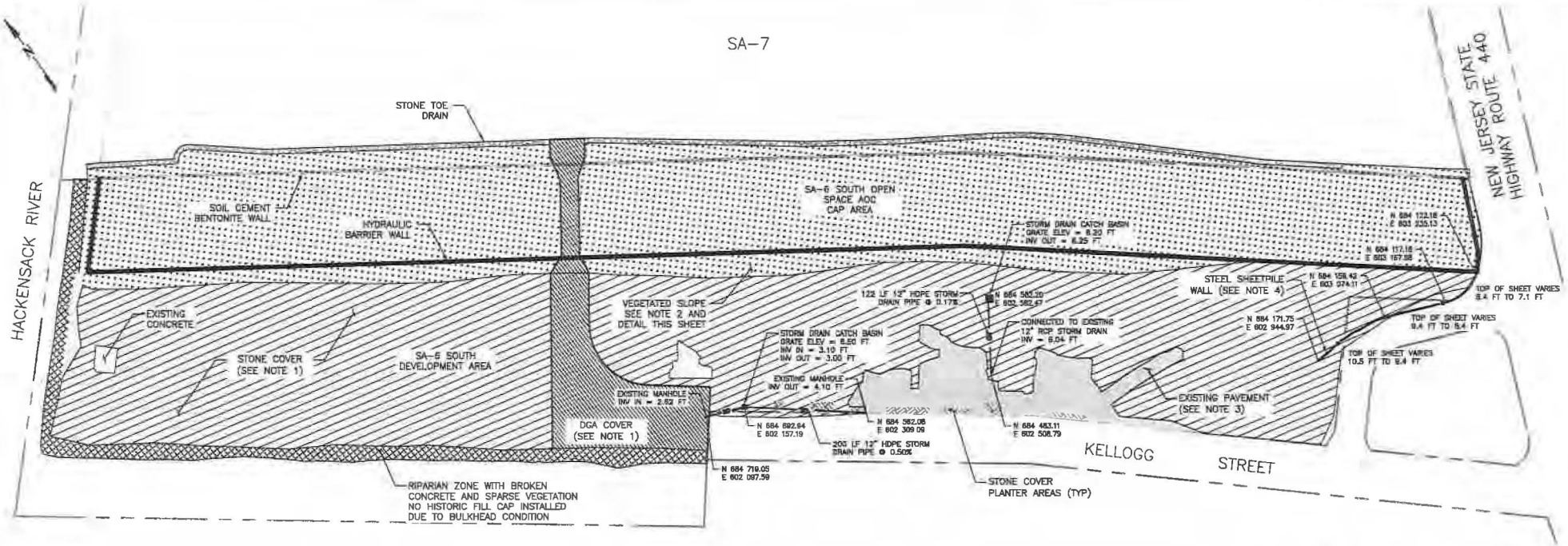
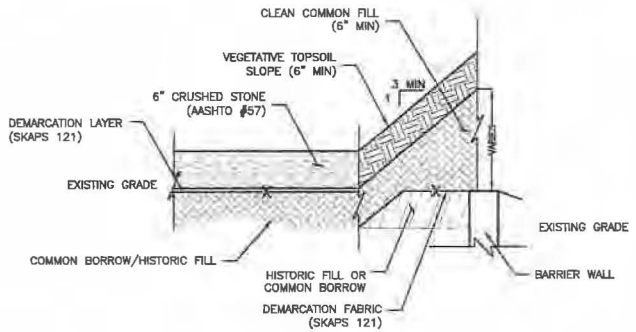
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\571004\deed notice\deed notice 2\3480150450-5100-B200-2000.dwg Tue, 14 Nov 2017 - 1:34pm scott.rudkin





NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA-7

TYPICAL VEGETATED SLOPE
NTS

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE ON THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL AS SHOWN ON THE TYPICAL VEGETATED SLOPE DETAIL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. EXISTING PAVEMENT WAS FIELD INSPECTED BY LSRP AND SUBJECT TO MINOR CRACK FILLING TO SATISFY HISTORIC FILL CAP REQUIREMENTS.
4. STEEL SHEETPILE WALL WAS INSTALLED AS EXCAVATION SUPPORT ALONG THIS AREA AND THEN CUT BELOW CURRENT GRADE AND LEFT IN PLACE. THE TOP OF SHEETPILE IS GENERALLY 0.5 TO 2.0 FT BELOW CURRENT GRADES.

EXHIBIT B-1C

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING TITLE: AS BUILT RESTORATION PLAN SA-6 SOUTH – SHEET 001 12/12/16

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION JERSEY CITY, NJ

Exhibit B-2: Table B-2
Soil Sample Data Table (Hexavalent Chromium)

EXHIBIT B-2

Restricted Area Data Table

Deed Notice #2 SA-6 South Deferred Area Adjacent to Route 440 ROW

Portion of Block 24601, Lot 8

Jersey City, New Jersey

Location	Top of Sample Depth (feet bgs)	Elevation (feet msl) NAVD88	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Soil Concentration (mg/kg)
124-SB-A04	0	8	Hexavalent Chromium	18540-29-9	20	**445J**
124-SB-A04	2	6	Hexavalent Chromium	18540-29-9	20	**81.7J**
124-SB-A04	4	4	Hexavalent Chromium	18540-29-9	20	**831J**
124-SB-A04	6	2	Hexavalent Chromium	18540-29-9	20	**8250J**

Notes:

Results reported in mg/kg.

Data Qualifiers:

J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

Abbreviations:

Feet bgs - Feet below ground surface

mg/kg - milligrams per kilogram

feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988

NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010

EXHIBIT C
Deed Notice #2 SA-6 South Deferred Area Adjacent to Route 440 ROW

C-1 Institutional Controls
C-2 Engineering Controls
Portion of Block 24601, Lot 8
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree (attached), Zoning as Institutional Controls: Exhibit C-1 (A through C) for that portion of Block 24601, Lot 8, City of Jersey City, New Jersey known as the Deferred Area

Exhibits C-1A and C-1B. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control; Exhibits C-1A and C-1B include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property is an approximately 15-foot wide, 1,315 square foot area on SA-6 South between the Route 440 Right of Way ("ROW") and the hydraulic barrier along the eastern edge of the SA-6 South Open Space AOC. Public Service Electric & Gas ("PSE&G") owns and operates a gas main on the Property, thus, excavation of chromium-impacted soil from the Property was not possible. Excavation of residual chromium contamination proximate to the gas line on the Property will be deferred by Honeywell until the gas line is relocated as part of the Route 440 Road Widening Project. Once the chromium-impacted soils on the Property are removed consistent with Article III of the Consent Decree, this deed notice will be terminated with the requirements of paragraph 13 above. The provisions of the LTMP, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes a portion of Block 24601, Lot 8. The estimated size of the Area containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) as identified on Exhibit B-1 is estimated at approximately 1315 square feet or approximately 0.03 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the

terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and the applicable portions of the LTMP developed thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the applicable zoning standards; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice*, and *the applicable zoning standards.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #2 SA-6 South Deferred Area Adjacent to Route 440 ROW

Portion of Block 24601, Lot 8
City of Jersey City, New Jersey

Exhibits C-2: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Controls consist of an asphalt cap.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above 20 mg/kg within the Property. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***

- ***A report to determine whether or not the engineering controls continue to operate as designed.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.***

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Docket No. 05-5955(DMC) Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 SOUTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey (hereafter "the Court") issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property then-owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property then-owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with

various properties collectively designated by NJDEP as Study Areas 5, 6 North, which includes the properties formerly owned by JCMUA and JCIA, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* owners of the properties comprising Study Areas 5, 6 South, and 6 North;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the Court (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, Riverkeeper has alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 South property;

Whereas, on April 21, 2008, the Court entered the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North (hereafter "the Study Area 6 North Consent Decree") resolving issues between Honeywell, Riverkeeper, and the Jersey City Entities related to chromium contamination at Study Area 6 North;

Whereas, on April 21, 2008, the district court for the District of New Jersey entered the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with the Study Area 6 North Decree, which resolved claims and cross-claims between Honeywell and the Jersey City Entities;

Whereas, on May 28, 2008, the Court entered the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, on September 3, 2008, the Court entered the Deep Overburden and Bedrock Groundwater Remedies Consent Order (hereafter "the Deep Groundwater Consent Order") resolving all issues related to the remediation of deep overburden and bedrock groundwater in both *ICO v. Honeywell* and the Consolidated Litigation;

Whereas, on May 13, 2011, Plaintiffs sent Honeywell a RCRA citizen action suit notice letter with respect to Site 163, and the Parties agree that the incorporation of Site 163 into this Consent Decree resolves any claims asserted, or that could have been asserted, in the RCRA notice letter or in any RCRA citizen suit with respect to Site 163;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 South that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq.*, as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, Study Area 6 and Study Area 7 consist of parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in

need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 South and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City; and

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Honeywell, the Riverkeeper, and Jersey City as a means to accomplish the aforesaid purposes of this settlement:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **"20 to 1000 Soils"** shall mean those soils containing less than 1000 mg/kg of hexavalent chromium, but greater than 20 mg/kg. **"20 to 240 Soils"** shall mean those soils containing less than 240 mg/kg of hexavalent chromium, but greater than 20 mg/kg.

2. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

3. **COPR** shall mean Chromite Ore Processing Residue.

4. **Chromium Remedy or Chromium Remediation** shall mean the remedy set forth in Article III.

5. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator*

Authority v. Honeywell International Inc., D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC).

6. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

7. **Deep Groundwater Consent Order** shall mean the Deep Overburden and Bedrock Groundwater Remedies Consent Order entered by the Court on September 3, 2008, in both *ICO v. Honeywell* and the Consolidated Litigation.

8. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, entered on August 15, 2008, in *ICO v. Honeywell,* and the remedies required under the Deep Groundwater Consent Order.

9. **Development Area of Concern** ("AOC") shall mean those portions of Study Area 6 South in which the hexavalent chromium concentration in the top 20 feet of soil below ground surfaces exceeds a concentration of 20 mg/kg, and for which future uses of the property may include commercial or residential development. The Open Space AOC shall not be part of the Development AOC and vice versa. The Development AOC consists of two parts: the Kellogg Street Development AOC and the Site 163 Development AOC. Collectively, the two parts shall be referred to as the "Development AOC." The approximate boundaries of the Development AOC as a whole and its two parts are shown on Exhibit A, but the boundaries may be further defined in the implementation of the Chromium Remedy. For the Kellogg Street Development AOC, remedial measures shall assume only a residential use. For the Site 163 Development AOC, remedial measures shall be implemented with the goal of unrestricted use, but limitations

on future uses (including prohibiting residential use) in some or all of the Site 163 Development AOC may be part of the remedy as set forth in paragraph 61.

10. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

11. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including 425-445 Route 440 Property LLC, Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

12. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

13. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

14. **Including** shall mean including, but not limited to.

15. **JCIA** shall mean the Jersey City Incinerator Authority.

16. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

17. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

18. **Jersey City/Honeywell Consent Order** shall mean the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. entered in the Consolidated Litigation on April 21, 2008.

19. **"L-Well Groundwater"** shall mean the groundwater found at the depth of the "L" wells on and near the former bowling alley property, NJDEP Site 124, located at 427 Route 440. The L-Well Groundwater is located within what has been referred to as the plume diversion area.

20. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

21. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit B.

22. **Open Space AOC** shall mean the portion of Study Area 6 South that is identified as The Promenade park and Grand Boulevard extending from Route 440 to the Hackensack River on page 39 of the Redevelopment Plan and for which the future uses of the property shall be restricted pursuant to paragraph 74, following remediation pursuant to paragraph 65. The Development AOC shall not be part of the Open Space AOC and vice versa. The approximate boundaries of the Open Space AOC are shown on Exhibit A, and the boundaries may be further defined in the implementation of the Chromium Remedy.

23. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

24. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.*, as amended.

25. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

26. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. § 40A:12A1, *et seq.*, as amended and supplemented.

27. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

28. **Remedial Investigation Work Plan Addendum or RIWP Addendum** shall mean the "Remedial Investigation Work Plan Addendum Study Area 6 South" submitted to NJDEP on June 27, 2008.

29. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

30. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation on May 28, 2008.

31. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

32. **Site** shall mean Study Area 6 South.

33. **Site Preparation Activities** shall mean those activities necessary to begin implementation of the Chromium Remedy in Article III of this Consent Decree, including, if appropriate, the temporary or permanent relocation of current activities and operations conducted on Study Area 6 South.

34. **Soil** shall mean soils, historic fill, and/or COPR.

35. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

36. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

37. **Study Area 5** shall mean that property comprising Sites 79, 90, 117, 153, and 184 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 42 acres and including (a) all such property owned by Bob Ciasulli consisting of Block 1291, Lot 76, and Block 1292, Lots 1F, 47, 48, 53, and 54PL, located at 540 Route 440, Jersey City, New Jersey, (b) all such property owned by Elisabeth and Rafael Rosario consisting of Block 1292, Lot 49, located at 93 Fisk Street, Jersey City, New Jersey, (c) all such property owned by Michael Vo consisting of Block 1292, Lot 50, located at 95 Fisk Street, Jersey City, New Jersey, (d) all such property owned by NJCU consisting of Block 1286, Lots 5 and 6D and Block 1286.5, Lots 1 and 2, Jersey City, New Jersey, (e) all such property owned by Inland Southeast Jersey City LLC consisting of Lot 1, Block 1285.5 located at 440 Route 440, Jersey City, New Jersey, and (f) all such property owned by 425/445 Route 440 Property LLC, consisting of Block 1289.5, Lot E, Jersey City, New Jersey.

38. **Study Area 6 North** shall mean the property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, which is subject to the Study Area 6 North Consent Decree.

39. **Study Area 6 North Consent Decree** shall mean the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North, entered by the Court on April 21, 2008, in the Consolidated Litigation.

40. **Study Area 6 South** shall mean (a) that property currently owned by Bayfront Redevelopment Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Bayfront Redevelopment LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Bayfront Redevelopment LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Bayfront Redevelopment LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Bayfront Redevelopment LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Bayfront Redevelopment LLC located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey; (h) that property currently owned by Bayfront Redevelopment LLC located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey; and (i) that property currently owned by Bayfront Redevelopment LLC, consisting of Site 163, formerly the Colonial Concrete Company, located at 75 Kellogg Street in Jersey City, Hudson County, New Jersey.

41. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

42. **Study Area 7** shall mean (a) that property currently owned by Bayfront Redevelopment LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that

property currently owned by Bayfront Redevelopment LLC located at 465 Route 440, Jersey City, Hudson County, New Jersey.

43. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

44. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

45. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

46. For purposes of this Consent Decree, the Riverkeeper Complaint in the Consolidated Litigation states claims upon which relief may be granted against Honeywell.

47. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 113, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils, shallow groundwater and L-Well groundwater at Study Area 6 South. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 5 or property owned by Regnal Realty consisting of Block 1288.2, lot 1, located at 420 Route 440, Jersey City, New Jersey.

48. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

49. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. General Terms and Requirements

50. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 South at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 South shall be undertaken in accordance with the terms of this Consent Decree.

51. **Designation of Chromium Areas of Concern.** For the purposes of remediation, Study Area 6 South shall consist of two AOC's, designated as the Open Space AOC and the Development AOC as shown approximately on Exhibit A. The exact boundaries of the two AOC's shall be subject to further delineation during the design and implementation of the Chromium Remedy.

52. **Consistency of the Chromium Remedy with NJDEP Guidance and Remedial Action Work Plan.** The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and any Remedial Action Work Plan, including any modifications or addenda approved by NJDEP. Prior to submitting any Remedial Action Work Plan, Honeywell shall take all reasonable steps to ensure that the plan is consistent with the Chromium Remedy. However, this Consent Decree shall have precedence over any Remedial Action Work Plan in the event of any inconsistency. The approved Remedial Action Work Plan is a minimum standard, and the Chromium Remedy may be more protective than the remedy NJDEP approves.

53. **General Scope of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and L-Well groundwater containing total chromium concentrations of 70 µg/l or greater and soil containing hexavalent chromium at concentrations of 20 mg/kg or greater within the top 20 feet of soil below the ground surface, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow and L-Well levels of groundwater (see paragraphs 69 - 72). The deep overburden and bedrock groundwater remediation, including source control, is addressed in the Deep Groundwater Consent Order.

54. **Development of a Schedule for the Chromium Remedy.** The Chromium Remedy shall be carried out diligently, and the development and implementation of any remedy required by NJDEP for non-chromium contamination shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Within 90 days of entry of this Consent Decree, Honeywell shall propose a Master Schedule for the implementation of the Chromium Remedy .

(a) The Master Schedule shall incorporate the following dates:

(i) No later than August 15, 2008, Honeywell shall submit a Chromium Impacted Soils Pilot Test Work Plan to NJDEP and Riverkeeper;

(ii) No later than September 15, 2008, Honeywell shall complete field work in accordance with the RIWP Addendum;

(iii)No later than December 31, 2008, Honeywell shall submit an Initial Treatment Study Report and Remedial Action Work Plan pursuant to paragraph 86(c);

(iv) No later than July 31, 2012, Honeywell shall submit the soil and groundwater data from its 2010 and 2011 supplemental investigation of Site 163, a brief summary report, and

a designation of the boundaries of the Site 163 Development AOC to the Special Master pursuant to paragraph 86(c);

(v) No later than October 1, 2012, Honeywell shall submit an addendum to the Study Area 6 South 100% Design setting forth the 100% Design for the Site 163 Development AOC portion of the Study Area 6 South Chromium Remedy; and

(vi) Honeywell shall undertake, in good faith, to begin implementation of the Chromium Remedy by March 1, 2013.

(b) In addition, the Master Schedule shall propose deadlines for the following milestones:

(i) Submission of all documents subject to submission and review pursuant to paragraph 86(c);

(ii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy;

(iii) Submission, following implementation of the soil components of the Chromium Remedy for the Development AOC, of the groundwater plans and reports required by paragraphs 70 and 72;

(iv) Completion of additional sampling for shallow groundwater delineation pursuant to paragraph 71 and a proposal for a remedy pursuant to paragraph 71, if needed;

(v) The submission of a 50% Design Report for the Chromium Remedy;

(vi) The submission of a 100% Design Report for the Chromium Remedy;

(vii) The date for completion of the installation of the Chromium Remedy;

(viii) Implementation of the long-term protections of the Open Space AOC established pursuant to paragraph 74; and

(ix) Transfer of the Open Space AOC to Jersey City pursuant to paragraph 74(a)(iii).

B. Initial Chromium Remedy Steps: Delineation, Treatment Study, and Remedial Action Work Plan

55. **Delineation of Development AOC.** Honeywell shall conduct further soil sampling on Study Area 6 South in accordance with the RIWP Addendum. In addition to the locations set forth in the RIWP Addendum, Honeywell shall conduct further soil sampling pursuant to the provisions of the RIWP Addendum at the boring locations set forth in Exhibit E. Upon completion of the soil sampling required by this paragraph, Honeywell shall submit a Second Supplemental Remedial Investigation Report that sets forth the results of the sampling and Honeywell's proposal as to the delineation of the Development AOC. In conjunction with its proposal, Honeywell shall set forth its rationale as to whether prior sampling data should be included or excluded in the proposed delineation. The soil sampling and submission of a Second Supplemental Remedial Investigation Report shall be completed in accordance with the Schedule set forth in paragraph 54. Honeywell shall submit the Second Supplemental Remedial Investigation Report pursuant to paragraph 86(c). The Site 163 Development AOC shall be exempt from the requirements of paragraphs 55-58.

56. **Conduct of a Treatment Study in the Development AOC.** Honeywell shall conduct a field study of the efficacy of *in situ* treatment of 20 to 1000 Soils in accordance with the Chromium Impacted Soil Pilot Test Work Plan. The purpose of the pilot test shall be to evaluate whether *in situ* chemical treatment of 20 to 1000 Soils with one or more reductants can result in the permanent establishment of hexavalent chromium concentrations below 20 mg/kg under conditions in those areas of the Development AOC that may be subject to treatment as a remedy. Honeywell shall provide the raw data from the pilot test to NJDEP and Riverkeeper in scientifically useable electronic form as soon as the data become available. Honeywell shall

submit an Initial Treatment Study Report setting forth the initial results of the pilot test pursuant to paragraph 86(c) .

57. **Continued Monitoring of the Treatment Study.** As the result of the need to complete Study Area 7 remediation, to maintain Study Area 7 remediation support operations currently located on Study Area 6 South, and to conduct Site Preparation activities including the relocation of operating businesses on Study Area 6 South in advance of implementation of the Chromium Remedy, the Parties do not anticipate that implementation of field work for the Chromium Remedy will begin until March 1, 2013. Honeywell shall continue to monitor the performance of the pilot test and shall submit a Final Treatment Study Monitoring Report assessing the long term effectiveness of treatment for 20 to 1000 Soils in the Development AOC pursuant to paragraph 86(c) no later than December 31, 2011.

58. **Submission of a Remedial Action Work Plan.** On or before December 31, 2008, Honeywell shall submit a Remedial Action Work Plan for the Chromium Remedy pursuant to paragraph 86(c). The Remedial Action Work Plan shall be consistent with the Chromium Remedy set forth in this Consent Decree.

C. Development AOC Soil Remedy

59. **Remedial Components.** In the Development AOC, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be remediated as follows:

(a) Soils with a concentration greater than 1000 mg/kg shall be:

(i) Excavated and disposed of off-site at a waste disposal facility licensed to accept such waste; or

(ii) Treated *ex situ* and consolidated under the cap in the Open Space AOC provided the requirements of paragraphs 60 and 63 are satisfied and provided that such soils do not

require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a).

(b) 20 to 1000 Soils shall be:

(i) Excavated and consolidated within the Open Space AOC provided that such soils do not require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a); or

(ii) Excavated and disposed of off-site pursuant to the requirements of paragraph 59(a); or

(iii) Remediated pursuant to paragraphs 59(c) or 59(d) provided that such soils are also 20 to 240 soils and meet the requirements of paragraphs 59(c) or 59(d).

(c) 20 to 240 Soils may be remediated by excavation and consolidation within the Study Area 6 North AOC 1 Open Space Area, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy.

(d) 20 to 240 Soils within the Site 163 Development AOC may be remediated by *in situ* treatment, provided the requirements of paragraph 61 are satisfied.

60. **Treatment and Consolidation of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** *Ex situ* treatment and consolidation under the Open Space AOC cap may be used as a remedial component for soils containing greater than 1000 mg/kg hexavalent chromium provided that the requirements of this paragraph are satisfied:

(a) Honeywell demonstrates in the Final Treatment Study Monitoring Report that the proposed treatment will likely result in the reduction of the hexavalent chromium concentration of the treated soils such that the post-treatment total chromium concentration shown by Toxicity

Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C);

(b) Following a review of the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d), NJDEP agrees that Honeywell has made the demonstration required by paragraph 60(a).

(c) Plaintiffs have had an opportunity to review and comment on the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d)and pursuant to the Special Master review process set forth in paragraphs 86(e)-86(f); and

(d) Following review of the demonstration required by paragraph 60(a) pursuant to the Special Master review process set forth in paragraph 86(f), the Special Master issues a recommendation finding that Honeywell has made the demonstration required by paragraph 60(a) or the Court finds that Honeywell has made the demonstration required by paragraph 60(a) in the event that any Party seeks the Court's review of the Special Master's recommendations under this paragraph.

61. **Treatment as a Remedial Component for 20 to 240 Soils.** *In situ* treatment may be used as a remedial component for the 20 to 240 Soils in the Site 163 Development ACO, provided that such soils are 3 feet or more below ground surface and the requirements of this paragraph are satisfied:

(a) If Honeywell elects to treat *in situ* 20 to 240 Soils in the Site 163 Development AOC, Honeywell shall include in the 100% Design Addendum for Site 163 a plan for such treatment. Such treatment plan shall be comparable in detail and approach to the pipeline treatability plan which is Appendix F to the Study Area 6 North 100% Design. The goal of such *in situ* treatment

shall be to reduce hexavalent chromium soil concentrations to less than 20 mg/kg in soils 20 feet or less below ground surface;

(b) Three years after conducting the treatment set forth in subparagraph (a), Honeywell shall collect additional soil samples in the treated areas to evaluate the success of the treatment. These soil samples shall be analyzed for EH, pH, hexavalent chromium (using EPA/NJDEP Methods 3060A/7199), and sulfides (using EPA Method 9030B). Within 60 days of its receipt of the final data from such sampling, Honeywell shall submit a report with such data to the Special Master pursuant to paragraph 86(c);

(c) In the event that the sampling pursuant to subparagraph (b) shows that soils with greater than 20 mg/kg hexavalent chromium remain or that excess treatment reductant remains present, Honeywell may elect to pursue one or more of the following approaches after providing notice to the Special Master, Riverkeeper and the Jersey City Entities;

(i) In the case of excess treatment reductant remaining in the soil, continue to monitor such areas pursuant to subparagraph (b) until the excess reductant is no longer present;

(ii) In the case of soils with greater than 20 mg/kg hexavalent chromium:

(1) Excavate such soils and consolidate them under the cap in the Open Space AOC, consolidate them under the cap in the Study Area 6 North AOC 1 Open Space Area, and/or dispose of them off-site provided that in each instance the applicable requirements of paragraph 59 are satisfied;

(2) Conduct further *in situ* treatment using additional treatment reductant and submit a monitoring plan pursuant to paragraph 64; or

(3) In the event that the soils are within the areas depicted as River Front Park, Riverfront Drive or Kellogg Street on page 39 of the Redevelopment Plan, cover the affected

soils with a road, walkway, and/or other hardscape and restrict the use of that area through each of the following institutional controls:

(a) Issuance and recording of a conservation restriction comparable to that required under paragraphs 74(b) and 74(d);

(b) Transfer of title to that area to Jersey City pursuant to paragraphs 74(a)(iii) through 74(a)(iv)(2); and

(c) Issuance and recording of a deed notice comparable to that required under paragraphs 74(c) and 74(d).

62. **Submissions Related to Site 163.** Pursuant to the Schedule, Honeywell shall prepare and submit the following with regard to Site 163:

(a) A summary report of all chromium soil and groundwater data collected during site investigations in 2010 and 2011; and

(b) An addendum incorporating Site 163 into the 100% Design.

63. **Post-Treatment Analysis of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** In the event that *ex situ* treatment is used as a final remedy for any portion of the soils containing greater than 1000 mg/kg pursuant to paragraph 59(a)(ii), Honeywell shall conduct post-treatment analysis of each treated batch of soil to demonstrate that the treatment has resulted in the reduction of the hexavalent chromium concentration such that the post-treatment total chromium concentration shown by Toxicity Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C). Such monitoring and demonstration shall be made prior to consolidation of the treated soils under the Open Space AOC cap pursuant to paragraph 59(a)(ii). In the event that Honeywell fails to make the demonstration required by this paragraph,

Honeywell shall dispose of the soils off-site at a waste disposal facility licensed to accept such waste.

64. **Post-Treatment Monitoring for 20 to 1000 Soils.** In the event that *in situ* treatment is used as a final remedy for any portion of the 20 to 1000 Soils, Honeywell shall conduct post-treatment monitoring to demonstrate that the treatment has resulted in permanent hexavalent chromium concentrations of less than 20 mg/kg in the treated area. Honeywell shall propose a program of post-treatment monitoring in a document that is submitted pursuant to paragraph 86(c). In the event that Honeywell fails to make the demonstration required by this paragraph, Honeywell shall propose further remedial actions pursuant to paragraph 59 in a document that is submitted pursuant to paragraph 86(c).

D. Open Space AOC Components of the Chromium Remedy

65. **Open Space AOC Soil Remedy.** In the Open Space AOC, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, pursuant to paragraph 59(b)(i), shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of a gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the Open Space AOC. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the Open Space AOC shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the

two feet of clean fill required by paragraph 65(c). Excavated 20 to 1000 Soils from the Development AOC shall be placed and spread in the Open Space AOC under the cap. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

E. Demolition, Grading, and Backfill Requirements

66. **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community from airborne dusts and exposures to contaminated soils.

67. **Backfill Requirements.** Soils excavated from the Development AOC shall be replaced with backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

68. **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

F. Groundwater Components of the Chromium Remedy

69. **Shallow Groundwater Remedy for the Open Space AOC.** The Open Space AOC shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing

above the meadow mat in the Open Space AOC to the extent that such groundwater contains total chromium in concentrations in excess of 70 µg/l. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 South and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the southern, eastern and western sides of the Open Space AOC and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that shall consist of (i) one or more shallow extraction wells, sumps, or french drains within the Open Space AOC; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater within the Open Space AOC;

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP regulations.

70. **The Shallow Groundwater Remedy for the Development AOC.** Following implementation of the Development AOC soil components of the Chromium Remedy, Honeywell shall submit a report to (a) determine whether shallow groundwater remaining in the

Development AOC exceeds 70 µg/l total chromium and, (b) if so, evaluate the need for further remedial measures to address any such shallow groundwater remaining in the Development AOC with total chromium concentrations in excess of 70 µg/l. This evaluation shall be subject to review and comment by the Parties and approval by the Special Master.

(a) In the event that the evaluation demonstrates that further remedial measures are necessary, Honeywell shall propose such measures subject to review and comment by the Parties and approval by the Special Master;

(b) The capture zone of any remedy shall include at least the entire area of contaminated shallow groundwater except for shallow groundwater that is captured and subject to the shallow groundwater remedy for the Open Space AOC pursuant to paragraph 69;

(c) In the event that a pump-and-treat system is selected as a contingency measure for shallow groundwater in the Development AOC, all infrastructure for the pump-and-treat contingency system that is needed to ensure that the contingency system is fully operational, as required by paragraph 70(d), shall be installed prior to or in conjunction to any development of the Site. This includes at least one shallow extraction well, sump, or french drain, and the piping to convey any extracted groundwater to Honeywell's water treatment plant;

(d) If it is determined that the pump-and-treat contingency system must be activated, the pump-and-treat system shall be operational no later than six months after the date of the determination.

71. **Off-Site Shallow Groundwater Remedy.** Honeywell shall propose additional sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site. Honeywell shall submit a report of the results of such sampling and, in the event that contaminated shallow groundwater is found to extend off-site, a proposal for a remedy based on

such results. The report and the proposal for a remedy shall be subject to review and comment by the Parties and approval by the Special Master.

72. **L-Well Groundwater Remedy.** At the time this Decree is entered, the L-Well Groundwater is contained and not contributing to further contamination of surrounding waters and/or soils. However, in order to verify that this status continues following implementation of the Chromium Remedy, including any groundwater remedial measures pursuant to paragraphs 70 and 71, Honeywell shall propose a plan for one round of monitoring designed to evaluate whether the L-Well Groundwater remains contained. The plan shall include monitoring for total and hexavalent chromium and major ion chemistry to determine whether there has been movement in the L-Well Groundwater.

(a) In the event that no substantial change is detected in the major ion chemistry, no further action is required unless paragraph 72(c) is applicable.

(b) In the event that substantial changes are detected in the major ion chemistry, Honeywell shall propose a plan for further monitoring of the L-Well Groundwater. Such a plan shall be subject to review and comment by the Parties and approval by the Special Master.

(c) In the event that the initial monitoring or monitoring conducted pursuant to paragraph 72(b) demonstrates that proximate waters have total chromium concentrations in excess of 70 µg/l, regardless of whether there is a change in the major ion chemistry, Honeywell shall propose a remediation plan for the L-Well Groundwater. Such remediation plan shall be subject to review and comment by the Parties and approval by the Special Master.

G. Permits and Authorizations

73. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article.

H. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

74. **Protection of the Open Space AOC.** Except as provided in paragraphs 74(j) and 74(k), development in the Open Space AOC shall be prohibited. The Open Space AOC shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the Open Space AOC pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54:

(a) **Ownership of and Access to the Open Space AOC.** Ownership of and access to the Open Space AOC shall be in accordance with the following:

(i) Bayfront Redevelopment LLC, as the current owner in fee simple absolute of all property that comprises the Open Space AOC, shall not convey any rights or interests in any parcel that comprises the Open Space AOC property except as provided in this Decree. Within 90 days of entry of this decree, Bayfront Redevelopment LLC shall give Jersey City an option to buy all of the Open Space AOC property prior to the planned transfer pursuant to paragraph 74(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall exercise the option to buy the Open Space AOC in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 98(c) or 98(d) are met;

(ii) Within 90 days of the entry of this Consent Decree, Bayfront Redevelopment LLC shall grant a conservation restriction for the Open Space AOC pursuant to the requirements of paragraph 74(b);

(iii) Upon the final construction of all roads and utility corridors within the Open Space AOC, Bayfront Development LLC shall donate good and marketable title to all the land comprising the Open Space AOC to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 South to create a new parcel(s) comprising the Open Space AOC. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the Open Space AOC by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the Open Space AOC unless and until it shall have complied with the requirements of paragraph 74(a)(iv);

(iv)After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the Open Space AOC to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the Open Space AOC to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the Open Space AOC and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the Open Space AOC pursuant to this paragraph

and routine maintenance of the permissible development in the Open Space AOC pursuant to paragraph 78(d); or

(2) The Open Space AOC has been remediated such that no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** Prior to the grant of the option to buy pursuant to paragraph 74(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the Open Space AOC substantially in the form set forth in Exhibit C. Exhibit C is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 74(j) and 74(k), including the construction and placement of roads and utilities. The Conservation Restriction shall also allow for current uses of the Open Space AOC to continue until such time as construction of the Chromium Remedy begins. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the Open Space AOC as set forth in paragraphs 74(j) and 74(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph 74(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the Open Space AOC shall be subjected to the deed notice substantially in the form set forth in Exhibit D that restricts

future activities on the Open Space AOC. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the Open Space AOC pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 74(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 74(b), and the deed notice imposed pursuant to paragraph 74(c) shall be recorded, pursuant to N.J.S.A. §§ 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the Open Space AOC. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the Open Space AOC in the real estate records related to the Open Space AOC.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the Open Space AOC is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 74(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the Open Space AOC, Jersey City shall add those portions of the Open Space AOC not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. § 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor,

maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 74(j) and 74(k); and (iv) the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the Open Space AOC have been added to its ROSI, such that those portions of the Open Space AOC shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the Open Space AOC is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 74(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the Open Space AOC subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the Open Space AOC under the statute. If the Parties are unable to reach agreement on establishment of an environmental covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the Open Space AOC without

unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the Open Space AOC. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the Open Space AOC if they would provide substantial additional protection for the Open Space AOC without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in Open Space AOC.** Only development satisfying the requirements of this paragraph and paragraph 74(k) shall be permitted in the Open Space AOC. All other development in the Open Space AOC shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the Open Space AOC regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 74(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the Open Space AOC shall be the development undertaken following the completion of the Chromium Remedy in the Open Space AOC. The Initial Development may occur in one or more phases. Honeywell and Bayfront

Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 74(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the Open Space AOC shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 74(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the Open Space AOC, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 74(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 74(b), and the Redevelopment Plan; however, in the

event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the Open Space AOC, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 74(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 86(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 86(e) and 86(f) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the Open Space AOC shall require the preparation and submission of a Development Plan pursuant to

paragraph 74(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 74(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and Jersey City. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and Jersey City for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 74(j)(v) and 74(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 74(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 74(j)(v); or

(3) The development meets the requirements of paragraphs 74(j)(v) and 74(j)(xi), and Jersey City provides notice of its intention to alter or add to the development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 74(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 74(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holder(s) of the conservation restriction established pursuant to paragraph 74(b) with an annual report that describes any alterations or additions, including those activities under paragraph 74(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the Open Space AOC.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 74(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the Open Space AOC, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii)Sidewalks, paths, walkways, and nature trails;

(iv)Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi)Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 74(l);

(ix)Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 74(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the Open Space AOC of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

75. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

76. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 65, 69, 68, 69, 72, and 77. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

77. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the Open Space AOC.

78. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 77. Honeywell shall provide Riverkeeper, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the Open Space AOC to ensure that it is not being put to any use that is inconsistent with paragraphs 74(j) and 74(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 74 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the Open Space AOC is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the Open Space AOC grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii) Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the Open Space AOC such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv) A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the Open Space AOC has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 65(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and

the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the Open Space AOC to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii)Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 69(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the Open Space AOC.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed

subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by the Court.

(c) **Contingency Plan**. As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance**. The title owner of the Open Space AOC shall conduct maintenance of the Open Space AOC features or facilities that are permissible under paragraphs 74(j) and 74(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the Open Space AOC or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of Open Space AOC shall annually provide to the other Parties and

the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the Open Space AOC shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the Open Space AOC identified by its workers during routine maintenance.

(e) **Recordkeeping**. Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring Plan. Such logs shall be provided to Riverkeeper on a quarterly basis.

79. **Monitoring and Reporting to Riverkeeper.** Riverkeeper shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 86(c).

80. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the Open Space AOC; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 78 and annual reports on changes to the Initial Development as required by paragraph 74(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The public provision of the maps and documents referred to in paragraph 80(b)(ii) via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

81. **Annual Letter to Riverkeeper on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 80, Honeywell shall provide a letter to the Riverkeeper documenting its compliance with paragraph 80.

82. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

83. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

I. Oversight and Enforcement by the Special Master and NJDEP

84. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.I.

85. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the Open Space AOC. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of any non-chromium related remedy, any site preparation activities, and any site redevelopment activities do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

86. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority**. Nothing in or pursuant to this Consent Decree shall limit NJDEP's full statutory and regulatory authority with respect to the Study Area 6 South site, including (i) permitting authority; (ii) authority to review and approve the Treatment Study reports, the Remedial Action Work Plan, the 100% Design, and final Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities**. The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting bi-monthly progress reports to the Court pursuant to the schedule for the submission of such reports established in *ICO v. Honeywell*;

(vi) Overseeing the financial assurances established pursuant to paragraphs 91 through 100, and, until the expiration of his term pursuant to paragraph 90, overseeing the financial assurances established pursuant to paragraphs 101 through 112;

(vii) Coordinating review of the documents as provided in paragraphs 86(c) through 86(g);

(viii) Overseeing all development undertaken in the Open Space AOC during the Initial Development Period pursuant to paragraph 74(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell.** Honeywell shall submit the following documents to Riverkeeper, Jersey City, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule") consistent with paragraph 54 above;

(ii) A Second Supplemental Remedial Investigation Report reporting the results of the field work conducted pursuant to paragraph 55;

(iii)A Chromium Impacted Soils Pilot Test Work Plan and Analytical Protocol for conduct of the treatment study pursuant to paragraph 56, unless such documents are agreed to by NJDEP and Riverkeeper before the entry of this Consent Decree;

(iv)An Initial Treatment Study Report for the Development AOC;

(v) A Final Treatment Study Monitoring Report;

(vi) The documents for Site 163 submitted pursuant to paragraphs 54(a)(iv), 54(a)(v), 61, and 62;

(vii) A report to evaluate the need for remediation of any potentially remaining contaminated shallow groundwater in the Development AOC after implementation of the Development AOC Soils Remedy and, based on such an evaluation, a proposal;

(viii) A report of the results of the sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site pursuant to paragraph 71 and, based on the results, a proposal for a remedy;

(ix)A plan for one round of monitoring to evaluate whether the L-Well Groundwater remains contained pursuant to paragraph 72;

(x) A proposal for a remedy of the L-Well Groundwater, in the event L-Well Groundwater monitoring indicates the contaminated groundwater is no longer contained, pursuant to paragraph 72;

(xi) A Remedial Action Work Plan;

(xii) A 50% Design Report (which may include the Development AOC Conceptual Design Plan as a component) as well as design drawings and specifications at the 50% level for other components of the Chromium Remedy (hereinafter the 50% Design);

(xiii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(xiv) The data validation plan, including quality control and quality assurance protocols;

(xv) The site-wide master health and safety plan;

(xvi) The Long-Term Monitoring Plan;

(xvii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(xviii) A program for post-treatment monitoring pursuant to paragraph 63, and, depending on such results, a proposal for further remedial actions;

(xix) A report reviewing measured groundwater levels for the groundwater remedy;

(xx) Documents required during the Initial Development Period pursuant to paragraphs 74(j)(vi), 74(j)(vii), and 74(j)(viii); and

(xxi) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Initial Review of Documents by NJDEP.** The Parties and Special Master shall allow the period of time set forth below for NJDEP to conduct its review of a submission (hereinafter "NJDEP Review Period") before the document is subject to the Special Master review and approval process. During the NJDEP Review Period, any Party may submit comments to NJDEP. For the Second Supplemental Remedial Investigation Report, the Remedial Action Work Plan, the Initial Treatment Study, and the Final Treatment Study Monitoring Report, the NJDEP Review Period shall be 90 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. For any other documents identified in paragraph 86(c), the NJDEP Review Period shall be 30 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. The NJDEP review period shall be extended an additional 30 days for any document for which NJDEP provides the Parties and the Special Master with notice that its review will require an additional 30 days. At the conclusion of the NJDEP Review Period, the comment and review process provided for in paragraphs 86(e) and 86(f) shall commence. In the event that any document has been revised during the NJDEP Review Period, Honeywell shall resubmit the applicable document for purposes of the comment and review provided for in paragraphs 86(e) and 86(f).

(e) **Comment on Submitted Documents.** For each of the documents submitted by Honeywell pursuant to paragraph 86(c), and following conclusion of the NJDEP Review Period as described in paragraph 86(d), the Special Master shall establish a schedule for the submission

of comments and responses to comments. For each of the documents submitted, Riverkeeper, Jersey City, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all comments received and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, Jersey City, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 86(f), unless the Parties agree both on the revised document and that further review and approval pursuant to paragraph 86(f) is unnecessary. In that event, the Parties shall inform the Special Master that review under paragraph 82(f) is unnecessary and Honeywell shall proceed to implement the revised document.

(f) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review**. Subject to the limitations in paragraph 82(e), all documents submitted by Honeywell, pursuant to paragraph 86(c) and 86(e), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 86(g). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure**. Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within

the timeframe established by the Special Master in the schedule for comments pursuant to paragraph 86(e). NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review**. If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(g) **Schedule and 100% Design Documents**. As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(h) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The

Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(i) **Changes to the Schedule.** The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54; and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

87. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 89.

88. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Sediment Consent Order. The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

89. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

90. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 74(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 74(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, the Study Area 6 North Consent Decree, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities

shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

J. Initial Financial Assurances

91. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy calculated using factors, including inflation and discount rates, determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process;

(ii) The costs of monitoring and maintenance activities for five years, as required by the Long-Term Monitoring Plan, calculated using factors including inflation and discount rates determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 91(a)(i) and 91(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

92. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than December 31, 2008, Honeywell shall submit to Riverkeeper and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If Riverkeeper does not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

93. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 94, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.J, the Special Master shall direct the cancellation of the prior Chromium Remedy

Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

94. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 91(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.K. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and

in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such terms. If Honeywell is not otherwise in default as provided in Article III.J and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

95. **Bankruptcy Protection**. Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

96. **Exclusive Court Jurisdiction**. The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

97. **Application of New York Law.** The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Chromium Remedy Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

98. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 85, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 93 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from

drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 98(c), and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

99. **Placement of Proceeds in Court Registry Investment System Account**. In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The

Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 103(b)(v).

100. **Termination of Chromium Remedy Letter of Credit.** The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.K.

K. Long-Term Financial Assurances

101. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 102(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

102. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater remedies pursuant to paragraphs 69, 70, and 71;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) The perpetual administration of the trust fund regardless of whether such trust fund is selected by Honeywell pursuant to paragraph 103(a) or is established from the Long-Term Letter of Credit pursuant to paragraphs 103(b)(ii), 103(b)(v), or 109.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 102(a)(i) through 102(a)(v) plus a 25% contingency when the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of the estimated future costs of the activities specified in paragraphs 102(a)(i) through 102(a)(v), plus a 25% contingency on those costs.

103. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution managing the

trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 102(a)(i) through 102(a)(iv).

(b) **Long-Term Letter of Credit**. In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 103(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 106.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of

Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(iii) The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits) as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Long-Term Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 98. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a). After the Special Master's appointment expires pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 103(b)(ii), 103(b)(v), or 109 and Honeywell has also selected a trust fund pursuant to paragraph 103(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(c) **Combination**. Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 103(a) and 103(b).

104. **Procedures for Review of the Proposed Long-Term Financial Assurances**. No later than June 1, 2009, Honeywell shall submit to Riverkeeper and the Special Master, for their review (a) the amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper agrees to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances.

105. **Temporary Maintenance of Chromium Remedy Letter of Credit**. Until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 91 in an amount equal to at least $20,000,000 in 2008 dollars. In the event of any default by Honeywell pursuant to paragraph 98 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 103(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under

paragraph 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), shall apply.

106. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 103, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to

long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 103(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 103(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 103(b).

107. **Exclusive Court Jurisdiction**. The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 103(a), 103(b)(ii), 103(b)(v), or 109.

108. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 103(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 108(c), if Honeywell fails to provide assurance to Riverkeeper, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

109. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or pursuant to paragraph 108 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be

paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

110. **Use of the Trust Fund in the Event of Honeywell's Default.** In the event of Honeywell's default, as defined in paragraphs 108(a) through 108(d), the money in the trust fund established pursuant to paragraph 103(a) shall be available to meet the obligations of paragraph 102(a), as well as for payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

111. **Use of a Trust Fund Established Pursuant to Paragraph 99, 103(b)(ii), 103(b)(v), or 109.** In the event that a trust fund is established pursuant to paragraph 99, 103(b)(ii), 103(b)(v), or 109, the money in the trust fund shall be available to meet the obligations of paragraph 102(a), as well as for the payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

112. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations under Article III.K shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the Open Space AOC or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive

standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: TERMINATION

113. **Termination of this Consent Decree**. This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 118:

(a) The Court fails to enter this Consent Decree or this Consent Decree is determined to be invalid on appeal; or

(b) NJDEP takes one of the following actions with respect to the Remedial Action Work Plan:

(i) Rejects or fails to approve the Remedial Action Work Plan for the Chromium Remedy within 180 days of submission of the plan;

(ii) Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in more than a 50% increase in the estimated costs of the Chromium Remedy as set forth in Article III; or

(iii) Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in a substantial reduction of the protection of human health and/or the environment.

114. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 113 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 113 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

115. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 113.

116. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 113, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 113, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: TRANSFER OF TITLE TO BAYFRONT REDEVELOPMENT LLC

117. **Transfer of Title of Study Areas 6 South and 7 to and from Bayfront Redevelopment LLC.** The transfer of title of Study Area 6 South and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of

Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 South and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 South or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 South and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 South under this Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell*.

ARTICLE VI: NOTICE

118. **Notice**. Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE VII: RIVERKEEPER'S ATTORNEYS' FEES

119. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $813,000.00 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 South portion of *Riverkeeper v. Honeywell* through August 31, 2008; and

(b) $353,746.67 in out-of-pocket expenses representing a portion of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses paid pursuant to the Sediment Consent Order, the Deep Groundwater Consent Order, and the Study Area 6 North Consent Decree.

(c) Payment of the sum of $813,000.00 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $879,317.92 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

120. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after August 31, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell*. In the event that Riverkeeper and Honeywell are unable to reach a settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to

Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order. In the event of Honeywell's default, Riverkeeper may seek attorneys' fees from any trust fund or court registry funds established pursuant to the financial assurances provisions of this Consent Decree.

ARTICLE VIII: MISCELLANEOUS PROVISIONS

121. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

122. **Bayfront Redevelopment LLC as a Party.** As a signatory to this Consent Decree, Bayfront Redevelopment LLC subjects itself to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agrees to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against Bayfront Redevelopment LLC.

123. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

124. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

125. **Reservation of Rights and Claims.** Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

126. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

127. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

128. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

129. **Measures to Effectuate This Consent Decree.** Jersey City shall take all appropriate steps to ensure that commitments it has agreed to with regard to the Open Space AOC have been duly considered, ratified, and approved. Such steps include consideration of such commitments and an effectuating ordinance at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the commitments made by Jersey City..

130. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

131. **Severability.** Each of the provisions in paragraph 74 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

132. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Remedial AOC's and Remedial Approach Map

Exhibit B: NJDEP Chromium Policy

Exhibit C: Conservation Restriction

Exhibit D: Deed Notice

Exhibit E: Additional Boring Locations

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NUMBER OF PAGES : 123
LHIGHSMITH

Deed Notice

Dated: _____, *2017*

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: Perry Florio, Esq

DEED NOTICE #3
SA-6 SOUTH SITE 163

Hudson County Recording Data Page **Honorable Diane Coleman** **Hudson County Register**	*Official Use Only – Barcode*
Official Use Only – Record & Return	*Official Use Only – Realty Transfer Fee*
Date of Document: November 16, 2017	Type of Document: Deed Notice
First Party Name: Bayfront Redevelopment, LLC	Second Party Name:
Additional Parties:	

20171130010138890 1/128
11/30/2017 09:55:01 AM DEED
Bk: 9259 Pg: 1
Diane Coleman
Hudson County, Register of Deeds
Receipt No 1307816

$13/3128 pg PSY

THE FOLLOWING SECTION IS REQUIRED FOR DEEDS ONLY	
Block:	Lot:
Municipality:	
Consideration:	
Mailing Address of Grantee:	

THE FOLLOWING SECTION IS FOR ORIGINAL MORTGAGE BOOKING & PAGING INFORMATION FOR ASSIGNMENTS, RELEASES, SATISFACTIONS, DISCHARGES & OTHER ORIGINAL MORTGAGE AGREEMENTS ONLY	
Original Book:	Original Page:

HUDSON COUNTY RECORDING DATA PAGE
Please do not detach this page from the original document as it contains important recording information and is part of the permanent record.

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature] William J. Hague, Global Director-Remediation Design & Construction
[Bayfront Redevelopment LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

DEED NOTICE CONCERNING CONTROLS INSTALLED FOR CHROMIUM AND HISTORIC FILL CONTAMINATION UNDERLYING THE PROPERTY

This Deed Notice is made as of the 16th day of November, 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950***. "Owner" shall mean Bayfront Redevelopment LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The Property (also referred to herein as the "Restricted Area(s)") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached.

1. THE PROPERTY. Bayfront Redevelopment LLC is the current owner in fee simple of certain real property designated as a portion of ***Block 24601, Lot 11 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]; the New Jersey Department of Environmental Protection Program Interest Number for the contaminated site which includes this property is ***Hudson County Chromate Site No. 163 (a.k.a. Posnak & Turkish) Program Interest ("PI") #010374*** [NJDEP PI# for non-chromium-related contaminants at the Property is #745719], and known as the Site 163

[1] All references to Block 24601 Lot 11 in this Deed Notice shall mean the applicable portions of Block 24601 Lot 11 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

Development Area of Concern ("AOC") pursuant to the First Amended Consent Decree Regarding the Remediation and Redevelopment of Study Area 6 South ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.,* D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The Property is part of Study Area 6 South ("SA-6 South"), a group of sites containing chromium contamination being addressed by Honeywell International Inc. ("Honeywell") as described in Paragraph 3. The Property is located along Droyers Cove as shown in Exhibit B-1 attached hereto.

This deed notice applies only to a portion of the Site 163 Development AOC which will become the Future Kellogg Street/Riverside Drive/Riverwalk during site redevelopment. The Consent Decree restricts transfer, use and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management (BCM) is the entity within the Department that is responsible for the chromium oversight of the remediation of the SA-6 South. The matter was Hudson County Chromate Site No. 163 PI No. 010374. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 South to address chromium-related and non-chromium soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") for chromium remedial actions was approved by the Department on June 22, 2012 for Hudson County Chromate Site No. 163, which includes remedial actions for chromium at the Property. The RAWP for non-chromium remedial actions pertaining to Site 163 was submitted to the Licensed Site Remediation Professional on March 21, 2011. Remedial actions were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP, soil contamination remains at the Site 163 Property which contains contaminants at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") was submitted to the Department on February 8, 2017. The Department approved the RAR on March 30, 2017. A Construction Completion Report ("CCR") for SA-6 South to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil

and groundwater for SA-6 South was entered by the Court on November 20, 2017, Docket Nos 1520 to 1525.

The Property is a portion of Site 163 at SA-6 South where remaining chromium-impacted soils were identified in the area south of the northern curbline of the future River Front Park/Riverside Drive/Kellogg Street. This deed notice area includes chromium and historic fill. The engineering control barrier on the Property includes clean fill material to a depth of approximately 4-feet below ground surface. During redevelopment of the Property additional engineering control barriers in the form of a roadway, walkway, and/or other hardscape will be constructed on the Property as required by paragraph 61(c)(ii)(3) of the Consent Decree. Honeywell will, or cause Bayfront Redevelopment LLC to, restrict the future use of this area by implementing a conservation restriction, which will be been recorded at the Hudson County Register of Deeds, and transfer, or cause Bayfront Redevelopment LLC to transfer, title to the City of Jersey City (as called for in Paragraph 61(c)(ii)(3) of the Consent Decree). The provisions of the Long Term Monitoring Plan ("LTMP"), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater contaminant concentrations and restrictions for SA-6 South in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater (recent groundwater samples for the Property do not indicate shallow groundwater contamination). As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil remediation for the Property in perpetuity.

4. CONSIDERATION. In accordance with the Department's approval of the chromium and non-chromium RAWPs for the remediation for the Hudson County Chromate Site No. 163 which includes the Property, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of contamination remaining at concentrations that do not allow for unrestricted use, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained either on on-site trailers or within the Groundwater Treatment Plant building, available for inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single family residence or a child care facility without the Department's prior written approval;

iii. The Consent Decree, paragraph 61(c), restricts the ownership, use, and development of the Property; and

iv. The Conservation Restriction, to be recorded with the Hudson County Register of Deeds, will restrict the use and development of the Property.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls on the Property. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, the LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has developed an LTMP which sets forth requirements for monitoring, maintaining, and repairing or and replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5E. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall

be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Restricted Areas, of the nature and location of known contamination in the Restricted Areas, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and Conservation Restriction, and (b) without first obtaining a Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(b), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of

contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree, and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the

environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C here, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer,

in whole or in part, of the owner's interest in the Property . Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 80 and 83 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice

would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. After development of the Property, this Deed Notice shall be modified to show further engineering controls and topographical features constructed on the Property, such as roads, walkways or other hardscape.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Restricted Area Data Tables - A separate table for each restricted area that includes either (A) or (B) through (F):

(A) Only for historic fill extending over the entire site or a portion of the site and for which analytical data are limited or do not exist, a narrative that states that historic fill is present at the site, a description of the fill material (e.g., ash, cinders, brick, dredge material), and a statement that such material may include, but is not limited to, contaminants such as PAHs and metals;

(B) Sample location designation from Restricted Area map (Exhibit B-1);

(C) Sample elevation based upon mean sea level;

(D) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(E) The restricted and unrestricted use standards for each contaminant in the table; and

(F) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C. Exhibit C-1A: Institutional Controls; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; Exhibit C-1D: Conservation Restriction as Institutional Control (recorded at Hudson County Register of Deeds as indicated in Paragraph 3): Exhibit C-1 (A through D) includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:

(1) Description and estimated size of the Restricted Areas as described above;

(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and

(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;

(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and

(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2. Exhibit C-2: Engineering Controls: Clean Fill Cover; Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:

(1) Description of the engineering control;

(2) The objective of the engineering control; and

(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;

(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering control continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Stephanie Frank
Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 28, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 28th day of November, 2017.

_____
Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #3 Site 163

A-1 Vicinity Map

A-2 Metes and Bounds Description and Tax Map

A-3 Property Map Portion of Block 24601, Lot 11, City of Jersey City, New Jersey

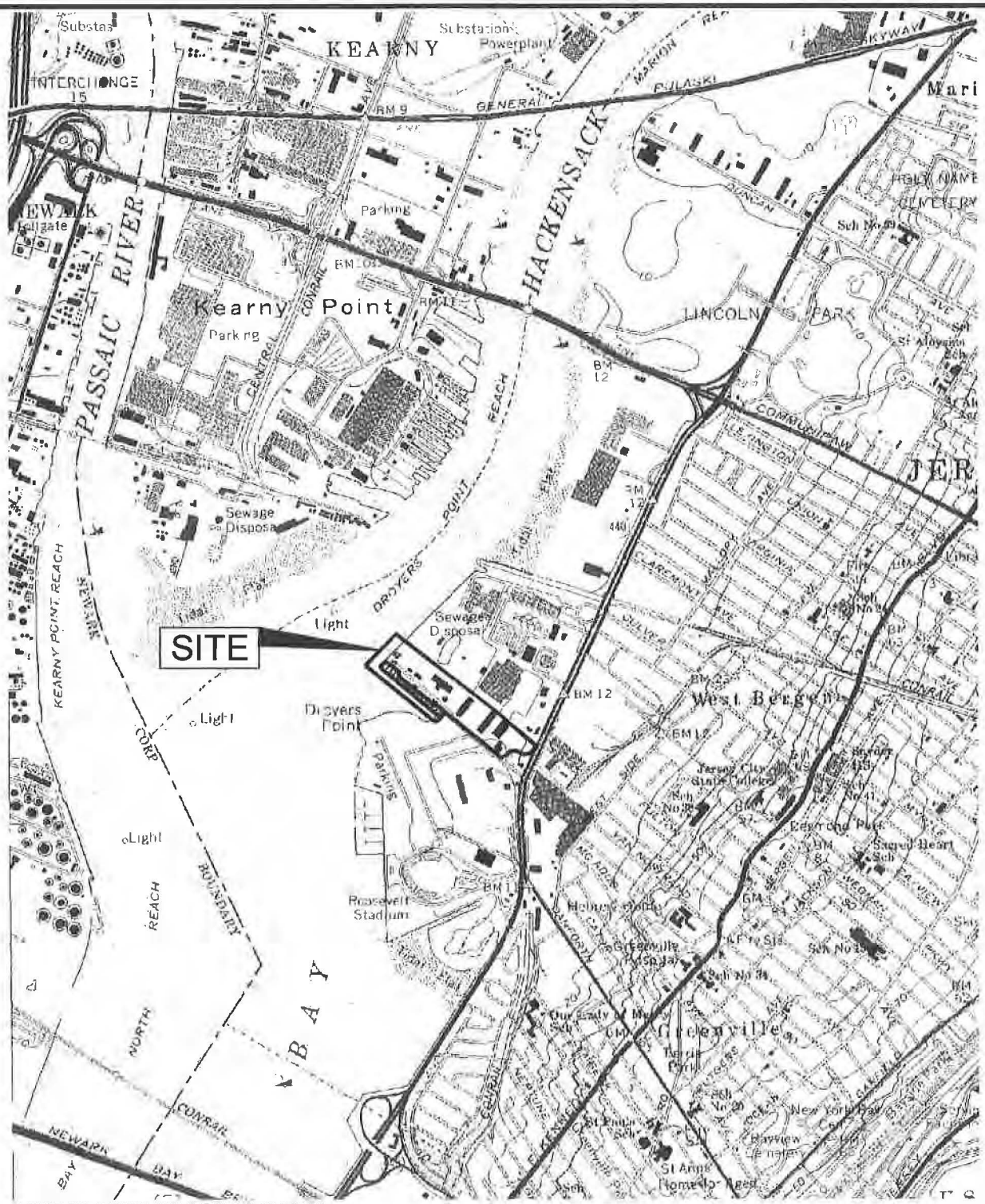
Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of a metes and bounds and a tax map for the Property.

Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering control for the Property. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 6 SOUTH SITE 163
JERSEY CITY, NEW JERSEY



SOURCE: USGS QUADRANGLE MAP, 7 5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150450-5100-A100-3000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-1** VICINITY MAP BLOCK 24601, LOT 11 DEED NOTICE #3 SA-6 SOUTH SITE 163 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16 *CHECKED/DATE:* NW 01/31/17		

Exhibit A-2
Deed Notice #3 Site 163
Metes and Bounds Description of Property: See Attached
Tax Map: See Attached

A-2 Metes and Bounds Description of Property Portion of Block 24601, Lot 11
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map, or any other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as a portion of Block 24601, Lot 11 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment LLC. A copy of the current tax map which includes the Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners • Surveyors • Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 • Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

DEED NOTICE AREA 3
BLOCK 24601 LOT 11
PROJECT NO. 10000292R
APRIL 12, 2016
REVISED SEPTEMBER 11, 2017

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 11 Block 24601, designated as Deed Notice Area 3 as shown on an exhibit entitled, "Deed Notice Area 3, SA6 South, Block 24601 Lot 11, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated April 6, 2016, revised September 11, 2017 and being more particularly bounded and described as follows, to wit:

COMMENCING at the intersection of the division line between Lots 5 and 11, Block 24601, with the northwesterly terminus of Kellogg Street (80 foot wide right of way); thence-

A. **S40°39'55" W, 3.74 feet**, along said northwesterly terminus to the **True** point of **BEGINNING**, and running; thence-

1. **S40° 39' 55"W, 80.21 feet,** along the same; thence-

Running through Lot 11 the following three (3) courses:

2. **N51°13'02" W, 1,061.96 feet,** to a point of curvature; thence-

3. **NORTHWESTWARDLY**, on an arc to the right having a radius of **26.00 feet,** and arc length of **43.82 feet** (central angle of **96°33'55"**), said arc being connected by a chord bearing **N 02° 56'04" W,** a chord distance of **38.81 feet**, to a point of tangency; thence-

4. **N45°20'54" E, 82.45 feet,** to the division line between Lots 11 and 1; thence-

5. **S51° 06' 45"E, 184.04 feet,** along said division line to a point of non-tangent curvature; thence -

Running through said Lot 11 the following twenty-three (23) courses:

6. **SOUTHEASTWARDLY**, on an arc to the left having a radius of **273.50 feet,** and arc length of **42.65 feet** (central angle of **08°56'07"**), said arc being connected by a chord bearing **S 03° 18'43" E,** a chord distance of **42.61 feet,** to a point of non-tangency; thence –

7. **S50° 24' 32"W, 42.19 feet,** thence -

8. **S18° 06' 16"W, 7.09 feet,** to a point of non-tangent curvature; thence -

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

DEED NOTICE AREA 3
BLOCK 24601 LOT 11
PROJECT NO. 10000292R
APRIL 12, 2016
REVISED SEPTEMBER 11, 2017

9. **SOUTHEASTWARDLY**, on an arc to the left having a radius of **250.97 feet,** and arc length of **16.39 feet** (central angle of **03°44'31"**), said arc being connected by a chord bearing **S 18° 13'05" E,** a chord distance of **16.39 feet,** to a point of non-tangency; thence –

10. **S50° 24' 32"E, 244.78 feet,** thence –

11. **N39° 35' 28"E, 19.37 feet**; thence-

12. **S52° 20' 21"E, 20.65 feet,** thence -

13. **S36° 31' 45"W, 10.78 feet,** to a point of non-tangent curvature; thence -

14. **SOUTHWESTWARDLY**, on an arc to the left having a radius of **19.33 feet,** and arc length of **9.87 feet** (central angle of **29°14'30"**), said arc being connected by a chord bearing **S 21° 54'30" W,** a chord distance of **9.76 feet**, to a point of non-tangency; thence-

15. **S50° 24' 32"E, 130.38 feet,** thence –

16. **S53° 28' 08"E, 14.33 feet,** thence –

17. **S87° 26' 31"E, 12.53 feet**; thence –

18. **S53° 28' 08"E, 89.62 feet**; thence-

19. **S18° 28' 37"E, 12.21 feet**; thence –

20. **S53° 27' 19"E, 50.67 feet,** to a point of non-tangent curvature; thence –

21. **NORTHEASTWARDLY**, on an arc to the left having a radius of **19.33 feet,** and arc length of **10.91 feet** (central angle of **32°20'50"**), said arc being connected by a chord bearing **N 52° 42'11" E,** a chord distance of **10.77 feet**, to a point of non-tangency; thence -

22. **N36° 31' 45"E, 9.88 feet**; thence –

23. **S51° 06' 45"E, 25.36 feet**; thence –

24. **S36° 31' 45"W, 8.86 feet**, to a point of non-tangent curvature; thence –

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

DEED NOTICE AREA 3
BLOCK 24601 LOT 11
PROJECT NO. 10000292R
APRIL 12, 2016
REVISED SEPTEMBER 11, 2017

25. **SOUTHWESTWARDLY**, on an arc to the left having a radius of **19.33 feet,** and arc length of **10.90 feet** (central angle of **32°18'35"**), said arc being connected by a chord bearing **S 20° 22'28" W,** a chord distance of **10.76 feet**, to a point of non-tangency; thence –

26. **S53° 27' 19"E, 34.71 feet**; thence –

27. **S88° 21' 24"E, 12.23 feet**; thence –

28. **S53° 26' 10"E, 160.18 feet**, to the point and place of **BEGINNING**.

CONTAINING: 81,406 S.F. of land more or less or 1.869 acres of land more or less.

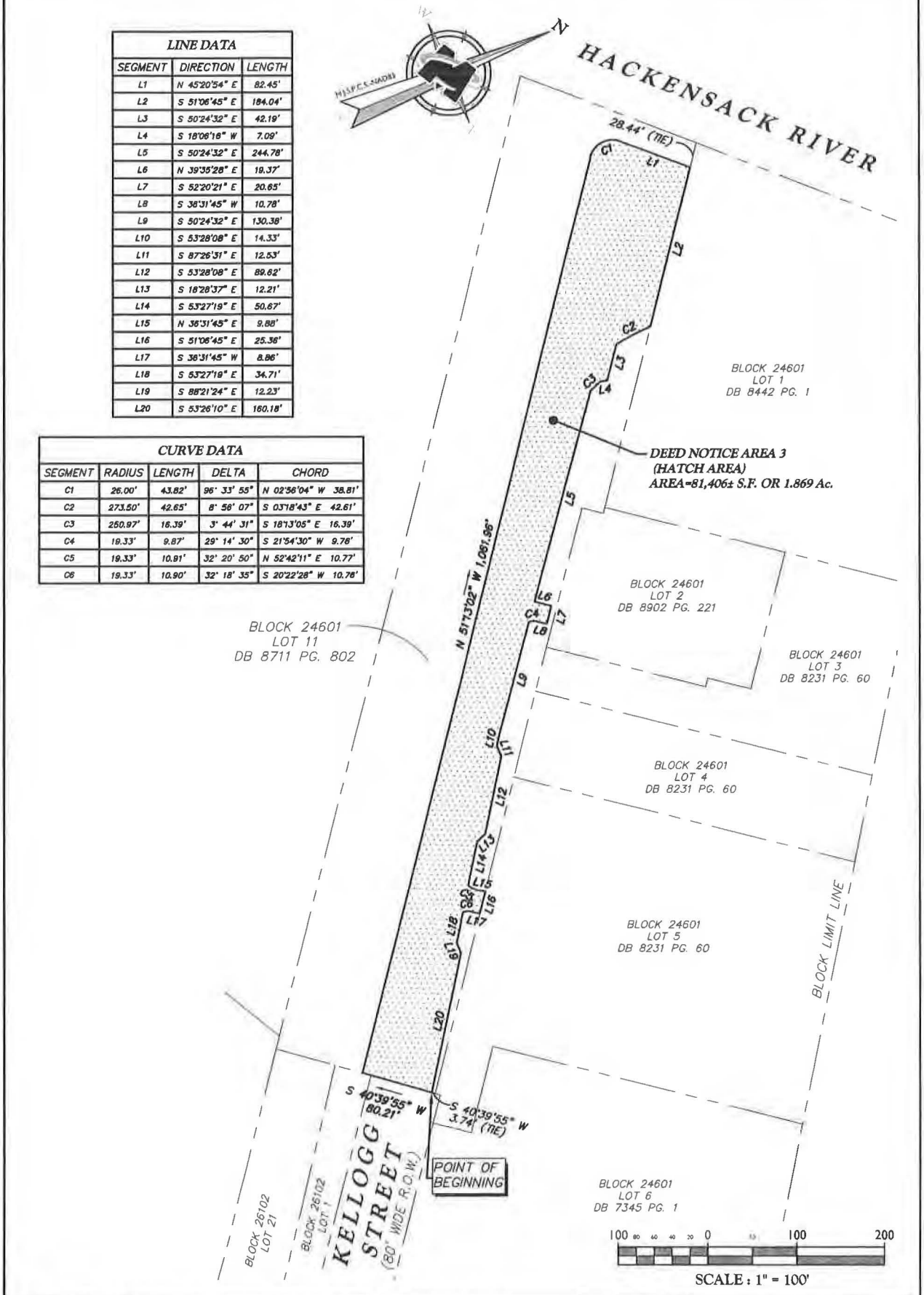
09/11/2017

GLEN J. LLOYD, P.L.S. — DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

R:\General\Projects\2010\10000292Q\Survey\Description\Metes & Bounds-Deed Notice 3_REV 9-11-17.docx

LINE DATA		
SEGMENT	DIRECTION	LENGTH
L1	N 45°20'54" E	82.45'
L2	S 51°06'45" E	184.04'
L3	S 50°24'32" E	42.19'
L4	S 18°06'18" W	7.09'
L5	S 50°24'32" E	244.78'
L6	N 39°35'28" E	19.37'
L7	S 52°20'21" E	20.65'
L8	S 38°31'45" W	10.78'
L9	S 50°24'32" E	130.38'
L10	S 53°28'08" E	14.33'
L11	S 87°26'31" E	12.53'
L12	S 53°28'08" E	89.62'
L13	S 18°28'37" E	12.21'
L14	S 53°27'19" E	50.67'
L15	N 36°31'45" E	9.88'
L16	S 51°06'45" E	25.36'
L17	S 38°31'45" W	8.86'
L18	S 53°27'19" E	34.71'
L19	S 88°21'24" E	12.23'
L20	S 53°26'10" E	160.18'

CURVE DATA				
SEGMENT	RADIUS	LENGTH	DELTA	CHORD
C1	26.00'	43.82'	96° 33' 55"	N 02°56'04" W 38.81'
C2	273.50'	42.65'	8° 56' 07"	S 03°18'43" E 42.61'
C3	250.97'	16.39'	3° 44' 31"	S 18°13'05" E 16.39'
C4	19.33'	9.87'	29° 14' 30"	S 21°54'30" W 9.76'
C5	19.33'	10.91'	32° 20' 50"	N 52°42'11" E 10.77'
C6	19.33'	10.90'	32° 18' 35"	S 20°22'28" W 10.76'



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REV	DATE	DRAWN BY	DESCRIPTION
1	9/1/17	HA	REVISE DEED NOTICE LINE

DEED NOTICE AREA 3
SA6 SOUTH

BLOCK 24601
LOT 11

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

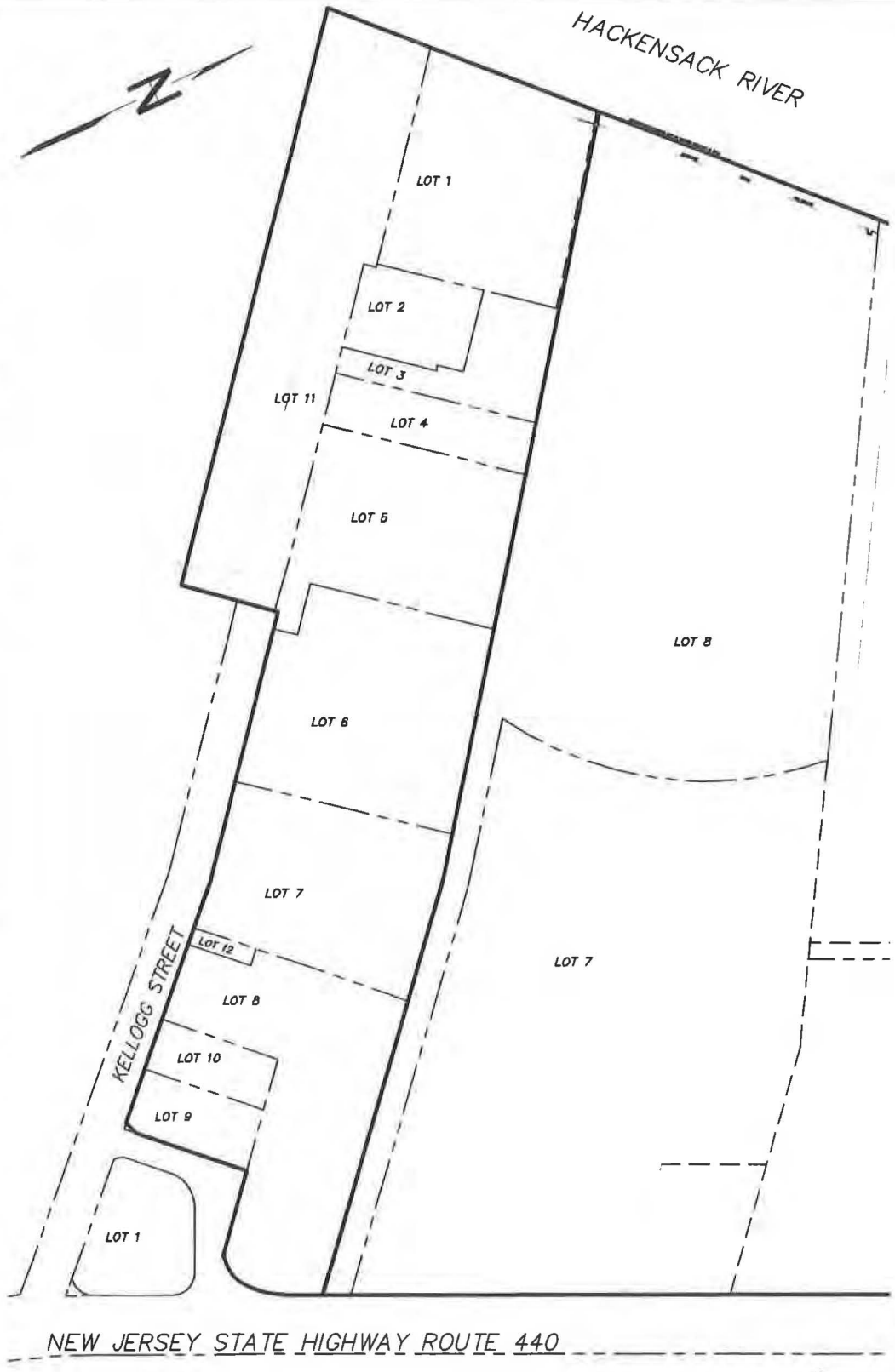
811 PROTECT YOURSELF
NJ STATE LAW (N.J.S.A. 48:2-73 & 48:2-91 ET SEQ.) REQUIRES ONE CALL NOTIFICATION PRIOR TO ANYONE THAT DISTURBS SURFACE OR SUBSURFACE SOIL.
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

BELLE BANK OFFICE
Corporate Headquarters
Suite 310
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1954

SCALE	DATE	DESIGNED BY	CHECKED BY
AS SHOWN	9/1/2016	HA	GJL
PROJECT NUMBER		DRAWING NAME	
		N:\2017-0244\5_NDE	

SHEET TITLE
DEED NOTICE EXHIBIT

SHEET NUMBER
1 of 1



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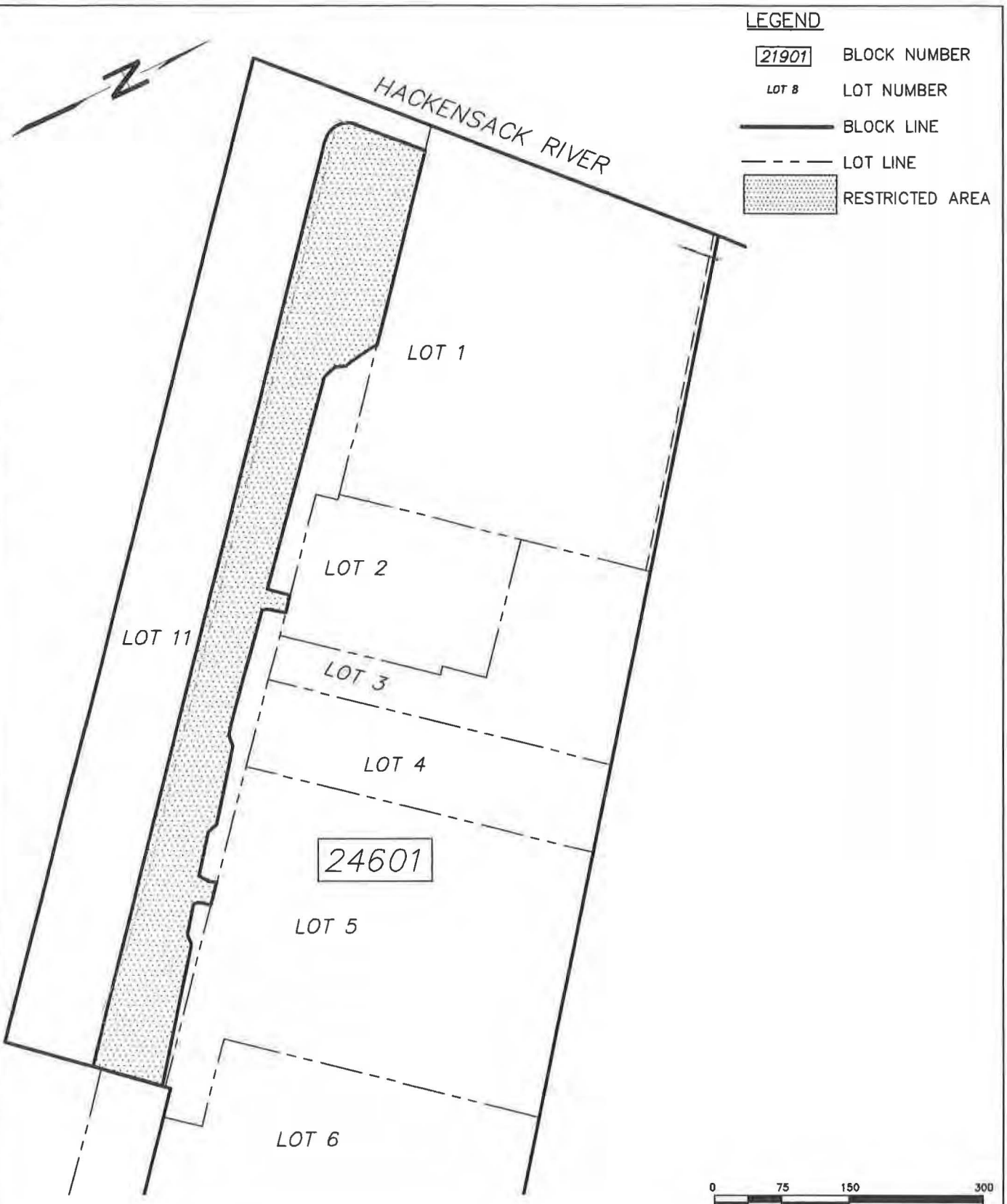
Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150450–5100–A200–3000	
PREPARED/DATE: STR 01/28/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE, Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-2
TAX MAP
BLOCK 24601, LOT 11
DEED NOTICE #3 SA-6 SOUTH SITE 163
JERSEY CITY, NEW JERSEY

Exhibit A-3
Property Map



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A300-3000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-3** PROPERTY AREA MAP BLOCK 24601 LOT 11 DEED NOTICE #3 SA-6 SOUTH SITE 163 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

EXHIBIT B
Deed Notice #3 Site 163
B-1 Restricted Area Maps
B-2 Restricted Area Data Table
Portion of Block 24601, Lot 11
City of Jersey City, New Jersey

Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area and Soil Sample Locations), Exhibit B-1B (Cap System Detail), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of contaminants remaining above the level established in the New Jersey Department of Environmental Protection (NJDEP) Chromium Policy and/or other applicable NJDEP Soil Quality Standards as described below.

Restricted Area Map Notes:

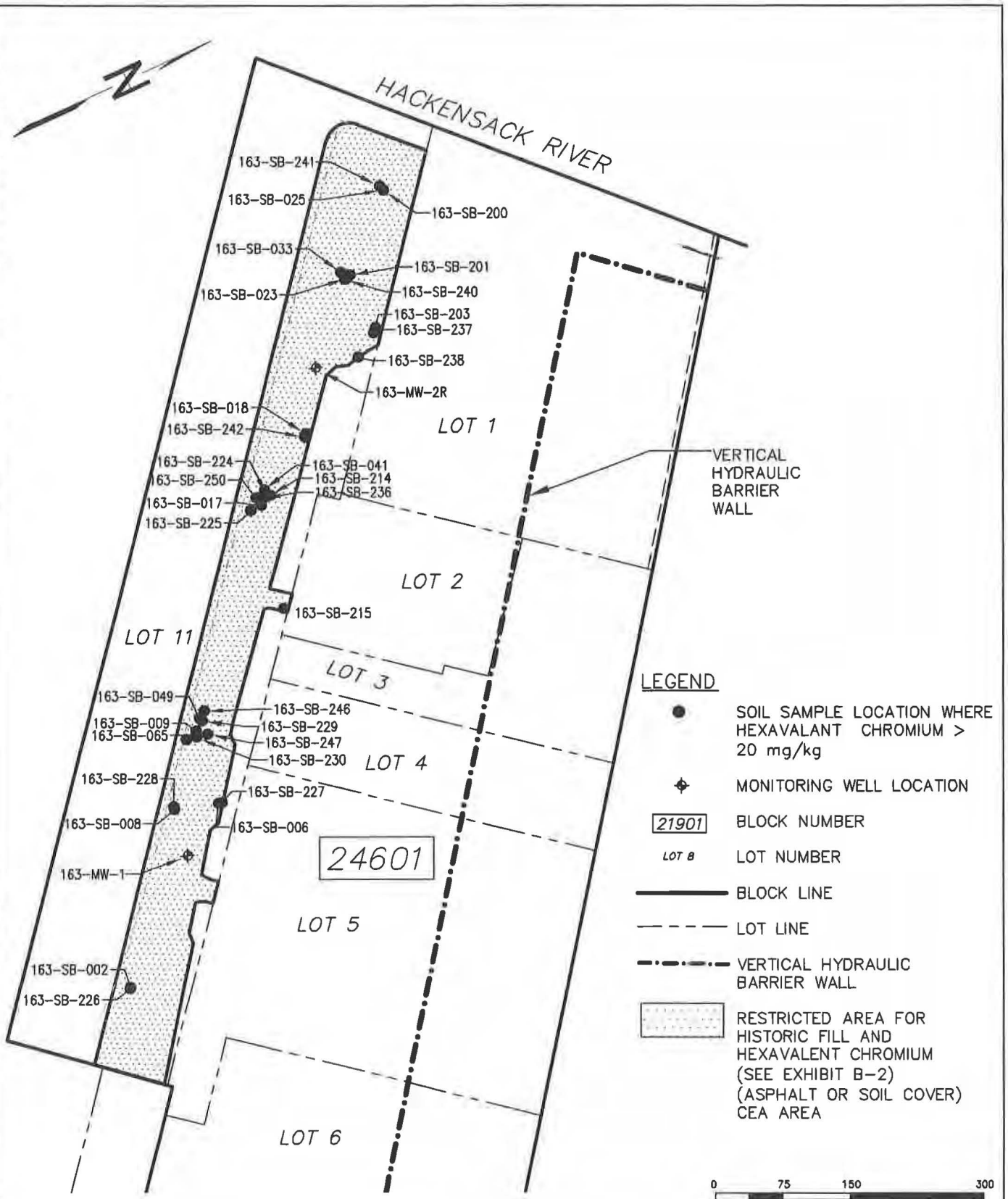
Exhibit B-1 indicates engineering controls. The engineering controls include 4 to 6-inches crushed stone cover overlying 4 to 6-feet of clean soils above the impacted soil. (As part of the Bayfront Redevelopment Plan, the engineering control will also include a paved road, walkway or other hardscape. At that time, this Deed Notice will be revised to reflect the revision to the engineering controls.).

Exhibits B-1A indicates the restricted area for soil containing contaminants of concern, including hexavalent chromium above 20 milligrams per kilogram (mg/kg) pursuant to the Chromium Policy, and soils that are consistent with NJDEP's definition of "historic fill material" found at N.J.A.C. 7:26E-1.8, as shown on Exhibit B-2.

Analytical results and soil borings indicate that historic fill is present onsite and extends over the entire Restricted Area. Historic fill onsite typically consists of the following: metals, PAHs, and miscellaneous debris (including but not limited to coal fragments, brick, timber, and other construction materials).

A table summarizing maximum concentrations of typical contaminants found in the historic fill material in the Restricted Area is included as Exhibit B-2.

Exhibit B-1
Restricted Area Maps



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-B100-3000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08618	**EXHIBIT B-1A** RESTRICTED AREA MAP BLOCK 24601 LOT 11 DEED NOTICE # 3 SA-6 SOUTH SITE 163 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

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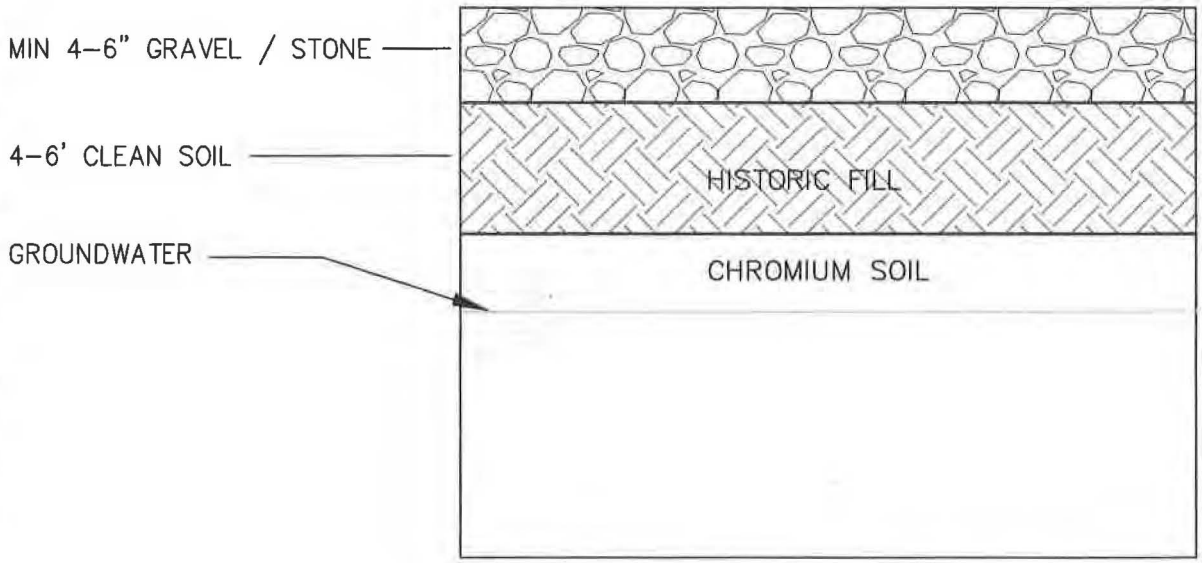
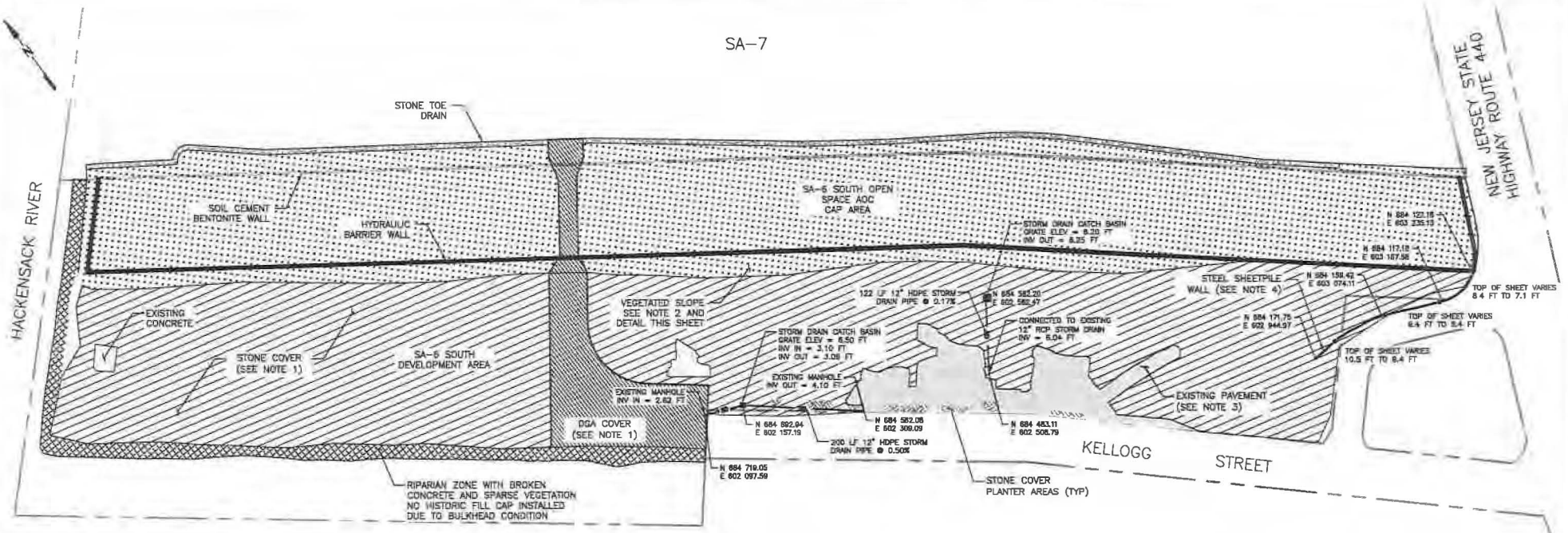
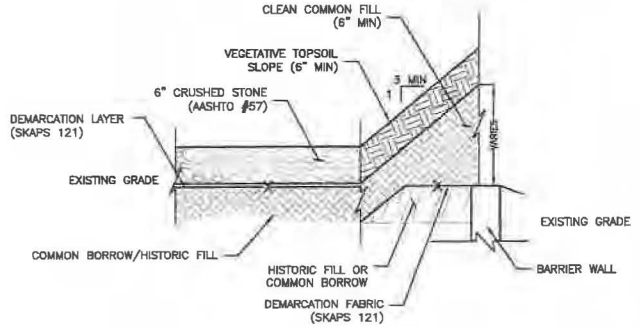
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\571004\deed notice\deed notice 3\3480150450-5100-B200-3000.dwg Tue, 14 Nov 2017 - 1:36pm scott.rinehart



CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150450-5100-B200-3000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 24601 LOT 11 DEED NOTICE # 3 SA-6 SOUTH SITE 163 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17		





NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA-7

TYPICAL VEGETATED SLOPE
NTS

EXHIBIT B-1C

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 8 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE ON THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL AS SHOWN ON THE TYPICAL VEGETATED SLOPE DETAIL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. EXISTING PAVEMENT WAS FIELD INSPECTED BY LSRP AND SUBJECT TO MINOR CRACK FILLING TO SATISFY HISTORIC FILL CAP REQUIREMENTS.
4. STEEL SHEETPILE WALL WAS INSTALLED AS EXCAVATION SUPPORT ALONG THIS AREA AND THEN CUT BELOW CURRENT GRADE AND LEFT IN PLACE. THE TOP OF SHEETPILE IS GENERALLY 0.5 TO 2.0 FT BELOW CURRENT GRADES.

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING TITLE: AS BUILT RESTORATION PLAN SA-6 SOUTH – SHEET 001 12/12/16

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION JERSEY CITY, NJ

Exhibit B-2: Table B-2
Soil Sample Data Table

EXHIBIT B-2
Restricted Area Data Table
Deed Notice #3 Site 163
Portions of Block 24601, Lot 11
Jersey City, New Jersey

Location ID	Elevation (feet msl) NAVD88	Start Depth (feet bgs)	End Depth (feet bgs)	Hexavalent Chromium Concentration (mg/kg)	CASR#	NJDEP Chromium SCC (mg/kg)
163-SB-002	-10.00	17	17.5	33.6	18540-29-9	20
163-SB-006	-1.70	8.5	9	24.7J	18540-29-9	20
163-SB-008	1.70	6.5	7	22.5	18540-29-9	20
163-SB-009	0.70	8	8.5	85.7J	18540-29-9	20
163-SB-017	6.10	1	1.5	1.5	18540-29-9	20
163-SB-017	0.60	6.5	7	24.6	18540-29-9	20
163-SB-018	-5.50	14	14.5	22.8	18540-29-9	20
163-SB-023	-4.70	14	14.5	40.4	18540-29-9	20
163-SB-025	-2.90	12	12.5	32.9	18540-29-9	20
163-SB-033	-2.90	12	12.5	23.6	18540-29-9	20
163-SB-041	1.10	6	6.5	31.8	18540-29-9	20
163-SB-049	0.2	8.5	9	24.9J	18540-29-9	20
163-SB-065	0.7	8	8.5	27.1	18540-29-9	20
163-SB-200	-2.90	12	13	9.9	18540-29-9	20
163-SB-200	-3.90	13	14	10.6	18540-29-9	20
163-SB-201	-4.70	14	15	21.1	18540-29-9	20
163-SB-201	-5.70	15	16	16.4	18540-29-9	20
163-SB-203	-1.7	10	11	6.2	18540-29-9	20
163-SB-203	-2.7	11	12	9.2	18540-29-9	20
163-SB-203	-3.7	12	13	14.8	18540-29-9	20
163-SB-203	-4.7	13	14	11.3	18540-29-9	20
163-SB-214	-4.7	12	13	3.7	18540-29-9	20
163-SB-214	-5.7	13	14	3.8	18540-29-9	20
163-SB-215	-6	13	14	1.8	18540-29-9	20
163-SB-215	-7	14	15	2.4	18540-29-9	20
163-SB-224	1.2	6	7	17	18540-29-9	20
163-SB-224	0.2	7	8	17.7	18540-29-9	20
163-SB-225	1	6	7	<0.51	18540-29-9	20
163-SB-225	0	7	8	0.53	18540-29-9	20
163-SB-226	-9	16	17	1.4	18540-29-9	20
163-SB-226	-10	17	18	5.7	18540-29-9	20
163-SB-227	-0.2	7	8	16.9	18540-29-9	20
163-SB-227	-1.2	8	9	8.3	18540-29-9	20
163-SB-228	1.2	6	7	8.4	18540-29-9	20
163-SB-228	0.2	7	8	8.4	18540-29-9	20
163-SB-229	0.7	8	9	57.2	18540-29-9	20
163-SB-229	-0.3	9	10	79.3	18540-29-9	20
163-SB-230	-1.8	10.5	11.5	27.7	18540-29-9	20
163-SB-230	-2.8	11.5	12.5	40.7	18540-29-9	20
163-SB-236	-3.7	11	12	50.6	18540-29-9	20
163-SB-236	-4.7	12	13	11.5	18540-29-9	20
163-SB-237	-2.7	11	12	34.3	18540-29-9	20
163-SB-237	-3.7	12	13	38.7	18540-29-9	20
163-SB-237	-4.7	13	14	31.3	18540-29-9	20
163-SB-237	-5.7	14	15	80.6	18540-29-9	20
163-SB-238	-4.4	13	14	18.4	18540-29-9	20
163-SB-238	-5.4	14	15	31.6	18540-29-9	20
163-SB-240	-4.8	14	15	27.2	18540-29-9	20
163-SB-240	-5.8	15	16	13.1	18540-29-9	20
163-SB-241	-2.9	12	13	22.2	18540-29-9	20
163-SB-241	-3.9	13	14	30.6	18540-29-9	20
163-SB-242	-5.5	14	15	27.3	18540-29-9	20
163-SB-242	-6.5	15	16	92.5	18540-29-9	20

EXHIBIT B-2
Restricted Area Data Table
Deed Notice #3 Site 163
Portions of Block 24601, Lot 11
Jersey City, New Jersey

Location ID	Elevation (feet msl) NAVD88	Start Depth (feet bgs)	End Depth (feet bgs)	Hexavalent Chromium Concentration (mg/kg)	CASR#	NJDEP Chromium SCC (mg/kg)
163-SB-246	0.7	8	9	44.5	18540-29-9	20
163-SB-246	-0.3	9	10	39.7	18540-29-9	20
163-SB-247	0.7	8	9	7.7	18540-29-9	20
163-SB-247	-0.3	9	10	4.2	18540-29-9	20
163-SB-250	1	6	7	0.5	18540-29-9	20
163-SB-250	0	7	8	0.64	18540-29-9	20

Notes:
Results reported in mg/kg.
Results from In-Situ Post Treatment included even if <20 mg/kg.

Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl - feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010

EXHIBIT B-2
HISTORIC FILL COMPOUNDS ABOVE STANDARD
Deed Notice #3 Site 163
Portions of Block 24601, Lot 11
Jersey City, New Jersey

Compound>RDC	RDC	# of Samples >RDC	Maximum Conc.
BENZO(A)ANTHRACENE	**0.6**	3	1.35
BENZO(A)PYRENE	**0.2**	8	1.01
BENZO(B)FLUORANTHENE	**0.6**	3	1.4
NAPHTHALENE	**6**	1	11.9

Notes:
RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 5/7/2012].
CONC: Concentration reported in milligrams per kilogram (mg/kg)
Historic fill is present throughout the Site consisting of PAH and metals.
R or N: Rejected or negated by laboratory or data validator

EXHIBIT C
Deed Notice #3 Site 163

C-1 Institutional Controls
C-2 Engineering Controls
Portion of Block 24601, Lot 11
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree, Zoning, Conservation Restriction as Institutional Controls: Exhibit C-1 (A through D) for that portion of Block 24601, Lot 11, City of Jersey City, New Jersey known as Site 163.

Exhibits C-1A through D. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; Exhibit C-1D: Conservation Restriction as Institutional Control (recorded at Hudson County Register of Deeds as indicated in Paragraph 3): Exhibits C-1A through C-1D include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property is a portion of Site 163 at SA-6 South where remaining chromium-impacted soils were identified in the area south of the northern curbline of the future River Front Park/Riverside Drive/Kellogg Street. This deed notice area includes chromium and historic fill. Honeywell will restrict, or will cause Bayfront Redevelopment LLC to restrict, the future use of this area by implementing a conservation restriction, which will be recorded at the Office of the Hudson County Register. In addition, Honeywell will transfer, or will cause Bayfront Redevelopment LLC to transfer title to the Property to Jersey City (as called for in Paragraph 61(c)(ii)(3) of the Consent Decree). The provisions of the LTMP, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes a portion of Block 24601, Lot 11. The estimated size of the Area containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) as identified on Exhibit B-1 is estimated at approximately 82,868 square feet or approximately 1.902 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, the applicable zoning standards, and the Conservation Restriction. Intrusive activities (i.e., excavation or digging) that breach the

engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg and soils that are historic fill.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and the applicable portions of the LTMP established thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the applicable zoning standards and the Conservation Restriction; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice, the applicable zoning standards and the Conservation Restriction.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #3 Site 163
Portion of Block 24601, Lot 11
City of Jersey City, New Jersey

Exhibits C-2A through C: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Controls consist of the following: 4 to 6-inches crushed stone cover overlying 4 to 6-feet of clean soils above the hexavalent chromium impacted soil. (As part of the Bayfront Redevelopment Plan, the engineering control will also include a paved road, walkway or other hardscape. At that time, this Deed Notice will be revised to reflect the revision to the engineering controls.)

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg and soils that are historic fill.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above 20 mg/kg and soils that are historic fill within the Property. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Should the activities carried out in conformance with the applicable portions of the LTMP developed pursuant to the Consent Decree indicate that other activities are necessary, those activities will be listed and executed.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***
- ***A report to determine whether or not the engineering controls continue to operate as designed.***
  A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Docket No. 05-5955(DMC) Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 SOUTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey (hereafter "the Court") issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property then-owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property then-owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with

various properties collectively designated by NJDEP as Study Areas 5, 6 North, which includes the properties formerly owned by JCMUA and JCIA, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* owners of the properties comprising Study Areas 5, 6 South, and 6 North;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the Court (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, Riverkeeper has alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 South property;

Whereas, on April 21, 2008, the Court entered the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North (hereafter "the Study Area 6 North Consent Decree") resolving issues between Honeywell, Riverkeeper, and the Jersey City Entities related to chromium contamination at Study Area 6 North;

Whereas, on April 21, 2008, the district court for the District of New Jersey entered the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with the Study Area 6 North Decree, which resolved claims and cross-claims between Honeywell and the Jersey City Entities;

Whereas, on May 28, 2008, the Court entered the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, on September 3, 2008, the Court entered the Deep Overburden and Bedrock Groundwater Remedies Consent Order (hereafter "the Deep Groundwater Consent Order") resolving all issues related to the remediation of deep overburden and bedrock groundwater in both *ICO v. Honeywell* and the Consolidated Litigation;

Whereas, on May 13, 2011, Plaintiffs sent Honeywell a RCRA citizen action suit notice letter with respect to Site 163, and the Parties agree that the incorporation of Site 163 into this Consent Decree resolves any claims asserted, or that could have been asserted, in the RCRA notice letter or in any RCRA citizen suit with respect to Site 163;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 South that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq.*, as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, Study Area 6 and Study Area 7 consist of parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in

need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 South and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City; and

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Honeywell, the Riverkeeper, and Jersey City as a means to accomplish the aforesaid purposes of this settlement:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **"20 to 1000 Soils"** shall mean those soils containing less than 1000 mg/kg of hexavalent chromium, but greater than 20 mg/kg. **"20 to 240 Soils"** shall mean those soils containing less than 240 mg/kg of hexavalent chromium, but greater than 20 mg/kg.

2. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

3. **COPR** shall mean Chromite Ore Processing Residue.

4. **Chromium Remedy or Chromium Remediation** shall mean the remedy set forth in Article III.

5. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator*

Authority v. Honeywell International Inc., D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC).

6. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

7. **Deep Groundwater Consent Order** shall mean the Deep Overburden and Bedrock Groundwater Remedies Consent Order entered by the Court on September 3, 2008, in both *ICO v. Honeywell* and the Consolidated Litigation.

8. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, entered on August 15, 2008, in *ICO v. Honeywell,* and the remedies required under the Deep Groundwater Consent Order.

9. **Development Area of Concern** ("AOC") shall mean those portions of Study Area 6 South in which the hexavalent chromium concentration in the top 20 feet of soil below ground surfaces exceeds a concentration of 20 mg/kg, and for which future uses of the property may include commercial or residential development. The Open Space AOC shall not be part of the Development AOC and vice versa. The Development AOC consists of two parts: the Kellogg Street Development AOC and the Site 163 Development AOC. Collectively, the two parts shall be referred to as the "Development AOC." The approximate boundaries of the Development AOC as a whole and its two parts are shown on Exhibit A, but the boundaries may be further defined in the implementation of the Chromium Remedy. For the Kellogg Street Development AOC, remedial measures shall assume only a residential use. For the Site 163 Development AOC, remedial measures shall be implemented with the goal of unrestricted use, but limitations

on future uses (including prohibiting residential use) in some or all of the Site 163 Development AOC may be part of the remedy as set forth in paragraph 61.

10. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

11. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including 425-445 Route 440 Property LLC, Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

12. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

13. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

14. **Including** shall mean including, but not limited to.

15. **JCIA** shall mean the Jersey City Incinerator Authority.

16. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

17. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

18. **Jersey City/Honeywell Consent Order** shall mean the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. entered in the Consolidated Litigation on April 21, 2008.

19. **"L-Well Groundwater"** shall mean the groundwater found at the depth of the "L" wells on and near the former bowling alley property, NJDEP Site 124, located at 427 Route 440. The L-Well Groundwater is located within what has been referred to as the plume diversion area.

20. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

21. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit B.

22. **Open Space AOC** shall mean the portion of Study Area 6 South that is identified as The Promenade park and Grand Boulevard extending from Route 440 to the Hackensack River on page 39 of the Redevelopment Plan and for which the future uses of the property shall be restricted pursuant to paragraph 74, following remediation pursuant to paragraph 65. The Development AOC shall not be part of the Open Space AOC and vice versa. The approximate boundaries of the Open Space AOC are shown on Exhibit A, and the boundaries may be further defined in the implementation of the Chromium Remedy.

23. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

24. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.*, as amended.

25. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

26. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. § 40A:12A1, *et seq.*, as amended and supplemented.

27. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

28. **Remedial Investigation Work Plan Addendum or RIWP Addendum** shall mean the "Remedial Investigation Work Plan Addendum Study Area 6 South" submitted to NJDEP on June 27, 2008.

29. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

30. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation on May 28, 2008.

31. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

32. **Site** shall mean Study Area 6 South.

33. **Site Preparation Activities** shall mean those activities necessary to begin implementation of the Chromium Remedy in Article III of this Consent Decree, including, if appropriate, the temporary or permanent relocation of current activities and operations conducted on Study Area 6 South.

34. **Soil** shall mean soils, historic fill, and/or COPR.

35. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

36. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

37. **Study Area 5** shall mean that property comprising Sites 79, 90, 117, 153, and 184 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 42 acres and including (a) all such property owned by Bob Ciasulli consisting of Block 1291, Lot 76, and Block 1292, Lots 1F, 47, 48, 53, and 54PL, located at 540 Route 440, Jersey City, New Jersey, (b) all such property owned by Elisabeth and Rafael Rosario consisting of Block 1292, Lot 49, located at 93 Fisk Street, Jersey City, New Jersey, (c) all such property owned by Michael Vo consisting of Block 1292, Lot 50, located at 95 Fisk Street, Jersey City, New Jersey, (d) all such property owned by NJCU consisting of Block 1286, Lots 5 and 6D and Block 1286.5, Lots 1 and 2, Jersey City, New Jersey, (e) all such property owned by Inland Southeast Jersey City LLC consisting of Lot 1, Block 1285.5 located at 440 Route 440, Jersey City, New Jersey, and (f) all such property owned by 425/445 Route 440 Property LLC, consisting of Block 1289.5, Lot E, Jersey City, New Jersey.

38. **Study Area 6 North** shall mean the property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, which is subject to the Study Area 6 North Consent Decree.

39. **Study Area 6 North Consent Decree** shall mean the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North, entered by the Court on April 21, 2008, in the Consolidated Litigation.

40. **Study Area 6 South** shall mean (a) that property currently owned by Bayfront Redevelopment Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Bayfront Redevelopment LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Bayfront Redevelopment LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Bayfront Redevelopment LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Bayfront Redevelopment LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Bayfront Redevelopment LLC located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey; (h) that property currently owned by Bayfront Redevelopment LLC located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey; and (i) that property currently owned by Bayfront Redevelopment LLC, consisting of Site 163, formerly the Colonial Concrete Company, located at 75 Kellogg Street in Jersey City, Hudson County, New Jersey.

41. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

42. **Study Area 7** shall mean (a) that property currently owned by Bayfront Redevelopment LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that

property currently owned by Bayfront Redevelopment LLC located at 465 Route 440, Jersey City, Hudson County, New Jersey.

43. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

44. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

45. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

46. For purposes of this Consent Decree, the Riverkeeper Complaint in the Consolidated Litigation states claims upon which relief may be granted against Honeywell.

47. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 113, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils, shallow groundwater and L-Well groundwater at Study Area 6 South. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 5 or property owned by Regnal Realty consisting of Block 1288.2, lot 1, located at 420 Route 440, Jersey City, New Jersey.

48. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

49. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. General Terms and Requirements

50. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 South at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 South shall be undertaken in accordance with the terms of this Consent Decree.

51. **Designation of Chromium Areas of Concern.** For the purposes of remediation, Study Area 6 South shall consist of two AOC's, designated as the Open Space AOC and the Development AOC as shown approximately on Exhibit A. The exact boundaries of the two AOC's shall be subject to further delineation during the design and implementation of the Chromium Remedy.

52. **Consistency of the Chromium Remedy with NJDEP Guidance and Remedial Action Work Plan.** The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and any Remedial Action Work Plan, including any modifications or addenda approved by NJDEP. Prior to submitting any Remedial Action Work Plan, Honeywell shall take all reasonable steps to ensure that the plan is consistent with the Chromium Remedy. However, this Consent Decree shall have precedence over any Remedial Action Work Plan in the event of any inconsistency. The approved Remedial Action Work Plan is a minimum standard, and the Chromium Remedy may be more protective than the remedy NJDEP approves.

53. **General Scope of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and L-Well groundwater containing total chromium concentrations of 70 µg/l or greater and soil containing hexavalent chromium at concentrations of 20 mg/kg or greater within the top 20 feet of soil below the ground surface, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow and L-Well levels of groundwater (see paragraphs 69 - 72). The deep overburden and bedrock groundwater remediation, including source control, is addressed in the Deep Groundwater Consent Order.

54. **Development of a Schedule for the Chromium Remedy.** The Chromium Remedy shall be carried out diligently, and the development and implementation of any remedy required by NJDEP for non-chromium contamination shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Within 90 days of entry of this Consent Decree, Honeywell shall propose a Master Schedule for the implementation of the Chromium Remedy .

(a) The Master Schedule shall incorporate the following dates:

(i) No later than August 15, 2008, Honeywell shall submit a Chromium Impacted Soils Pilot Test Work Plan to NJDEP and Riverkeeper;

(ii) No later than September 15, 2008, Honeywell shall complete field work in accordance with the RIWP Addendum;

(iii)No later than December 31, 2008, Honeywell shall submit an Initial Treatment Study Report and Remedial Action Work Plan pursuant to paragraph 86(c);

(iv) No later than July 31, 2012, Honeywell shall submit the soil and groundwater data from its 2010 and 2011 supplemental investigation of Site 163, a brief summary report, and

a designation of the boundaries of the Site 163 Development AOC to the Special Master pursuant to paragraph 86(c);

(v) No later than October 1, 2012, Honeywell shall submit an addendum to the Study Area 6 South 100% Design setting forth the 100% Design for the Site 163 Development AOC portion of the Study Area 6 South Chromium Remedy; and

(vi) Honeywell shall undertake, in good faith, to begin implementation of the Chromium Remedy by March 1, 2013.

(b) In addition, the Master Schedule shall propose deadlines for the following milestones:

(i) Submission of all documents subject to submission and review pursuant to paragraph 86(c);

(ii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy;

(iii)Submission, following implementation of the soil components of the Chromium Remedy for the Development AOC, of the groundwater plans and reports required by paragraphs 70 and 72;

(iv)Completion of additional sampling for shallow groundwater delineation pursuant to paragraph 71 and a proposal for a remedy pursuant to paragraph 71, if needed;

(v) The submission of a 50% Design Report for the Chromium Remedy;

(vi) The submission of a 100% Design Report for the Chromium Remedy;

(vii) The date for completion of the installation of the Chromium Remedy;

(viii)Implementation of the long-term protections of the Open Space AOC established pursuant to paragraph 74; and

(ix) Transfer of the Open Space AOC to Jersey City pursuant to paragraph 74(a)(iii).

B. Initial Chromium Remedy Steps: Delineation, Treatment Study, and Remedial Action Work Plan

55. **Delineation of Development AOC.** Honeywell shall conduct further soil sampling on Study Area 6 South in accordance with the RIWP Addendum. In addition to the locations set forth in the RIWP Addendum, Honeywell shall conduct further soil sampling pursuant to the provisions of the RIWP Addendum at the boring locations set forth in Exhibit E. Upon completion of the soil sampling required by this paragraph, Honeywell shall submit a Second Supplemental Remedial Investigation Report that sets forth the results of the sampling and Honeywell's proposal as to the delineation of the Development AOC. In conjunction with its proposal, Honeywell shall set forth its rationale as to whether prior sampling data should be included or excluded in the proposed delineation. The soil sampling and submission of a Second Supplemental Remedial Investigation Report shall be completed in accordance with the Schedule set forth in paragraph 54. Honeywell shall submit the Second Supplemental Remedial Investigation Report pursuant to paragraph 86(c). The Site 163 Development AOC shall be exempt from the requirements of paragraphs 55-58.

56. **Conduct of a Treatment Study in the Development AOC.** Honeywell shall conduct a field study of the efficacy of *in situ* treatment of 20 to 1000 Soils in accordance with the Chromium Impacted Soil Pilot Test Work Plan. The purpose of the pilot test shall be to evaluate whether *in situ* chemical treatment of 20 to 1000 Soils with one or more reductants can result in the permanent establishment of hexavalent chromium concentrations below 20 mg/kg under conditions in those areas of the Development AOC that may be subject to treatment as a remedy. Honeywell shall provide the raw data from the pilot test to NJDEP and Riverkeeper in scientifically useable electronic form as soon as the data become available. Honeywell shall

submit an Initial Treatment Study Report setting forth the initial results of the pilot test pursuant to paragraph 86(c) .

57. **Continued Monitoring of the Treatment Study.** As the result of the need to complete Study Area 7 remediation, to maintain Study Area 7 remediation support operations currently located on Study Area 6 South, and to conduct Site Preparation activities including the relocation of operating businesses on Study Area 6 South in advance of implementation of the Chromium Remedy, the Parties do not anticipate that implementation of field work for the Chromium Remedy will begin until March 1, 2013. Honeywell shall continue to monitor the performance of the pilot test and shall submit a Final Treatment Study Monitoring Report assessing the long term effectiveness of treatment for 20 to 1000 Soils in the Development AOC pursuant to paragraph 86(c) no later than December 31, 2011.

58. **Submission of a Remedial Action Work Plan.** On or before December 31, 2008, Honeywell shall submit a Remedial Action Work Plan for the Chromium Remedy pursuant to paragraph 86(c). The Remedial Action Work Plan shall be consistent with the Chromium Remedy set forth in this Consent Decree.

C. Development AOC Soil Remedy

59. **Remedial Components.** In the Development AOC, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be remediated as follows:

(a) Soils with a concentration greater than 1000 mg/kg shall be:

(i) Excavated and disposed of off-site at a waste disposal facility licensed to accept such waste; or

(ii) Treated *ex situ* and consolidated under the cap in the Open Space AOC provided the requirements of paragraphs 60 and 63 are satisfied and provided that such soils do not

require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a).

(b) 20 to 1000 Soils shall be:

(i) Excavated and consolidated within the Open Space AOC provided that such soils do not require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a); or

(ii) Excavated and disposed of off-site pursuant to the requirements of paragraph 59(a); or

(iii) Remediated pursuant to paragraphs 59(c) or 59(d) provided that such soils are also 20 to 240 soils and meet the requirements of paragraphs 59(c) or 59(d).

(c) 20 to 240 Soils may be remediated by excavation and consolidation within the Study Area 6 North AOC 1 Open Space Area, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy.

(d) 20 to 240 Soils within the Site 163 Development AOC may be remediated by *in situ* treatment, provided the requirements of paragraph 61 are satisfied.

60. **Treatment and Consolidation of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** *Ex situ* treatment and consolidation under the Open Space AOC cap may be used as a remedial component for soils containing greater than 1000 mg/kg hexavalent chromium provided that the requirements of this paragraph are satisfied:

(a) Honeywell demonstrates in the Final Treatment Study Monitoring Report that the proposed treatment will likely result in the reduction of the hexavalent chromium concentration of the treated soils such that the post-treatment total chromium concentration shown by Toxicity

Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C);

(b) Following a review of the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d), NJDEP agrees that Honeywell has made the demonstration required by paragraph 60(a).

(c) Plaintiffs have had an opportunity to review and comment on the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d)and pursuant to the Special Master review process set forth in paragraphs 86(e)-86(f); and

(d) Following review of the demonstration required by paragraph 60(a) pursuant to the Special Master review process set forth in paragraph 86(f), the Special Master issues a recommendation finding that Honeywell has made the demonstration required by paragraph 60(a) or the Court finds that Honeywell has made the demonstration required by paragraph 60(a) in the event that any Party seeks the Court's review of the Special Master's recommendations under this paragraph.

61. **Treatment as a Remedial Component for 20 to 240 Soils.** *In situ* treatment may be used as a remedial component for the 20 to 240 Soils in the Site 163 Development ACO, provided that such soils are 3 feet or more below ground surface and the requirements of this paragraph are satisfied:

(a) If Honeywell elects to treat *in situ* 20 to 240 Soils in the Site 163 Development AOC, Honeywell shall include in the 100% Design Addendum for Site 163 a plan for such treatment. Such treatment plan shall be comparable in detail and approach to the pipeline treatability plan which is Appendix F to the Study Area 6 North 100% Design. The goal of such *in situ* treatment

shall be to reduce hexavalent chromium soil concentrations to less than 20 mg/kg in soils 20 feet or less below ground surface;

(b) Three years after conducting the treatment set forth in subparagraph (a), Honeywell shall collect additional soil samples in the treated areas to evaluate the success of the treatment. These soil samples shall be analyzed for EH, pH, hexavalent chromium (using EPA/NJDEP Methods 3060A/7199), and sulfides (using EPA Method 9030B). Within 60 days of its receipt of the final data from such sampling, Honeywell shall submit a report with such data to the Special Master pursuant to paragraph 86(c);

(c) In the event that the sampling pursuant to subparagraph (b) shows that soils with greater than 20 mg/kg hexavalent chromium remain or that excess treatment reductant remains present, Honeywell may elect to pursue one or more of the following approaches after providing notice to the Special Master, Riverkeeper and the Jersey City Entities;

(i) In the case of excess treatment reductant remaining in the soil, continue to monitor such areas pursuant to subparagraph (b) until the excess reductant is no longer present;

(ii) In the case of soils with greater than 20 mg/kg hexavalent chromium:

(1) Excavate such soils and consolidate them under the cap in the Open Space AOC, consolidate them under the cap in the Study Area 6 North AOC 1 Open Space Area, and/or dispose of them off-site provided that in each instance the applicable requirements of paragraph 59 are satisfied;

(2) Conduct further *in situ* treatment using additional treatment reductant and submit a monitoring plan pursuant to paragraph 64; or

(3) In the event that the soils are within the areas depicted as River Front Park, Riverfront Drive or Kellogg Street on page 39 of the Redevelopment Plan, cover the affected

soils with a road, walkway, and/or other hardscape and restrict the use of that area through each of the following institutional controls:

(a) Issuance and recording of a conservation restriction comparable to that required under paragraphs 74(b) and 74(d);

(b) Transfer of title to that area to Jersey City pursuant to paragraphs 74(a)(iii) through 74(a)(iv)(2); and

(c) Issuance and recording of a deed notice comparable to that required under paragraphs 74(c) and 74(d).

62. **Submissions Related to Site 163.** Pursuant to the Schedule, Honeywell shall prepare and submit the following with regard to Site 163:

(a) A summary report of all chromium soil and groundwater data collected during site investigations in 2010 and 2011; and

(b) An addendum incorporating Site 163 into the 100% Design.

63. **Post-Treatment Analysis of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** In the event that *ex situ* treatment is used as a final remedy for any portion of the soils containing greater than 1000 mg/kg pursuant to paragraph 59(a)(ii), Honeywell shall conduct post-treatment analysis of each treated batch of soil to demonstrate that the treatment has resulted in the reduction of the hexavalent chromium concentration such that the post-treatment total chromium concentration shown by Toxicity Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C). Such monitoring and demonstration shall be made prior to consolidation of the treated soils under the Open Space AOC cap pursuant to paragraph 59(a)(ii). In the event that Honeywell fails to make the demonstration required by this paragraph,

Honeywell shall dispose of the soils off-site at a waste disposal facility licensed to accept such waste.

64. **Post-Treatment Monitoring for 20 to 1000 Soils.** In the event that *in situ* treatment is used as a final remedy for any portion of the 20 to 1000 Soils, Honeywell shall conduct post-treatment monitoring to demonstrate that the treatment has resulted in permanent hexavalent chromium concentrations of less than 20 mg/kg in the treated area. Honeywell shall propose a program of post-treatment monitoring in a document that is submitted pursuant to paragraph 86(c). In the event that Honeywell fails to make the demonstration required by this paragraph, Honeywell shall propose further remedial actions pursuant to paragraph 59 in a document that is submitted pursuant to paragraph 86(c).

D. Open Space AOC Components of the Chromium Remedy

65. **Open Space AOC Soil Remedy.** In the Open Space AOC, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, pursuant to paragraph 59(b)(i), shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of a gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the Open Space AOC. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the Open Space AOC shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the

two feet of clean fill required by paragraph 65(c). Excavated 20 to 1000 Soils from the Development AOC shall be placed and spread in the Open Space AOC under the cap. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

E. Demolition, Grading, and Backfill Requirements

66. **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community from airborne dusts and exposures to contaminated soils.

67. **Backfill Requirements.** Soils excavated from the Development AOC shall be replaced with backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

68. **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

F. Groundwater Components of the Chromium Remedy

69. **Shallow Groundwater Remedy for the Open Space AOC.** The Open Space AOC shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing

above the meadow mat in the Open Space AOC to the extent that such groundwater contains total chromium in concentrations in excess of 70 µg/l. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 South and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the southern, eastern and western sides of the Open Space AOC and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that shall consist of (i) one or more shallow extraction wells, sumps, or french drains within the Open Space AOC; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater within the Open Space AOC;

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP regulations.

70. **The Shallow Groundwater Remedy for the Development AOC.** Following implementation of the Development AOC soil components of the Chromium Remedy, Honeywell shall submit a report to (a) determine whether shallow groundwater remaining in the

Development AOC exceeds 70 µg/l total chromium and, (b) if so, evaluate the need for further remedial measures to address any such shallow groundwater remaining in the Development AOC with total chromium concentrations in excess of 70 µg/l. This evaluation shall be subject to review and comment by the Parties and approval by the Special Master.

(a) In the event that the evaluation demonstrates that further remedial measures are necessary, Honeywell shall propose such measures subject to review and comment by the Parties and approval by the Special Master;

(b) The capture zone of any remedy shall include at least the entire area of contaminated shallow groundwater except for shallow groundwater that is captured and subject to the shallow groundwater remedy for the Open Space AOC pursuant to paragraph 69;

(c) In the event that a pump-and-treat system is selected as a contingency measure for shallow groundwater in the Development AOC, all infrastructure for the pump-and-treat contingency system that is needed to ensure that the contingency system is fully operational, as required by paragraph 70(d), shall be installed prior to or in conjunction to any development of the Site. This includes at least one shallow extraction well, sump, or french drain, and the piping to convey any extracted groundwater to Honeywell's water treatment plant;

(d) If it is determined that the pump-and-treat contingency system must be activated, the pump-and-treat system shall be operational no later than six months after the date of the determination.

71. **Off-Site Shallow Groundwater Remedy.** Honeywell shall propose additional sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site. Honeywell shall submit a report of the results of such sampling and, in the event that contaminated shallow groundwater is found to extend off-site, a proposal for a remedy based on

such results. The report and the proposal for a remedy shall be subject to review and comment by the Parties and approval by the Special Master.

72. **L-Well Groundwater Remedy.** At the time this Decree is entered, the L-Well Groundwater is contained and not contributing to further contamination of surrounding waters and/or soils. However, in order to verify that this status continues following implementation of the Chromium Remedy, including any groundwater remedial measures pursuant to paragraphs 70 and 71, Honeywell shall propose a plan for one round of monitoring designed to evaluate whether the L-Well Groundwater remains contained. The plan shall include monitoring for total and hexavalent chromium and major ion chemistry to determine whether there has been movement in the L-Well Groundwater.

(a) In the event that no substantial change is detected in the major ion chemistry, no further action is required unless paragraph 72(c) is applicable.

(b) In the event that substantial changes are detected in the major ion chemistry, Honeywell shall propose a plan for further monitoring of the L-Well Groundwater. Such a plan shall be subject to review and comment by the Parties and approval by the Special Master.

(c) In the event that the initial monitoring or monitoring conducted pursuant to paragraph 72(b) demonstrates that proximate waters have total chromium concentrations in excess of 70 µg/l, regardless of whether there is a change in the major ion chemistry, Honeywell shall propose a remediation plan for the L-Well Groundwater. Such remediation plan shall be subject to review and comment by the Parties and approval by the Special Master.

G. Permits and Authorizations

73. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article.

H. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

74. **Protection of the Open Space AOC.** Except as provided in paragraphs 74(j) and 74(k), development in the Open Space AOC shall be prohibited. The Open Space AOC shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the Open Space AOC pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54:

(a) **Ownership of and Access to the Open Space AOC.** Ownership of and access to the Open Space AOC shall be in accordance with the following:

(i) Bayfront Redevelopment LLC, as the current owner in fee simple absolute of all property that comprises the Open Space AOC, shall not convey any rights or interests in any parcel that comprises the Open Space AOC property except as provided in this Decree. Within 90 days of entry of this decree, Bayfront Redevelopment LLC shall give Jersey City an option to buy all of the Open Space AOC property prior to the planned transfer pursuant to paragraph 74(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall exercise the option to buy the Open Space AOC in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 98(c) or 98(d) are met;

(ii) Within 90 days of the entry of this Consent Decree, Bayfront Redevelopment LLC shall grant a conservation restriction for the Open Space AOC pursuant to the requirements of paragraph 74(b);

(iii) Upon the final construction of all roads and utility corridors within the Open Space AOC, Bayfront Development LLC shall donate good and marketable title to all the land comprising the Open Space AOC to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 South to create a new parcel(s) comprising the Open Space AOC. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the Open Space AOC by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the Open Space AOC unless and until it shall have complied with the requirements of paragraph 74(a)(iv);

(iv)After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the Open Space AOC to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the Open Space AOC to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the Open Space AOC and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the Open Space AOC pursuant to this paragraph

and routine maintenance of the permissible development in the Open Space AOC pursuant to paragraph 78(d); or

(2) The Open Space AOC has been remediated such that no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** Prior to the grant of the option to buy pursuant to paragraph 74(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the Open Space AOC substantially in the form set forth in Exhibit C. Exhibit C is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 74(j) and 74(k), including the construction and placement of roads and utilities. The Conservation Restriction shall also allow for current uses of the Open Space AOC to continue until such time as construction of the Chromium Remedy begins. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the Open Space AOC as set forth in paragraphs 74(j) and 74(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph 74(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the Open Space AOC shall be subjected to the deed notice substantially in the form set forth in Exhibit D that restricts

future activities on the Open Space AOC. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the Open Space AOC pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 74(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 74(b), and the deed notice imposed pursuant to paragraph 74(c) shall be recorded, pursuant to N.J.S.A. §§ 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the Open Space AOC. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the Open Space AOC in the real estate records related to the Open Space AOC.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the Open Space AOC is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 74(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the Open Space AOC, Jersey City shall add those portions of the Open Space AOC not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. § 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor,

maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 74(j) and 74(k); and (iv) the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the Open Space AOC have been added to its ROSI, such that those portions of the Open Space AOC shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the Open Space AOC is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 74(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the Open Space AOC subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the Open Space AOC under the statute. If the Parties are unable to reach agreement on establishment of an environmental covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the Open Space AOC without

unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the Open Space AOC. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the Open Space AOC if they would provide substantial additional protection for the Open Space AOC without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in Open Space AOC.** Only development satisfying the requirements of this paragraph and paragraph 74(k) shall be permitted in the Open Space AOC. All other development in the Open Space AOC shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the Open Space AOC regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 74(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the Open Space AOC shall be the development undertaken following the completion of the Chromium Remedy in the Open Space AOC. The Initial Development may occur in one or more phases. Honeywell and Bayfront

Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 74(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the Open Space AOC shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 74(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the Open Space AOC, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 74(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 74(b), and the Redevelopment Plan; however, in the

event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the Open Space AOC, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 74(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 86(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 86(e) and 86(f) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the Open Space AOC shall require the preparation and submission of a Development Plan pursuant to

paragraph 74(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 74(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and Jersey City. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and Jersey City for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix)During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 74(j)(v) and 74(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 74(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 74(j)(v); or

(3) The development meets the requirements of paragraphs 74(j)(v) and 74(j)(xi), and Jersey City provides notice of its intention to alter or add to the development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 74(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 74(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holder(s) of the conservation restriction established pursuant to paragraph 74(b) with an annual report that describes any alterations or additions, including those activities under paragraph 74(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the Open Space AOC.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 74(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the Open Space AOC, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 74(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 74(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the Open Space AOC of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

75. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

76. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 65, 69, 68, 69, 72, and 77. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

77. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the Open Space AOC.

78. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 77. Honeywell shall provide Riverkeeper, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the Open Space AOC to ensure that it is not being put to any use that is inconsistent with paragraphs 74(j) and 74(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 74 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the Open Space AOC is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the Open Space AOC grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii)Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the Open Space AOC such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv)A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the Open Space AOC has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 65(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and

the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the Open Space AOC to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii)Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 69(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the Open Space AOC.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed

subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by the Court.

(c) **Contingency Plan**. As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance**. The title owner of the Open Space AOC shall conduct maintenance of the Open Space AOC features or facilities that are permissible under paragraphs 74(j) and 74(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the Open Space AOC or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of Open Space AOC shall annually provide to the other Parties and

the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the Open Space AOC shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the Open Space AOC identified by its workers during routine maintenance.

(e) **Recordkeeping**. Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring Plan. Such logs shall be provided to Riverkeeper on a quarterly basis.

79. **Monitoring and Reporting to Riverkeeper.** Riverkeeper shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 86(c).

80. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the Open Space AOC; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 78 and annual reports on changes to the Initial Development as required by paragraph 74(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The public provision of the maps and documents referred to in paragraph 80(b)(ii) via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

81. **Annual Letter to Riverkeeper on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 80, Honeywell shall provide a letter to the Riverkeeper documenting its compliance with paragraph 80.

82. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

83. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

I. Oversight and Enforcement by the Special Master and NJDEP

84. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.I.

85. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the Open Space AOC. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of any non-chromium related remedy, any site preparation activities, and any site redevelopment activities do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

86. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority**. Nothing in or pursuant to this Consent Decree shall limit NJDEP's full statutory and regulatory authority with respect to the Study Area 6 South site, including (i) permitting authority; (ii) authority to review and approve the Treatment Study reports, the Remedial Action Work Plan, the 100% Design, and final Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities**. The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting bi-monthly progress reports to the Court pursuant to the schedule for the submission of such reports established in *ICO v. Honeywell*;

(vi) Overseeing the financial assurances established pursuant to paragraphs 91 through 100, and, until the expiration of his term pursuant to paragraph 90, overseeing the financial assurances established pursuant to paragraphs 101 through 112;

(vii) Coordinating review of the documents as provided in paragraphs 86(c) through 86(g);

(viii) Overseeing all development undertaken in the Open Space AOC during the Initial Development Period pursuant to paragraph 74(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell**. Honeywell shall submit the following documents to Riverkeeper, Jersey City, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule") consistent with paragraph 54 above;

(ii) A Second Supplemental Remedial Investigation Report reporting the results of the field work conducted pursuant to paragraph 55;

(iii)A Chromium Impacted Soils Pilot Test Work Plan and Analytical Protocol for conduct of the treatment study pursuant to paragraph 56, unless such documents are agreed to by NJDEP and Riverkeeper before the entry of this Consent Decree;

(iv)An Initial Treatment Study Report for the Development AOC;

(v) A Final Treatment Study Monitoring Report;

(vi) The documents for Site 163 submitted pursuant to paragraphs 54(a)(iv), 54(a)(v), 61, and 62;

(vii) A report to evaluate the need for remediation of any potentially remaining contaminated shallow groundwater in the Development AOC after implementation of the Development AOC Soils Remedy and, based on such an evaluation, a proposal;

(viii) A report of the results of the sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site pursuant to paragraph 71 and, based on the results, a proposal for a remedy;

(ix) A plan for one round of monitoring to evaluate whether the L-Well Groundwater remains contained pursuant to paragraph 72;

(x) A proposal for a remedy of the L-Well Groundwater, in the event L-Well Groundwater monitoring indicates the contaminated groundwater is no longer contained, pursuant to paragraph 72;

(xi) A Remedial Action Work Plan;

(xii) A 50% Design Report (which may include the Development AOC Conceptual Design Plan as a component) as well as design drawings and specifications at the 50% level for other components of the Chromium Remedy (hereinafter the 50% Design);

(xiii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(xiv) The data validation plan, including quality control and quality assurance protocols;

(xv) The site-wide master health and safety plan;

(xvi) The Long-Term Monitoring Plan;

(xvii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(xviii) A program for post-treatment monitoring pursuant to paragraph 63, and, depending on such results, a proposal for further remedial actions;

(xix) A report reviewing measured groundwater levels for the groundwater remedy;

(xx) Documents required during the Initial Development Period pursuant to paragraphs 74(j)(vi), 74(j)(vii), and 74(j)(viii); and

(xxi) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Initial Review of Documents by NJDEP.** The Parties and Special Master shall allow the period of time set forth below for NJDEP to conduct its review of a submission (hereinafter "NJDEP Review Period") before the document is subject to the Special Master review and approval process. During the NJDEP Review Period, any Party may submit comments to NJDEP. For the Second Supplemental Remedial Investigation Report, the Remedial Action Work Plan, the Initial Treatment Study, and the Final Treatment Study Monitoring Report, the NJDEP Review Period shall be 90 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. For any other documents identified in paragraph 86(c), the NJDEP Review Period shall be 30 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. The NJDEP review period shall be extended an additional 30 days for any document for which NJDEP provides the Parties and the Special Master with notice that its review will require an additional 30 days. At the conclusion of the NJDEP Review Period, the comment and review process provided for in paragraphs 86(e) and 86(f) shall commence. In the event that any document has been revised during the NJDEP Review Period, Honeywell shall resubmit the applicable document for purposes of the comment and review provided for in paragraphs 86(e) and 86(f).

(e) **Comment on Submitted Documents**. For each of the documents submitted by Honeywell pursuant to paragraph 86(c), and following conclusion of the NJDEP Review Period as described in paragraph 86(d), the Special Master shall establish a schedule for the submission

of comments and responses to comments. For each of the documents submitted, Riverkeeper, Jersey City, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all comments received and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, Jersey City, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 86(f), unless the Parties agree both on the revised document and that further review and approval pursuant to paragraph 86(f) is unnecessary. In that event, the Parties shall inform the Special Master that review under paragraph 82(f) is unnecessary and Honeywell shall proceed to implement the revised document.

(f) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review**. Subject to the limitations in paragraph 82(e), all documents submitted by Honeywell, pursuant to paragraph 86(c) and 86(e), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 86(g). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure**. Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within

the timeframe established by the Special Master in the schedule for comments pursuant to paragraph 86(e). NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review**. If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(g) **Schedule and 100% Design Documents**. As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(h) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The

Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(i) **Changes to the Schedule.** The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54; and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

87. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 89.

88. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Sediment Consent Order. The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

89. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

90. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 74(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 74(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, the Study Area 6 North Consent Decree, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities

shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

J. Initial Financial Assurances

91. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy calculated using factors, including inflation and discount rates, determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process;

(ii) The costs of monitoring and maintenance activities for five years, as required by the Long-Term Monitoring Plan, calculated using factors including inflation and discount rates determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 91(a)(i) and 91(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

92. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than December 31, 2008, Honeywell shall submit to Riverkeeper and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If Riverkeeper does not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

93. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 94, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.J, the Special Master shall direct the cancellation of the prior Chromium Remedy

Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

94. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 91(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.K. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and

in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such terms. If Honeywell is not otherwise in default as provided in Article III.J and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

95. **Bankruptcy Protection**. Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

96. **Exclusive Court Jurisdiction**. The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

97. **Application of New York Law.** The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Chromium Remedy Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

98. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 85, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 93 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from

drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 98(c), and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

99. **Placement of Proceeds in Court Registry Investment System Account**. In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The

Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 103(b)(v).

100. **Termination of Chromium Remedy Letter of Credit**. The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.K.

K. Long-Term Financial Assurances

101. **Long-Term Financial Assurances**. Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 102(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

102. **Costs Subject to Long-Term Financial Assurances**.

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater remedies pursuant to paragraphs 69, 70, and 71;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) The perpetual administration of the trust fund regardless of whether such trust fund is selected by Honeywell pursuant to paragraph 103(a) or is established from the Long-Term Letter of Credit pursuant to paragraphs 103(b)(ii), 103(b)(v), or 109.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 102(a)(i) through 102(a)(v) plus a 25% contingency when the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of the estimated future costs of the activities specified in paragraphs 102(a)(i) through 102(a)(v), plus a 25% contingency on those costs.

103. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution managing the

trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 102(a)(i) through 102(a)(iv).

(b) **Long-Term Letter of Credit**. In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 103(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 106.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of

Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(iii) The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits) as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Long-Term Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 98. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a). After the Special Master's appointment expires pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 103(b)(ii), 103(b)(v), or 109 and Honeywell has also selected a trust fund pursuant to paragraph 103(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(c) **Combination**. Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 103(a) and 103(b).

104. **Procedures for Review of the Proposed Long-Term Financial Assurances**. No later than June 1, 2009, Honeywell shall submit to Riverkeeper and the Special Master, for their review (a) the amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper agrees to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances.

105. **Temporary Maintenance of Chromium Remedy Letter of Credit**. Until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 91 in an amount equal to at least $20,000,000 in 2008 dollars. In the event of any default by Honeywell pursuant to paragraph 98 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 103(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under

paragraph 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), shall apply.

106. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 103, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to

long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 103(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 103(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 103(b).

107. **Exclusive Court Jurisdiction**. The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 103(a), 103(b)(ii), 103(b)(v), or 109.

108. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 103(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 108(c), if Honeywell fails to provide assurance to Riverkeeper, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

109. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or pursuant to paragraph 108 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be

paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

110. **Use of the Trust Fund in the Event of Honeywell's Default.** In the event of Honeywell's default, as defined in paragraphs 108(a) through 108(d), the money in the trust fund established pursuant to paragraph 103(a) shall be available to meet the obligations of paragraph 102(a), as well as for payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

111. **Use of a Trust Fund Established Pursuant to Paragraph 99, 103(b)(ii), 103(b)(v), or 109.** In the event that a trust fund is established pursuant to paragraph 99, 103(b)(ii), 103(b)(v), or 109, the money in the trust fund shall be available to meet the obligations of paragraph 102(a), as well as for the payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

112. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations under Article III.K shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the Open Space AOC or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive

standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: TERMINATION

113. **Termination of this Consent Decree.** This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 118:

(a) The Court fails to enter this Consent Decree or this Consent Decree is determined to be invalid on appeal; or

(b) NJDEP takes one of the following actions with respect to the Remedial Action Work Plan:

(i) Rejects or fails to approve the Remedial Action Work Plan for the Chromium Remedy within 180 days of submission of the plan;

(ii) Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in more than a 50% increase in the estimated costs of the Chromium Remedy as set forth in Article III; or

(iii) Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in a substantial reduction of the protection of human health and/or the environment.

114. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 113 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 113 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

115. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 113.

116. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 113, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 113, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: TRANSFER OF TITLE TO BAYFRONT REDEVELOPMENT LLC

117. **Transfer of Title of Study Areas 6 South and 7 to and from Bayfront Redevelopment LLC.** The transfer of title of Study Area 6 South and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of

Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 South and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 South or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 South and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 South under this Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell*.

ARTICLE VI: NOTICE

118. **Notice**. Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE VII: RIVERKEEPER'S ATTORNEYS' FEES

119. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $813,000.00 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 South portion of *Riverkeeper v. Honeywell* through August 31, 2008; and

Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order. In the event of Honeywell's default, Riverkeeper may seek attorneys' fees from any trust fund or court registry funds established pursuant to the financial assurances provisions of this Consent Decree.

ARTICLE VIII: MISCELLANEOUS PROVISIONS

121. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

122. **Bayfront Redevelopment LLC as a Party.** As a signatory to this Consent Decree, Bayfront Redevelopment LLC subjects itself to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agrees to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against Bayfront Redevelopment LLC.

(b) $353,746.67 in out-of-pocket expenses representing a portion of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses paid pursuant to the Sediment Consent Order, the Deep Groundwater Consent Order, and the Study Area 6 North Consent Decree.

(c) Payment of the sum of $813,000.00 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $879,317.92 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

120. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after August 31, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell*. In the event that Riverkeeper and Honeywell are unable to reach a settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to

123. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

124. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

125. **Reservation of Rights and Claims.** Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

126. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

127. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party..

128. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

129. **Measures to Effectuate This Consent Decree.** Jersey City shall take all appropriate steps to ensure that commitments it has agreed to with regard to the Open Space AOC have been duly considered, ratified, and approved. Such steps include consideration of such commitments and an effectuating ordinance at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the commitments made by Jersey City..

130. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

131. **Severability.** Each of the provisions in paragraph 74 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

132. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Remedial AOC's and Remedial Approach Map

Exhibit B: NJDEP Chromium Policy

Exhibit C: Conservation Restriction

Exhibit D: Deed Notice

Exhibit E: Additional Boring Locations

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11/30/2017 09:55:01 AM
DEED
NUMBER OF PAGES : 128
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Deed Notice

Dated: _____, *2017*

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: Perry Florio, Esq

DEED NOTICE #4
SA-6 SOUTH SITE 073 AND SA-7

Hudson County Recording Data Page Honorable Diane Coleman Hudson County Register	*Official Use Only – Barcode*
Official Use Only – Record & Return	*Official Use Only – Realty Transfer Fee*
Date of Document: November 16, 2017	Type of Document: Deed Notice
First Party Name: Bayfront Redevelopment, LLC	Second Party Name:
Additional Parties:	

20171130010138820 1/127
11/30/2017 09:28:34 AM DEED
Bk: 9258 Pg: 566
Diane Coleman
Hudson County, Register of Deeds
Receipt No. 1307784

$1313 128pgs

THE FOLLOWING SECTION IS REQUIRED FOR DEEDS ONLY	
Block:	Lot:
Municipality:	
Consideration:	
Mailing Address of Grantee:	

THE FOLLOWING SECTION IS FOR ORIGINAL MORTGAGE BOOKING & PAGING INFORMATION FOR ASSIGNMENTS, RELEASES, SATISFACTIONS, DISCHARGES & OTHER ORIGINAL MORTGAGE AGREEMENTS ONLY	
Original Book:	Original Page:

HUDSON COUNTY RECORDING DATA PAGE

Please do not detach this page from the original document as it contains important recording information and is part of the permanent record.

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature] William J. Hague, Global Director – Remediation Design & Construction
_____
[Bayfront Redevelopment LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

DEED NOTICE CONCERNING CONTROLS INSTALLED FOR CHROMIUM CONTAMINATION UNDERLYING THE PROPERTY

This Deed Notice is made as of the 16th day of November 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950***. "Owner" shall mean Bayfront Redevelopment LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The Property (also referenced herein as the "Restricted Area(s)") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached.

1. THE PROPERTY. Bayfront Redevelopment LLC is the current owner in fee simple of certain real property designated as a portion of ***Block 24601, Lot 1 and Block 21901 Lots 8 and 10 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]; the New Jersey Department of Environmental Protection Program Interest Numbers for the contaminated site which includes this property are ***Hudson County Chromate Site No. 073 Program Interest ("PI") No. G000000927 and Hudson County Chromate Site No. 115 PI No. G000002548*** (NJDEP PI# for non-chromium-related contaminants at the Property is #745719). The Property is located between the Hackensack

[1] All references to Block 24601 Lot 1 and Block 21901 Lots 8 and 10 in this Deed Notice shall mean those applicable portions of Block 24601 Lot 1 and applicable portions of Block 21901 Lots 8 and 10 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

River bulkhead and the western hydraulic barrier walls installed within Study Areas 6 South and 7 as shown on Exhibit B-1, attached hereto. A portion of the Property (Tract 1) is part of the site referred to as Study Area 7 (Site 115) and the subject of an Administrative Consent Order (ACO) between Honeywell International Inc. ("Honeywell") and the Department dated June 17, 1993, and a Court-Ordered Remedy pursuant to the U.S. District Court for the District of New Jersey ("Court") Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Case No. 95-2097, entered on June 30, 2003. The second portion of the Property (Tract 2) is subject to the ACO and to litigation captioned *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J. Civ. No. 05-5955, and *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J. Civ. No. 05-5993. Study Area 7 was previously remediated by Honeywell and received a No Further Action/Covenant Not to Sue letter, dated December 23, 2010, which did not include Tract 1. Tract 2 of the Property is part of the site referred to as Study Area 6 South (Site 073) for which Honeywell recently completed the Chromium Remedy pursuant to the First Amended Consent Decree Regarding the Remediation and Redevelopment of Study Area 6 South ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.*, D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.*, D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.*, D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The Consent Decree restricts transfer, use, and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management (BCM) is the entity within the Department that is responsible for the chromium oversight of the remediation of SA-6 South and SA-7. The matter for SA-6 South was Hudson County Chromate Site No. 073 Program Interest (PI) No. G000000927. The matter for SA-7 was Hudson County Chromate Site No. 115 PI No. G000002548. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 South and SA-7 to address chromium-related soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented.

For SA-6 South, the Remedial Action Work Plan ("RAWP") was approved by the Department on March 24, 2009 for Hudson County Chromate Site Nos. 073, 124, 125, 134, and 140, which included portions of the Property. Remedial actions were further approved pursuant to the Consent Decree. Under both the Consent Decree and the RAWP, soil contamination remains in the

Property at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 South was submitted to the Department on February 8, 2017. The Department approved the RAR on March 30, 2017. A Construction Completion Report ("CCR") for SA-6 South to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 South was entered by the Court on November 20, 2017, Docket Nos 1520 to 1525.

For SA-7, the Court-Ordered Remedy 100% Design was approved by the Court on March 14, 2005. Remediation was completed to comply with the court order to remove all materials containing hexavalent chromium in excess of 240 milligrams per kilogram ("mg/kg"). The remedial action achieved compliance with the Department's current most stringent soil cleanup criteria of 20 mg/kg, with the exception of a small portion of the Property at the bulkhead along the Hackensack River where excavation was technically impractical (the Technically Impracticable Area (or "TI Area")) (*i.e.*, Tract 1). Completion of the excavation remedy at SA-7 was acknowledged by the Court in the Amended Order Modifying the Judgment, January 13, 2012, ECF No. 1116, in Interfaith Community Organization v. Honeywell International Inc., Civ. No. 95-2097. Remedial actions for soils are also documented in a Remedial Action Report for Soils ("RAR") submitted to the New Jersey Department of Environmental Protection during December 2010.

The Property is comprised of two tracts of land; Tract 1 is on a portion of SA-7 and Tract 2 is on a portion of Site 073 on SA-6 South. Tract 1 is an approximately 22,323 square foot area on SA-7 between the bulkhead and the western hydraulic barrier installed at SA-7. Tract 1 includes the western hydraulic barrier of SA-7. Tract 1 is the "Technically Impracticable Area or TI Area" identified in the SA-7 RAR. NJDEP issued a conditional No Further Action letter for SA-7 soils on December 23, 2010, that excludes the TI Area. Soils within Tract 1 do not meet the 20 mg/kg objective in the NJDEP Chromium Policy. Tract 1 soils exceeding 20 mg/kg hexavalent chromium are covered by at least 7 feet of clean soils. Tract 1 will not be remediated by Honeywell; instead the 7-foot thick clean soil cap will remain in place and Tract 1 will be subject to this Deed Notice. Tract 1 also includes two steel sheetpile "wing walls" that project toward the bulkhead from the northern and southern corners of the hydraulic barrier intersections. These wing walls are part of the SA-7 Remedy in that they act to minimize re-contamination of the clean backfill material placed in the TI area from either the north or south. The Riverwalk feature including bulkhead improvements, additional fill soils and hardscape features will be constructed over the top of the Tract 1 Deed Notice Area. The provisions of the Long Term Monitoring Plan ("LTMP"), developed pursuant to the Consent Decree, will apply to Tract 1 of the Property.

Tract 2 is an approximately 11,689 square foot area adjacent to the bulkhead partially between the western boundary of the SA 6 South western hydraulic barrier wall and the bulkhead and extending south. The 100% Design plan for the Tract 2 area was to excavate the top 4 feet of soils within the area and defer additional excavation below a depth of 4 feet until implementation of the Bayfront Redevelopment Project when the bulkhead will either be repaired or replaced. Because an approximately 5-foot thick concrete slab was unexpectedly encountered while excavating in this area and because removal of this concrete would jeopardize the integrity of the bulkhead, excavation of residual chromium-impacted soil at any depth in Tract 2 will be coordinated with

bulkhead improvement work to be implemented during the Bayfront Redevelopment Project. Tract 2 soils exceeding 20 mg/kg hexavalent chromium are covered by at least 1 foot of clean soils.

Honeywell is instituting this deed notice on the Property (both Tracts 1 and 2 together). Once the remediation of the Tract 2 area is complete (*i.e.*, the excavation of soils with hexavalent chromium concentration of 20 mg/kg or greater to a depth of 20 feet below ground surface), Honeywell will terminate the deed notice for Tract 2 consistent with the requirements of Paragraph 13 below. In the meantime, the provisions of the LTMP, developed pursuant to the Consent Decree, will apply to Tract 2 of the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater contaminant concentrations and restrictions for SA-6 South in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater (recent groundwater samples collected in the Tract 1 portion of the Property do not indicate shallow groundwater contamination within the Property). As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree (for Tract 2), Honeywell is responsible for monitoring and maintaining the soil remediation for the Property in perpetuity or until remediation is implemented that renders this Deed Notice unnecessary.

4. CONSIDERATION. In accordance with the Department's approval of the chromium RAWP for the Hudson County Chromate Site Nos. 073, 124, 125, 134, and 140 and the Department's issuance of the No Further Action/Covenant Not to Sue letter for soils at SA-7, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of contamination remaining at concentrations that do not allow for unrestricted use, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained either at onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care

facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a child care facility without the Department's prior written approval;

iii. The Consent Decree, paragraph 9, prohibits the unrestricted use of Tract 2 of the Property until the Chromium Remedy set forth in Article III of the Consent Decree is implemented; and

iv. The Conservation Restriction, recorded with the Hudson County Register of Deeds at Book 8772, page 105, restricts the use and development of Tract 2 of the Property; the Conservation Restriction will be removed if the Chromium Remedy set forth in Article III of the Consent Decree is implemented and the Deed Notice for Tract 2 is terminated.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls within the Property. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, the LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has developed an LTMP which sets forth requirements for monitoring, maintenance, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, with limitations for Tract 1 of the Property as described above, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Mount Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5F. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Restricted Areas, of the nature and location of known contamination in the Restricted Areas, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and Conservation Restriction, and (b) without first obtaining a Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(b), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and

LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or

exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, to ensure that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice as to Tract 2 is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 80 and 83 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as roads, walkways and other hardscape.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Restricted Area Data Tables - Table for the Property that includes:

(A) Sample location designation from Restricted Area maps (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A and B. Exhibit C-1-A: Deed Notice as Institutional Control; Exhibit C-1-B: Consent Decree as Institutional Control (attached): Exhibit C-1 (A and B) includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
(1) Description and estimated size of the Restricted Areas as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:
(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;
(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;

(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and

(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2. Exhibit C-2: Engineering Controls: Clean Fill/Crushed Stone Cover; Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:

(1) Description of the engineering control;

(2) The objective of the engineering control; and

(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;

(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering control continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Stephanie Frank
Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 28, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 28th day of November, 2017.

_____
Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #4 Site 073 and SA-7

A-1 Vicinity Map

A-2 Metes and Bounds Description and Tax Map

A-3 Property Map Portions of Block 24601, Lot 1 and Portions of Block 21901 Lots 8 and 10, City of Jersey City, New Jersey

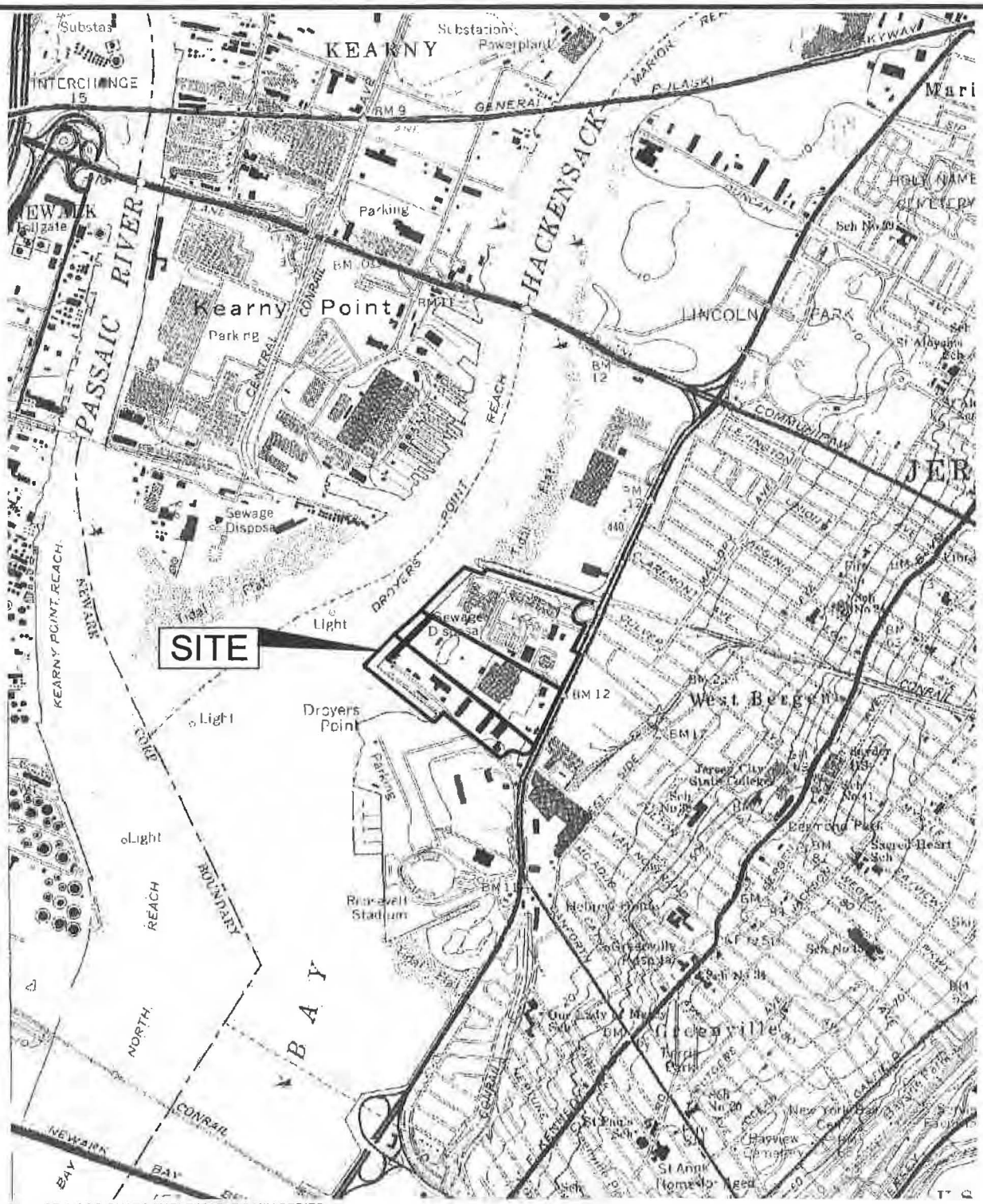
Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of the metes and bounds and a tax map for the Property.

Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering control for the Property. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as roads, walkways and other hardscape.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 6 SOUTH SITES 073 and PORTIONS OF STUDY AREA 7
SITE 115
JERSEY CITY, NEW JERSEY



SOURCE: USGS QUADRANGLE MAP, 7 5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

SA–6 SITE 073 DEFERRED AREA AND SA–7

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150450–5100–A100–4000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-1** VICINITY MAP BLOCK 24601 LOT 1 AND BLOCK 21901 LOTS 8 &10 DEED NOTICE # 4 SA-6 SOUTH SITE 073 DEFERRED AREA AND SA-7 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	*CHECKED/DATE:* NW 01/31/17		

CONFIDENTIAL. AND MAY NOT BE COPIED OR DISCLOSED, AND (2) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THE DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\JOBS\HONEYWELL JERSEY CITY\SA 6 SOUTH\3480150486\5100\571004.dwg notice\deed notice\3480150450-5100-A100-4000.dwg Tue, 14 Nov 2017 - 1:15pm scott.rupp

Exhibit A-2
Deed Notice #4 Site 073 and SA-7
Metes and Bounds Description of Property: See Attached
Tax Map: See Attached

A-2 Metes and Bounds Description of Property Portions of Block 24601, Lot 1 and Portions of Block 21901 Lots 8 and 10
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map, or any other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as a portion of Block 24601, Lot 1 and portion of Block 21901 Lots 8 and 10 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment LLC. A copy of the current tax map which includes the Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732 383.1950 ▪ Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q

DEED NOTICE AREA 4
BLOCK 24601 LOT 1
& BLOCK 21901 LOTS 8 & 10
APRIL 6, 2016
REVISED: JUNE 28, 2017

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 1 Block 24601, and a portion of Lot 8 Block 21901, designated as Deed Notice Area 4 as shown on an exhibit entitled, "Deed Notice Area 4, SA6 South, Block 21901, Lot 8, Block 24601, Lot 1, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated April 6, 2016, revised June 28, 2017 and being more particularly bounded and described as follows, to wit:

TRACT I:

COMMENCING at the intersection of the division line between Lots 8 and 10, Block 21901, with the northwesterly line of said Lot 8; thence-

A. **S 59°39'05" E, 23.69 feet**, along said division line to the **True** point of **BEGINNING**, and running; thence-

1. **N 44° 21' 38" E, 6.65 feet,** through a portion of Lot 10, Block 21901; thence-

2. **S 50° 26' 45" E, 40.33 feet,** through said Lot 10 to a point in said division line between Lots 8 and 10, Block 21901; thence-

Running through said Lot 8, Block 21901 the following two (2) courses, as shown on aforementioned exhibit map:

3. **S 45°51'07" W, 569.68 feet**; thence-

4. **S 45°54'51" W, 4.10 feet,** to the division line between Lot 1, Block 24601 and Lot 8, Block 21901; thence-

5. **N 53° 42' 45" W, 40.04 feet,** along said division line; thence –

Running through said Lot 8, Block 21901 the following three (3) courses, as shown on aforementioned exhibit map:

6. **N 45° 37' 13" E, 5.46 feet**; thence –

7. **N 45° 57' 38" E, 511.35 feet**; thence-

8. **N 44° 21' 38" E, 52.57 feet,** to the point and place of **BEGINNING**.

CONTAINING: 22,457 S.F. of land more or less or 0.516 acres of land more or less.

TRACT II:

COMMENCING at the intersection of the division line between Lot 1, Block 24601 and Lot 8, Block 21901, with the northwesterly line of said Lot 8; thence-

A. **S 53° 42' 45" E, 23.85 feet**, along said division line to the **True** point of **BEGINNING**, and running; thence-

1. **S 53° 42' 45" E, 40.04 feet,** along said division line; thence-

Running through said Lot 1, Block 24601 the following ten (10) courses, as shown on aforementioned exhibit map:

2. **S 45°54'51" W, 153.16 feet,** thence –
3. **S 53° 41' 21" E, 12.04 feet**; thence-
4. **S 36° 26' 04" W, 6.50 feet,** thence –
5. **S 38° 36' 29" W, 41.58 feet,** thence –
6. **S 40° 39' 53" W, 9.05 feet,** thence-
7. **N 88° 57' 37" W, 27.39 feet,** thence -
8. **S 26° 56' 10" W, 17.04 feet,** thence -
9. **S 54° 23' 40" W, 30.23 feet,** thence –
10. **N 46° 36' 39" W, 38.87 feet,** thence –
11. **N 45° 37' 13" E, 268.17 feet,** to the point and place of **BEGINNING**.

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q

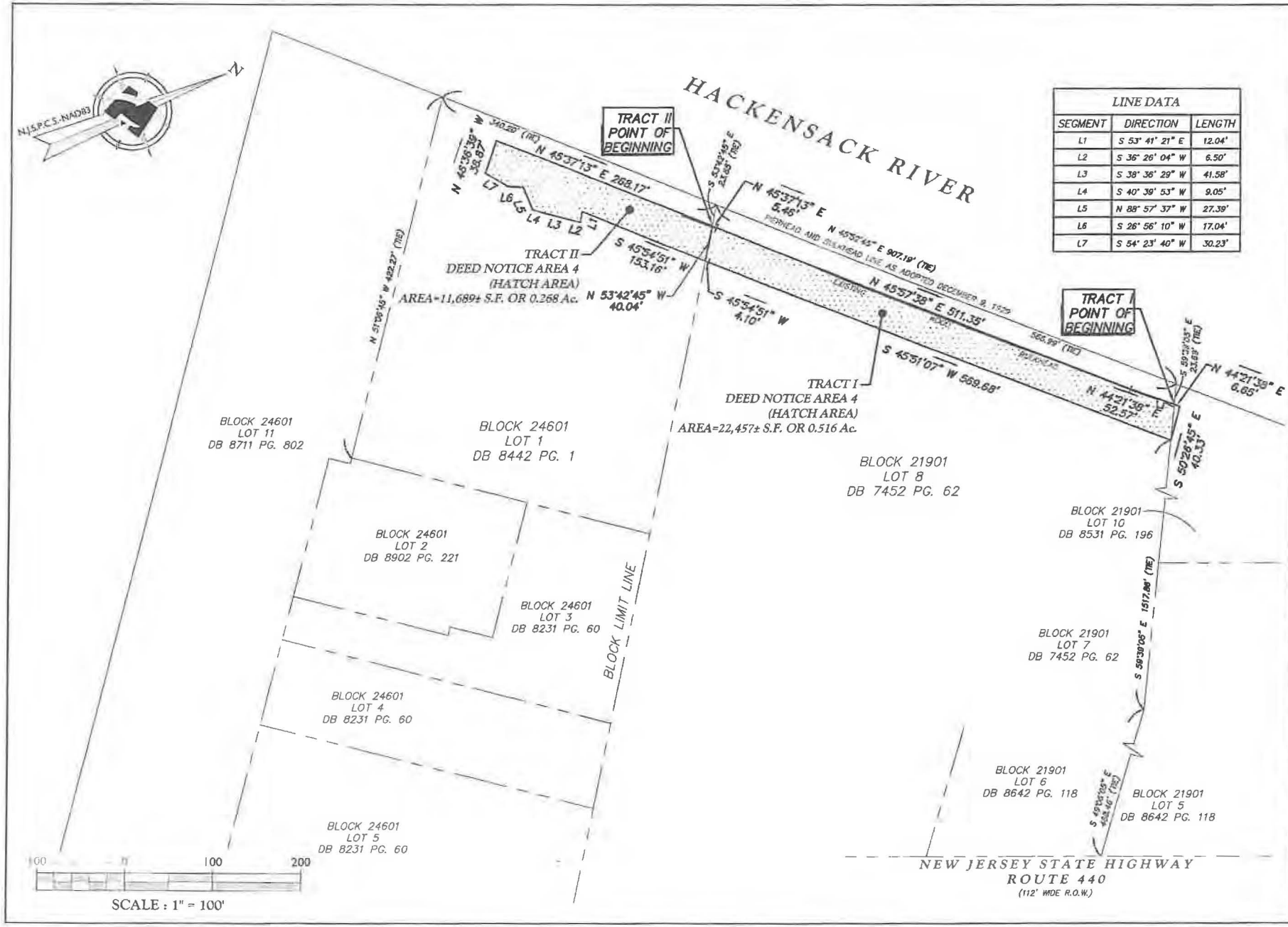
DEED NOTICE AREA 4
BLOCK 24601 LOT 1
& BLOCK 21901 LOTS 8 & 10
APRIL 6, 2016
REVISED: JUNE 28, 2017

CONTAINING: 11,689 S.F. of land more or less or 0. 0.268 acres of land more or less.

06/28/17

GLEN J. LLOYD, P.L.S. DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

\\HQFAS1\General\Projects\2010\10000292Q\Survey\Description\Metes & Bounds-Deed Notice 4 REV_6-28-17.docx



LINE DATA		
SEGMENT	DIRECTION	LENGTH
L1	S 53° 41' 21" E	12.04'
L2	S 36° 26' 04" W	6.50'
L3	S 38° 36' 29" W	41.58'
L4	S 40° 39' 53" W	9.05'
L5	N 88° 57' 37" W	27.39'
L6	S 26° 56' 10" W	17.04'
L7	S 54° 23' 40" W	30.23'

MASER CONSULTING P.C.

811 PROTECT YOURSELF

REV	DATE	DESCRIPTION
1	2/2/17	DIVIDED DN-4 INTO TWO TRACTS
2	4/28/17	REVISE DN-4 TRACT I SOUTHEASTERLY LINE NEAR LOT 10

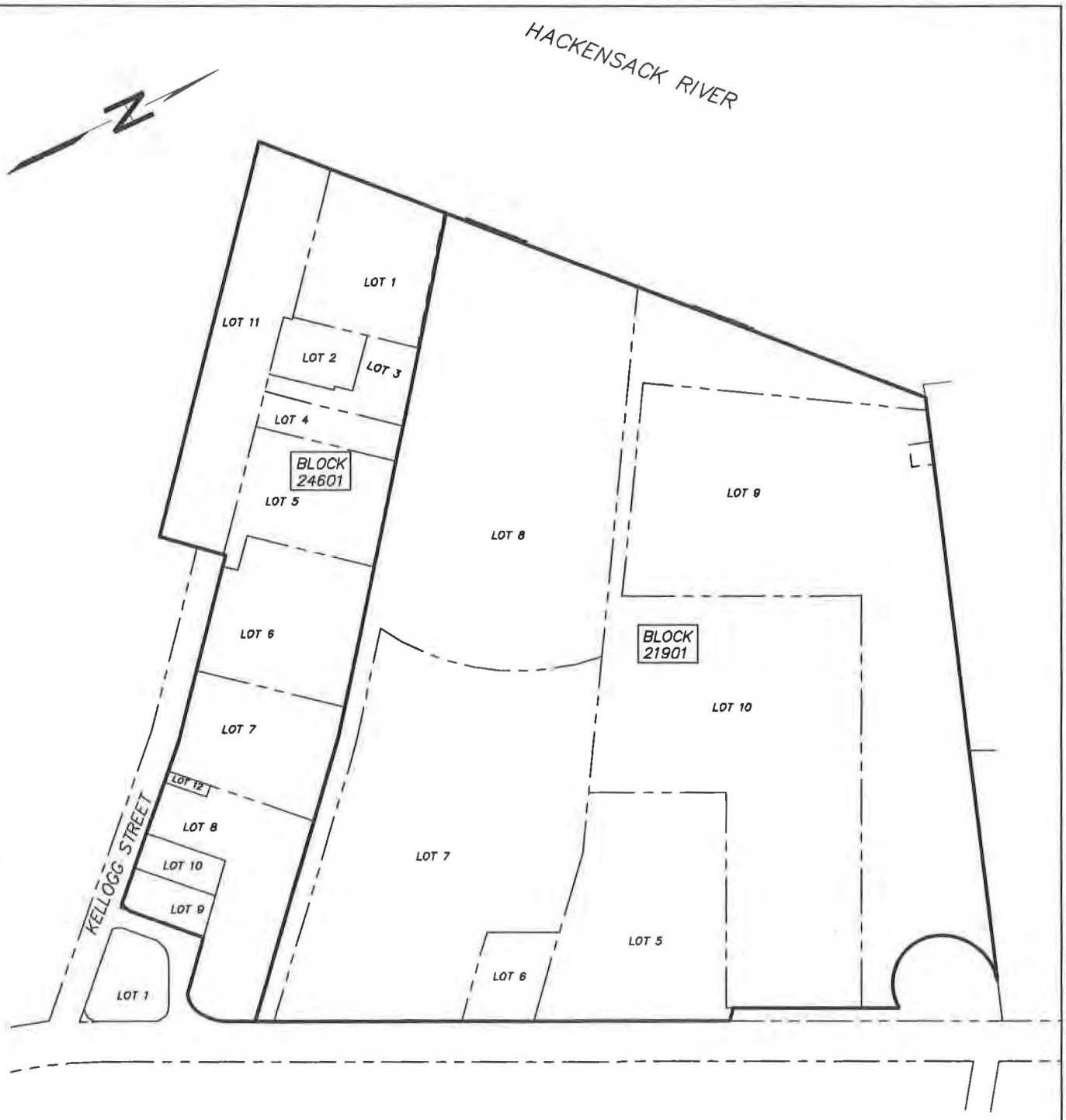
DEED NOTICE AREA 4
SA6 SOUTH
FOR

BLOCK 21901, LOT 8
BLOCK 24601, LOT 1
CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

RFD BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 202
Red Bank, NJ 07701

DEED NOTICE EXHIBIT

1 of 1



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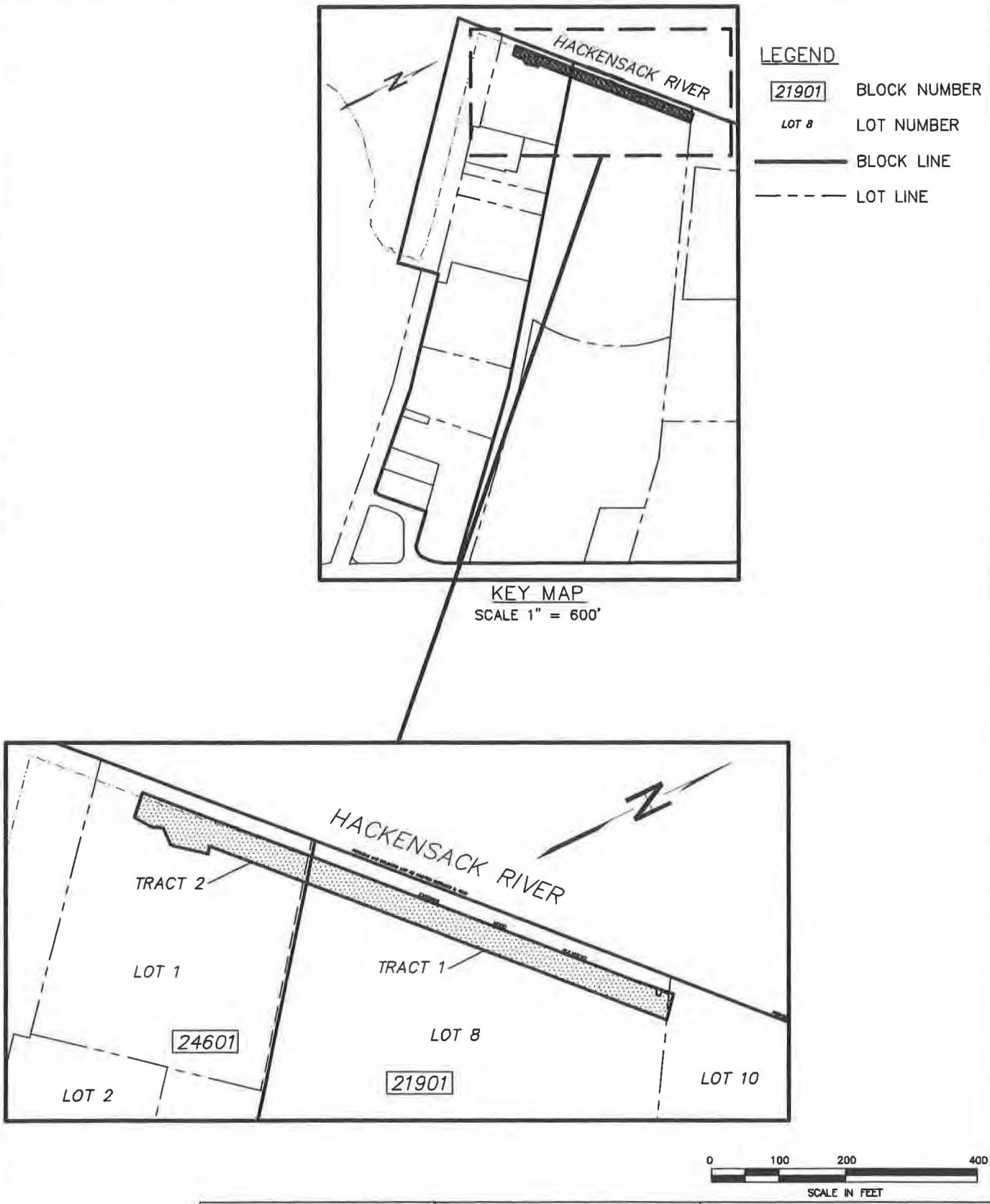
P:\CADD\CIVIL\NEW JERSEY CITY\SITE 073 - SOUTH\3480150450\5100\5710\5710804\sheet mailers\sheet mailers v1\3480150450-5100-A200-4000.dwg Tue, 14 Nov 2017 - 3:48pm scott.rollin

Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A200-4000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-2** TAX MAP BLOCK 24601 LOT 1 AND BLOCK 21901 LOTS 8 & 10 DEED NOTICE # 4 SA-6 SOUTH SITE 073 DEFERRED AREA AND SA-7 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17		

Exhibit A-3
Property Map



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-A300-4000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-3** PROPERTY AREA MAP BLOCK 24601, LOT 1 AND BLOCK 21901, LOTS 8 & 10 DEED NOTICE # 4 SA-6 SOUTH SITE 073 DEFERRED AREA AND SA-7 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16 CHECKED/DATE: NW 01/31/17		

EXHIBIT B
Deed Notice #4 Site 073 and SA-7
B-1 Restricted Area Maps
B-2 Restricted Area Data Table
Block 24601, Lot 1 and Block 21901 Lots 8 and 10
City of Jersey City, New Jersey

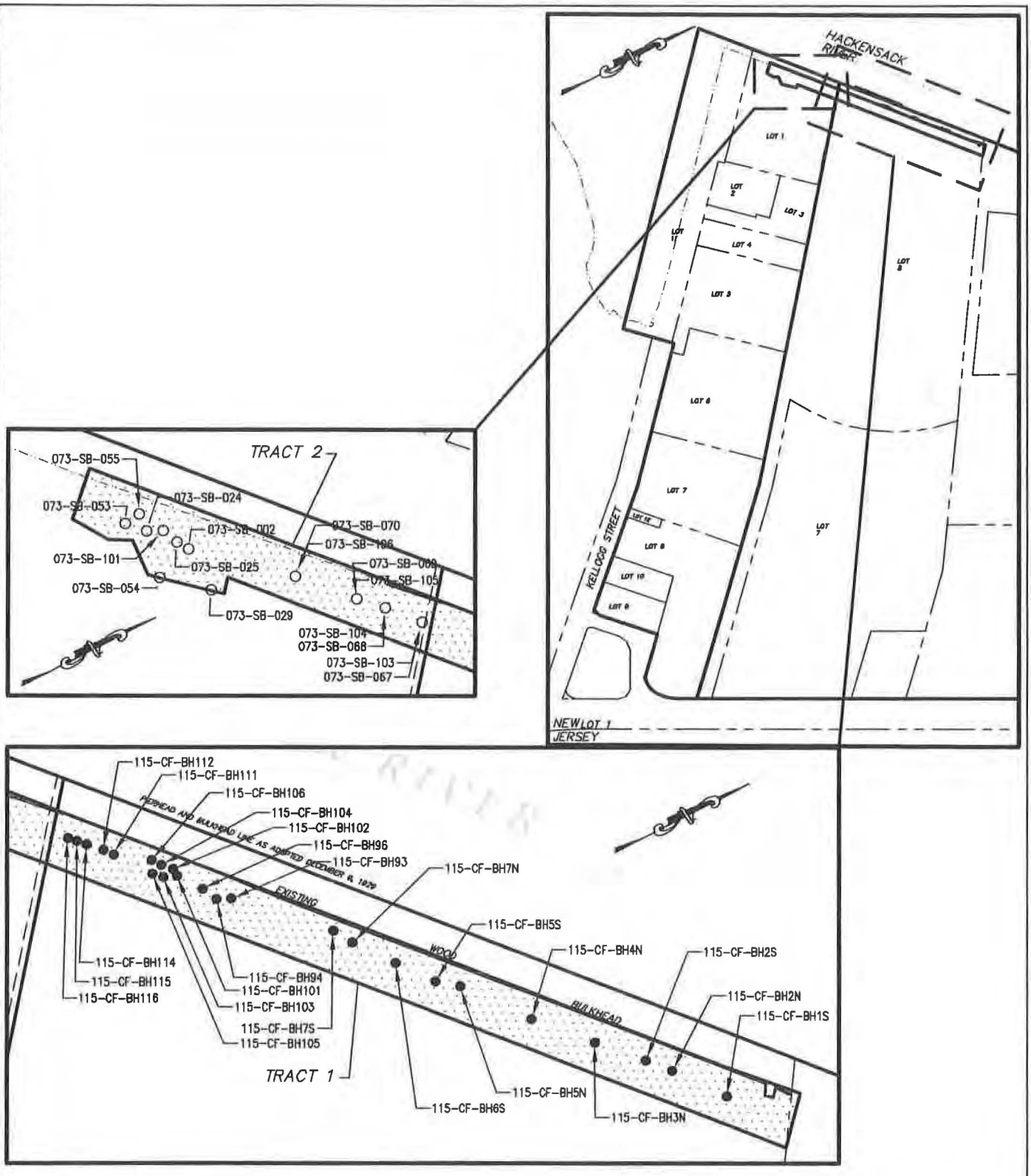
Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area and Soil Sample Locations), Exhibit B-1B (Cap System Details), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of hexavalent chromium remaining above the level established in the New Jersey Department of Environmental Protection (NJDEP) Chromium Policy of 20 milligrams per kilogram (mg/kg).

Restricted Area Map Notes:

Exhibit B-1 indicates the engineering controls for the chromium remedy components. For soils with hexavalent chromium concentrations above 20 mg/kg, the engineering controls include a minimum of 7 to 14 feet of clean soil cover/crushed stone in the Tract 1 area and a minimum 1 foot of clean soil cover plus asphalt in the Tract 2 area.

Exhibit B-1
Restricted Area Maps



0 150 300 600

SCALE IN FEET

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P:\CADD\HONEYWELL-JERSEY CITY\SA 8 SOUTH\3480150458\8100\8710\8710DA\deed notice\deed notice #3480150458-5100-B100-4000.dwg Tue, 14 Nov 2017 - 1:34pm scott.radkin

Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-B100-4000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD. SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1A** RESTRICTED AREA MAP BLOCK 24601 LOT 1 & BLOCK 21901 LOTS 8 & 10 DEED NOTICE # 4 SA-6 SOUTH SITE 073 DEFERRED AREA AND SA-7 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/28/16 | CHECKED/DATE: NW 01/31/17		

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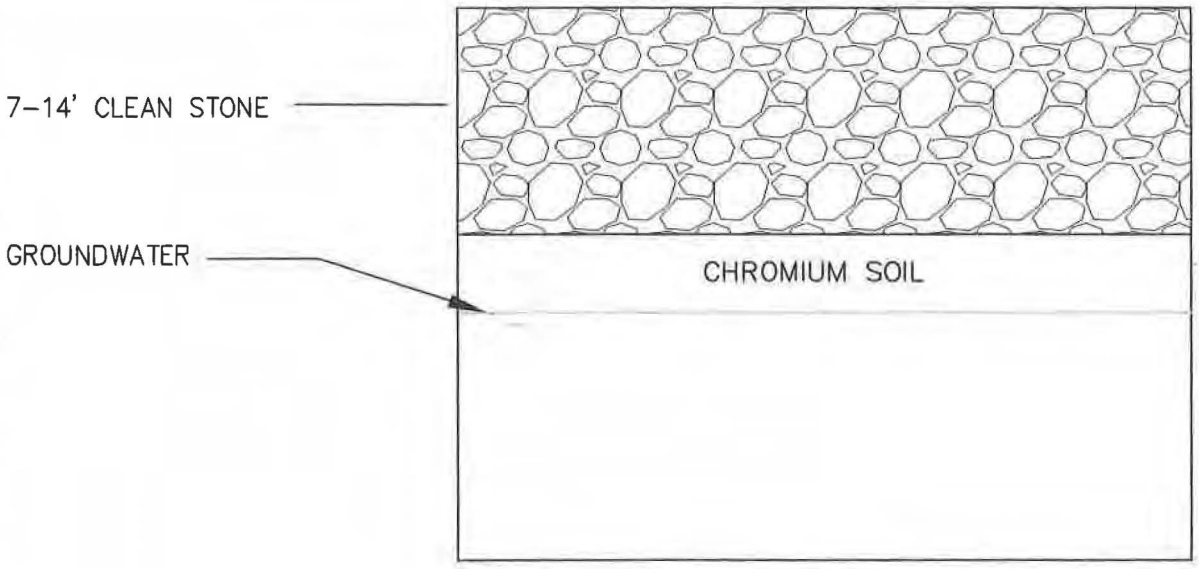
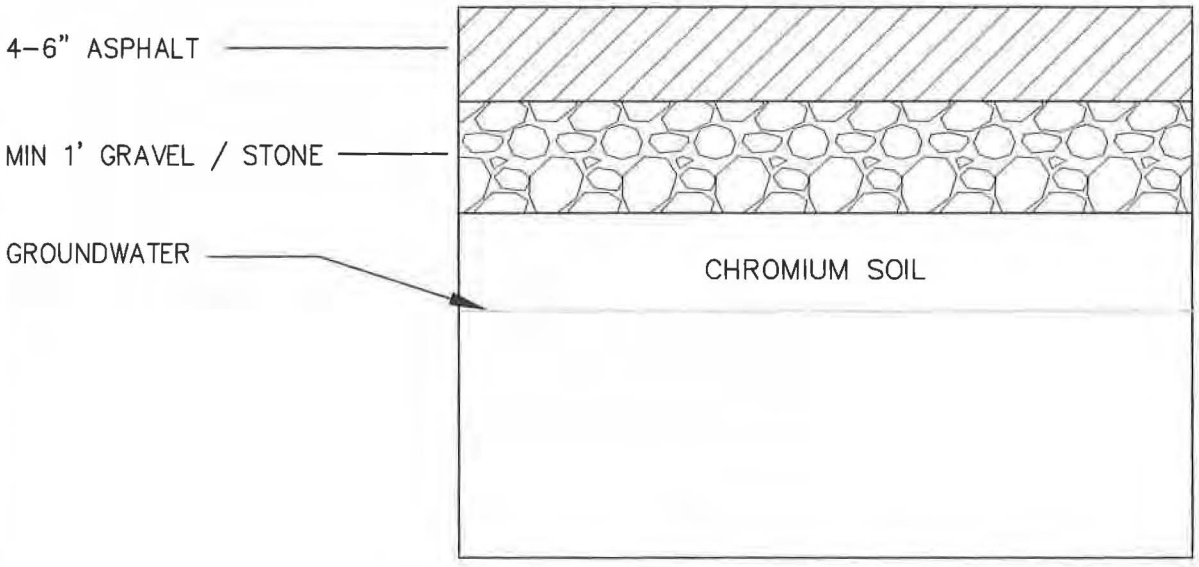
P:\DADDY HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\571004\deed notice 4\3480150450-5100-B200-4000.dwg Tue, 14 Nov 2017 - 1:36pm scott.roslin

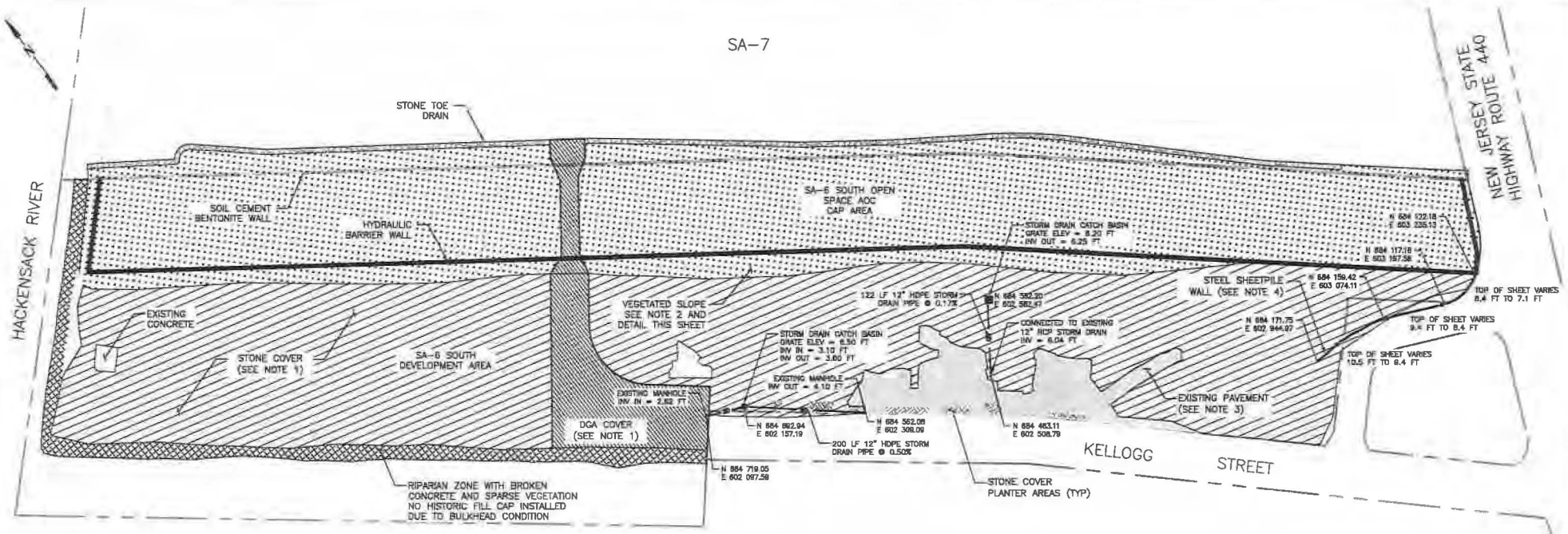


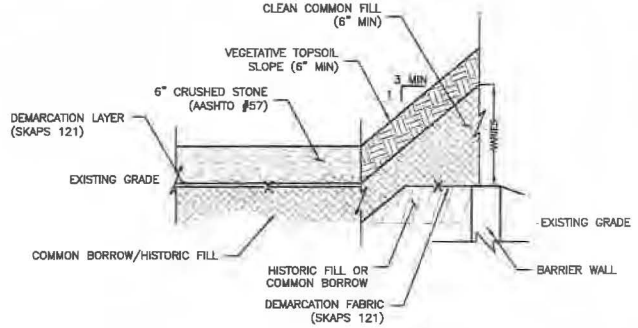
CAP SYSTEM DETAIL
TRACT 1
NTS



CAP SYSTEM DETAIL
TRACT 2
NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150450-5100-B200-4000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAILS BLOCK 24601 LOT 1 & BLOCK 21901 LOTS 8 & 10 DEED NOTICE # 4 SA-6 SOUTH SITE 073 DEFERRED AREA AND SA-7 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/25/17	CHECKED/DATE: NW 01/31/17		





NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA–7

TYPICAL VEGETATED SLOPE
NTS

EXHIBIT B-1C

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE ON THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL AS SHOWN ON THE TYPICAL VEGETATED SLOPE DETAIL. THE VEGETATED SLOPE ALONG SA–7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. EXISTING PAVEMENT WAS FIELD INSPECTED BY LSRP AND SUBJECT TO MINOR CRACK FILLING TO SATISFY HISTORIC FILL CAP REQUIREMENTS.
4. STEEL SHEETPILE WALL WAS INSTALLED AS EXCAVATION SUPPORT ALONG THIS AREA AND THEN CUT BELOW CURRENT GRADE AND LEFT IN PLACE. THE TOP OF SHEETPILE IS GENERALLY 0.5 TO 2.0 FT BELOW CURRENT GRADES.

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING TITLE: AS BUILT RESTORATION PLAN SA–6 SOUTH – SHEET 001 12/12/16

PROJECT NAME & LOCATION: HONEYWELL SA–6 REMEDIATION JERSEY CITY, NJ

Exhibit B-2: Table B-2
Soil Sample Data Table (Hexavalent Chromium)

EXHIBIT B-2
Restricted Area Data Table
Deed Notice #4 Tract 2 Site 073 and Tract 1 SA-7
Portion of Block 24601, Lot 1 and Portion of Block 21901 Lot 8
Jersey City, New Jersey

Location	Elevation (feet msl)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Soil Concentration (mg/kg)
115-CF-BH1S	-0.8	Hexavalent Chromium	18540-29-9	20	27.9
115-CF-BH2N	0.058	Hexavalent Chromium	18540-29-9	20	30.6
115-CF-BH2S	-0.311	Hexavalent Chromium	18540-29-9	20	21.2
115-CF-BH3N	0.051	Hexavalent Chromium	18540-29-9	20	36.3
115-CF-BH4N	-0.129	Hexavalent Chromium	18540-29-9	20	22.7 J
115-CF-BH5N	-0.525	Hexavalent Chromium	18540-29-9	20	36.4 J
115-CF-BH5S	-0.154	Hexavalent Chromium	18540-29-9	20	25.3 J
115-CF-BH6S	-1.639	Hexavalent Chromium	18540-29-9	20	46.9
115-CF-BH7N	-2.118	Hexavalent Chromium	18540-29-9	20	31.8
115-CF-BH7S	-1.981	Hexavalent Chromium	18540-29-9	20	20.9
115-CF-BH93	-2.579	Hexavalent Chromium	18540-29-9	20	34.6
115-CF-BH94	-2.556	Hexavalent Chromium	18540-29-9	20	21.7
115-CF-BH96	-3.164	Hexavalent Chromium	18540-29-9	20	28.7
115-CF-BH101	-5.224	Hexavalent Chromium	18540-29-9	20	45.6
115-CF-BH102	-5.657	Hexavalent Chromium	18540-29-9	20	36.8
115-CF-BH103	-5.617	Hexavalent Chromium	18540-29-9	20	42.2
115-CF-BH104	-5.645	Hexavalent Chromium	18540-29-9	20	32.2
115-CF-BH105	-5.563	Hexavalent Chromium	18540-29-9	20	113
115-CF-BH106	-5.597	Hexavalent Chromium	18540-29-9	20	26
115-CF-BH111	-5.291	Hexavalent Chromium	18540-29-9	20	75.1
115-CF-BH112	-5.533	Hexavalent Chromium	18540-29-9	20	105
115-CF-BH113	-5.696	Hexavalent Chromium	18540-29-9	20	68.9
115-CF-BH114	-5.646	Hexavalent Chromium	18540-29-9	20	83.7
115-CF-BH115	-5.718	Hexavalent Chromium	18540-29-9	20	39.9
115-CF-BH116	-5.477	Hexavalent Chromium	18540-29-9	20	61.1
115-CF-BH12E	-7	Hexavalent Chromium	18540-29-9	20	75.9
115-CF-BH12W	-7	Hexavalent Chromium	18540-29-9	20	53.8
073-SB-002	8.5	Hexavalent Chromium	18540-29-11	20	534 J
073-SB-002	6	Hexavalent Chromium	18540-29-12	20	721
073-SB-002	5	Hexavalent Chromium	18540-29-13	20	1100
073-SB-002	3	Hexavalent Chromium	18540-29-14	20	27.9 J
073-SB-024	3.2	Hexavalent Chromium	18540-29-15	20	22
073-SB-025	8	Hexavalent Chromium	18540-29-15	20	25.6
073-SB-025	7	Hexavalent Chromium	18540-29-16	20	52.6
073-SB-053	6.8	Hexavalent Chromium	18540-29-17	20	356
073-SB-054	6.4	Hexavalent Chromium	18540-29-18	20	71.6
073-SB-067	8.7	Hexavalent Chromium	18540-29-24	20	36.3
073-SB-067	5.7	Hexavalent Chromium	18540-29-25	20	1370
073-SB-067	3.7	Hexavalent Chromium	18540-29-26	20	211
073-SB-067	2.7	Hexavalent Chromium	18540-29-27	20	62.4
073-SB-067	0.7	Hexavalent Chromium	18540-29-19	20	54.3
073-SB-067	-1.3	Hexavalent Chromium	18540-29-20	20	33.3
073-SB-067	-4.3	Hexavalent Chromium	18540-29-21	20	132
073-SB-067	-5.3	Hexavalent Chromium	18540-29-22	20	86.3
073-SB-067	-7.8	Hexavalent Chromium	18540-29-23	20	201
073-SB-068	4.5	Hexavalent Chromium	18540-29-33	20	179
073-SB-068	2.5	Hexavalent Chromium	18540-29-34	20	35.1
073-SB-068	1	Hexavalent Chromium	18540-29-35	20	42.1
073-SB-068	-2	Hexavalent Chromium	18540-29-28	20	23.9
073-SB-068	-3.5	Hexavalent Chromium	18540-29-29	20	28.2
073-SB-068	-5.5	Hexavalent Chromium	18540-29-30	20	66.3
073-SB-068	-7.5	Hexavalent Chromium	18540-29-31	20	112
073-SB-068	-10	Hexavalent Chromium	18540-29-32	20	81.2
073-SB-069	4.4	Hexavalent Chromium	18540-29-39	20	176
073-SB-069	1.9	Hexavalent Chromium	18540-29-40	20	23.8

EXHIBIT B-2
Restricted Area Data Table
Deed Notice #4 Tract 2 Site 073 and Tract 1 SA-7
Portion of Block 24601, Lot 1 and Portion of Block 21901 Lot 8
Jersey City, New Jersey

Location	Elevation (feet msl)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Soil Concentration (mg/kg)
073-SB-069	0.4	Hexavalent Chromium	18540-29-41	20	20.1
073-SB-069	-3.6	Hexavalent Chromium	18540-29-36	20	24.5
073-SB-069	-7.6	Hexavalent Chromium	18540-29-37	20	106
073-SB-069	-10.1	Hexavalent Chromium	18540-29-38	20	24.5
073-SB-101	7.7	Hexavalent Chromium	18540-29-43	20	705
073-SB-101	-1.3	Hexavalent Chromium	18540-29-42	20	21.1
073-SB-103	3.75	Hexavalent Chromium	18540-29-43	20	71.6
073-SB-103	1.7	Hexavalent Chromium	18540-29-44	20	1490
073-SB-103	-0.3	Hexavalent Chromium	18540-29-45	20	523
073-SB-103	-2.3	Hexavalent Chromium	18540-29-46	20	35
073-SB-103	-4.3	Hexavalent Chromium	18540-29-47	20	23.6
073-SB-103	-6.3	Hexavalent Chromium	18540-29-48	20	136
073-SB-103	-8.3	Hexavalent Chromium	18540-29-49	20	35.4
073-SB-103	-10.3	Hexavalent Chromium	18540-29-50	20	76
073-SB-104	4.5	Hexavalent Chromium	18540-29-51	20	362
073-SB-104	2.5	Hexavalent Chromium	18540-29-52	20	4710
073-SB-104	0.5	Hexavalent Chromium	18540-29-53	20	118
073-SB-104	-1.5	Hexavalent Chromium	18540-29-54	20	144
073-SB-104	-3.5	Hexavalent Chromium	18540-29-55	20	112
073-SB-104	-5.5	Hexavalent Chromium	18540-29-56	20	25.7
073-SB-104	-7.5	Hexavalent Chromium	18540-29-57	20	54.6
073-SB-104	-9.5	Hexavalent Chromium	18540-29-58	20	87.3
073-SB-104	-11.5	Hexavalent Chromium	18540-29-59	20	67.4
073-SB-105	0.6	Hexavalent Chromium	18540-29-60	20	52.6
073-SB-105	-1.4	Hexavalent Chromium	18540-29-60	20	36.7
073-SB-105	-3.4	Hexavalent Chromium	18540-29-60	20	69.4
073-SB-105	-7.4	Hexavalent Chromium	18540-29-60	20	125
073-SB-105	-9.4	Hexavalent Chromium	18540-29-60	20	264
073-SB-105	-11.4	Hexavalent Chromium	18540-29-60	20	142
073-SB-106	2.5	Hexavalent Chromium	18540-29-60	20	36.7
073-SB-106	-1.5	Hexavalent Chromium	18540-29-60	20	76.1
073-SB-106	-3.5	Hexavalent Chromium	18540-29-60	20	50.3
073-SB-106	-5.5	Hexavalent Chromium	18540-29-60	20	57.7
073-SB-106	-7.5	Hexavalent Chromium	18540-29-60	20	59.3
073-SB-106	-9.5	Hexavalent Chromium	18540-29-60	20	23
073-SB-106	-11.5	Hexavalent Chromium	18540-29-60	20	88.7

Notes:
Results reported in mg/kg.

Data Qualifiers:
J-Data indicates the presence of a compound that meets the identification criteria. The concentration is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl = feet mean seal level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010

EXHIBIT C
Deed Notice #4 Site 073 and SA-7

C-1 Institutional Controls
C-2 Engineering Controls
Portion of Block 24601, Lot 1 and a portion of Block 21901 Lots 8 and 10
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree (attached), as Institutional Controls: Exhibit C-1 (A and B) for those portions of Block 24601, Lot 1 and of Block 21901 Lots 8 and 10, City of Jersey City, New Jersey known as Tracts 1 and 2.

Exhibits C-1A and C-1B. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control; Exhibits C-1A and C-1B include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property is comprised of two tracts of land; Tract 1 is on a portion of SA-7 and Tract 2 is on a portion of Site 073 on SA-6 South. Tract 1 is an approximately 22,323 square foot area on SA-7 between the bulkhead and the western hydraulic barrier installed at SA-7. Tract 1 includes the western hydraulic barrier wall of SA-7. Tract 1 is the "Technically Impracticable Area or TI Area" identified in the SA-7 RAR. NJDEP issued a conditional No Further Action letter for SA-7 soils on December 23, 2010, that excludes the TI Area. Soils within Tract 1 do not meet the 20 mg/kg objective in the NJDEP Chromium Policy. Tract 1 soils exceeding 20 mg/kg hexavalent chromium are covered by at least 7 feet of clean soils. Tract 1 will not be remediated by Honeywell; instead the 7-foot thick clean soil cap will remain in place and Tract 1 will be subject to this Deed Notice. Tract 1 also includes two steel sheetpile "wing walls" that project toward the bulkhead from the northern and southern corners of the hydraulic barrier intersections. These wing walls are part of the SA-7 Remedy in that they act to minimize re-contamination of the clean backfill material placed in the TI area from either the north or south. The Riverwalk feature including bulkhead improvements, additional fill soils and hardscape features will be constructed over top of the Tract 1 Deed Notice Area. The provisions of the LTMP, developed pursuant to the Consent Decree, will apply to Tract 1 of the Property.

Tract 2 is an approximately 11,689 square foot area adjacent to the bulkhead partially between the western boundary of the SA 6 South western hydraulic barrier wall and the bulkhead and partially south. The 100% Design plan for the Tract 2 area was to excavate the top 4 feet of soils within the area and defer additional excavation below a depth of 4 feet until implementation of the Bayfront Redevelopment Plan when the bulkhead will either be repaired or replaced. Because an approximately 5-foot thick concrete slab was unexpectedly encountered while excavating in this area and because

removal of this concrete would jeopardize the integrity of the bulkhead, excavation of residual chromium-impacted soil at any depth in Tract 2 will be coordinated with bulkhead improvement work to be implemented during the Bayfront Redevelopment Project. Tract 2 soils exceeding 20 mg/kg hexavalent chromium are covered by at least 1 foot of clean soils. In the meantime, Honeywell will institute this deed notice on this area which will include both Tracts 1 and 2. Once the remediation of the Tract 2 area is complete and soils in Tract 2 have a hexavalent chromium concentration of less than 20 mg/kg to a depth of 20 feet below ground surface, Honeywell will terminate the deed notice for Tract 2 with approval of the Court and the Department pursuant to Paragraph 13 above. In the meantime, the LTMP, developed pursuant to the Consent Decree, will apply to Tract II of the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes a portion of Block 24601, Lot 1 and a portion of Block 21901 Lots 8 and 10. The estimated size of the Area containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) as identified on Exhibit B-1 is estimated at approximately 34,000 square feet or approximately 0.781 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy Criteria of 20 mg/kg.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and the applicable portions of the LTMP developed thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, and the applicable zoning standards; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice,* and *the applicable zoning standards.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #4 Site 073 and SA-7
Portion of Block 24601, Lot 1 and Portion of Block 21901 Lots 8 and 10
City of Jersey City, New Jersey

Exhibits C-2: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Controls consist of the following: The engineering controls for Tract 1 Study Area 7 (Site 115) include a minimum 7 to 14 feet of clean soil cover (crushed stone) and for Tract 2 Study Area 6 South (Site 073) a minimum of 1 foot of clean soil cover plus asphalt pavement as shown on Exhibit B-1.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above 20 mg/kg within the Property. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree for the portion of the Property that lies within SA-6 South. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***
- ***A report to determine whether or not the engineering controls continue to operate as designed.***
  A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Docket No. 05-5955(DMC) Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated with Docket No. 05-5955 (DMC) under Docket No. 95-2097

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 SOUTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey (hereafter "the Court") issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property then-owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property then-owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with

various properties collectively designated by NJDEP as Study Areas 5, 6 North, which includes the properties formerly owned by JCMUA and JCIA, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* owners of the properties comprising Study Areas 5, 6 South, and 6 North;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the Court (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, Riverkeeper has alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 South property;

Whereas, on April 21, 2008, the Court entered the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North (hereafter "the Study Area 6 North Consent Decree") resolving issues between Honeywell, Riverkeeper, and the Jersey City Entities related to chromium contamination at Study Area 6 North;

Whereas, on April 21, 2008, the district court for the District of New Jersey entered the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with the Study Area 6 North Decree, which resolved claims and cross-claims between Honeywell and the Jersey City Entities;

Whereas, on May 28, 2008, the Court entered the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, on September 3, 2008, the Court entered the Deep Overburden and Bedrock Groundwater Remedies Consent Order (hereafter "the Deep Groundwater Consent Order") resolving all issues related to the remediation of deep overburden and bedrock groundwater in both *ICO v. Honeywell* and the Consolidated Litigation;

Whereas, on May 13, 2011, Plaintiffs sent Honeywell a RCRA citizen action suit notice letter with respect to Site 163, and the Parties agree that the incorporation of Site 163 into this Consent Decree resolves any claims asserted, or that could have been asserted, in the RCRA notice letter or in any RCRA citizen suit with respect to Site 163;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 South that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq.*, as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, Study Area 6 and Study Area 7 consist of parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in

need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 South and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City; and

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Honeywell, the Riverkeeper, and Jersey City as a means to accomplish the aforesaid purposes of this settlement:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **"20 to 1000 Soils"** shall mean those soils containing less than 1000 mg/kg of hexavalent chromium, but greater than 20 mg/kg. **"20 to 240 Soils"** shall mean those soils containing less than 240 mg/kg of hexavalent chromium, but greater than 20 mg/kg.

2. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

3. **COPR** shall mean Chromite Ore Processing Residue.

4. **Chromium Remedy or Chromium Remediation** shall mean the remedy set forth in Article III.

5. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator*

Authority v. Honeywell International Inc., D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC).

6. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

7. **Deep Groundwater Consent Order** shall mean the Deep Overburden and Bedrock Groundwater Remedies Consent Order entered by the Court on September 3, 2008, in both *ICO v. Honeywell* and the Consolidated Litigation.

8. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, entered on August 15, 2008, in *ICO v. Honeywell,* and the remedies required under the Deep Groundwater Consent Order.

9. **Development Area of Concern** ("AOC") shall mean those portions of Study Area 6 South in which the hexavalent chromium concentration in the top 20 feet of soil below ground surfaces exceeds a concentration of 20 mg/kg, and for which future uses of the property may include commercial or residential development. The Open Space AOC shall not be part of the Development AOC and vice versa. The Development AOC consists of two parts: the Kellogg Street Development AOC and the Site 163 Development AOC. Collectively, the two parts shall be referred to as the "Development AOC." The approximate boundaries of the Development AOC as a whole and its two parts are shown on Exhibit A, but the boundaries may be further defined in the implementation of the Chromium Remedy. For the Kellogg Street Development AOC, remedial measures shall assume only a residential use. For the Site 163 Development AOC, remedial measures shall be implemented with the goal of unrestricted use, but limitations

on future uses (including prohibiting residential use) in some or all of the Site 163 Development AOC may be part of the remedy as set forth in paragraph 61.

10. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

11. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including 425-445 Route 440 Property LLC, Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

12. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

13. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

14. **Including** shall mean including, but not limited to.

15. **JCIA** shall mean the Jersey City Incinerator Authority.

16. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

17. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

18. **Jersey City/Honeywell Consent Order** shall mean the Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc. entered in the Consolidated Litigation on April 21, 2008.

19. **"L-Well Groundwater"** shall mean the groundwater found at the depth of the "L" wells on and near the former bowling alley property, NJDEP Site 124, located at 427 Route 440. The L-Well Groundwater is located within what has been referred to as the plume diversion area.

20. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

21. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit B.

22. **Open Space AOC** shall mean the portion of Study Area 6 South that is identified as The Promenade park and Grand Boulevard extending from Route 440 to the Hackensack River on page 39 of the Redevelopment Plan and for which the future uses of the property shall be restricted pursuant to paragraph 74, following remediation pursuant to paragraph 65. The Development AOC shall not be part of the Open Space AOC and vice versa. The approximate boundaries of the Open Space AOC are shown on Exhibit A, and the boundaries may be further defined in the implementation of the Chromium Remedy.

23. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

24. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.*, as amended.

25. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

26. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. § 40A:12A1, *et seq.*, as amended and supplemented.

27. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

28. **Remedial Investigation Work Plan Addendum or RIWP Addendum** shall mean the "Remedial Investigation Work Plan Addendum Study Area 6 South" submitted to NJDEP on June 27, 2008.

29. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

30. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation on May 28, 2008.

31. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

32. **Site** shall mean Study Area 6 South.

33. **Site Preparation Activities** shall mean those activities necessary to begin implementation of the Chromium Remedy in Article III of this Consent Decree, including, if appropriate, the temporary or permanent relocation of current activities and operations conducted on Study Area 6 South.

34. **Soil** shall mean soils, historic fill, and/or COPR.

35. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

36. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

37. **Study Area 5** shall mean that property comprising Sites 79, 90, 117, 153, and 184 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 42 acres and including (a) all such property owned by Bob Ciasulli consisting of Block 1291, Lot 76, and Block 1292, Lots 1F, 47, 48, 53, and 54PL, located at 540 Route 440, Jersey City, New Jersey, (b) all such property owned by Elisabeth and Rafael Rosario consisting of Block 1292, Lot 49, located at 93 Fisk Street, Jersey City, New Jersey, (c) all such property owned by Michael Vo consisting of Block 1292, Lot 50, located at 95 Fisk Street, Jersey City, New Jersey, (d) all such property owned by NJCU consisting of Block 1286, Lots 5 and 6D and Block 1286.5, Lots 1 and 2, Jersey City, New Jersey, (e) all such property owned by Inland Southeast Jersey City LLC consisting of Lot 1, Block 1285.5 located at 440 Route 440, Jersey City, New Jersey, and (f) all such property owned by 425/445 Route 440 Property LLC, consisting of Block 1289.5, Lot E, Jersey City, New Jersey.

38. **Study Area 6 North** shall mean the property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, which is subject to the Study Area 6 North Consent Decree.

39. **Study Area 6 North Consent Decree** shall mean the Consent Decree and Order Regarding Remediation and Redevelopment of Study Area 6 North, entered by the Court on April 21, 2008, in the Consolidated Litigation.

40. **Study Area 6 South** shall mean (a) that property currently owned by Bayfront Redevelopment Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Bayfront Redevelopment LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Bayfront Redevelopment LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Bayfront Redevelopment LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Bayfront Redevelopment LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Bayfront Redevelopment LLC located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey; (h) that property currently owned by Bayfront Redevelopment LLC located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey; and (i) that property currently owned by Bayfront Redevelopment LLC, consisting of Site 163, formerly the Colonial Concrete Company, located at 75 Kellogg Street in Jersey City, Hudson County, New Jersey.

41. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

42. **Study Area 7** shall mean (a) that property currently owned by Bayfront Redevelopment LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that

property currently owned by Bayfront Redevelopment LLC located at 465 Route 440, Jersey City, Hudson County, New Jersey.

43. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

44. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

45. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

46. For purposes of this Consent Decree, the Riverkeeper Complaint in the Consolidated Litigation states claims upon which relief may be granted against Honeywell.

47. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 113, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils, shallow groundwater and L-Well groundwater at Study Area 6 South. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 5 or property owned by Regnal Realty consisting of Block 1288.2, lot 1, located at 420 Route 440, Jersey City, New Jersey.

48. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

49. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. General Terms and Requirements

50. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 South at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 South shall be undertaken in accordance with the terms of this Consent Decree.

51. **Designation of Chromium Areas of Concern.** For the purposes of remediation, Study Area 6 South shall consist of two AOC's, designated as the Open Space AOC and the Development AOC as shown approximately on Exhibit A. The exact boundaries of the two AOC's shall be subject to further delineation during the design and implementation of the Chromium Remedy.

52. **Consistency of the Chromium Remedy with NJDEP Guidance and Remedial Action Work Plan.** The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and any Remedial Action Work Plan, including any modifications or addenda approved by NJDEP. Prior to submitting any Remedial Action Work Plan, Honeywell shall take all reasonable steps to ensure that the plan is consistent with the Chromium Remedy. However, this Consent Decree shall have precedence over any Remedial Action Work Plan in the event of any inconsistency. The approved Remedial Action Work Plan is a minimum standard, and the Chromium Remedy may be more protective than the remedy NJDEP approves.

53. **General Scope of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and L-Well groundwater containing total chromium concentrations of 70 µg/l or greater and soil containing hexavalent chromium at concentrations of 20 mg/kg or greater within the top 20 feet of soil below the ground surface, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow and L-Well levels of groundwater (see paragraphs 69 - 72). The deep overburden and bedrock groundwater remediation, including source control, is addressed in the Deep Groundwater Consent Order.

54. **Development of a Schedule for the Chromium Remedy.** The Chromium Remedy shall be carried out diligently, and the development and implementation of any remedy required by NJDEP for non-chromium contamination shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Within 90 days of entry of this Consent Decree, Honeywell shall propose a Master Schedule for the implementation of the Chromium Remedy .

(a) The Master Schedule shall incorporate the following dates:

(i) No later than August 15, 2008, Honeywell shall submit a Chromium Impacted Soils Pilot Test Work Plan to NJDEP and Riverkeeper;

(ii) No later than September 15, 2008, Honeywell shall complete field work in accordance with the RIWP Addendum;

(iii)No later than December 31, 2008, Honeywell shall submit an Initial Treatment Study Report and Remedial Action Work Plan pursuant to paragraph 86(c);

(iv) No later than July 31, 2012, Honeywell shall submit the soil and groundwater data from its 2010 and 2011 supplemental investigation of Site 163, a brief summary report, and

a designation of the boundaries of the Site 163 Development AOC to the Special Master pursuant to paragraph 86(c);

(v) No later than October 1, 2012, Honeywell shall submit an addendum to the Study Area 6 South 100% Design setting forth the 100% Design for the Site 163 Development AOC portion of the Study Area 6 South Chromium Remedy; and

(vi) Honeywell shall undertake, in good faith, to begin implementation of the Chromium Remedy by March 1, 2013.

(b) In addition, the Master Schedule shall propose deadlines for the following milestones:

(i) Submission of all documents subject to submission and review pursuant to paragraph 86(c);

(ii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy;

(iii)Submission, following implementation of the soil components of the Chromium Remedy for the Development AOC, of the groundwater plans and reports required by paragraphs 70 and 72;

(iv)Completion of additional sampling for shallow groundwater delineation pursuant to paragraph 71 and a proposal for a remedy pursuant to paragraph 71, if needed;

(v) The submission of a 50% Design Report for the Chromium Remedy;

(vi) The submission of a 100% Design Report for the Chromium Remedy;

(vii) The date for completion of the installation of the Chromium Remedy;

(viii)Implementation of the long-term protections of the Open Space AOC established pursuant to paragraph 74; and

(ix) Transfer of the Open Space AOC to Jersey City pursuant to paragraph 74(a)(iii).

B. Initial Chromium Remedy Steps: Delineation, Treatment Study, and Remedial Action Work Plan

55. **Delineation of Development AOC.** Honeywell shall conduct further soil sampling on Study Area 6 South in accordance with the RIWP Addendum. In addition to the locations set forth in the RIWP Addendum, Honeywell shall conduct further soil sampling pursuant to the provisions of the RIWP Addendum at the boring locations set forth in Exhibit E. Upon completion of the soil sampling required by this paragraph, Honeywell shall submit a Second Supplemental Remedial Investigation Report that sets forth the results of the sampling and Honeywell's proposal as to the delineation of the Development AOC. In conjunction with its proposal, Honeywell shall set forth its rationale as to whether prior sampling data should be included or excluded in the proposed delineation. The soil sampling and submission of a Second Supplemental Remedial Investigation Report shall be completed in accordance with the Schedule set forth in paragraph 54. Honeywell shall submit the Second Supplemental Remedial Investigation Report pursuant to paragraph 86(c). The Site 163 Development AOC shall be exempt from the requirements of paragraphs 55-58.

56. **Conduct of a Treatment Study in the Development AOC.** Honeywell shall conduct a field study of the efficacy of *in situ* treatment of 20 to 1000 Soils in accordance with the Chromium Impacted Soil Pilot Test Work Plan. The purpose of the pilot test shall be to evaluate whether *in situ* chemical treatment of 20 to 1000 Soils with one or more reductants can result in the permanent establishment of hexavalent chromium concentrations below 20 mg/kg under conditions in those areas of the Development AOC that may be subject to treatment as a remedy. Honeywell shall provide the raw data from the pilot test to NJDEP and Riverkeeper in scientifically useable electronic form as soon as the data become available. Honeywell shall

submit an Initial Treatment Study Report setting forth the initial results of the pilot test pursuant to paragraph 86(c) .

57. **Continued Monitoring of the Treatment Study.** As the result of the need to complete Study Area 7 remediation, to maintain Study Area 7 remediation support operations currently located on Study Area 6 South, and to conduct Site Preparation activities including the relocation of operating businesses on Study Area 6 South in advance of implementation of the Chromium Remedy, the Parties do not anticipate that implementation of field work for the Chromium Remedy will begin until March 1, 2013. Honeywell shall continue to monitor the performance of the pilot test and shall submit a Final Treatment Study Monitoring Report assessing the long term effectiveness of treatment for 20 to 1000 Soils in the Development AOC pursuant to paragraph 86(c) no later than December 31, 2011.

58. **Submission of a Remedial Action Work Plan.** On or before December 31, 2008, Honeywell shall submit a Remedial Action Work Plan for the Chromium Remedy pursuant to paragraph 86(c). The Remedial Action Work Plan shall be consistent with the Chromium Remedy set forth in this Consent Decree.

C. Development AOC Soil Remedy

59. **Remedial Components.** In the Development AOC, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be remediated as follows:

(a) Soils with a concentration greater than 1000 mg/kg shall be:

(i) Excavated and disposed of off-site at a waste disposal facility licensed to accept such waste; or

(ii) Treated *ex situ* and consolidated under the cap in the Open Space AOC provided the requirements of paragraphs 60 and 63 are satisfied and provided that such soils do not

require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a).

(b) 20 to 1000 Soils shall be:

(i) Excavated and consolidated within the Open Space AOC provided that such soils do not require venting of gases and do not serve as the basis for gas venting as set forth in paragraph 65(a); or

(ii) Excavated and disposed of off-site pursuant to the requirements of paragraph 59(a); or

(iii) Remediated pursuant to paragraphs 59(c) or 59(d) provided that such soils are also 20 to 240 soils and meet the requirements of paragraphs 59(c) or 59(d).

(c) 20 to 240 Soils may be remediated by excavation and consolidation within the Study Area 6 North AOC 1 Open Space Area, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy.

(d) 20 to 240 Soils within the Site 163 Development AOC may be remediated by *in situ* treatment, provided the requirements of paragraph 61 are satisfied.

60. **Treatment and Consolidation of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** *Ex situ* treatment and consolidation under the Open Space AOC cap may be used as a remedial component for soils containing greater than 1000 mg/kg hexavalent chromium provided that the requirements of this paragraph are satisfied:

(a) Honeywell demonstrates in the Final Treatment Study Monitoring Report that the proposed treatment will likely result in the reduction of the hexavalent chromium concentration of the treated soils such that the post-treatment total chromium concentration shown by Toxicity

Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C);

(b) Following a review of the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d), NJDEP agrees that Honeywell has made the demonstration required by paragraph 60(a).

(c) Plaintiffs have had an opportunity to review and comment on the demonstration required by paragraph 60(a) pursuant to the NJDEP review process set forth in paragraph 86(d)and pursuant to the Special Master review process set forth in paragraphs 86(e)-86(f); and

(d) Following review of the demonstration required by paragraph 60(a) pursuant to the Special Master review process set forth in paragraph 86(f), the Special Master issues a recommendation finding that Honeywell has made the demonstration required by paragraph 60(a) or the Court finds that Honeywell has made the demonstration required by paragraph 60(a) in the event that any Party seeks the Court's review of the Special Master's recommendations under this paragraph.

61. **Treatment as a Remedial Component for 20 to 240 Soils.** *In situ* treatment may be used as a remedial component for the 20 to 240 Soils in the Site 163 Development ACO, provided that such soils are 3 feet or more below ground surface and the requirements of this paragraph are satisfied:

(a) If Honeywell elects to treat *in situ* 20 to 240 Soils in the Site 163 Development AOC, Honeywell shall include in the 100% Design Addendum for Site 163 a plan for such treatment. Such treatment plan shall be comparable in detail and approach to the pipeline treatability plan which is Appendix F to the Study Area 6 North 100% Design. The goal of such *in situ* treatment

shall be to reduce hexavalent chromium soil concentrations to less than 20 mg/kg in soils 20 feet or less below ground surface;

(b) Three years after conducting the treatment set forth in subparagraph (a), Honeywell shall collect additional soil samples in the treated areas to evaluate the success of the treatment. These soil samples shall be analyzed for EH, pH, hexavalent chromium (using EPA/NJDEP Methods 3060A/7199), and sulfides (using EPA Method 9030B). Within 60 days of its receipt of the final data from such sampling, Honeywell shall submit a report with such data to the Special Master pursuant to paragraph 86(c);

(c) In the event that the sampling pursuant to subparagraph (b) shows that soils with greater than 20 mg/kg hexavalent chromium remain or that excess treatment reductant remains present, Honeywell may elect to pursue one or more of the following approaches after providing notice to the Special Master, Riverkeeper and the Jersey City Entities;

(i) In the case of excess treatment reductant remaining in the soil, continue to monitor such areas pursuant to subparagraph (b) until the excess reductant is no longer present;

(ii) In the case of soils with greater than 20 mg/kg hexavalent chromium:

(1) Excavate such soils and consolidate them under the cap in the Open Space AOC, consolidate them under the cap in the Study Area 6 North AOC 1 Open Space Area, and/or dispose of them off-site provided that in each instance the applicable requirements of paragraph 59 are satisfied;

(2) Conduct further *in situ* treatment using additional treatment reductant and submit a monitoring plan pursuant to paragraph 64; or

(3) In the event that the soils are within the areas depicted as River Front Park, Riverfront Drive or Kellogg Street on page 39 of the Redevelopment Plan, cover the affected

soils with a road, walkway, and/or other hardscape and restrict the use of that area through each of the following institutional controls:

(a) Issuance and recording of a conservation restriction comparable to that required under paragraphs 74(b) and 74(d);

(b) Transfer of title to that area to Jersey City pursuant to paragraphs 74(a)(iii) through 74(a)(iv)(2); and

(c) Issuance and recording of a deed notice comparable to that required under paragraphs 74(c) and 74(d).

62. **Submissions Related to Site 163.** Pursuant to the Schedule, Honeywell shall prepare and submit the following with regard to Site 163:

(a) A summary report of all chromium soil and groundwater data collected during site investigations in 2010 and 2011; and

(b) An addendum incorporating Site 163 into the 100% Design.

63. **Post-Treatment Analysis of Soils Containing Greater than 1000 mg/kg Hexavalent Chromium.** In the event that *ex situ* treatment is used as a final remedy for any portion of the soils containing greater than 1000 mg/kg pursuant to paragraph 59(a)(ii), Honeywell shall conduct post-treatment analysis of each treated batch of soil to demonstrate that the treatment has resulted in the reduction of the hexavalent chromium concentration such that the post-treatment total chromium concentration shown by Toxicity Characteristic Leaching Procedure SW-846, Test Method 1311, is less than 5 mg/l and the soils are no longer classified as hazardous waste under 40 C.F.R. 261.24 (Subpart C). Such monitoring and demonstration shall be made prior to consolidation of the treated soils under the Open Space AOC cap pursuant to paragraph 59(a)(ii). In the event that Honeywell fails to make the demonstration required by this paragraph,

Honeywell shall dispose of the soils off-site at a waste disposal facility licensed to accept such waste.

64. **Post-Treatment Monitoring for 20 to 1000 Soils.** In the event that *in situ* treatment is used as a final remedy for any portion of the 20 to 1000 Soils, Honeywell shall conduct post-treatment monitoring to demonstrate that the treatment has resulted in permanent hexavalent chromium concentrations of less than 20 mg/kg in the treated area. Honeywell shall propose a program of post-treatment monitoring in a document that is submitted pursuant to paragraph 86(c). In the event that Honeywell fails to make the demonstration required by this paragraph, Honeywell shall propose further remedial actions pursuant to paragraph 59 in a document that is submitted pursuant to paragraph 86(c).

D. Open Space AOC Components of the Chromium Remedy

65. **Open Space AOC Soil Remedy.** In the Open Space AOC, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, pursuant to paragraph 59(b)(i), shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of a gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the Open Space AOC. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the Open Space AOC shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the

two feet of clean fill required by paragraph 65(c). Excavated 20 to 1000 Soils from the Development AOC shall be placed and spread in the Open Space AOC under the cap. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

E. Demolition, Grading, and Backfill Requirements

66. **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community from airborne dusts and exposures to contaminated soils.

67. **Backfill Requirements.** Soils excavated from the Development AOC shall be replaced with backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

68. **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

F. Groundwater Components of the Chromium Remedy

69. **Shallow Groundwater Remedy for the Open Space AOC.** The Open Space AOC shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing

above the meadow mat in the Open Space AOC to the extent that such groundwater contains total chromium in concentrations in excess of 70 µg/l. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 South and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the southern, eastern and western sides of the Open Space AOC and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that shall consist of (i) one or more shallow extraction wells, sumps, or french drains within the Open Space AOC; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater within the Open Space AOC;

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP regulations.

70. **The Shallow Groundwater Remedy for the Development AOC.** Following implementation of the Development AOC soil components of the Chromium Remedy, Honeywell shall submit a report to (a) determine whether shallow groundwater remaining in the

Development AOC exceeds 70 µg/l total chromium and, (b) if so, evaluate the need for further remedial measures to address any such shallow groundwater remaining in the Development AOC with total chromium concentrations in excess of 70 µg/l. This evaluation shall be subject to review and comment by the Parties and approval by the Special Master.

(a) In the event that the evaluation demonstrates that further remedial measures are necessary, Honeywell shall propose such measures subject to review and comment by the Parties and approval by the Special Master;

(b) The capture zone of any remedy shall include at least the entire area of contaminated shallow groundwater except for shallow groundwater that is captured and subject to the shallow groundwater remedy for the Open Space AOC pursuant to paragraph 69;

(c) In the event that a pump-and-treat system is selected as a contingency measure for shallow groundwater in the Development AOC, all infrastructure for the pump-and-treat contingency system that is needed to ensure that the contingency system is fully operational, as required by paragraph 70(d), shall be installed prior to or in conjunction to any development of the Site. This includes at least one shallow extraction well, sump, or french drain, and the piping to convey any extracted groundwater to Honeywell's water treatment plant;

(d) If it is determined that the pump-and-treat contingency system must be activated, the pump-and-treat system shall be operational no later than six months after the date of the determination.

71. **Off-Site Shallow Groundwater Remedy.** Honeywell shall propose additional sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site. Honeywell shall submit a report of the results of such sampling and, in the event that contaminated shallow groundwater is found to extend off-site, a proposal for a remedy based on

such results. The report and the proposal for a remedy shall be subject to review and comment by the Parties and approval by the Special Master.

72. **L-Well Groundwater Remedy.** At the time this Decree is entered, the L-Well Groundwater is contained and not contributing to further contamination of surrounding waters and/or soils. However, in order to verify that this status continues following implementation of the Chromium Remedy, including any groundwater remedial measures pursuant to paragraphs 70 and 71, Honeywell shall propose a plan for one round of monitoring designed to evaluate whether the L-Well Groundwater remains contained. The plan shall include monitoring for total and hexavalent chromium and major ion chemistry to determine whether there has been movement in the L-Well Groundwater.

(a) In the event that no substantial change is detected in the major ion chemistry, no further action is required unless paragraph 72(c) is applicable.

(b) In the event that substantial changes are detected in the major ion chemistry, Honeywell shall propose a plan for further monitoring of the L-Well Groundwater. Such a plan shall be subject to review and comment by the Parties and approval by the Special Master.

(c) In the event that the initial monitoring or monitoring conducted pursuant to paragraph 72(b) demonstrates that proximate waters have total chromium concentrations in excess of 70 µg/l, regardless of whether there is a change in the major ion chemistry, Honeywell shall propose a remediation plan for the L-Well Groundwater. Such remediation plan shall be subject to review and comment by the Parties and approval by the Special Master.

G. Permits and Authorizations

73. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article.

H. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

74. **Protection of the Open Space AOC.** Except as provided in paragraphs 74(j) and 74(k), development in the Open Space AOC shall be prohibited. The Open Space AOC shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the Open Space AOC pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54:

(a) **Ownership of and Access to the Open Space AOC.** Ownership of and access to the Open Space AOC shall be in accordance with the following:

(i) Bayfront Redevelopment LLC, as the current owner in fee simple absolute of all property that comprises the Open Space AOC, shall not convey any rights or interests in any parcel that comprises the Open Space AOC property except as provided in this Decree. Within 90 days of entry of this decree, Bayfront Redevelopment LLC shall give Jersey City an option to buy all of the Open Space AOC property prior to the planned transfer pursuant to paragraph 74(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall exercise the option to buy the Open Space AOC in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 98(c) or 98(d) are met;

(ii) Within 90 days of the entry of this Consent Decree, Bayfront Redevelopment LLC shall grant a conservation restriction for the Open Space AOC pursuant to the requirements of paragraph 74(b);

(iii) Upon the final construction of all roads and utility corridors within the Open Space AOC, Bayfront Development LLC shall donate good and marketable title to all the land comprising the Open Space AOC to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 South to create a new parcel(s) comprising the Open Space AOC. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the Open Space AOC by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the Open Space AOC unless and until it shall have complied with the requirements of paragraph 74(a)(iv);

(iv) After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the Open Space AOC to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the Open Space AOC to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the Open Space AOC and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the Open Space AOC pursuant to this paragraph

and routine maintenance of the permissible development in the Open Space AOC pursuant to paragraph 78(d); or

(2) The Open Space AOC has been remediated such that no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** Prior to the grant of the option to buy pursuant to paragraph 74(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the Open Space AOC substantially in the form set forth in Exhibit C. Exhibit C is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 74(j) and 74(k), including the construction and placement of roads and utilities. The Conservation Restriction shall also allow for current uses of the Open Space AOC to continue until such time as construction of the Chromium Remedy begins. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the Open Space AOC as set forth in paragraphs 74(j) and 74(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph 74(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the Open Space AOC, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the Open Space AOC shall be subjected to the deed notice substantially in the form set forth in Exhibit D that restricts

future activities on the Open Space AOC. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the Open Space AOC pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 74(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 74(b), and the deed notice imposed pursuant to paragraph 74(c) shall be recorded, pursuant to N.J.S.A. §§ 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the Open Space AOC. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the Open Space AOC in the real estate records related to the Open Space AOC.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the Open Space AOC is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 74(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the Open Space AOC, Jersey City shall add those portions of the Open Space AOC not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. § 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor,

maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 74(j) and 74(k); and (iv) the conservation restriction imposed pursuant to paragraph 74(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the Open Space AOC have been added to its ROSI, such that those portions of the Open Space AOC shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the Open Space AOC is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 74(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the Open Space AOC subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the Open Space AOC under the statute. If the Parties are unable to reach agreement on establishment of an environmental covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the Open Space AOC without

unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the Open Space AOC. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the Open Space AOC if they would provide substantial additional protection for the Open Space AOC without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in Open Space AOC.** Only development satisfying the requirements of this paragraph and paragraph 74(k) shall be permitted in the Open Space AOC. All other development in the Open Space AOC shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the Open Space AOC regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 74(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the Open Space AOC shall be the development undertaken following the completion of the Chromium Remedy in the Open Space AOC. The Initial Development may occur in one or more phases. Honeywell and Bayfront

Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 74(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the Open Space AOC shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 74(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the Open Space AOC, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 74(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 74(b), and the Redevelopment Plan; however, in the

event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the Open Space AOC, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 74(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 86(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 86(e) and 86(f) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the Open Space AOC shall require the preparation and submission of a Development Plan pursuant to

paragraph 74(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 74(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and Jersey City. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and Jersey City for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix)During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 74(j)(v) and 74(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 74(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 74(j)(v); or

(3) The development meets the requirements of paragraphs 74(j)(v) and 74(j)(xi), and Jersey City provides notice of its intention to alter or add to the development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 74(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 74(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holder(s) of the conservation restriction established pursuant to paragraph 74(b) with an annual report that describes any alterations or additions, including those activities under paragraph 74(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the Open Space AOC.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 74(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the Open Space AOC, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 74(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 74(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the Open Space AOC of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

75. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

76. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 65, 69, 68, 69, 72, and 77. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

77. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the Open Space AOC.

78. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 77. Honeywell shall provide Riverkeeper, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the Open Space AOC to ensure that it is not being put to any use that is inconsistent with paragraphs 74(j) and 74(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 74 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the Open Space AOC is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the Open Space AOC grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii)Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the Open Space AOC such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv)A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the Open Space AOC has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 65(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and

the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the Open Space AOC to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii)Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 69(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the Open Space AOC.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed

subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by the Court.

(c) **Contingency Plan**. As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance**. The title owner of the Open Space AOC shall conduct maintenance of the Open Space AOC features or facilities that are permissible under paragraphs 74(j) and 74(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the Open Space AOC or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of Open Space AOC shall annually provide to the other Parties and

the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the Open Space AOC shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the Open Space AOC identified by its workers during routine maintenance.

(e) **Recordkeeping**. Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring Plan. Such logs shall be provided to Riverkeeper on a quarterly basis.

79. **Monitoring and Reporting to Riverkeeper.** Riverkeeper shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 86(c).

80. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the Open Space AOC; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 78 and annual reports on changes to the Initial Development as required by paragraph 74(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The public provision of the maps and documents referred to in paragraph 80(b)(ii) via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

81. **Annual Letter to Riverkeeper on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 80, Honeywell shall provide a letter to the Riverkeeper documenting its compliance with paragraph 80.

82. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

83. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

I. Oversight and Enforcement by the Special Master and NJDEP

84. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.I.

85. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the Open Space AOC. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of any non-chromium related remedy, any site preparation activities, and any site redevelopment activities do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

86. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority**. Nothing in or pursuant to this Consent Decree shall limit NJDEP's full statutory and regulatory authority with respect to the Study Area 6 South site, including (i) permitting authority; (ii) authority to review and approve the Treatment Study reports, the Remedial Action Work Plan, the 100% Design, and final Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities**. The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting bi-monthly progress reports to the Court pursuant to the schedule for the submission of such reports established in *ICO v. Honeywell*;

(vi) Overseeing the financial assurances established pursuant to paragraphs 91 through 100, and, until the expiration of his term pursuant to paragraph 90, overseeing the financial assurances established pursuant to paragraphs 101 through 112;

(vii) Coordinating review of the documents as provided in paragraphs 86(c) through 86(g);

(viii) Overseeing all development undertaken in the Open Space AOC during the Initial Development Period pursuant to paragraph 74(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell**. Honeywell shall submit the following documents to Riverkeeper, Jersey City, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule") consistent with paragraph 54 above;

(ii) A Second Supplemental Remedial Investigation Report reporting the results of the field work conducted pursuant to paragraph 55;

(iii)A Chromium Impacted Soils Pilot Test Work Plan and Analytical Protocol for conduct of the treatment study pursuant to paragraph 56, unless such documents are agreed to by NJDEP and Riverkeeper before the entry of this Consent Decree;

(iv)An Initial Treatment Study Report for the Development AOC;

(v) A Final Treatment Study Monitoring Report;

(vi) The documents for Site 163 submitted pursuant to paragraphs 54(a)(iv), 54(a)(v), 61, and 62;

(vii) A report to evaluate the need for remediation of any potentially remaining contaminated shallow groundwater in the Development AOC after implementation of the Development AOC Soils Remedy and, based on such an evaluation, a proposal;

(viii) A report of the results of the sampling to complete delineation of contaminated shallow groundwater in the area to the southeast of the Site pursuant to paragraph 71 and, based on the results, a proposal for a remedy;

(ix) A plan for one round of monitoring to evaluate whether the L-Well Groundwater remains contained pursuant to paragraph 72;

(x) A proposal for a remedy of the L-Well Groundwater, in the event L-Well Groundwater monitoring indicates the contaminated groundwater is no longer contained, pursuant to paragraph 72;

(xi) A Remedial Action Work Plan;

(xii) A 50% Design Report (which may include the Development AOC Conceptual Design Plan as a component) as well as design drawings and specifications at the 50% level for other components of the Chromium Remedy (hereinafter the 50% Design);

(xiii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(xiv) The data validation plan, including quality control and quality assurance protocols;

(xv) The site-wide master health and safety plan;

(xvi) The Long-Term Monitoring Plan;

(xvii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(xviii) A program for post-treatment monitoring pursuant to paragraph 63, and, depending on such results, a proposal for further remedial actions;

(xix) A report reviewing measured groundwater levels for the groundwater remedy;

(xx) Documents required during the Initial Development Period pursuant to paragraphs 74(j)(vi), 74(j)(vii), and 74(j)(viii); and

(xxi) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Initial Review of Documents by NJDEP.** The Parties and Special Master shall allow the period of time set forth below for NJDEP to conduct its review of a submission (hereinafter "NJDEP Review Period") before the document is subject to the Special Master review and approval process. During the NJDEP Review Period, any Party may submit comments to NJDEP. For the Second Supplemental Remedial Investigation Report, the Remedial Action Work Plan, the Initial Treatment Study, and the Final Treatment Study Monitoring Report, the NJDEP Review Period shall be 90 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. For any other documents identified in paragraph 86(c), the NJDEP Review Period shall be 30 days from the date of submission of the document to NJDEP, the Special Master, and the Parties. The NJDEP review period shall be extended an additional 30 days for any document for which NJDEP provides the Parties and the Special Master with notice that its review will require an additional 30 days. At the conclusion of the NJDEP Review Period, the comment and review process provided for in paragraphs 86(e) and 86(f) shall commence. In the event that any document has been revised during the NJDEP Review Period, Honeywell shall resubmit the applicable document for purposes of the comment and review provided for in paragraphs 86(e) and 86(f).

(e) **Comment on Submitted Documents.** For each of the documents submitted by Honeywell pursuant to paragraph 86(c), and following conclusion of the NJDEP Review Period as described in paragraph 86(d), the Special Master shall establish a schedule for the submission

of comments and responses to comments. For each of the documents submitted, Riverkeeper, Jersey City, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all comments received and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, Jersey City, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 86(f), unless the Parties agree both on the revised document and that further review and approval pursuant to paragraph 86(f) is unnecessary. In that event, the Parties shall inform the Special Master that review under paragraph 82(f) is unnecessary and Honeywell shall proceed to implement the revised document.

(f) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review**. Subject to the limitations in paragraph 82(e), all documents submitted by Honeywell, pursuant to paragraph 86(c) and 86(e), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 86(g). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure**. Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within

the timeframe established by the Special Master in the schedule for comments pursuant to paragraph 86(e). NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review**. If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(g) **Schedule and 100% Design Documents**. As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(h) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The

Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(i) **Changes to the Schedule**. The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54; and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

87. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 89.

88. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Sediment Consent Order. The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

89. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

90. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 74(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 74(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, the Study Area 6 North Consent Decree, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities

shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

J. Initial Financial Assurances

91. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy calculated using factors, including inflation and discount rates, determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process;

(ii) The costs of monitoring and maintenance activities for five years, as required by the Long-Term Monitoring Plan, calculated using factors including inflation and discount rates determined to be appropriate in the Study Area 6 North Consent Decree financial assurance comment and approval process; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 91(a)(i) and 91(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

92. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than December 31, 2008, Honeywell shall submit to Riverkeeper and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If Riverkeeper does not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

93. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 94, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.J, the Special Master shall direct the cancellation of the prior Chromium Remedy

Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

94. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 91(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 91(a)(i) and 91(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.K. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and

in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such terms. If Honeywell is not otherwise in default as provided in Article III.J and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

95. **Bankruptcy Protection**. Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

96. **Exclusive Court Jurisdiction**. The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

97. **Application of New York Law.** The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Chromium Remedy Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

98. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 85, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 93 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from

drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 98(c), and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

99. **Placement of Proceeds in Court Registry Investment System Account**. In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The

Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 103(b)(v).

100. **Termination of Chromium Remedy Letter of Credit**. The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.K.

K. Long-Term Financial Assurances

101. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 102(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

102. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater remedies pursuant to paragraphs 69, 70, and 71;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) The perpetual administration of the trust fund regardless of whether such trust fund is selected by Honeywell pursuant to paragraph 103(a) or is established from the Long-Term Letter of Credit pursuant to paragraphs 103(b)(ii), 103(b)(v), or 109.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 102(a)(i) through 102(a)(v) plus a 25% contingency when the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of the estimated future costs of the activities specified in paragraphs 102(a)(i) through 102(a)(v), plus a 25% contingency on those costs.

103. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution managing the

trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 102(a)(i) through 102(a)(iv).

(b) **Long-Term Letter of Credit**. In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 103(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 106.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of

Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. § 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(iii) The then-current provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits) as published by the International Chamber of Commerce or such successor organization and New York law shall apply to the Long-Term Letter of Credit at the time that Honeywell obtains such letter of credit or any replacements thereafter.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 98. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a). After the Special Master's appointment expires pursuant to paragraph 90, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 103(b)(ii), 103(b)(v), or 109 and Honeywell has also selected a trust fund pursuant to paragraph 103(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary.

(c) **Combination**. Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 103(a) and 103(b).

104. **Procedures for Review of the Proposed Long-Term Financial Assurances**. No later than June 1, 2009, Honeywell shall submit to Riverkeeper and the Special Master, for their review (a) the amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper agrees to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances.

105. **Temporary Maintenance of Chromium Remedy Letter of Credit**. Until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 91 in an amount equal to at least $20,000,000 in 2008 dollars. In the event of any default by Honeywell pursuant to paragraph 98 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 103(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under

paragraph 91(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 91(a)(i), shall apply.

106. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 103, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 102(a)(i) through 102(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to

long-term financial assurances, as set forth in paragraph 102(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 103(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 103(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 103(b).

107. **Exclusive Court Jurisdiction**. The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 103(a), 103(b)(ii), 103(b)(v), or 109.

108. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 103(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 108(c), if Honeywell fails to provide assurance to Riverkeeper, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

109. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or pursuant to paragraph 108 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be

paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 103(a) but satisfying the requirements of paragraph 103(a).

110. **Use of the Trust Fund in the Event of Honeywell's Default.** In the event of Honeywell's default, as defined in paragraphs 108(a) through 108(d), the money in the trust fund established pursuant to paragraph 103(a) shall be available to meet the obligations of paragraph 102(a), as well as for payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

111. **Use of a Trust Fund Established Pursuant to Paragraph 99, 103(b)(ii), 103(b)(v), or 109.** In the event that a trust fund is established pursuant to paragraph 99, 103(b)(ii), 103(b)(v), or 109, the money in the trust fund shall be available to meet the obligations of paragraph 102(a), as well as for the payment of future attorneys' fees and expenses pursuant to paragraph 120. Riverkeeper shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper.

112. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations under Article III.K shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the Open Space AOC or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive

standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: TERMINATION

113. **Termination of this Consent Decree**. This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 118:

(a) The Court fails to enter this Consent Decree or this Consent Decree is determined to be invalid on appeal; or

(b) NJDEP takes one of the following actions with respect to the Remedial Action Work Plan:

(i) Rejects or fails to approve the Remedial Action Work Plan for the Chromium Remedy within 180 days of submission of the plan;

(ii) Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in more than a 50% increase in the estimated costs of the Chromium Remedy as set forth in Article III; or

(iii) Approves the Remedial Action Work Plan for the Chromium Remedy, but conditions such approval on changes in the Work Plan that result in a substantial reduction of the protection of human health and/or the environment.

114. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 113 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 113 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

115. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 113.

116. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 113, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 113, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: TRANSFER OF TITLE TO BAYFRONT REDEVELOPMENT LLC

117. **Transfer of Title of Study Areas 6 South and 7 to and from Bayfront Redevelopment LLC.** The transfer of title of Study Area 6 South and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of

Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 South and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 South or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 South and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 South under this Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell*.

ARTICLE VI: NOTICE

118. **Notice.** Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE VII: RIVERKEEPER'S ATTORNEYS' FEES

119. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $813,000.00 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 South portion of *Riverkeeper v. Honeywell* through August 31, 2008; and

(b) $353,746.67 in out-of-pocket expenses representing a portion of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses paid pursuant to the Sediment Consent Order, the Deep Groundwater Consent Order, and the Study Area 6 North Consent Decree.

(c) Payment of the sum of $813,000.00 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $879,317.92 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

120. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after August 31, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell*. In the event that Riverkeeper and Honeywell are unable to reach a settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to

Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order. In the event of Honeywell's default, Riverkeeper may seek attorneys' fees from any trust fund or court registry funds established pursuant to the financial assurances provisions of this Consent Decree.

ARTICLE VIII: MISCELLANEOUS PROVISIONS

121. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

122. **Bayfront Redevelopment LLC as a Party.** As a signatory to this Consent Decree, Bayfront Redevelopment LLC subjects itself to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agrees to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against Bayfront Redevelopment LLC.

123. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

124. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

125. **Reservation of Rights and Claims.** Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

126. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

127. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

128. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

129. **Measures to Effectuate This Consent Decree.** Jersey City shall take all appropriate steps to ensure that commitments it has agreed to with regard to the Open Space AOC have been duly considered, ratified, and approved. Such steps include consideration of such commitments and an effectuating ordinance at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the commitments made by Jersey City..

130. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

131. **Severability.** Each of the provisions in paragraph 74 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

132. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Remedial AOC's and Remedial Approach Map

Exhibit B: NJDEP Chromium Policy

Exhibit C: Conservation Restriction

Exhibit D: Deed Notice

Exhibit E: Additional Boring Locations

20171130010138820
11/30/2017 09:28:34 AM
DEED
NUMBER OF PAGES : 127
LHIGHSMITH

Deed Notice

Dated: _____, *2017*

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: Perry Florio, Esq

DEED NOTICE #5
SA-6 NORTH OPEN SPACE

Deed Notice #5
SA-6 North Open Space Area
Portions of Block 21901 Lots 5-10

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature]
Global Director - Remediation Design & Construction
[Bayfront Redevelopment LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

20171214010145690 1/130
12/14/2017 11:34:11 AM DEED
Bk: 9264 Pg: 678
Diane Coleman
Hudson County, Register of Deeds
Receipt No. 1312618

DEED NOTICE CONCERNING CONTROLS INSTALLED TO CONTAIN CHROMIUM AND HISTORIC FILL CONTAMINATION UNDERLYING THE CENTRAL PARK

This Deed Notice is made as of the 29th day of November, 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950.*** "Owner" shall mean Bayfront Redevelopment LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The Property (also referred to herein as Restricted Area(s)") is particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. Bayfront Redevelopment LLC is the current owner in fee simple of certain real property designated as portions of ***Block 21901, Lots 5 through 10 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]; the New Jersey Department of Environmental Protection ("the Department") Program Interest ("PI") Numbers for the contaminated site which includes this property are ***Hudson County Chromate Site No. 087 PI No. G000008710 and Hudson County Chromate Site No. 088 PI No. G000008711*** (NJDEP PI# for non-chromium-

[1] All references to Block 21901 Lots 5 through 10 in this Deed Notice shall mean the applicable portions of Block 21901 Lots 5 through 10 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

related contaminants at the Property is #745719) and known as the Open Space Area pursuant to the First Amended Consent Decree Regarding the Remediation and Redevelopment of Study Area 6 North ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.,* D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The approximate location of the Open Space Area is also referred to as Central Park in the Bayfront I Redevelopment Plan adopted by Jersey City on March 12, 2008. The Property also includes a portion of the area referred to as treatment area 10 (TA-10) that is located immediately north of the SA-6 North Open Space Area northern hydraulic barrier and south of the northern curbline of the future Stegman Boulevard. The Consent Decree restricts transfer, use and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management ("BCM") is the entity within the Department that is responsible for the oversight of the chromium remediation of the Property. The matter was Case No. Hudson County Chromate Site No. 087 PI# G000008710 and Hudson County Chromate Site No. 088 PI# G000008711. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International, Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 North to address chromium-related soil and non-chromium related soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") for chromium remedial actions was approved by the Department on February 19, 2009 for Hudson County Chromate Site Nos. 087 and 088 which included the Property. The RAWP for non-chromium remedial actions was approved by the Department on November 10, 2009. Remedial actions for chromium were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP soil and groundwater contamination remains in the Property at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 North was submitted to the Department on March 16, 2017. The Department approved the RAR on June 1, 2017. A Construction Completion Report ("CCR") for SA-6 North to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 North was entered by the Court on December 5, 2017, Docket No. 1528.

The Property encompasses approximately 10 acres. This deed notice area includes chromium, benzene, MTBE, and historic fill. The horizontal extents of the Property include an existing soil-cement-bentonite ("SCB") wall along the southern boundary of the Property with SA-7, the hydraulic barrier walls installed on the other three sides as part of the Chromium Remedy, and the portion of TA-10 that is south of the northern curbline of the future Stegman Boulevard. The engineering barrier covering the contamination in the area of the Property contained within the SCB and hydraulic barrier walls consists of an engineered Resource Conservation Recovery Act ("RCRA") cap that includes a gas collection system, base protective layer, geomembrane liner, geocomposite drainage layer, filter fabric, warning layer and cover soils. The engineering barrier in the TA-10 area of the Property consists of at least 12 feet of clean fill and the area will be capped by the future Stegman Boulevard. TheProperty includes chromium for the Open Space Area and the TA-10 area, and benzene, methyl tert-butyl ether (MTBE) and historic fill for the Open Space Area. Honeywell will restrict, or will cause Bayfront Redevelopment LLC to restrict, the future use of this area by implementing a conservation restriction, which has been recorded at the Office of the Hudson County Register, and Honeywell will transfer, or cause Bayfront Redevelopment LLC to transfer, title to the City of Jersey City (as called for in Paragraph 60(a)(iii) of the Consent Decree). The provisions of the Long Term Monitoring Plan ("LTMP") and the Open Space Design Standards ("OSDS"), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater within the Property remains contaminated. Groundwater contaminant concentrations and restrictions for SA-6 North in its entirety are addressed in the Classification Exception Area (CEA)] approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater. As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil and groundwater remediation for the Property in perpetuity.

4. CONSIDERATION. In accordance with the Department's approval of the chromium and non-chromium RAWPs for the remediation for the Hudson County Chromate Site Nos. 087 and 088 which includes the Property, and in consideration of the terms and conditions of that remedial action, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions

which will be maintained at either the onsite trailers or within the Groundwater Treatment Plant building and be available for inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a child care facility without the Department's prior written approval;

iii. The Consent Decree, paragraph 60, prohibits development in the Property except as allowed by paragraphs 60(j) and (k) of the Consent Decree; and

iv. The Conservation Restriction, recorded with the Hudson County Register of Deeds at Book 8644, page 662, restricts the use and development of the Property.[2]

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls within the Property. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, the LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has developed an LTMP which sets forth requirements for monitoring, maintaining, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5E. OPEN SPACE DESIGN STANDARDS. Pursuant to the Consent Decree, Honeywell has prepared the OSDS which set forth the standards that must be met to ensure the protection of the Chromium Remedy during all development and other intrusive work conducted within the Property.

[2] In the future, the boundary of the existing conservation restriction recorded on the Property will be amended to conform to the portion of the TA-10 area that is south of the northern curbline of the future Stegman Boulevard and the location of the as-built hydraulic barrier walls.

5F. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of known contamination in the Property, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and Conservation Restriction,(b) as is consistent with the OSDS, and (c) without first obtaining aa Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(c), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree, the OSDS, and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C)Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F)Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree, and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Open Space Area Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of

any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the Owner's interest in the Property. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 66 and 69 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that

any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description of Property- A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as

overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1 and B-2 (Exhibits B-1A, B-1B, B-2A, and B-2B): Restricted Area Maps - Maps for the that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system including trenches and pumps;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-3 (Table B-3): Restricted Area Data Tables - Table for the Open Space Area Property that includes:

(A) Sample location designation from Restricted Area maps (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through D. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; Exhibit C-1D: Conservation Restriction as Institutional Control (recorded at Hudson County Register of Deeds as indicated in Paragraph 3): Exhibit C-1 (A through D) includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:

(1) Description and estimated size of the Restricted Areas as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;
(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and
(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;
(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and
(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2A through C. Exhibit C-2A: Engineering Controls: Clean Fill and Soil Capping System; Exhibit C-2B: Engineering Controls: Underground Containment Walls; Exhibit C-2C: Engineering Controls: Shallow Groundwater Collection and Treatment System.

Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:

(1) Description of the engineering control;
(2) The objective of the engineering control; and
(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;
(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;
(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;
(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;
(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and
(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;
(2) The engineering control continues to operate as designed; and
(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Stephanie Frank
Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 29, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 29th day of November 2017.

Cheryl L. Toles
Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #5 SA-6 North Property

A-1 Vicinity Map

A-2 Metes and Bounds Description of the Property and Tax Map

A-3Property Maps Portions of Block 21901, Lots 5 through 10, City of Jersey City, New Jersey

Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of the metes and bounds and a tax map for the Property.

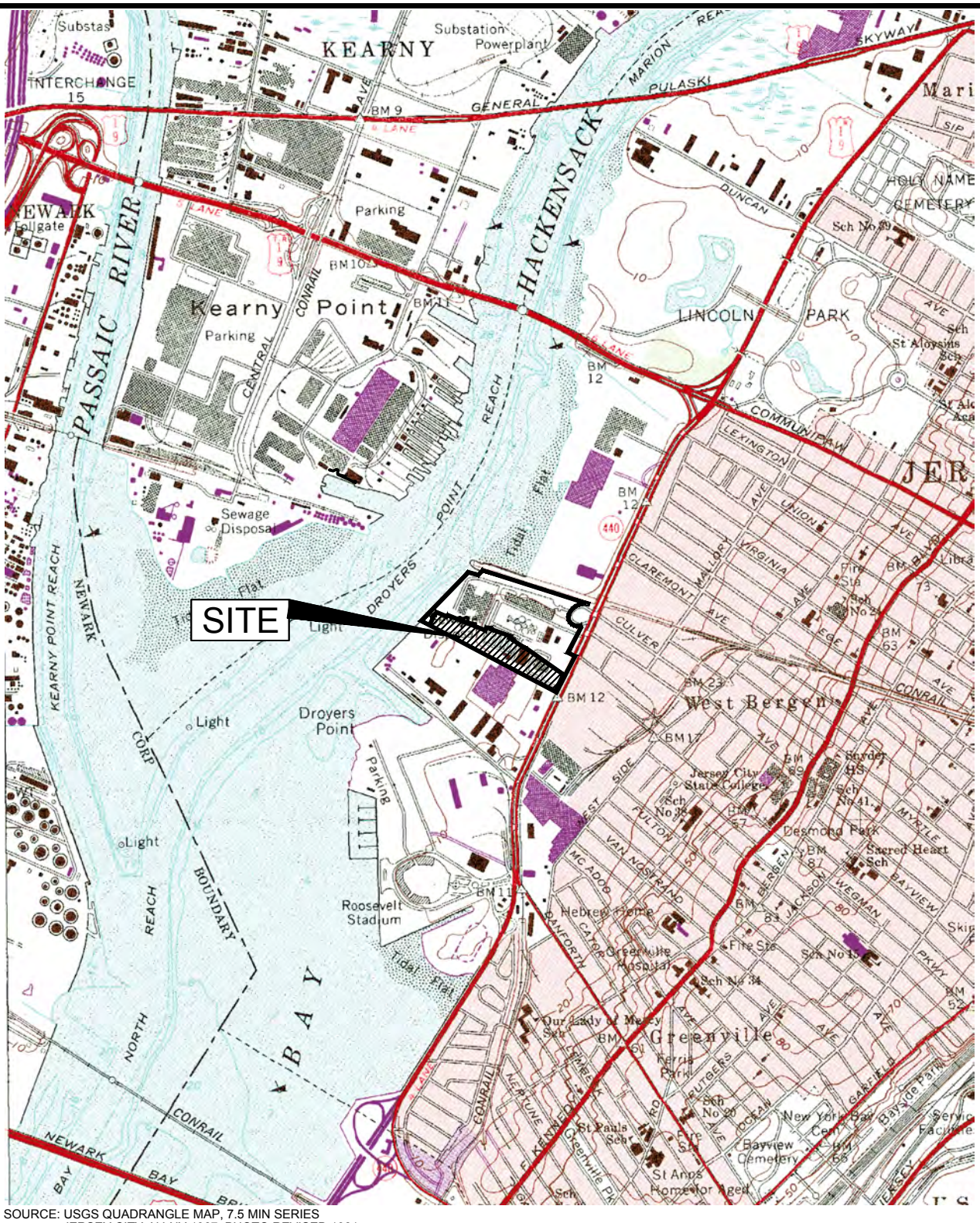
Exhibit A-3A and 3B Property Maps consist of figures indicating major surface features and engineering control for the Property. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

Exhibit A-1
Site Vicinity Map

EXHIBIT A-1
SITE VICINITY MAP
STUDY AREA 6 NORTH SITES 087 and 088
JERSEY CITY, NEW JERSEY

CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\6100\1\DEED NOTICE\DN 5\3480150487-6100-A105-0000.dwg Wed, 29 Nov 2017 - 8:59am scott.rudkin



SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

OPEN SPACE AOC
RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A105-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-1
VICINITY MAP
BLOCK 21901 LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #5

Exhibit A-2
Deed Notice #5 SA-6 North Property

Metes and Bounds Description of the Property and Tax Map

A-2 Metes and Bounds Description of Property Portions of Block 21901, Lots 5 through 10 City of Jersey City, New Jersey (see attached)

If there is any discrepancy between the Metes and Bounds and the tax map, or any other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as portions of Block 21901, Lots 5 through 10 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment LLC. A copy of the current tax map which includes the general location of the Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 ▪ Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292R

DEED NOTICE AREA 5
BLOCK 21901 LOTS 5 THRU 10
MAY 18, 2016
REVISED: AUGUST 16, 2017

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lots 5 thru 10, in Block 21901, designated as Deed Notice Area 5 as shown on an exhibit entitled, "Deed Notice Area 5, SA6 North, Block 21901, Lots 5 Thru 10, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated May 12, 2016, revised through August 16, 2017 and being more particularly bounded and described as follows, to wit:

BEGINNING at a point in the westerly sideline of New Jersey State Highway Route 440 (112 foot wide right of way), said sideline being distant 61 feet westward at right angles to the centerline thereof, said beginning point being distant **S24° 46' 55"W, 4.16 feet** along said sideline, from its intersection with the division line between Lots 5 and 6 in Block 21901, and running; thence-

1. **N49° 06' 51"W, 488.50 feet,** running through Lot 6 and beyond, to a point in Lot 7; thence –

2. **N59° 38' 29"W, 1,519.31 feet,** running through said Lot 7 and beyond, to a point in Lot 8; thence –

3. **N45° 51' 07"E, 4.13 feet,** still running through said Lot 8, to a point in the common division line between Lot 8 and Lot 10 in Block 21901; thence –

4. **S59° 39' 05"E, 111.22 feet,** along said common division line; thence –

Running through said Lot 10, the following seven (7) courses:

5. **N28° 37' 00"E, 19.46 feet,** through the same and beyond, to a point in Lot 10; thence –

6. **N30° 01' 01"E, 48.06 feet**; thence –

7. **N19° 17' 57"W, 17.97 feet**; thence –

8. **N31° 55' 37"E, 23.15 feet**; thence –

9. **N76° 06' 19"E, 18.87 feet**; thence –

10. **N29° 16' 27"E, 36.41 feet**; thence –

11. **S65° 27' 42"E, 153.93 feet**, through said Lot 10 and beyond, to a point in Lot 9; thence –

Running through said Lot 9 the following fifteen (15) courses:

12. **N24° 46' 55"E, 9.39 feet**; thence –

13. **S63° 20' 43"E, 154.05 feet**; thence –

14. **S64° 10' 53"E, 3.13 feet**; thence –

15. **N89° 06' 30"E, 10.85 feet**; thence –

16. **S71° 33' 46"E, 49.04 feet**; thence –

17. **N64° 44' 16"E, 48.64 feet**; thence –

18. **S71° 27' 06"E, 29.23 feet**; thence –

19. **S20° 45' 38"W, 20.55 feet**; thence –

20. **S06° 10' 50"W, 25.40 feet**; thence –

21. **S43° 02' 17"E, 20.42 feet**; thence –

22. **S75° 55' 23"E, 91.65 feet**; thence –

23. **N69° 31' 56"E, 18.75 feet**; thence –

24. **S73° 19' 46"E, 15.58 feet**; thence –

25. **S31° 22' 02"E, 27.50 feet**; thence –

26. **S63° 54' 38"E, 73.11 feet** to a point in Lot 10; thence –

27. **S53° 29' 05"E, 36.52 feet,** through Lot 10 to a point in the thirteenth (13th) course of the aforesaid Deed Notice Area 5; thence –

28. **N21° 49' 22"E, 36.10 feet**; thence –

29. **S64° 01' 16"E, 27.11 feet**; thence –

30. **S71° 46' 41"E, 7.00 feet**; thence –

31. **S64° 53' 57"E, 170.96 feet**; thence –

32. **S64° 26' 41"E, 145.28 feet**; thence –

33. **S21° 49' 39"W, 13.27 feet**; thence –

34. **S30° 55' 57"W, 14.90 feet**; thence –

35. **S63° 05' 16"E, 40.95 feet**; thence –

36. **S23° 59' 21"E, 5.01 feet**; thence –

37. **S09° 06' 51"W, 5.08 feet**; thence –

38. **S62° 39' 21"E, 11.92 feet**; thence –

39. **S52° 51' 45"E, 21.10 feet**; thence –

40. **S53° 17' 55"E, 88.34 feet**, through the same and beyond, to a point in Lot 5; thence –

Running through said Lot 5 the following ten (10) courses:

41. **S52° 44' 24"E, 69.21 feet**; thence –

42. **S51° 37' 08"E, 58.38 feet**; thence –

43. **S51° 38' 54"E, 66.12 feet**; thence –

44. **S50° 49' 27"E, 106.68 feet**; thence –

45. **S48° 28' 21"E, 88.28 feet**; thence –

46. **S47° 08' 10"E, 8.77 feet**; thence –

47. **S27° 42' 13"E, 2.67 feet**; thence –

48. **S51° 51' 37"E, 32.05 feet**; thence –

49. **S49° 13' 40"E, 214.67 feet**; thence –

50. **S49° 22' 28"E, 10.39 feet**, to the aforesaid westerly sideline of Route 440; thence –

51. **S24° 46' 55"W, 241.26 feet**, along said westerly sideline to the point and place of BEGINNING.

CONTAINING: 445, 993 S.F. of land more or less or 10.239 acres of land more or less.

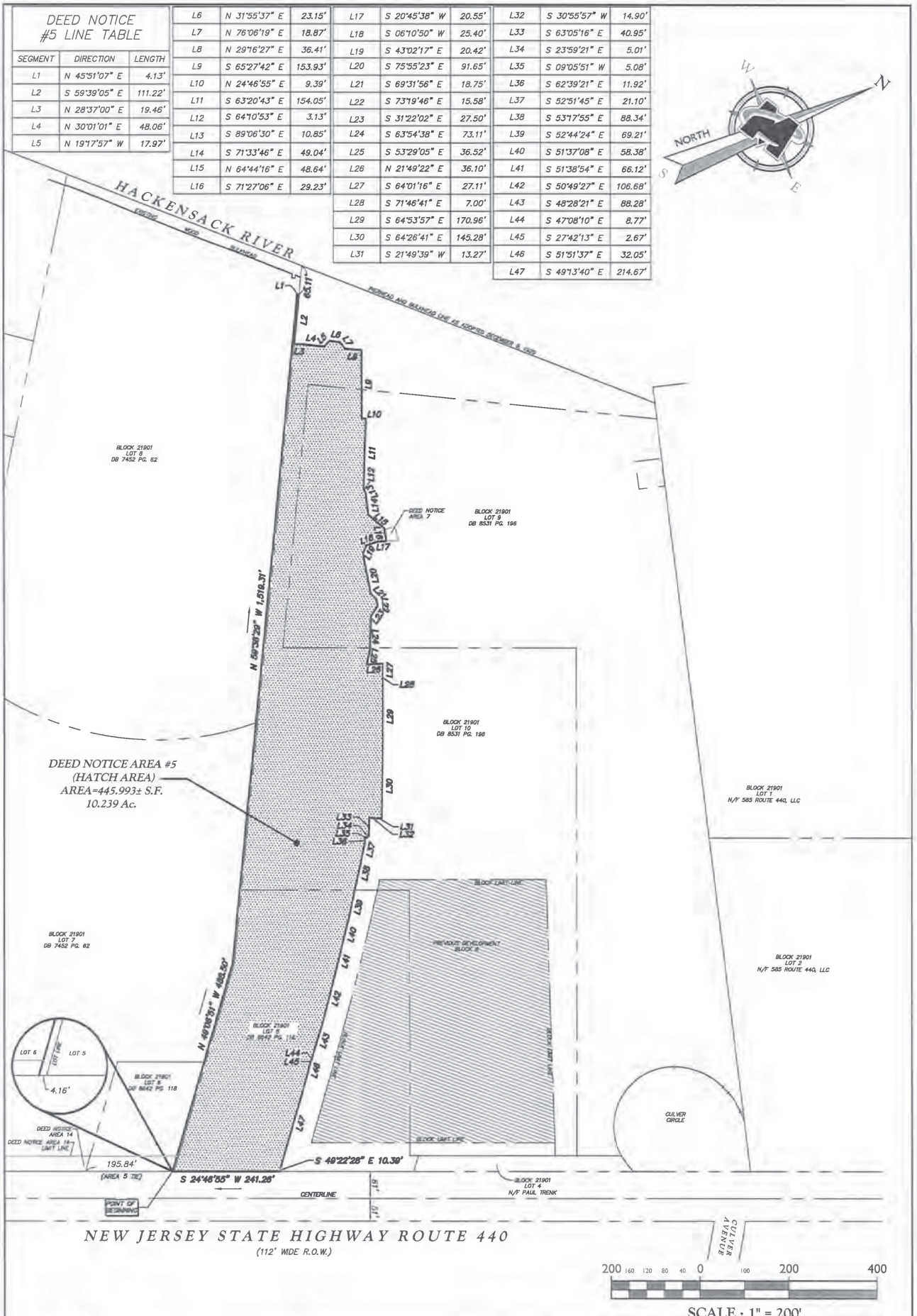
08/16/17

GLEN J. LLOYD, P.L.S. DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

R:\General\Projects\2010\10000292R\Survey\Description\Metes & Bounds-Deed Notice 5_REV 08.16.17.docx

DEED NOTICE #5 LINE TABLE

SEGMENT	DIRECTION	LENGTH
L1	N 45°51'07" E	4.13'
L2	S 59°39'05" E	111.22'
L3	N 28°37'00" E	19.46'
L4	N 30°01'01" E	48.06'
L5	N 19°17'57" W	17.97'
L6	N 31°55'37" E	23.15'
L7	N 76°06'19" E	18.87'
L8	N 29°16'27" E	36.41'
L9	S 65°27'42" E	153.93'
L10	N 24°46'55" E	9.39'
L11	S 63°20'43" E	154.05'
L12	S 64°10'53" E	3.13'
L13	S 89°06'30" E	10.85'
L14	S 71°33'46" E	49.04'
L15	N 64°44'16" E	48.64'
L16	S 71°27'06" E	29.23'
L17	S 20°45'38" W	20.55'
L18	S 06°10'50" W	25.40'
L19	S 43°02'17" E	20.42'
L20	S 75°55'23" E	91.65'
L21	S 69°31'56" E	18.75'
L22	S 73°19'46" E	15.58'
L23	S 31°22'02" E	27.50'
L24	S 63°54'38" E	73.11'
L25	S 53°29'05" E	36.52'
L26	N 21°49'22" E	36.10'
L27	S 64°01'16" E	27.11'
L28	S 71°46'41" E	7.00'
L29	S 64°53'57" E	170.96'
L30	S 64°26'41" E	145.28'
L31	S 21°49'39" W	13.27'
L32	S 30°55'57" W	14.90'
L33	S 63°05'16" E	40.95'
L34	S 23°59'21" E	5.01'
L35	S 09°05'51" W	5.08'
L36	S 62°39'21" E	11.92'
L37	S 52°51'45" E	21.10'
L38	S 53°17'55" E	88.34'
L39	S 52°44'24" E	69.21'
L40	S 51°37'08" E	58.38'
L41	S 51°38'54" E	66.12'
L42	S 50°49'27" E	106.68'
L43	S 48°28'21" E	88.28'
L44	S 47°08'10" E	8.77'
L45	S 27°42'13" E	2.67'
L46	S 51°51'37" E	32.05'
L47	S 49°13'40" E	214.67'



MASER CONSULTING P.A.

Customer Loyalty through Client Satisfaction
www.maserconsulting.com
Engineers • Planners • Surveyors
Landscape Architects • Environmental Scientists
State of N.J. Cert. of Authorization: 24GA27986500

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- Red Bank, NJ
- Clinton, NJ
- Hamilton, NJ
- Marmora, NJ
- Mt. Arlington, NJ
- Mt. Laurel, NJ
- Sterling, VA
- Norfolk, VA
- Albuquerque, NM
- Albany, NY
- Chestnut Ridge, NY
- Newburgh, NY
- Hawthorne, NY
- Lehigh Valley, PA
- Exton, PA
- Philadelphia, PA
- Columbia, MD
- Tampa, FL

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REV	DATE	DRAWN BY	DESCRIPTION
1	12/7/16	HA	EXPAND DEED NOTICE AREA
2	1/13/17	KAN	BLOCK 6
3	2/2/17	KAN	BLOCK 6
4	8/16/17	KAN	EXPAND DEED NOTICE AREA

DEED NOTICE AREA 5
SA6 NORTH

BLOCK 21901
LOTS 5-10

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

811 PROTECT YOURSELF
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

RED BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1984

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/16/2016	KAN	GJL
PROJECT NUMBER:		FILE NAME:	
H000239Q3		V-EXBT-DN-5_REV	

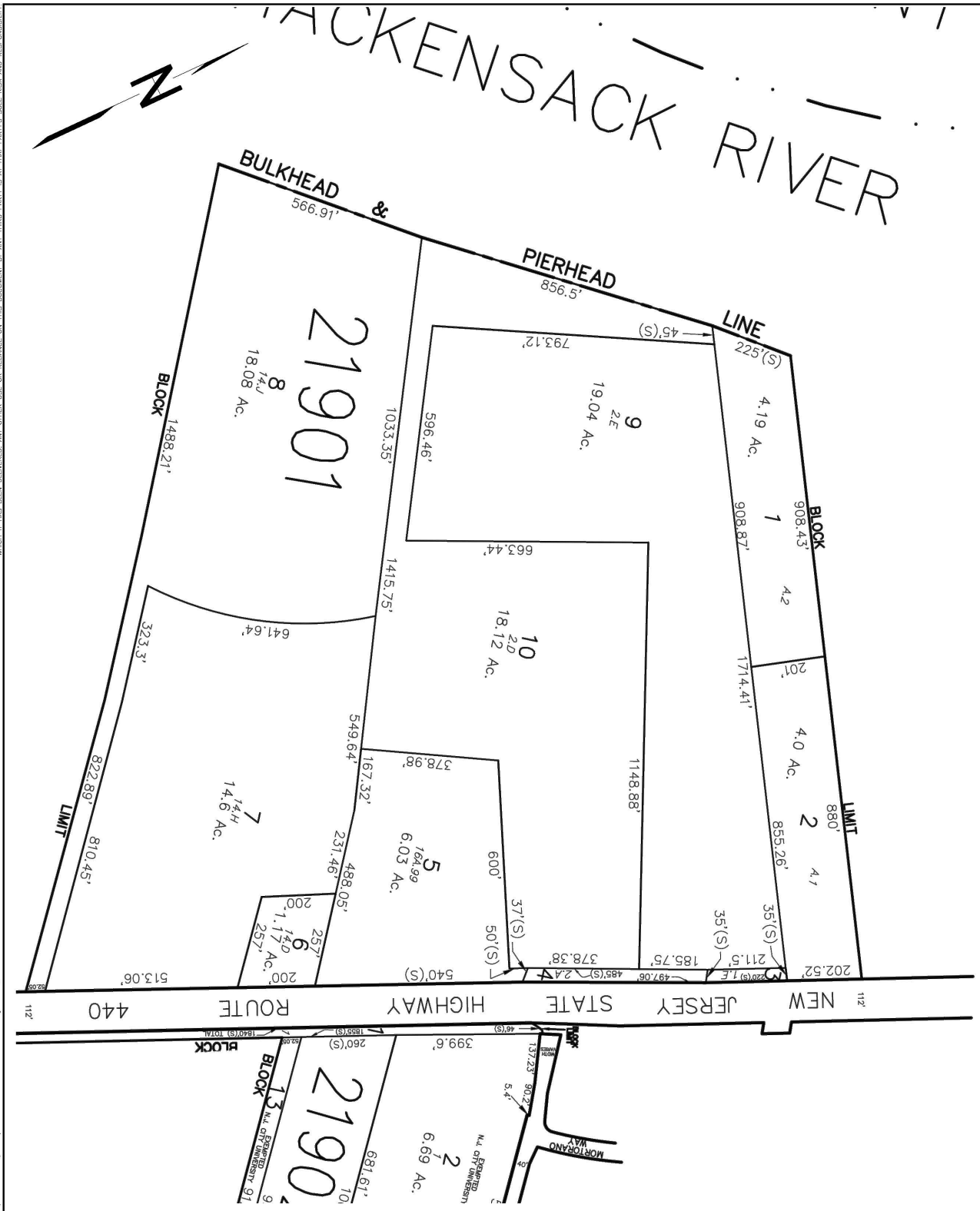
SHEET TITLE: DEED NOTICE EXHIBIT

SHEET NUMBER: 1 of 1

Exhibit A-2
Tax Map

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (i) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\61000\1\DEED NOTICE\DN S\3480150487-6100-A205-0000.dwg Wed, 29 Nov 2017 - 9:00am scott.ruskin



SOURCE:
DRAWING TITLED: "TAX MAP CITY OF JERSEY CITY", PREPARED BY T&M ASSOCIATED, MIDDLETOWN TWP., NJ SHEET 219, DATED AUGUST, 2006; NEW JERSEY DEPARTMENT OF THE TREASURY DIVISION OF TAXATION PROPERTY ADMINISTRATION DATED MAY 8, 2009 SERIAL NO.: 934.

0 150 300 600
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150487-6100-A205-0000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-2** TAX MAP BLOCK 21901, LOTS 5 -10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE # 5
PREPARED/DATE: STR 12/15/16 | *CHECKED/DATE:* NW 01/31/17		

Exhibit A-3A and A-3B
Property Maps

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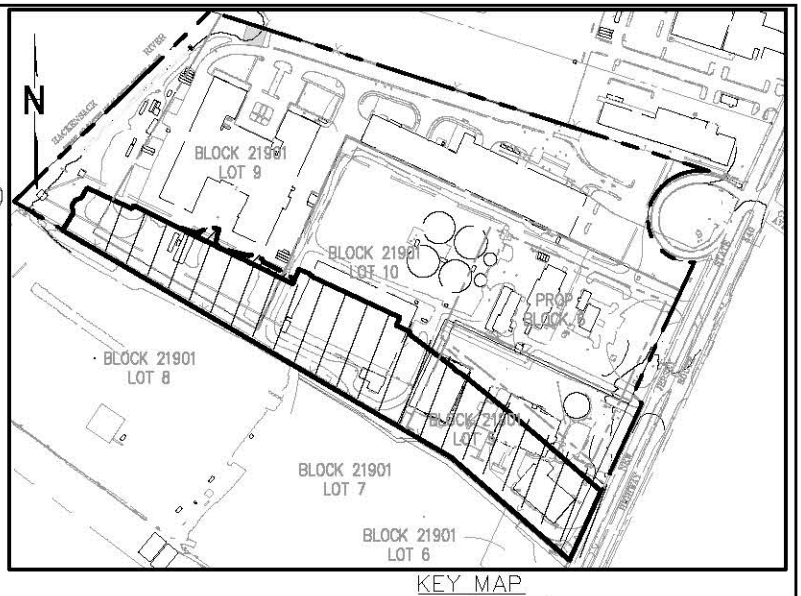
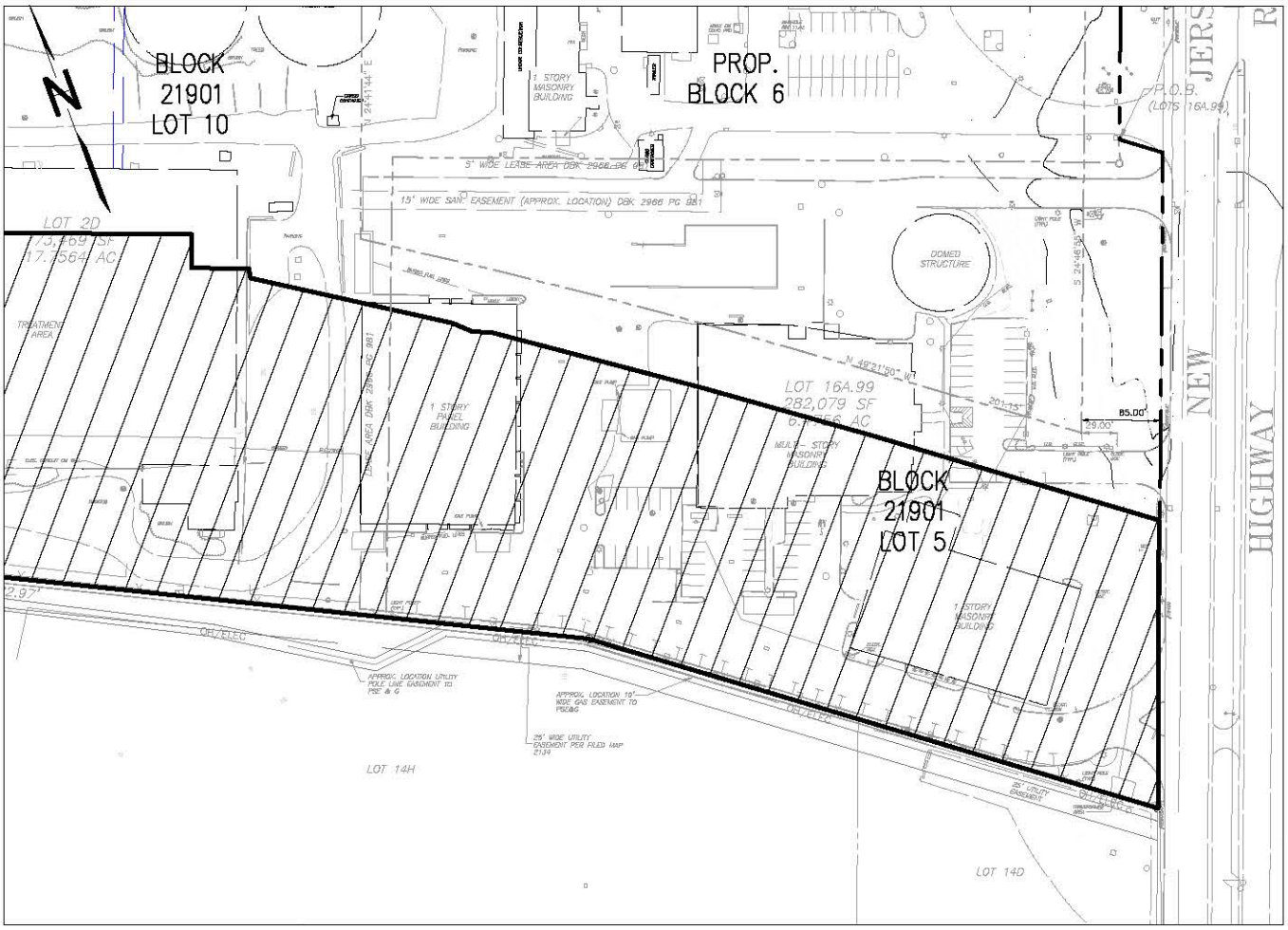
LEGEND

PROPERTY BOUNDARY

CEA AREA AND OPEN SPACE AREA (INCLUDES PORTION OF TA–10 AREA NORTH OF HYDRAULIC BARRIER WALL)



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 60 120 240
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A305-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-3A
PROPERTY AREA MAP
BLOCK 21901; LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE 5

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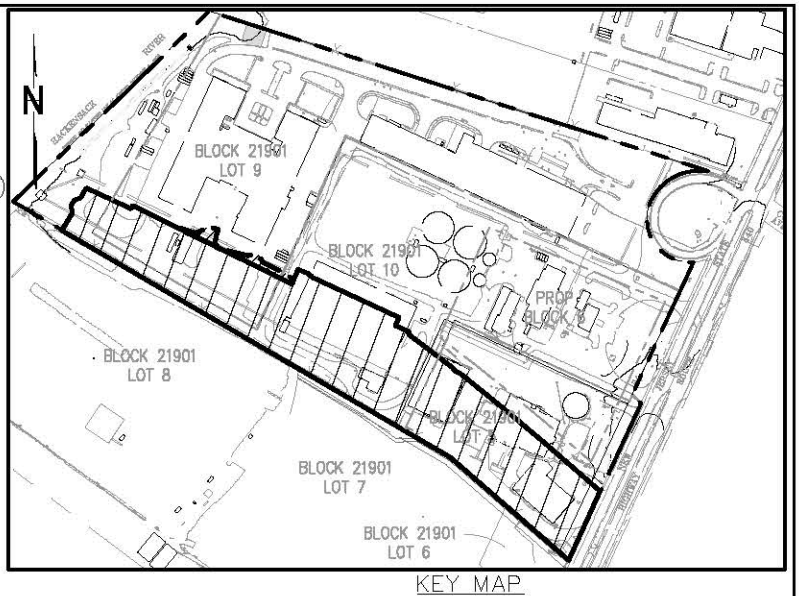
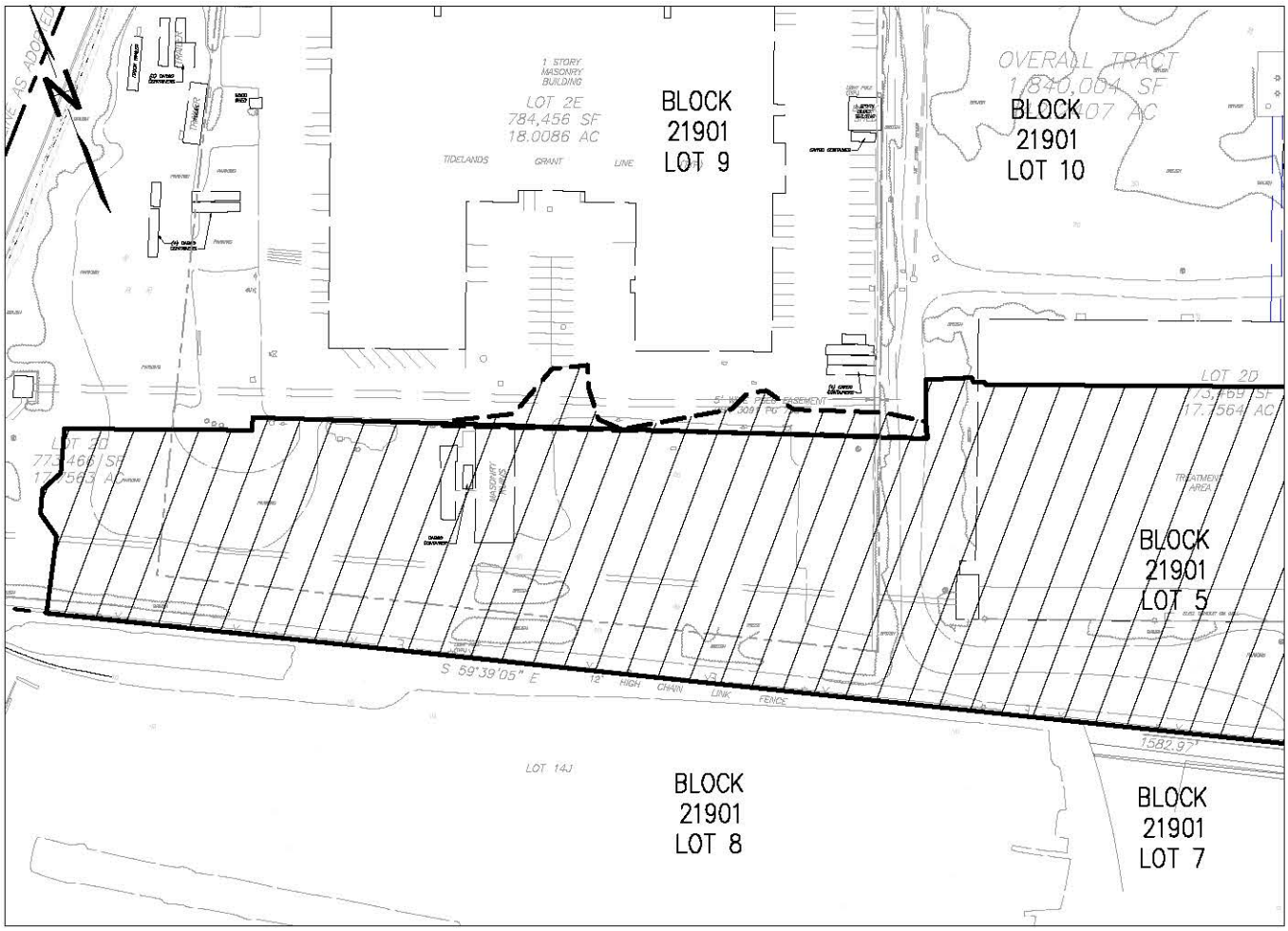
LEGEND

PROPERTY BOUNDARY

CEA AREA AND OPEN SPACE AREA (INCLUDES PORTION OF TA-10 AREA NORTH OF HYDRAULIC BARRIER WALL)



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

0 75 150 300
SCALE IN FEET

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A305-0000	
PREPARED/DATE: STR 12/12/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-3B
PROPERTY AREA MAP
BLOCK 21901; LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #5

EXHIBIT B
Deed Notice #5 SA-6 North Property

B-1A and B-1B Restricted Area Maps
B-2A Chromium Remedy Components
B-2B and B-2C Cap System Detail
B-2D As-Built Restoration Plan
B-3 Restricted Area Data Table
Portions of Block 21901, Lots 5 through 10
City of Jersey City, New Jersey

Exhibit B-1 Restricted Area Maps includes Exhibit B-1A and Exhibit B-1B (Restricted Area Soil Sample Locations).

Exhibit B-2 Chromium Remedy Components includes Exhibit B-2A (Chromium Remedy Components), B-2B and B-2C (Cap System Detail), and Exhibit B-2D (As-Built Restoration Plan).

Exhibit B-3 is a Restricted Area Data Table indicating soil sample locations with concentrations of contaminants remaining above the level established in the New Jersey Department of Environmental Protection (NJDEP) Chromium Policy and/or other applicable NJDEP Soil Quality Standards as described below.

Restricted Area Map Notes:

Exhibits B-1A and B-1B indicate engineering controls. The engineering controls include (1) underground containment walls, and (2) a capping system consisting of: a warning layer, impervious geo-membrane liner; geo-composite drainage layer; and clean soil cover with minimum 12 inches thickness in areas where pavement is proposed; and an average of 36-inches and a minimum 24-inches thickness in areas where landscaping is proposed.

Exhibit B-2B indicates engineering controls cap system detail.

Exhibits B-1A and B-1B indicate the restricted area for soil containing contaminants of concern, including hexavalent chromium above 20 milligrams per kilogram (mg/kg), benzene above the NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) of 2 mg/kg, methyl tert-butyl ether (MTBE) above the NJDEP RDCSRS of 320 mg/kg, and soils that are consistent with NJDEP's definition of "historic fill material" found at N.J.A.C. 7:26E-1.8 as shown on Exhibit B-3.

Analytical results and soil borings indicate that historic fill is present onsite and extends over the entire Restricted Area. Historic fill onsite typically consists of the following: metals, PAHs, and miscellaneous debris (including but not limited to coal fragments, brick, timber, and other construction materials).

A table summarizing maximum concentrations of typical contaminants found in the historic fill material in the Restricted Area is included as Exhibit B-3.

For soils north of the hydraulic barrier wall with hexavalent chromium concentrations above 20 mg/kg, the engineering control is 12 feet of clean soil and an asphalt cap as shown on Exhibit B-2C.

Exhibits B-1A and B-1B
Restricted Area Maps

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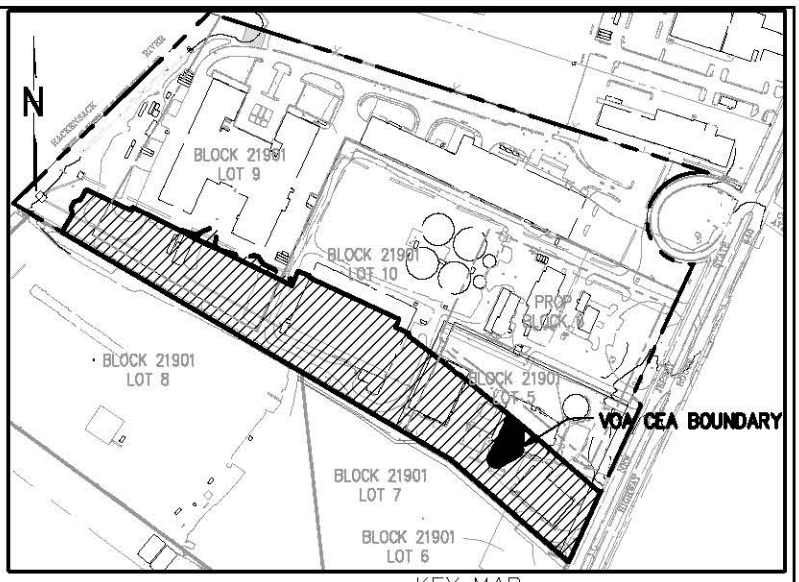
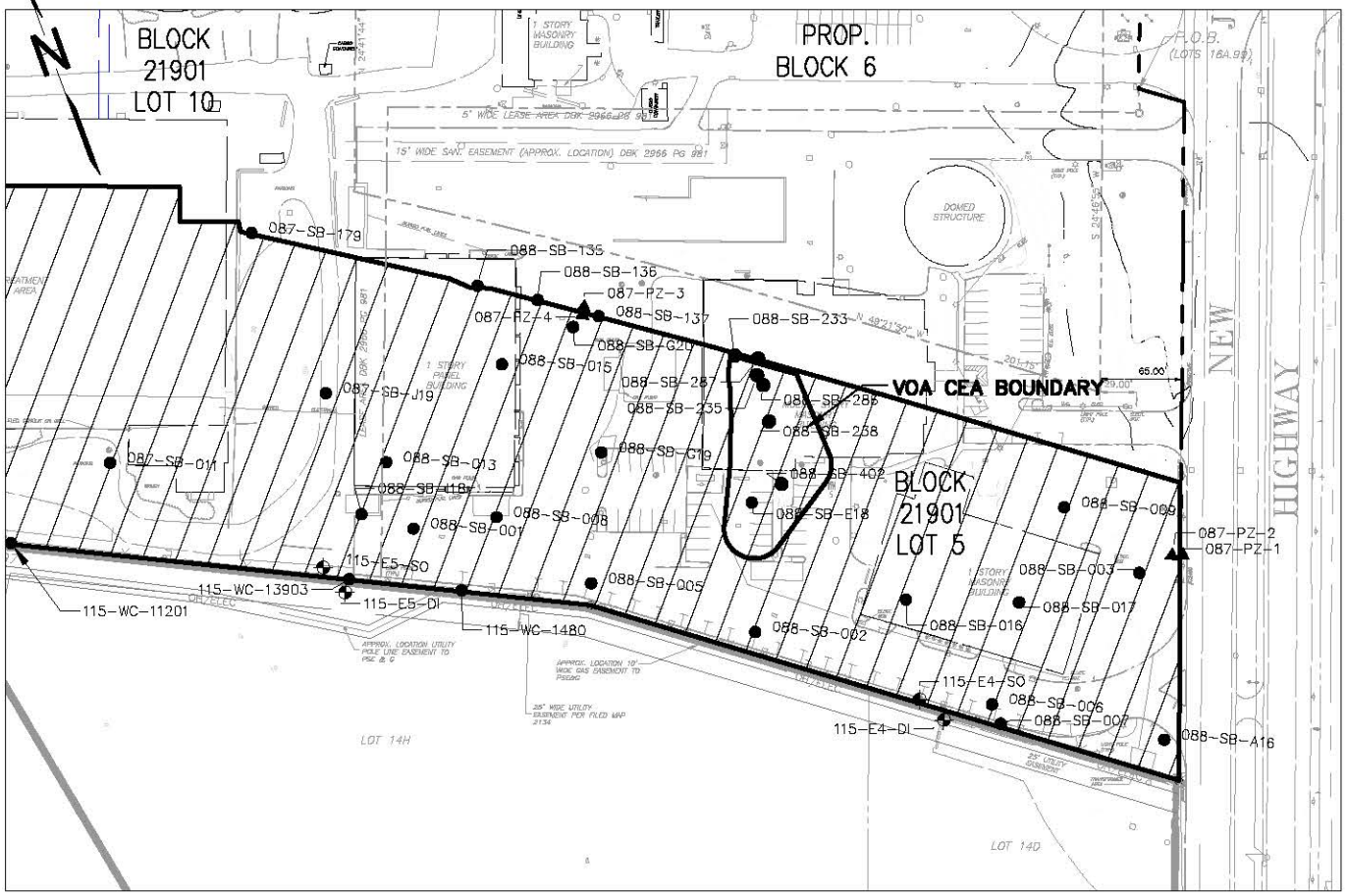
LEGEND

- SOIL SAMPLE LOCATION ABOVE STANDARD (SEE EXHIBIT B-2)
- MONITORING WELL
- PIEZOMETER
- PROPERTY BOUNDARY
- HYDRAULIC BARRIER SCB WALL
- CEA AREA AND OPEN SPACE AREA RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 75 150 300
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 DRAWING: 3480150487-6100-B005-0000	
PREPARED/DATE: STR 12/15/16	CHECKED/DATE: NW 12/22/16

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1A
RESTRICTED AREA MAP
BLOCK 21901; LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE 5

P:\AUP\HAWELL\JERSEY CITY\SA 6 NORTH\3480150487\GIS\MXD\USED MXDS\UR_3480150487_6100_B005_0000.mxd Wed, 28 Dec 2016 - 9:54am mwellman Layout: Layout1 (3)

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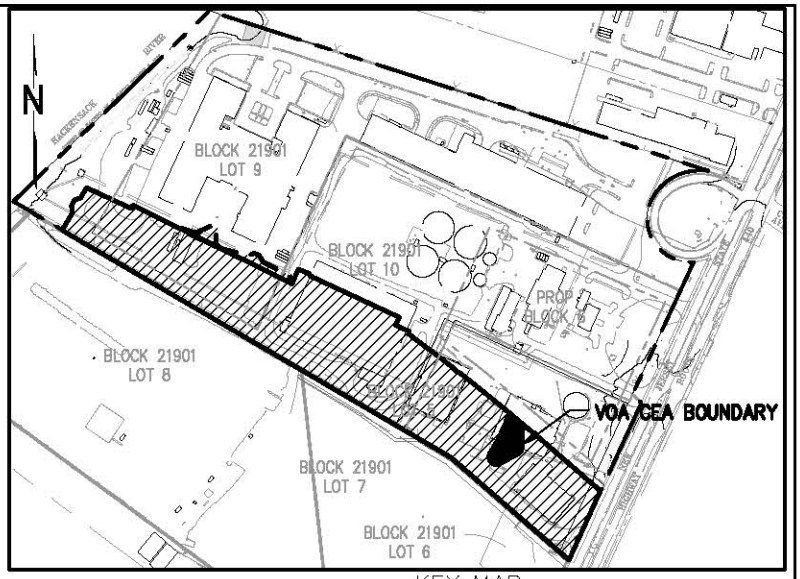
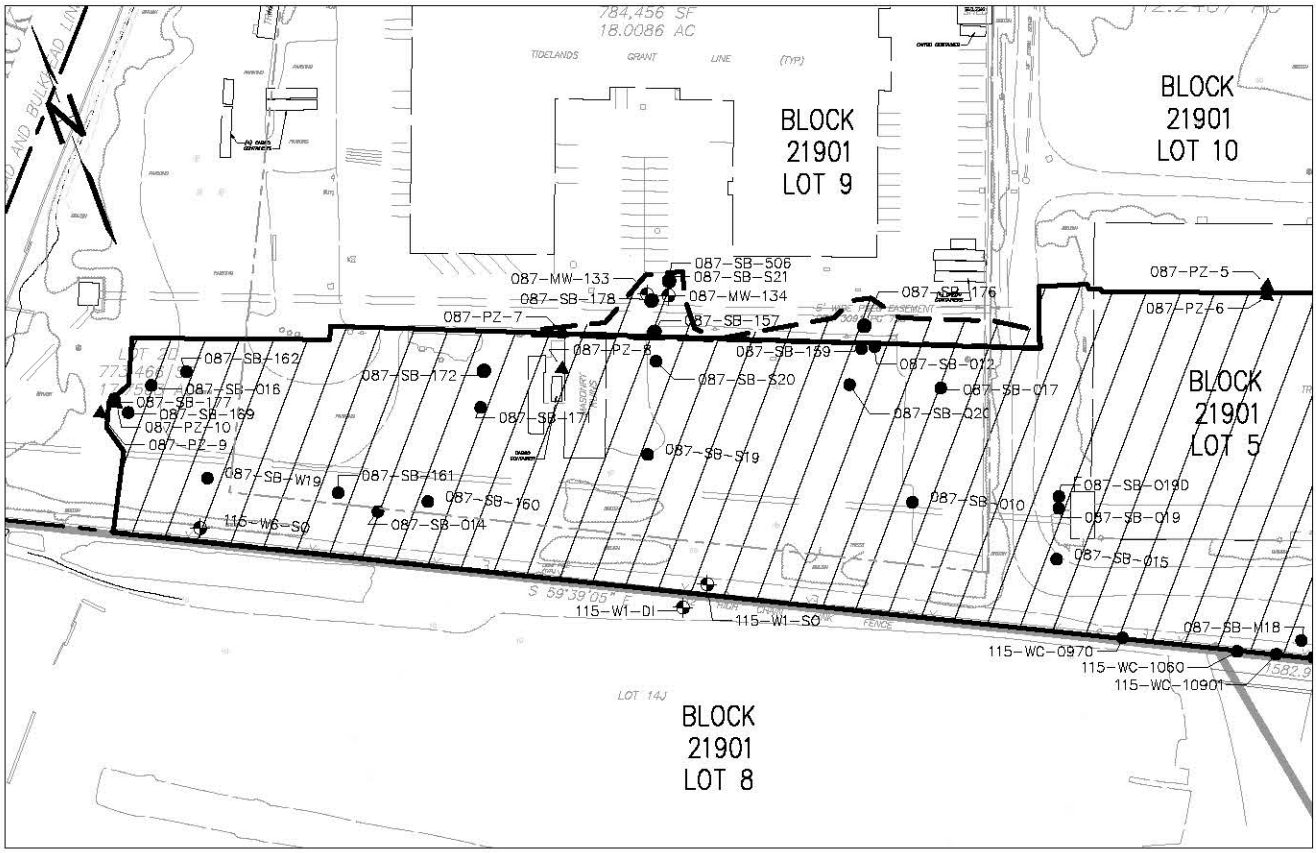
LEGEND

- SOIL SAMPLE LOCATION ABOVE STANDARD (SEE EXHIBIT B-2)
- MONITORING WELL
- PIEZOMETER
- PROPERTY BOUNDARY
- HYDRAULIC BARRIER SCB WALL
- CEA AREA AND OPEN SPACE AREA RESTRICTED AREA (INCLUDES PORTION OF TA-10 AREA NORTH OF HYDRAULIC BARRIER WALL)



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 75 150 300
SCALE IN FEET

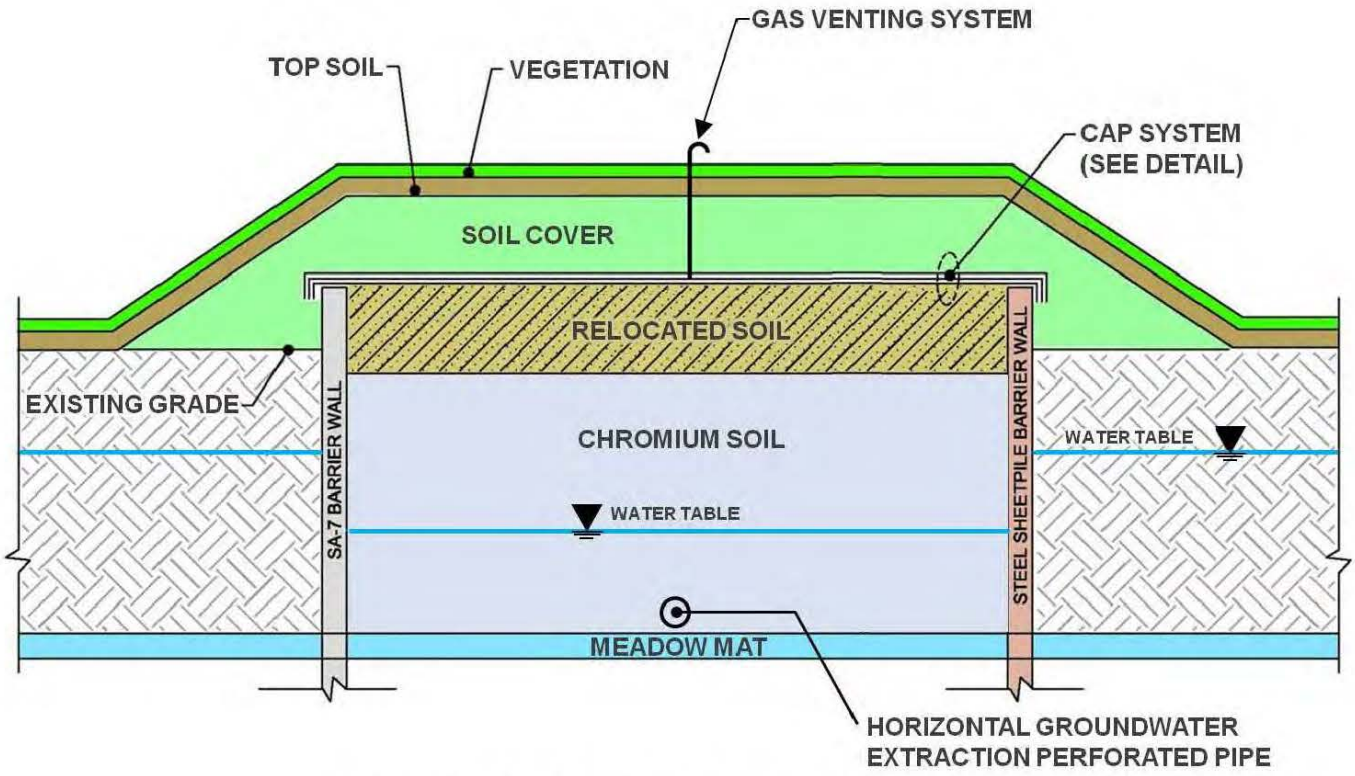
Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-B005-0000	
PREPARED/DATE: STR 12/12/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1B
RESTRICTED AREA MAP
BLOCK 21901; LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE 5

Exhibit B-2
Chromium Remedy Components and Cap System Details



CHROMIUM REMEDY COMPONENTS

NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150487-6100-CPCS-5000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-2A** CHROMIUM REMEDY COMPONENTS BLOCK 21901 LOTS 5-10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE # 5
PREPARED/DATE: STR 03/10/16	CHECKED/DATE: DEN 01/31/17		

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\61001\DEED NOTICE\DN 5\3480150487-6100-CPCS-5000.dwg Wed, 29 Nov 2017 - 9:06am scott.rudkin

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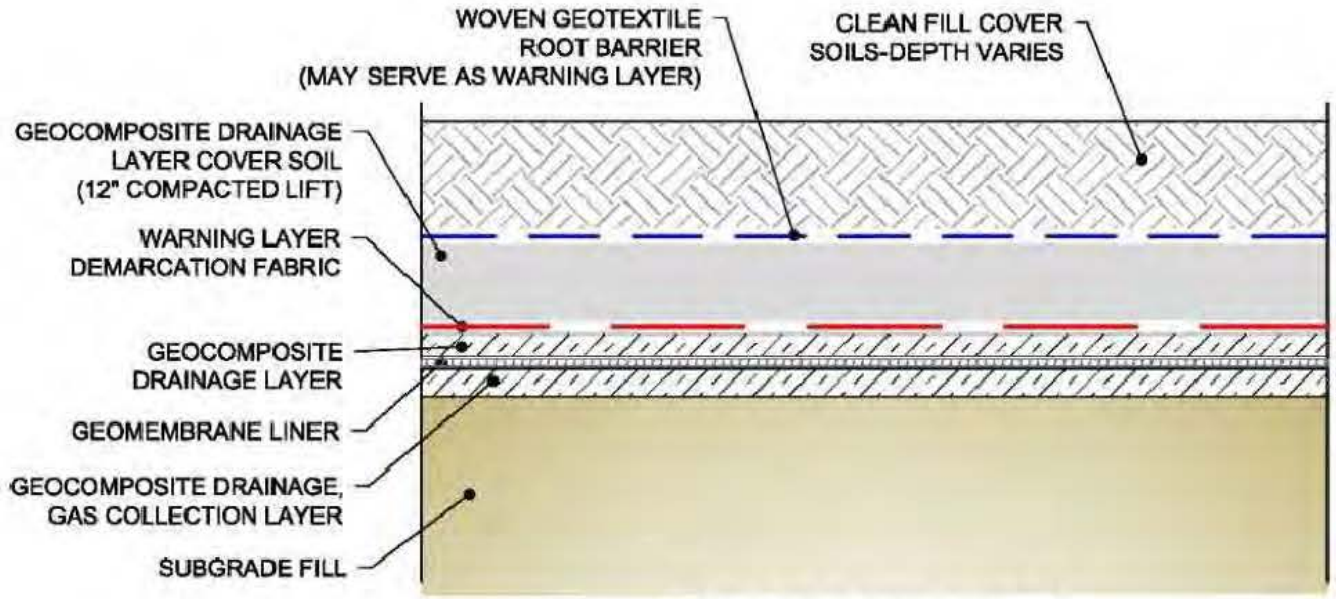
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\61001\DEED NOTICE\DN 5\3480150487-6100-CSDD-5000.dwg Wed, 29 Nov 2017 - 9:07am scott.rudkin



CAP SYSTEM DETAIL

NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150487-6100-CSDD-5000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619
PREPARED/DATE: STR 03/10/16	CHECKED/DATE: DEN 01/31/17	

EXHIBIT B-2B
CAP SYSTEM DETAIL
BLOCK 21901 LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE # 5

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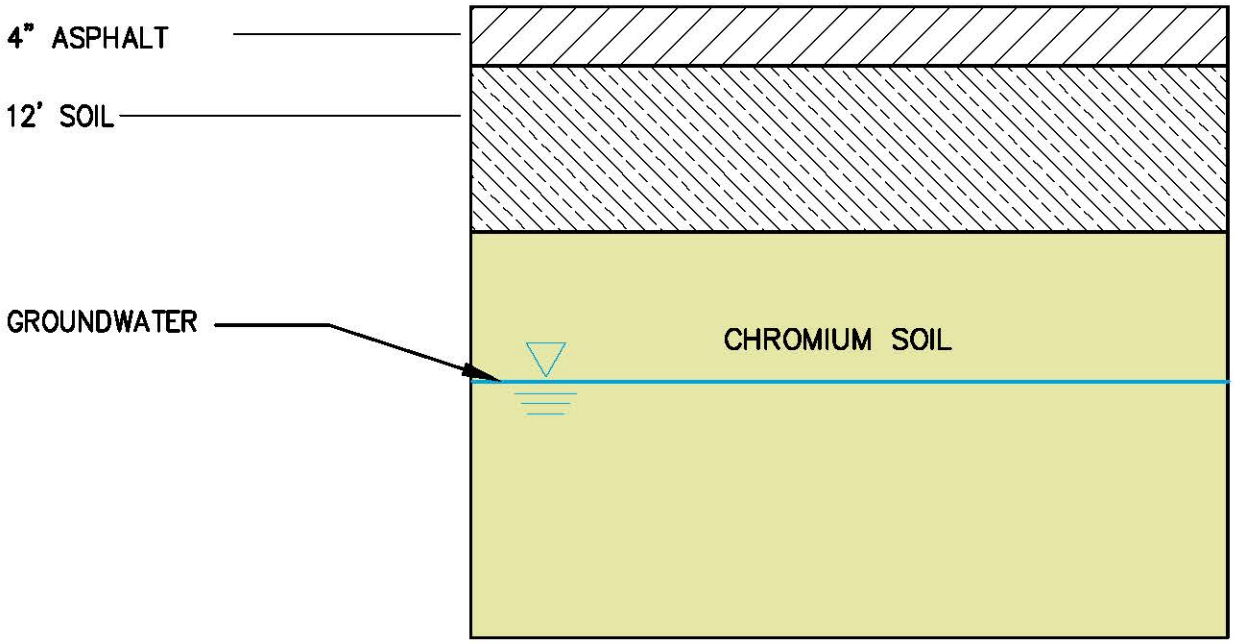
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 5\3480150487-6100-C005-0000.dwg Wed, 29 Nov 2017 - 9:57am scott.rudkin

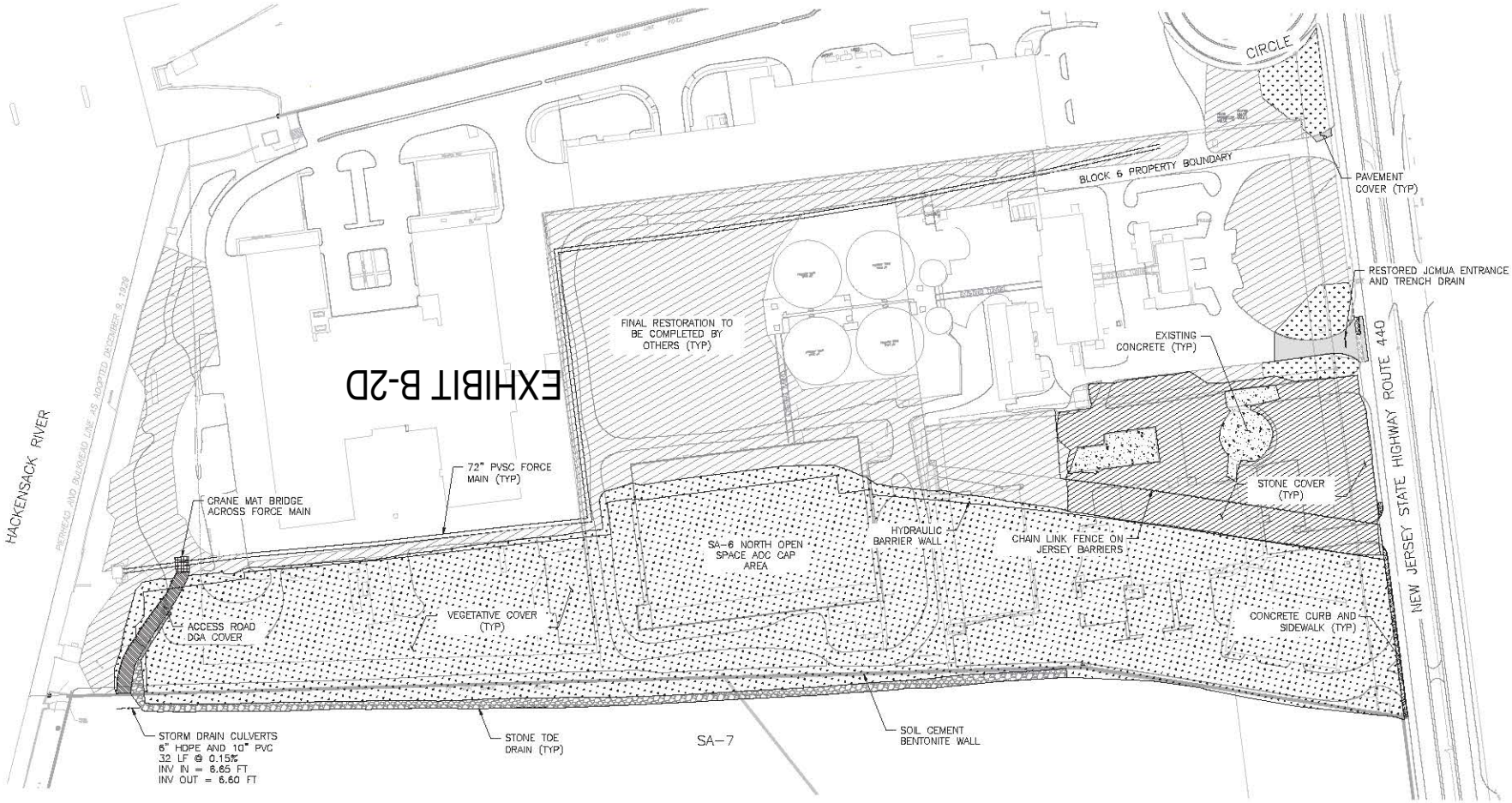


CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150487-6100-C005-0000	
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-2C
CAP SYSTEM DETAIL
BLOCK 21901; LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE # 5



NOTE:

1. REFER TO CONSTRUCTION CONTROL GRID FIGURE AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE WITHIN THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. REMAINING RESTORATION AREAS IDENTIFIED ON THE CHROMIUM REMEDY 100% DESIGN DRAWINGS WILL BE ADDRESSED AS PART OF THE NON CHROMIUM REMEDIATION WORK CURRENTLY BEING COMPLETED. FINAL RESTORATION OF ALL AREAS IS SCHEDULED TO BE COMPLETE IN MARCH 2017.

EXHIBIT B-2D

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
DGA COVER
RESTORATION BY OTHERS
STONE TOE DRAIN
SD STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH - SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

Exhibit B-3: Table B-3
Soil Sample Data Tables

EXHIBIT B-3
Restricted Area Data Table
Deed Notice #5 SA-6 North Open Space Area Property
Portions of Block 21901, Lots 5 through 10
Jersey City, New Jersey

Location ID	Sample Date	Sample Elevation (NAVD88)	Hexavalent Chromium (mg/kg)	Q
087-SB-010	05/27/2005	-1.9	**52.3**	J
087-SB-010	05/27/2005	-4.9	**3590**	J
087-SB-011	05/24/2005	-0.5	**104**	
087-SB-011	05/24/2005	-3	**4630**	J
087-SB-012	05/27/2005	-5.9	**873**	J
087-SB-014	05/27/2005	1.5	**292**	J
087-SB-014	05/27/2005	-3.5	**292**	J
087-SB-015	05/24/2005	1.5	**8530**	J
087-SB-015	05/24/2005	-0.5	**6960**	J
087-SB-015	05/24/2005	4.5	**5580**	J
087-SB-016	05/26/2005	2.2	**5340**	J
087-SB-017	05/27/2005	-5	**980**	J
087-SB-017	05/27/2005	-9.4	**7580**	J
087-SB-157	07/02/2008	-0.3	**80.1**	
087-SB-159	07/02/2008	3.5	**93.5**	
087-SB-159	07/02/2008	2	**722**	
087-SB-160	07/09/2008	3	**22.4**	J
087-SB-160	07/09/2008	1.5	**1990**	
087-SB-160	07/09/2008	-0.5	**40.5**	J
087-SB-161	07/09/2008	0	**606**	
087-SB-162	07/09/2008	5.5	**10800**	J
087-SB-162	07/09/2008	2	**22.5**	J
087-SB-169	08/08/2008	5	**25.5**	J
087-SB-169	08/08/2008	3.5	**60.8**	J
087-SB-169	08/08/2008	1.5	**20.3**	J
087-SB-171	08/11/2008	3.5	**27.5**	
087-SB-171	08/11/2008	1	**1760**	J
087-SB-172	08/11/2008	1	**429**	
087-SB-177	09/03/2008	4	**7020**	
087-SB-178	09/04/2008	1.7	**81.2**	J
087-SB-179	09/03/2008	-3.4	**20.3**	
087-SB-J19	08/20/1997	-4.4	**27.8**	
087-SB-J19	08/20/1997	-6.4	**4390**	
087-SB-M18	05/21/1997	11.5	**21.6**	J
087-SB-M18	05/21/1997	1.5	**9600**	J
087-SB-M18	05/21/1997	-0.5	**10200**	J
087-SB-M18	05/21/1997	-2.5	**1180**	J
087-SB-M18	05/21/1997	-4.5	**5210**	J
087-SB-M18	05/21/1997	3.5	**39.8**	J
087-SB-O19	05/20/1997	14	**42.6**	J
087-SB-O19	05/20/1997	2	**6100**	J
087-SB-O19D	10/13/1997	2	**3480**	J
087-SB-Q20	05/21/1997	1.6	**282**	J
087-SB-S19	05/20/1997	-0.4	**1140**	J
087-SB-S20	08/21/1997	0.7	**346**	
087-SB-S20	08/21/1997	-1.3	**734**	
087-SB-S20	08/21/1997	-3.3	**588**	
087-SB-S20	08/21/1997	12.7	**266**	
087-SB-W19	05/20/1997	2.4	**97.3**	J
087-SB-W19	05/20/1997	0.4	**25.2**	J

EXHIBIT B-3
Restricted Area Data Table
Deed Notice #5 SA-6 North Open Space Area Property
Portions of Block 21901, Lots 5 through 10
Jersey City, New Jersey

Location ID	Sample Date	Sample Elevation (NAVD88)	Hexavalent Chromium (mg/kg)	Q
087-SB-W19	05/20/1997	14.4	**161**	J
087-SB-506	04/13/2009	2.8	**46.3**	
088-MW-02	05/16/2005	8.7	**2110**	J
088-MW-02	05/16/2005	3.7	**973**	J
088-SB-001	05/20/2005	1.3	**4730**	J
088-SB-001	05/20/2005	-3.2	**7880**	J
088-SB-001	05/20/2005	-5.7	**1470**	J
088-SB-001	05/20/2005	5.3	**327**	J
088-SB-002	05/17/2005	11.6	**25.8**	J
088-SB-002	05/17/2005	-1.9	**54.7**	J
088-SB-002	05/17/2005	-4.4	**395**	J
088-SB-002	05/17/2005	9.6	**227**	J
088-SB-002	05/17/2005	3.6	**4240**	J
088-SB-003	05/20/2005	-1.3	**1740**	J
088-SB-003	05/20/2005	-4.3	**190**	J
088-SB-003	05/20/2005	7.7	**911**	J
088-SB-003	05/20/2005	3.7	**2040**	J
088-SB-005	05/17/2005	-1	**9150**	J
088-SB-005	05/17/2005	-4.5	**2410**	J
088-SB-005	05/17/2005	3.5	**754**	J
088-SB-006	05/17/2005	-0.8	**11300**	J
088-SB-006	05/17/2005	-3.3	**12100**	J
088-SB-006	05/17/2005	7.7	**4660**	J
088-SB-006	05/17/2005	3.7	**28.7**	J
088-SB-007	05/16/2005	-1.8	**14600**	J
088-SB-007	05/16/2005	3.7	**3440**	J
088-SB-007	05/17/2005	8.69	**1730**	J
088-SB-008	05/20/2005	-2.7	**165**	J
088-SB-008	05/20/2005	-7.7	**206**	J
088-SB-008	05/20/2005	-9.5	**6510**	J
088-SB-009	05/20/2005	-3.13	**7160**	J
088-SB-009	05/20/2005	-6.13	**4580**	J
088-SB-009	05/20/2005	1.87	**239**	J
088-SB-013	05/18/2005	-2.7	**5310**	
088-SB-013	05/18/2005	-7.2	**2050**	
088-SB-015	05/18/2005	-2.7	**4020**	
088-SB-016	05/20/2005	-1.4	**9120**	
088-SB-016	05/20/2005	-5.9	**5690**	
088-SB-016	05/20/2005	6.6	**3770**	
088-SB-016	05/20/2005	3.6	**7990**	
088-SB-017	05/20/2005	-1.3	**123**	J
088-SB-017	05/20/2005	-6.3	**222**	J
088-SB-017	05/20/2005	6.7	**189**	
088-SB-017	05/20/2005	3.7	**7290**	
088-SB-135	09/04/2008	-4.2	**225**	J
088-SB-136	09/04/2008	-2.7	**146**	J
088-SB-136	09/04/2008	-4.2	**217**	J
088-SB-137	09/03/2008	-0.7	**37.4**	J
088-SB-137	09/03/2008	-3.2	**162**	
088-SB-137	09/03/2008	-4.7	**35.2**	

EXHIBIT B-3
Restricted Area Data Table
Deed Notice #5 SA-6 North Open Space Area Property
Portions of Block 21901, Lots 5 through 10
Jersey City, New Jersey

Location ID	Sample Date	Sample Elevation (NAVD88)	Hexavalent Chromium (mg/kg)	Q
088-SB-142	09/04/2008	-0.4	**1360**	J
088-SB-142	09/04/2008	-1.4	**159**	J
088-SB-142	09/04/2008	-2.9	**188**	J
088-SB-143	09/05/2008	2.6	**320**	
088-SB-143	09/05/2008	1.1	**595**	
088-SB-A16	05/15/1997	13.2	**144**	
088-SB-A16	05/15/1997	1.2	**35.1**	
088-SB-A16	05/15/1997	11.2	**3550**	
088-SB-A16	05/15/1997	9.2	**948**	
088-SB-A16	05/15/1997	7.2	**2580**	
088-SB-A16	05/15/1997	5.2	**4550**	
088-SB-A16	11/17/1998	11.2	**263**	J
088-SB-E18	05/15/1997	5.1	**4840**	
088-SB-G19	05/15/1997	3.1	**5500**	
088-SB-G19	05/15/1997	1.1	**9080**	
088-SB-G19	05/15/1997	5.1	**24.7**	
088-SB-G20	08/20/1997	-2.9	**585**	J
088-SB-I18	05/15/1997	11.8	**2650**	J
088-SB-I18	05/15/1997	1.8	**9170**	J
088-SB-I18	05/15/1997	-0.2	**11100**	J
088-SB-I18	05/15/1997	-2.2	**1960**	J
088-SB-I18	05/15/1997	-4.2	**8780**	J
088-SB-I18	05/15/1997	-6.2	**732**	J
115-WC-N1480	7/27/2007	7	**25.2**	
115-WC-N13903	3/6/2008	13.3	**27.4**	
115-WC-N11201	5/14/2008	12.2	**25.5**	
115-WC-N10901	5/14/2008	11.8	**28.9**	
115-WC-N1060	6/3/2008	7	**50.8**	J
115-WC-N0970	6/3/2008	7	**47.4**	

Notes:
Results reported in milligrams per kilogram (mg/kg).

Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria.
The concentration given is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010
CASR# - Chemical Abstract Service Number for hexavalent chromium is 18540-29-9.

EXHIBIT B-3
Restricted Area Data Table
Deed Notice #5 SA-6 North Open Space Area Property
Portions of Block 21901, Lots 5 through 10
Jersey City, New Jersey

Location ID	Sample Date	Sample Elevation (feet msl)	Depth (ft bgs)	Compounds	CASR #	NJ 2012 RDCSRS (mg/kg)	Concentration (mg/kg)
088-SB-231	7/8/2013	6	7.0-7.5	Benzene	71-43-2	2.0	**4.12**
088-SB-235	6/12/2008	7	6.0-8.0	Benzene	71-43-2	2.0	**67.3**
088-SB-238	6/12/2008	7	6.0-8.0	Benzene	71-43-2	2	**24.2**
		-1	14.0-16.0	Benzene	71-43-2	2	**2.26**
088-SB-287	6/15/2009	5.5	7.5-8.0	Benzene	71-43-2	2.0	**2.71**
088-SB-286	6/11/2009	6	7.0-7.5	Benzene	71-43-2	2.0	**60.9**
	6/11/2009	3	10-10.5	Benzene	71-43-2	2.0	**5.97**
088-SB-402	7/14/2013	6	7.0-7.5	methyl tert butyl ether (MTBE)	1634-04-4	110	**129**

Notes:
Results reported in milligrams per kilogram (mg/kg).

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP RDCSRS - New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standard, 2012
CASR# - Chemical Abstract Service Number

Prepared By: US 09/20/2016

EXHIBIT B-3

Restricted Area Data Table - Historic Fill

Deed Notice #5 SA-6 North Open Space Area Property

Portions of Block 21901; Lots 5 through 10

Jersey City, New Jersey

Parameter Name	NJDEP Residential Direct Contact Soil Remediation Standard (mg/kg)	NJDEP Maximum Historic Fill Concentration[1] (mg/kg)	NJDEP Average Historic Fill Concentration[1] (mg/kg)	Number of Samples[2]	Site-wide Fill Minimum Detected Concentration	Site-wide Fill Maximum Detected Concentration
SVOCs (mg/kg)						
BENZO(A)ANTHRACENE	5	160	1.37	161	0.008	12
BENZO(A)PYRENE	0.5	120	1.89	161	0.008	13
BENZO(B)FLUORANTHENE	5	110	1.91	161	0.008	10
BIS(2-ETHYLHEXYL)PHTHALATE	35	NA	NA	161	0.041	42
DIBENZO(A,H)ANTHRACENE	0.5	25	1.24	161	0.005	2.4
INDENO(1,2,3-CD)PYRENE	5	67	1.41	161	0.016	7.2
NAPHTHALENE	6	NA	NA	160	0.012	194
METALS (mg/kg)						
ANTIMONY	31	NA	NA	160	0.8	243
ARSENIC	19	1098	13.15	160	0.65	191
COPPER	3100	NA	NA	160	4.2	3530
LEAD	400	10700	574	160	5.8	5720
MERCURY	23	NA	NA	161	0.034	1560
NICKEL	1600	NA	NA	160	0.75	3060
VANADIUM	78	NA	NA	92	6.9	478
ZINC	23000	10900	575	160	10.9	13700
TOTAL PCBs (mg/kg)						
TOTAL PCBs	4.7	NA	NA	82	0.0475	46.72

Notes:

All concentrations reported in milligrams per kilogram (mg/kg)

[1] - NJDEP Reference Historic Fill Concentrations from Table 4-2 of the prior version of Technical Requirements for Site Remediation; N.J.A.C 7:26E-4.6

[2] - Site-wide historic fill database includes a total of 159 sample points: 26 samples from the initial RI (TTNUS, 2000); 69 samples from Supplemental RI (MACTEC, 2006); and 64 samples from the RI activities completed during 2008. Samples include both Deed Notice #5 and #13

SVOCs - Semivolatile organic compounds

PCBs - Polychlorinated biphenyls - standard is the NJDEP approved 95% Upper Confidence Limit

NA - None available

Prepared by: JB

Checked by: TG

EXHIBIT C
Deed Notice #5 SA-6 North Property

C-1 Institutional Controls
C-2 Engineering Controls
Portions of Block 21901, Lots 5 through 10 City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree, Zoning, and Conservation Restriction as Institutional Controls: Exhibit C-1 (A through D) for the portions of Block 21901, Lots 5 through 10, City of Jersey City, New Jersey known as the Property.

i. Exhibits C-1A through D. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; Exhibit C-1D: Conservation Restriction as Institutional Control (recorded at the Office of Hudson County Register as indicated in Paragraph 3): Exhibits C-1A through C-1D include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property encompasses approximately 10 acres. This deed notice area includes chromium, benzene, MTBE, and historic fill. The horizontal extent of the Property include an existing SCB wall along the southern boundary of the Property with SA-7, the hydraulic barrier walls installed on the other three sides as part of the Chromium Remedy, and the portion of TA-10 that is south of the northern curbline of the future Stegman Boulevard. The engineering barrier covering the contamination in the area of the Property contained within the SCB and hydraulic barrier walls consists of an engineered RCRA cap that includes a gas collection system, base protective layer, geomembrane liner, geocomposite drainage layer, filter fabric, warning layer and cover soils. The engineering barrier in the TA-10 area of the Property consists of at least 12 feet of clean fill and the area will be capped by the future Stegman Boulevard. The Property includes chromium, for the Open Space Area and the TA-10 area, and benzene, MTBE, and historic fill for the Open Space Area. Honeywell has restricted the future use of the Open Space Area by implementing a conservation restriction, which has been recorded at the Office of the Hudson County Register. Honeywell will amend the conservation restriction to include TA-10 and to restrict the future use of the TA-10 area. The amended conservation restriction will be recorded at the Office of the Hudson County Register. Honeywell will transfer, or cause Bayfront Redevelopment LLC to transfer, title to the City of Jersey City (as called for in Paragraph 60(a)(iii) of the Consent Decree). The provisions of the LTMP and the OSDS, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes portions of Block 21901, Lots 5 through and 10. The estimated size of the Property containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) is identified Cap Area on Exhibit B-1 is estimated at approximately 10 acres. The Property also includes chromium-impacted soils (hexavalent chromium above 20 mg/kg) identified on Exhibit B-1 as TA-10 and estimated at approximately 0.2 acre in size.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, including, but not limited to, Paragraphs 60(j) and 60 (k) of the Consent Decree, the applicable zoning standards, and the Conservation Restriction. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the terms of the Consent Decree and the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B, Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg, soils containing benzene above the NJDEP RDCSRS of 2 mg/kg, soils containing MTBE above the NJDEP RDCSRS of 320 mg/kg and soils that are historic fill.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and LTMP established thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the Property.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the OSDS, the applicable zoning standards and the Conservation Restriction; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice, the OSDS, the applicable zoning standards and the Conservation Restriction.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #5 SA-6 North Property

Portions of Block 21901, Lots 5 through 10
City of Jersey City, New Jersey

Exhibits C-2A through C: Narrative description of the Engineering Controls including (A) the Clean Fill and Soil Capping System; (B) Underground Containment Walls; (C) Shallow Groundwater Collection and Treatment System as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Controls consist of the following: (A) The engineering controls include a capping system consisting of: a root barrier, a warning layer, impervious geo-membrane liner; geo-composite drainage layer; and clean soil cover with minimum 12 inches thickness in areas where pavement is proposed; and an average of 36-inches and a minimum 24-inches thickness in areas where landscaping is proposed. For the purposes of this Deed Notice, the engineering controls exclude cover soils that are within 12 inches of the root barrier. (B) Engineering controls will also include underground containment walls around the perimeter of the Property, except for the TA-10 area. The Engineering Controls in the TA-10 area of the Property consist of at least 12 feet of clean fill and the area will be capped by the future Stegman Boulevard. The Engineering Controls are more fully set forth in the Consent Decree.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg, soils containing benzene above the NJDEP RDCSRS of 2 mg/kg, soils containing MTBE above the NJDEP RDCSRS of 320 mg/kg, and soils that are historic fill material, and to contain shallow groundwater above the NJDEP groundwater quality standard for total chromium.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils impacted as defined above. The groundwater engineering controls are intended to restrict the flow of shallow groundwater, and to collect and treat contaminated groundwater within the Property. Monitoring requirements for the engineering controls are set forth in the LTMP.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Should the activities carried out in conformance with the LTMP developed pursuant to the Consent Decree indicate that other activities are necessary, those activities will be listed and executed.

(6) Any new standards, regulations, or laws apply to the Open Space Area Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***
- ***A report to determine whether or not the engineering controls continue to operate as designed.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.***

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5955 Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 NORTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with various properties collectively designated by NJDEP as Study Areas 5, 6 North, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, the property owned by JCIA and JCMUA and collectively the subject of *JCMUA v. Honeywell* and *JCIA v. Honeywell* comprises a part of Study Area 6 North;

Whereas, the City of Jersey City ("Jersey City") also owns property that comprises a part of Study Area 6 North;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* Jersey City, JCMUA, and JCIA (collectively the "Jersey City Entities");

Whereas, the Jersey City Entities and Honeywell also asserted cross-claims against each other in *Riverkeeper v. Honeywell*;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the United States District Court for the District of New Jersey (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, the Jersey City Entities and Riverkeeper have alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 North property;

Whereas, in the Consolidated Litigation, Honeywell has alleged that the Jersey City Entities bear full responsibility for lead and other contamination on the Study Area 6 North property, and also bear an equitable share of liability for the presence and remediation of COPR and chromium in soils and groundwater on the Study Area 6 North property and for chromium and other contamination in Hackensack River sediments in the vicinity of Study Area 6 North;

Whereas, on October 9, 2007, Honeywell and Riverkeeper submitted the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 North that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq*., as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, the portions of Study Area 6 and Study Area 7 (i) which are owned by the Jersey City Entities, (ii) which are owned by Honeywell, (iii) as to which Honeywell has a purchase and sale agreement with the current owner, or (iv) which hereafter will be acquired by a Jersey City Entity and/or Honeywell are parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 North and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City;

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Parties as a means to accomplish the aforesaid purposes of this settlement;

Whereas, the consent of each of the Jersey City Entities to this Consent Decree was considered at a duly noticed and appropriate meeting of their respective governing bodies, open to the public, at which members of the public were provided an opportunity to comment on all aspects of the settlement, including, without limitation, the commitments made by the Jersey City Entities herein; and

Whereas, Honeywell and the Jersey City Entities are settling their claims, cross-claims, or counter-claims in the Consolidated Litigation against each other in the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with this Consent Decree and attached as Exhibit A to this Consent Decree:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **AOC 1** shall mean that area of Study Area 6 North in which the hexavalent chromium concentration in the top 20 feet of soil below existing ground surfaces exceeds concentrations of 20 mg/kg and the Chromium Remedy will be implemented pursuant to Article III. AOC 1 is shown on Exhibit B.

2. **AOC 1 Additional Excavation Areas** shall mean those areas of Study Area 6 North which require excavation pursuant to paragraph 57. The AOC 1 Additional Excavation Areas are not contiguous to AOC 1. The AOC 1 Additional Excavation Areas are shown on Exhibit B.

3. **AOC 1 Open Space Area** shall mean the AOC 1 Open Space Area, as defined by paragraph 53, consisting of approximately 11 acres enclosed by the hydraulic barrier walls constructed under the Chromium Remedy, and which shall be subject to paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B.

4. **AOC 2** shall mean that area of Study Area 6 North on which the Historic Fill Remedy will be implemented pursuant to Article II.B of the Jersey City/Honeywell Consent Order. AOC 2 is shown on Exhibit B.

5. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

6. **COPR** shall mean Chromite Ore Processing Residue.

7. **Chromium Remedy** or **Chromium Remediation** shall mean the remedy set forth in Article III.

8. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC).

9. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

10. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, and the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, currently pending before the Special Master in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell reach a settlement on source control issues, the Deep Groundwater Remedy shall

include the remedy to which Riverkeeper and Honeywell have agreed. In the event that Riverkeeper and Honeywell do not reach a settlement on source control issues, the Deep Groundwater Remedy shall include the remedy ordered by the Special Master or the Court in *ICO v. Honeywell* for source control.

11. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

12. **Historic Fill** shall have the definition provided in the NJDEP Technical Requirements for Site Remediation.

13. **Historic Fill Remedy or Historic Fill Remediation** shall mean the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order, except that the Historic Fill Remedy shall not be limited to the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order if NJDEP requires a more stringent remedy.

14. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

15. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

16. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

17. **Including** shall mean including, but not limited to.

18. **JCIA** shall mean the Jersey City Incinerator Authority.

19. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

20. **JCRA** shall mean the Jersey City Redevelopment Agency.

21. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

22. **Jersey City/Honeywell Consent Order** shall mean the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* entered in the Consolidated Litigation simultaneously with this Consent Decree.

23. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

24. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit C.

25. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

26. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*, as amended.

27. **Redevelopment Agreement** shall have the meaning set forth in paragraph 4.11(e) of the Jersey City/Honeywell Consent Order.

28. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

29. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. 40A:12A1, *et seq.*, as amended and supplemented.

30. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

31. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

32. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, which the Parties expect will be entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation.

33. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

34. **Site** shall mean Study Area 6 North.

35. **Site Preparation Activities** shall have the meaning set forth in paragraph 3.1 of the Jersey City/Honeywell Consent Order.

36. **Site Preparation Plan** shall have the meaning set forth in paragraph 3.2 of the Jersey City/Honeywell Consent Order.

37. **Soil** shall mean soils, historic fill, and/or COPR.

38. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

39. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

40. **Study Area 6 North** shall mean that property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 41.58 acres and including: (a) all such property owned by JCMUA located at 555 Route 440, Jersey City, New Jersey, (b) all such property owned by JCIA located at 501 Route 440, Jersey City, New Jersey; (c) all such property owned by Jersey City or its Department of Public Works and located at 575 Route 440, Jersey City, New Jersey; and (d) all such property owned by Paul Trenk consisting of Block 1290.1, Lot 2A, Jersey City, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

41. **Study Area 6 South** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Kellogg Street 60 LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Kellogg Street/440 Property LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Cordova Enterprises Ltd located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey, and (g) that property currently owned by Cordova Enterprises Ltd located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

42. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

43. **Study Area 7** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that property currently owned by Roned Realty/Edward Navlen located at 465 Route 440, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

44. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

45. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

46. Except as provided in this paragraph, the terms of the Jersey City/Honeywell Consent Order shall remain in full force and effect. To the extent that any provision in the Jersey City/Honeywell Consent Order refers to the Chromium Remedy or Chromium Remediation, it shall be construed as referring to Article III of this Decree. In the event of any conflict or inconsistency between the terms of this Decree and the Jersey City/Honeywell Consent Order, the terms of this Decree govern. In the event that any action taken pursuant to the Jersey City/Honeywell Consent Order is in conflict with or inconsistent with the terms of this Decree, the terms of this Decree shall govern.

47. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

48. For purposes of this Consent Decree, the Complaints in the Consolidated Litigation each state claims upon which relief may be granted against Honeywell.

49. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 100, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils and shallow groundwater at Study Area 6 North. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 6 South, Study Area 5, or groundwater at Study Area 6 North other than shallow groundwater.

50. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

51. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. Chromium Remedy

52. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 North at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 North shall be undertaken in accordance with the terms of this Consent Decree.

53. **AOC 1 and AOC 2.** For the purposes of remediation, Study Area 6 North shall consist of two Areas of Concern ("AOCs"), designated as AOC 1 and AOC 2 as shown on Exhibit B. AOC 1 is set forth on Exhibit B and consists of that portion of Study Area 6 North for which chromium remediation is required pursuant to paragraphs 55, 56, and 57. AOC 2 consists of the entirety of Study Area 6 North, including AOC 1, to the extent that historic fill is present in any area of Study Area 6 North. For AOC 1, the intended land use will determine the types

of remedial measures taken in the Chromium Remedy. There are two distinct land uses for AOC 1: open space and residential. As a result, AOC 1 will be further subdivided into:

(a) The AOC 1 Open Space Area, which shall comprise that portion of AOC 1 for which future use shall be restricted as provided in paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B;

(b) The AOC 1 Residential Area, which shall comprise that portion of AOC 1 for which future use shall allow for residential and/or commercial and retail uses, but for which the remedial measures shall assume only a residential use . The AOC 1 Residential Area is shown on Exhibit B; and

(c) The AOC 1 Additional Excavation Areas, which consist of those portions of Study Area 6 North that require remediation pursuant to paragraph 57. The planned land use for the AOC 1 Additional Excavation Areas is residential and/or commercial and retail uses, but the remedial measures shall assume only a residential use.

54. **Scope and General Requirements of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and soil containing hexavalent chromium in AOC 1, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow level of groundwater (see paragraph 58). The deep overburden and bedrock groundwater remediation, including source control, shall be addressed in a separate consent order, which shall place these issues within the jurisdiction of the Special Master in conjunction with the groundwater remedies for Study Area 7.

(a) The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and the Remedial Action Work Plan (with addenda) approved by NJDEP on or about February 19, 2008. This Consent Decree shall have precedence

over the Remedial Action Work Plan in the event of any inconsistency.

(b) The Chromium Remedy shall be carried out diligently, and the development and implementation of the Historic Fill Remedy shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Honeywell shall propose a master Schedule for the implementation of the Chromium Remedy within 90 days of the entry of this Consent Decree, which shall include, at a minimum, the following milestones:

(i) Submission to the Special Master for all documents subject to review by the Special Master pursuant to paragraph 72(c);

(ii) Relocation of the Jersey City Entities' Study Area 6 North Operations as shall be required prior to the implementation of the Chromium Remedy;

(iii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy, including remediation of the AOC 1 Additional Excavation Areas;

(iv) A final date for Honeywell's proposal of *in situ* treatment for any part of the AOC 1 Residential Area pursuant to paragraph 55(d) and a date for the final decision as to whether excavation or *in situ* treatment shall be used in the event of such a proposal;

(v) The initiation of work related to the Chromium Remedy;

(vi) The date for completion of the installation of the Chromium Remedy;

(vii) Implementation of the long-term protections of the AOC 1 Open Space Area established pursuant to paragraph 60; and

(viii) Transfer of the AOC 1 Open Space Area to Jersey City pursuant to paragraph 60(a)(iii).

(c) **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community

from airborne dusts and exposures to contaminated soils.

(d) **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

55. **AOC 1 Residential Area Soil Remedy.** In the AOC 1 Residential Area, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive.

(a) Those soils excavated from the AOC 1 Residential Area in which hexavalent chromium concentrations exceed 240 mg/kg shall be disposed of off-site at a waste disposal facility licensed to accept such waste.

(b) Those soils excavated from the AOC 1 Residential Area in which the hexavalent chromium concentration is less than 240 mg/kg, but greater than 20 mg/kg, shall be consolidated within the AOC 1 Open Space Area. However, any such soils which would require venting of gases shall be disposed of off-site.

(c) Soils excavated from the AOC 1 Residential Area shall be replaced with existing soils from AOC 2 or backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

(d) In the AOC 1 Residential Area, excavation of soils containing hexavalent chromium greater than 20 mg/kg shall be the presumptive remedy. Around remaining active underground utilities or other structures, such as the bulkhead, *in situ* treatment may be considered in lieu of excavation only if Honeywell demonstrates, and all Parties, the Special

Master, and NJDEP agree that (1) excavation is technically impracticable and (2) treatment will result in hexavalent chromium concentrations of 20 mg/kg or less and no rebound will occur. If no treatment option is available, Honeywell shall propose an alternative remedial approach, subject to review and comment by the Parties and approval by the Special Master.

(e) Honeywell shall excavate all soils containing hexavalent chromium greater than 20 mg/kg in conjunction with the placement of the piping for the Deep Groundwater Remedy. Honeywell shall not propose treatment in lieu of excavation based on the location of the pipes for the Deep Groundwater Remedy or any apparent impracticability of excavating in conjunction with their installation.

56. **AOC 1 Open Space Area Soil Remedy.** In the AOC 1 Open Space Area, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils, with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is

needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities. Honeywell shall configure the cap so that all active piping for the wastewater treatment system operated by JCMUA, including all force mains and any connections to the emergency outfall, shall be outside the capped area. Honeywell may propose, subject to the review process in paragraph 72, to use treatment in lieu of excavation in the vicinity of the emergency outfall line if the criteria of paragraph 55(d) are satisfied; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the AOC 1 Open Space Area. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the AOC 1 Open Space Area shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the two feet of clean fill required by paragraph 56(c). Excavated hexavalent

chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the AOC 1 Residential Area shall be placed and spread in the AOC 1 Open Space Area under the cap. Excavated hexavalent chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the Study Area 6 South Development AOC (as defined in the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South and including only those portions of Study Area 6 South for which the future uses of the property may include commercial or residential development) may be placed and spread in the AOC 1 Open Space Area under the cap, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

57. **AOC 1 Additional Excavation Areas Remedy.** For those AOC 1 Additional Excavation Areas, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive. Excavation of those areas comprising the AOC 1 Additional Excavation Areas shall initially be conducted in the 50-foot by 50-foot area planned in the RAWP but shall not be so limited in the event that confirmation sampling indicates that hexavalent chromium concentrations continue to exceed 20 mg/kg. Honeywell shall excavate laterally and vertically (to depths of up to 20 feet below current ground surface) until the hexavalent chromium is less than 20 mg/kg based on the results of confirmation sampling. Confirmation sampling for the AOC 1 Additional Excavation Areas shall be taken from the side

walls and bottom of the excavation, in accordance with the Technical Requirements for Site Remediation, to confirm complete removal of contaminated soils.

58. **Shallow Groundwater Remedy.** The shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing above the meadow mat in the AOC 1 Open Space Area. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 North and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the northern, eastern and western sides of the AOC 1 Open Space Area and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that will consist of (i) one or more shallow extraction wells, sumps, or french drains within the AOC 1 Open Space Area; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater (except for shallow groundwater that penetrates the meadow mat and is captured by the Deep Groundwater Remedy);

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP

regulations.

59. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article. The Jersey City Entities agree to cooperate with Honeywell in the applications for any such permits, authorizations, or approvals. Such cooperation shall include providing information or data with respect to permit applications, co-signing permit applications, and allowing access to Study Area 6 North to obtain information necessary for the permits.

B. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

60. **Protection of the AOC 1 Open Space Area.** Except as provided in paragraphs 60(j) and 60(k), development in the AOC 1 Open Space Area shall be prohibited. The AOC 1 Open Space Area shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the AOC 1 Open Space Area pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54(b):

(a) **Ownership of and Access to the AOC 1 Open Space Area.** Ownership of and access to the AOC 1 Open Space Area shall be in accordance with the following:

(i) Pursuant to the terms of this Consent Decree and paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall become the owner in fee simple absolute of all of the property that comprises the AOC 1 Open Space Area and shall not convey any rights or interests in such property except as provided in this Decree. At the time

of the conveyance from JCRA to Bayfront Redevelopment LLC, Bayfront Redevelopment LLC shall give Jersey City an option to buy AOC 1 Open Space Area prior to the planned transfer pursuant to paragraph 60(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall exercise the option to buy the AOC 1 Open Space Area in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 84(c) or 84(d) are met;

(ii) At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall grant a conservation restriction for the AOC 1 Open Space Area pursuant to the requirements of paragraph 60(b);

(iii) Upon the final construction of all roads and utility corridors within the AOC 1 Open Space Area, Bayfront Development LLC shall donate good and marketable title to all the land comprising the AOC 1 Open Space Area to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 North to create a new parcel(s) comprising the AOC 1 Open Space Area. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the AOC 1 Open Space Area by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the AOC 1 Open Space Area unless and until it shall have complied with the requirements of paragraph 60(a)(iv);

(iv) After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the AOC 1 Open Space Area to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the AOC 1 Open Space Area to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the AOC 1 Open Space Area and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the AOC 1 Open Space Area pursuant to this paragraph and routine maintenance of the permissible development in the AOC 1 Open Space Area pursuant to paragraph 64(d); or

(2) The AOC 1 Open Space Area has been remediated such that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, but prior to the grant of the option to buy pursuant to paragraph 60(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the AOC 1 Open Space Area substantially in the form set forth in Exhibit D. Exhibit D is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 60(j) and 60(k), including the construction and

placement of roads and utilities. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the AOC 1 Open Space Area as set forth in paragraphs 60(j) and 60(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph60(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the

levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the AOC 1 Open Space Area shall be subjected to the deed notice substantially in the form set forth in Exhibit E that restricts future activities on the AOC 1 Open Space Area. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the AOC 1 Open Space Area pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 60(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 60(b), and the deed notice imposed pursuant to paragraph 60(c) shall be recorded, pursuant to N.J.S.A. 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the AOC 1 Open Space Area. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the AOC 1 Open Space Area in the real estate records related to the AOC 1 Open Space Area.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the AOC 1 Open Space Area is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 60(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the AOC 1 Open Space, Jersey City shall add those portions of the AOC 1 Open Space Area not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to

roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor, maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 60(j) and 60(k); and (iv) the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the AOC 1 Open Space Area have been added to its ROSI, such that those portions of the AOC 1 Open Space Area shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the AOC 1 Open Space Area is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 60(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the AOC 1 Open Space Area subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the AOC 1 Open Space Area under the statute. If the Parties are unable to reach agreement on establishment of an environmental

covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the AOC 1 Open Space Area. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the AOC 1 Open Space Area if they would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in AOC 1 Open Space Area.** Only development satisfying the requirements of this paragraph and paragraph 60(k) shall be permitted in the AOC 1 Open Space Area. All other development in the AOC 1 Open Space Area shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the AOC 1 Open Space Area regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 60(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the AOC 1 Open Space Area shall be the

development undertaken following the completion of the Chromium Remedy in the AOC 1 Open Space Area. The Initial Development may occur in one or more phases. Honeywell and Bayfront Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 60(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the AOC 1 Open Space Area shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 60(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the AOC 1 Open Space Area, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 60(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 60(b), and the Redevelopment Plan;

however, in the event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the AOC 1 Open Space Area, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 60(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 72(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 72(d) and 72(e) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the AOC 1 Open Space Area shall require the preparation and submission of a Development Plan pursuant

to paragraph 60(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 60(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and the Jersey City Entities. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and the Jersey City Entities for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 60(j)(v) and 60(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 60(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 60(j)(v); or

(3) The development meets the requirements of paragraphs 60(j)(v) and 60(j)(xi), and Jersey City provides notice of its intention to alter or add to the

development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 60(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) with an annual report that describes any alterations or additions, including those activities under paragraph 60(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the AOC 1 Open Space Area.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 60(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the AOC 1 Open Space Area, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 60(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 60(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the AOC 1 Open Space Area of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

61. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a

successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

62. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 56, 58, and 63. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

63. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the AOC 1 Open Space Area.

64. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 63. Honeywell shall provide Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the AOC 1 Open Space Area to ensure that it is not being put to any use that is inconsistent with paragraphs 60(j) and 60(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 60 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the AOC 1 Open Space Area is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the AOC 1 Open Space Area grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii) Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the AOC 1 Open Space Area such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design

and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv) A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the AOC 1 Open Space Area has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 56(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the AOC 1 Open Space Area to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a

minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii) Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 58(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the AOC 1 Open Space Area.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by

the Court.

(c) **Contingency Plan.** As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance.** The title owner of the AOC 1 Open Space Area shall conduct maintenance of the AOC 1 Open Space Area features or facilities that are permissible under paragraphs 60(j) and 60(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the AOC 1 Open Space Area or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of AOC 1 Open Space Area shall annually provide to the other Parties and the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the AOC 1 Open Space Area shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the AOC 1 Open Space Area identified by its workers during routine maintenance.

(e) **Recordkeeping.** Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring

Plan. Such logs shall be provided to Riverkeeper and the Jersey City Entities on a quarterly basis.

65. **Monitoring and Reporting to Riverkeeper and Jersey City Entities.** Riverkeeper and Jersey City Entities shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 72(c).

66. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the AOC 1 Open Space Area; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 64 and annual reports on changes to the Initial Development as required by paragraph 60(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The provision of the maps and documents referred to in paragraph 66(b)(ii) to the public via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

67. **Annual Letter to Riverkeeper and Jersey City Entities on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 66, Honeywell shall provide a letter to the Riverkeeper and the Jersey City Entities documenting its compliance with paragraph 66.

68. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

69. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the

remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

C. Oversight and Enforcement by the Special Master and NJDEP

70. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.C.

71. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the AOC 1 Open Space Area. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of the Historic Fill Remedy, the site preparation activities, and the site redevelopment activities described in the Jersey City/Honeywell Consent Order, Articles II.B, III, and IV, do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

72. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority.** NJDEP shall retain its full statutory and regulatory authority with respect to the Study Area 6 North site, including (i) permitting authority; (ii) authority to review and approve the Remedial Action Work Plan, 100% Design, and final

Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities.** The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting quarterly progress reports to the Court;

(vi) Overseeing the financial assurances established pursuant to paragraphs 77 through 86, and, until the expiration of his term pursuant to paragraph 76, overseeing the financial assurances established pursuant to paragraphs 87 through 98;

(vii) Coordinating review of the documents as provided in paragraphs 72(c) through 72(f);

(viii) Overseeing all development undertaken in the AOC 1 Open Space Area during the Initial Development Period pursuant to paragraph 60(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell.** Honeywell shall submit the following documents to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule");

(ii) Design drawings and specifications at the 50% level;

(iii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(iv) The data validation plan, including quality control and quality assurance protocols;

(v) The site-wide master health and safety plan;

(vi) The Long-Term Monitoring Plan;

(vii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(viii) A report reviewing measured groundwater levels for the groundwater remedy;

(ix) Documents required during the Initial Development Period pursuant to paragraphs 60(j)(vi), 60(j)(vii), and 60(j)(viii) ; and

(x) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Comment on Submitted Documents.** For each of the documents submitted by Honeywell pursuant to paragraph 72(c), the Special Master shall establish a schedule for the submission of comments and responses to comments. For each of the documents submitted, Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all received comments and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 72(e).

(e) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review.** All documents submitted by Honeywell, pursuant to paragraph 72(c) and 72(d), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 72(f). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure.** Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within 30 days of NJDEP's receipt of the notice. NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review.** If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(f) **Schedule and 100% Design Documents.** As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper and the Jersey City Entities shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(g) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less

stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(h) **Changes to the Schedule.** The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54(b); and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

73. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 75.

74. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"). The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

75. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the

oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

76. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 60(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 60(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall

be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

D. Initial Financial Assurances

77. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy;

(ii) The costs of monitoring and maintenance activities, as required by the Long-Term Monitoring Plan, for five years; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 77(a)(i) and 77(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

78. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than 60 days after entry by the Court of this Consent Decree, Honeywell shall submit to Riverkeeper, Jersey City Entities, and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If

Riverkeeper or the Jersey City Entities do not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

79. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 80, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.D, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

80. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper, the Jersey City Entities, and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 77(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.E. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and the Jersey City Entities in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such

terms. If Honeywell is not otherwise in default as provided in Article III.D and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

81. **Bankruptcy Protection.** Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

82. **Exclusive Court Jurisdiction.** The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

83. **Application of New York Law.** The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Chromium Remedy Letter of Credit.

84. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 71, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to

this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 79 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 84(c) above, and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to

carry out the terms of this Consent Decree.

85. **Placement of Proceeds in Court Registry Investment System Account.** In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 77(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 90(b)(v).

86. **Termination of Chromium Remedy Letter of Credit.** The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.E.

E. Long-Term Financial Assurances

87. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 89(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

88. **Resolution of the Amount of Long-Term Financial Assurances.** The Parties have agreed to the following options with regard to how the long-term financial assurances shall be determined:

(a) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less,

and agree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E.

(b) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, but disagree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E except that the dispute as to the amount of the long-term financial assurances shall be submitted to the Special Master pursuant to paragraph 91.

(c) If the Parties do not agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, or the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is greater than $10,000,000, the Parties shall seek resolution by the Court of the long-term financial assurances issues, including (i) the type of financial assurances to be provided; (ii) the scope of the financial assurances; (iii) the amount of the financial assurances; and (iv) the duration of the financial assurances. In the event that the Parties seek resolution by the Court, the provisions of paragraphs 90 through 98 shall not apply.

(d) Within 60 days of the entry of this Consent Decree, the Parties shall determine which option under this paragraph shall apply. In the event that the Parties determine that paragraph 88(c) applies, Riverkeeper shall initiate the proceedings by moving the Court for the imposition of long-term financial assurances.

(e) If the Parties determine that they are proceeding under paragraph 88(c), Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 77 in an amount equal to at least $20,000,000 in 2008 dollars until such time as the long-term financial assurances ordered by the Court are in place. In the event of any default by Honeywell pursuant

to paragraph 84 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 90(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under paragraph 77(a)(i) plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), shall apply.

89. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater pump-and-treat remedy;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) In the event that Honeywell selects a trust fund pursuant to paragraph 90(a), the perpetual administration of the trust fund.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 89(a)(i) through 89(a)(v) plus a 25% contingency when the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of

the estimated future costs of the activities specified in paragraphs 89(a)(i) through 89(a)(v), plus a 25% contingency on those costs.

90. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution managing the trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 89(a)(i) through 89(a)(iv).

(b) **Long-Term Letter of Credit.** In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 90(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 92.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit

and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(iii) The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Long-Term Letter of Credit.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 84. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a). After the Special Master's appointment expires pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws

on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 90(b)(ii), 90(b)(v) or 95 and Honeywell has also selected a trust fund pursuant to paragraph 90(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(c) **Combination.** Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 90(a) and 90(b).

91. **Procedures for Review of the Proposed Long-Term Financial Assurances.** In the event that the Parties have determined that they are proceeding pursuant to paragraph 88(a) or 88(b), no later than 120 days after the determination under paragraph 88(d), Honeywell shall submit to Riverkeeper, the Jersey City Entities, and the Special Master, for their review (a) the

amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper and the Jersey City Entities agree to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances. In any event, until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit and the requirements of paragraphs 88(e) and 90(b)(v) shall apply to the Chromium Remedy Letter of Credit.

92. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 90, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the

cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 90(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 90(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 90(b).

93. **Exclusive Court Jurisdiction.** The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the

trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 90(a), 90(b)(ii), 90(b)(v), or 95.

94. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper or the Jersey City Entities may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 90(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper or the Jersey City Entities to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under

paragraph 94(c), if Honeywell fails to provide assurance to Riverkeeper, the Jersey City Entities, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

95. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or the Jersey City Entities pursuant to paragraph 94 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

96. **Use of the Trust Fund in the Event of Honeywell's Default**. In the event of Honeywell's default, the money in the trust fund established pursuant to paragraph 90(a) shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

97. **Use of a Trust Fund Established Pursuant to Paragraph 85, 90(b)(ii), 90(b)(v), or 95.** In the event that a trust fund is established pursuant to paragraph 85, 90(b)(ii), 90(b)(v), or 95, the money in the trust fund shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

98. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations

under Article III.E shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: IMPLEMENTATION SCHEDULE AND TERMINATION

99. **Schedule for Remedy and Site Preparation Implementation Activities.** The Chromium Remedy under Article III and the Historic Fill Remedy under Article II.B of the Jersey City/Honeywell Consent Order and Site Preparation Activities under Article III of the Jersey City/Honeywell Consent Order shall be undertaken by the Parties in accordance with the following anticipated schedule, recognizing that this schedule may be further modified in writing by agreement of the Parties and with the approval of the Court:

(a) By October 1, 2008, the Jersey City Entities and Honeywell shall develop a Site Preparation Plan, pursuant to paragraph 3.2 of the Jersey City/Honeywell Consent Order, for all Site Preparation Activities necessary to undertake the Chromium Remedy;

(b) No later than June 18, 2009, Honeywell shall submit to NJDEP a remedial design document for the Chromium Remedy;

(c) No later than September 1, 2009, Honeywell shall submit all applications for permits and authorizations for the performance of the Chromium Remedy to all appropriate local, state, and federal government entities;

(d) Honeywell shall use its best efforts to complete the Chromium Remedy no later than four years after all appropriate applications and authorizations for the performance of the Chromium Remedy have been obtained;

(e) By May 1, 2008, Honeywell and the Jersey City Entities shall submit a work plan for further Remedial Investigation for AOC 2 to NJDEP; and

(f) By December 1, 2008, Honeywell and the Jersey City Entities shall submit a Remedial Action Selection Report and Remedial Action Workplan for the Historic Fill Remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order. The Workplan shall contain a schedule for implementation of the Historic Fill Remedy.

100. **Termination of this Consent Decree.** This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 108:

(a) The Court fails to enter the Jersey City/Honeywell Consent Order or this Consent Decree or either the Jersey City/Honeywell Consent Order or this Consent Decree is determined to be invalid on appeal;

(b) JCRA fails to take those actions required under paragraphs 4.11(a), (b), and (c) of the Jersey City/Honeywell Consent Order within nine months of entry of this Consent Decree; or

(c) JCRA fails to approve a Redevelopment Agreement between Bayfront Redevelopment LLC and JCRA pursuant to paragraph 4.11(e) of the Jersey City/Honeywell Consent Order within 12 months of entry of this Consent Decree.

101. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 100 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 100 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

102. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 100.

103. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 100, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 100, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: ADDITIONAL PROVISIONS RELATED TO HISTORIC FILL AND SITE PREPARATION AND REDEVELOPMENT

104. **Historic Fill Remedy**. This Consent Decree shall adopt and incorporate the terms of Article II.B of the Jersey City/Honeywell Consent Order with respect to the Historic Fill Remedy. The Historic Fill Remedy shall not be limited to the activities set forth in Article II.B of the Jersey City/Honeywell Consent Order in the event that NJDEP requires a more extensive remedy. The Historic Fill Remedy shall be compatible with the Chromium Remedy such that no

part of the Historic Fill Remedy shall interfere with the installation, maintenance, and monitoring of the Chromium Remedy. In addition, the Historic Fill Remedy for any discharge of non-chromium contaminants to the Hackensack River shall not interfere with the remedies under the Sediment Consent Order, including the source control remedies. In the event that Jersey City conducts the Historic Fill Remedy instead of Honeywell, the terms of this paragraph shall still apply.

105. **Oversight of Historic Fill Remedy**. Paragraph 2.11 of the Jersey City/Honeywell Consent Order shall apply only to the Historic Fill Remedy, not the Chromium Remedy. The Progress Reports provided for in paragraphs 2.12 and 3.7 of the Jersey City/Honeywell Consent Order shall be provided to Riverkeeper and the Special Master at the time they are submitted.

106. **Transfer of Title of Study Areas 6 North and 7 to and from Bayfront Redevelopment LLC**. The transfer of title of Study Area 6 North and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 North and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 North or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 North and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 North under this

Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell.*

107. **Dispute Resolution Procedures.** The provisions of Article VIII of the Jersey City/Honeywell Consent Order do not apply to any disputes regarding or impacting the Chromium Remedy, which shall be resolved as provided in paragraph 72. The provisions of Article VIII of the Jersey City/Honeywell Consent Order shall apply to disputes between the Jersey City Entities and Honeywell regarding the Historic Fill Remedy and other obligations provided in the Jersey City/Honeywell Consent Order, except to the extent that such disputes may affect the Chromium Remedy. If any such dispute may affect the Chromium Remedy, it shall be resolved as provided in paragraph 72. Honeywell shall provide Riverkeeper with a copy of each notice of any breach provided under paragraph 8.1 of the Jersey City/Honeywell Consent Order within 10 days of Honeywell's receipt or issuance of such notice. Honeywell shall provide Riverkeeper with a copy of any written resolution of a dispute pursuant to paragraph 8.2 within 10 days of the resolution.

ARTICLE XI: NOTICE

108. **Notice.** Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to JCIA:

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

If to JCMUA:

Sam Della Fera Jr.
Trenk, DiPasquale, Webster,
Della Ferra & Sodono, P.C.
347 Mount Pleasant Ave.
West Orange, NJ 07052
(973) 243-8600

If to JCRA:

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE XII: RIVERKEEPER'S ATTORNEYS' FEES

109. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $1,513,217.15 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 North portion of *Riverkeeper v. Honeywell* through March 27, 2008; and

(b) $187,862.27 in out-of-pocket expenses representing 50% of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses to be paid pursuant to the Sediment Consent Order.

Payment of the sum of $1,513,217.15 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $1,556,747.46 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

110. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after March 27, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell are unable to reach a

settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order.

ARTICLE XIII: MISCELLANEOUS PROVISIONS

111. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

112. **JCRA and Bayfront Redevelopment LLC as Parties.** As signatories to this Consent Decree, JCRA and Bayfront Redevelopment LLC subject themselves to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agree to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against JCRA and Bayfront Redevelopment LLC.

113. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

114. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

115. **Reservation of Rights and Claims**. Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

116. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

117. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

118. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

119. **Measures to Effectuate This Consent Decree.** The Jersey City Entities and JCRA shall take all appropriate steps to ensure that this Consent Decree has been (and that actions required hereunder will be) duly considered, ratified, and approved. Such steps include consideration of this Consent Decree at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the Settlement, including the commitments made by Jersey City; and consideration by and approval of the commissioners of the JCIA, JCMUA, and JCRA.

120. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

121. **Severability.** Each of the provisions in paragraph 60 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

122. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/David L. Isabel

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

Counsel for Jersey City Incinerator Authority

s/ Joni Noble McDonnell

Joni Noble McDonnell
Genova, Bruns & Giantomasi
4974 Broad Street
Newark, NJ 07102
973-535-4435

Counsel for Jersey City Municipal Utilities Authority

Robert Antonichello
~~Executive Director~~
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Executive Director of Jersey City Redevelopment Agency

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

_____
Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Jersey City/Honeywell Consent Order

Exhibit B: Remedial AOC's and Remedial Approach Map

Exhibit C: NJDEP Chromium Policy

Exhibit D: Conservation Restriction

Exhibit E: Deed Notice

Deed Notice

Dated: _____, 2017

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: _____, Esq

DEED NOTICE #6
SA-6 NORTH RT 440 DEFERRED AREA

Deed Notice #6
SA-6 North Deferred Area Adjacent to Route 440 ROW
A Portion of Block 21901 Lot 5

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature]
Global Director - Remediation Design & Construction
[Bayfront Redevelopment, LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

20171214010145750 1/115
12/14/2017 12:04:06 PM DEED
Bk: 9264 Pg: 905
Diane Coleman
Hudson County, Register of Deeds
Receipt No. 1312644

DEED NOTICE CONCERNING CONTROLS INSTALLED FOR CHROMIUM CONTAMINATION UNDERLYING THE PROPERTY

This Deed Notice is made as of the 29th day of November, 2017, ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950***. "Owner" shall mean Bayfront Redevelopment, LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. Block 21901 Lot 5 is currently owned by Bayfront Redevelopment, LLC. The "Property" (also referenced herein as the "Deferred Area" or the "Restricted Area(s)") is particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. Bayfront Redevelopment, LLC is the current owner in fee simple of certain real property designated as a portion of ***Block 21901, Lot 5 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]. The New Jersey Department of Environmental Protection (NJDEP) Program Interest Number for the contaminated site which includes this Property is ***Hudson County Chromate Site No. 088 Program Interest ("PI") # G000008711*** (NJDEP PI# for non-chromium-related contaminants at the Property is #745719). Remediation of hexavalent chromium is pursuant to the First Amended Consent Decree Regarding the Remediation and

[1] All references to Block 21901 Lot 5 in this Deed Notice shall mean the applicable portions of Block 21901 Lot 5 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

Redevelopment of Study Area 6 North ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.,* D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The Consent Decree restricts transfer, use and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management ("BCM") is the entity within the Department that is responsible for the oversight of the chromium remediation of SA-6 North and the Property. The matter is Case No. Hudson County Chromate Site No. 088 PI# G000008711. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 North to address chromium-related soil contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") was approved by the Department on February 19, 2009 for Hudson County Chromate Site No. 088, which included portions of the Property. Remedial actions were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP soil contamination remains in the Property at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 North was submitted to the Department on March 16, 2017. The Department approved the RAR on June 1, 2017. A Construction Completion Report ("CCR") for SA-6 North to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 North was entered by the Court on December 5, 2017, Docket No. 1528.

The Property, also known as The Deferred Area, is an approximately 4,077 square foot strip of land on SA-6 North adjacent to the Route 440 ROW where a Public Service Electric & Gas ("PSE&G") gas main is located north and east of the SA-6 North Open Space Area. PSE&G owns and operates a 24-inch high pressure gas main within the ROW in this area. In the 100% Design Report, Honeywell indicated its intention of deferring excavation of chromium-impacted soil within The Deferred Area footprint until such time that the gas main is relocated during the future Route 440 Road Widening Project. Excavation of residual chromium-impacted soil along the eastern edge of the SA-6 North property line in this area will be coordinated with the relocation of the gas main

during the Route 440 Road Widening Project. Once the remediation of this area is complete in accordance with Article III of the Consent Decree, Honeywell will terminate the deed notice consistent with the requirements of Paragraph 13 below. In the meantime, the provisions of the Long Term Monitoring Plan ("LTMP"), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater contaminant concentrations and restrictions for SA-6 North in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater (recent groundwater samples for the Property do not indicate shallow groundwater contamination). As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil remediation for the Property in perpetuity or until remediation is implemented that renders this Deed Notice unnecessary.

4. CONSIDERATION. In accordance with the Department's approval of the chromium RAWP for the remediation of Hudson County Chromate Site Nos. 087 and 088 which includes the Property, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained at either the onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a child care facility without the Department's prior written approval; and

iii. The Consent Decree, paragraph 53, prohibits the unrestricted use of the Property until the Chromium Remedy set forth in Article III of the Consent Decree is implemented and the concentration of hexavalent chromium in soil is less than 20 mg/kg to a depth of 20 feet below ground surface.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls within the Property. The engineering controls include geotextile demarcation fabric overlain by 6-inches of gravel. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, the LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has developed a LTMP pursuant to the Consent Decree which sets forth requirements for monitoring, maintaining, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5F. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of known contamination in the Property, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and (b) without first obtaining a Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(b), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program

P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree, and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to

the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program

P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 60 and 69 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system including trenches and pumps;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Restricted Area Data Tables - Table for the Property that includes:

(A) Sample location designation from Restricted Area maps (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C-1C. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control (attached); Exhibit C-1C: Zoning as Institutional Control; includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
(1) Description and estimated size of the Restricted Areas as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:
(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;
(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and
(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of

the remedial action that includes this Deed Notice and the other Institutional Controls;
(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and
(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2. Exhibit C-2: Engineering Controls;

Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:
(1) Description of the engineering control;
(2) The objective of the engineering control; and
(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:
(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;
(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;
(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;
(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;
(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and
(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;
(2) The engineering control continues to operate as designed; and
(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 29, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 29th day of November, 2017.

Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #6 SA-6 North Deferred Area Adjacent to Route 440 ROW

A-1 Vicinity Map

A-2 Metes and Bounds Description and tax map

A-3 Property Map A portion of Block 21901, Lot 5, City of Jersey City, New Jersey

Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of a metes and bounds and tax map for the Property.

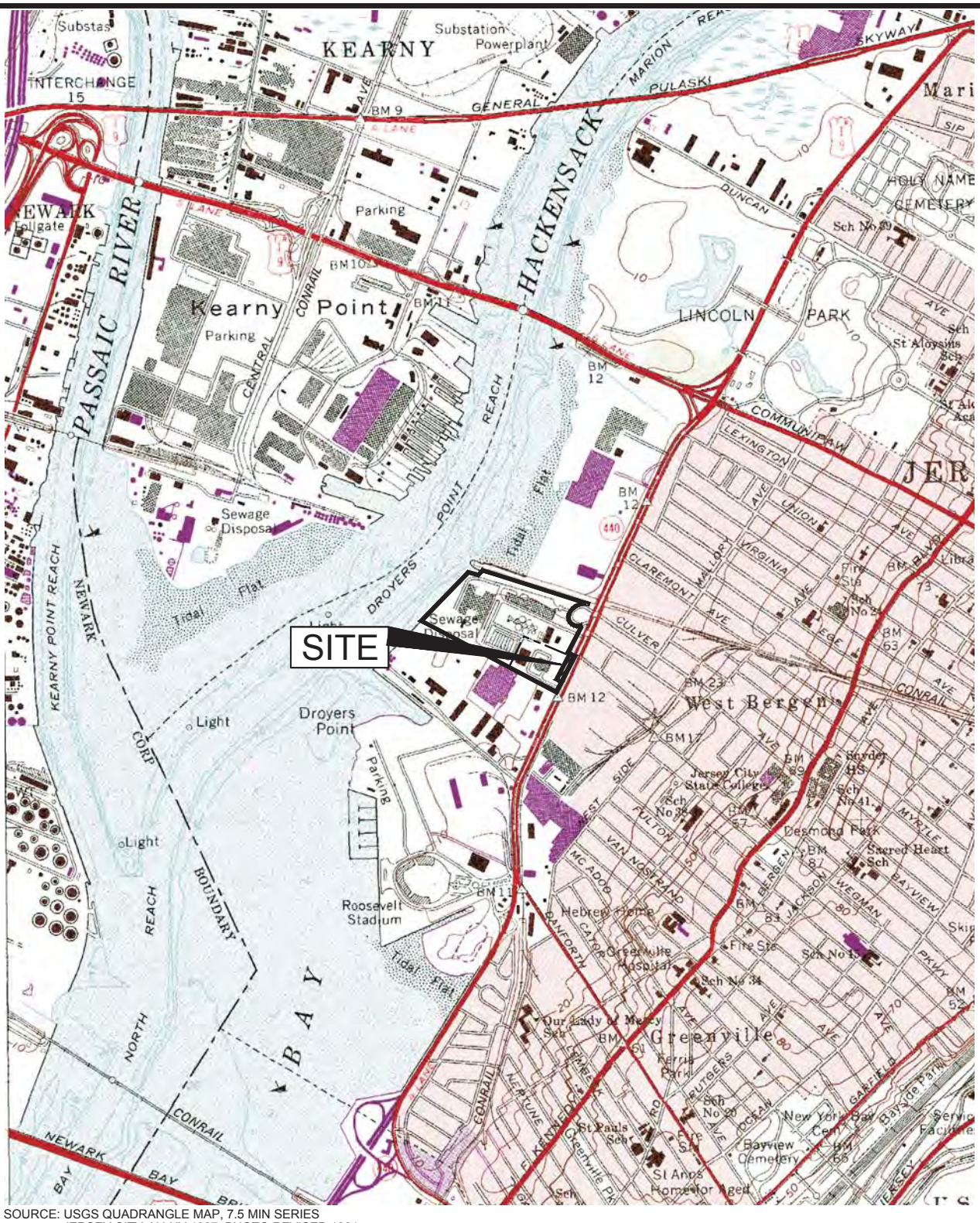
Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering control for the Property. After development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 6 NORTH SITE 088
JERSEY CITY, NEW JERSEY

CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\6100001\DEED NOTICE\DN 6\3480150487-6100-A106-0000.dwg Tue, 28 Nov 2017 - 10:26am scott.rudkin



SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A106-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-1
VICINITY MAP
BLOCK 21901 LOT 5
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #6

Exhibit A-2
Deed Notice #6 SA-6 North Deferred Area Adjacent to Route 440 ROW

Metes and Bounds Description of Property: See Attached
Tax Map: See Attached

A-2 Metes and Bounds Description of Property A portion of Block 21901, Lot 5
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map; the Metes and Bounds prevails.

The Property is identified as a portion of Block 21901, Lot 5 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment, LLC. A copy of the current tax map which includes the Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 ▪ Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292R

DEED NOTICE AREA 6
BLOCK 21901, LOT 5
MAY 18, 2016
REVISED OCTOBER 13, 2016

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 5 in Block 21901, designated as Deed Notice Area 6 as shown on an exhibit entitled, "Deed Notice Area 6, SA6 North, Block 21901, Lot 5, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated April 12, 2016, revised October 7, 2016 and being more particularly bounded and described as follows, to wit:

BEGINNING at the intersection of the westerly line of New Jersey State Highway Route 440 (112 foot wide right of way), with the division line between Lots 4 and 5 in Block 21901 and running; thence–

1. Along said westerly line of Route 440, **S 24° 46' 55" W, 302.60 feet**; thence-

Running through a portion of Lot 5 in Block 21601, the following four (4) courses:

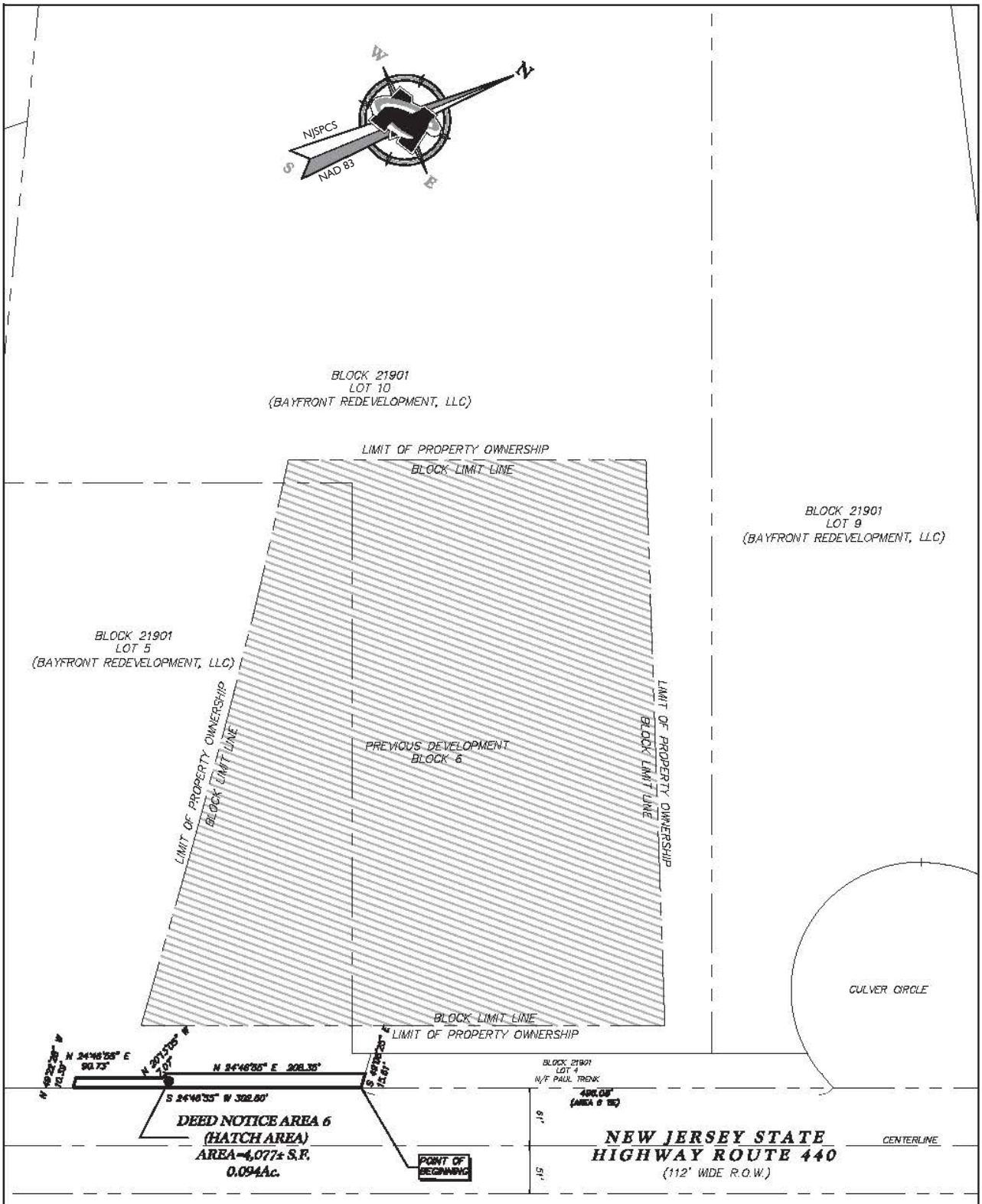
2. **N 49° 22' 28" W, 10.39 feet**; thence-
3. **N 24° 46' 55" E, 90.73 feet**; thence-
4. **N 20° 13' 05" W, 7.07 feet**; thence -
5. **N 24° 46' 55" E, 208.35 feet,** to the aforesaid division line between Lots 4 and 5 in Block 21901; thence –
6. Along said division line, **S 49° 08' 25" E, 15.61 feet**, to the point and place of **BEGINNING.**

CONTAINING: 4,077 S.F. of land more or less or 0.094 acre of land more or less.

10/13/16

GLEN J. LLOYD, P.L.S. DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

\\HQFAS1\General\Projects\2010\10000292R\Survey\Description\Metes & Bounds-Deed Notice 6_REV.docx



100 80 60 40 20 0 50 100 200

SCALE : 1" = 100'

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State of N.J. Cert. of Authorization: 24GA27986500

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REV	DATE	DRAWN BY	DESCRIPTION
1	10/7/16	KAN	EXCLUDE PORTION WITHIN TRENK PROPERTY AS REQUESTED
2	12/22/16	KAN	BLOCK 6
3	1/10/17	KAN	BLOCK 6
4	1/13/17	KAN	BLOCK 6
5	2/2/17	KAN	BLOCK 6
.	.	.	.

DEED NOTICE AREA 6
SA6 NORTH

BLOCK 21901
LOT 5

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

RED BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1984

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/12/2016	KAN	CJK

PROJECT NUMBER: 2010\1000
DRAWING NAME: Y-EXBT-DN-6_REV

SHEET TITLE: DEED NOTICE EXHIBIT

SHEET NUMBER: 1 of 1

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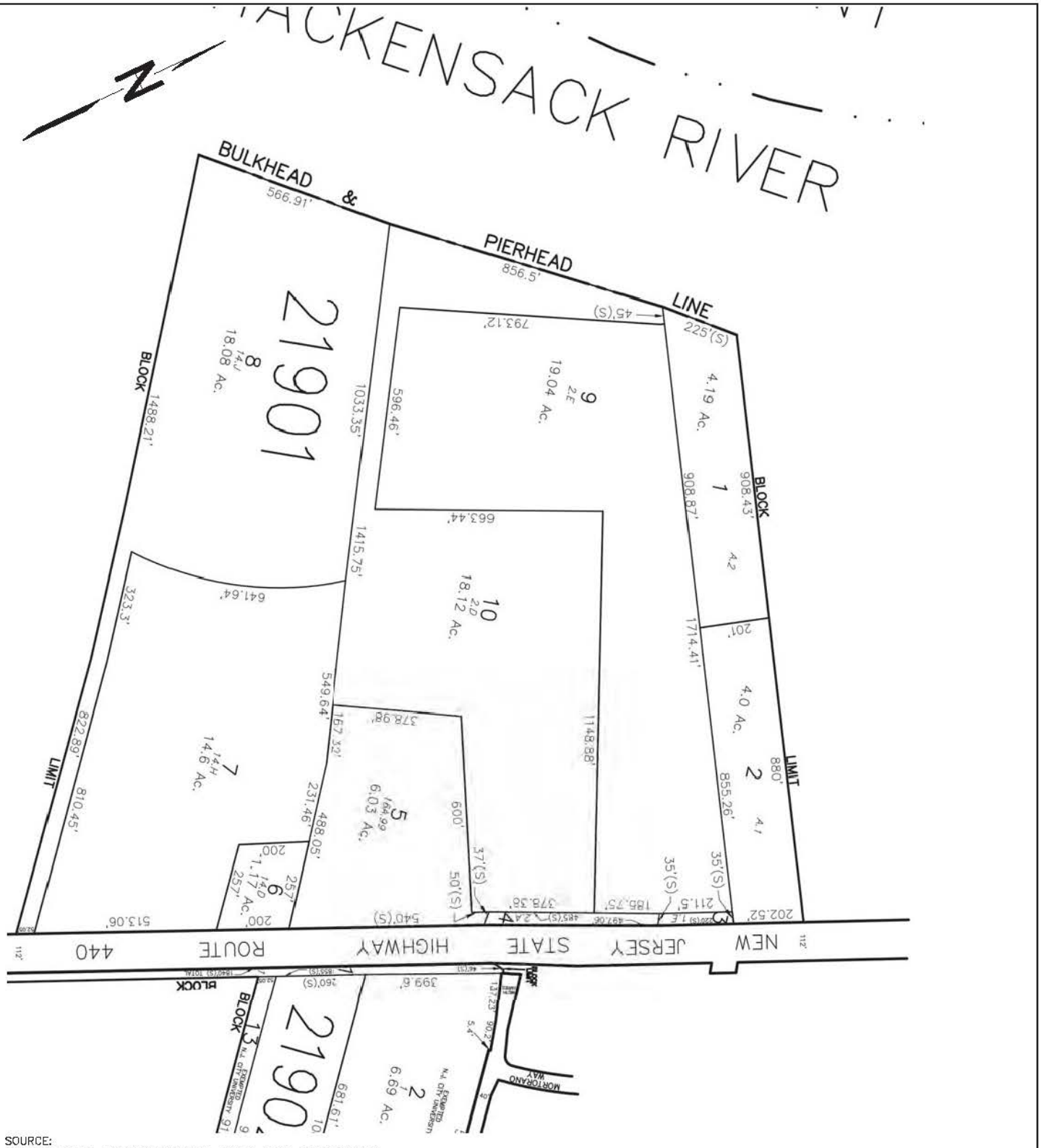

SOURCE:
DRAWING TITLED: "TAX MAP CITY OF JERSEY CITY", PREPARED BY T&M ASSOCIATED, MIDDLETOWN TWP., NJ SHEET 219, DATED AUGUST, 2006; NEW JERSEY DEPARTMENT OF THE TREASURY DIVISION OF TAXATION PROPERTY ADMINISTRATION DATED MAY 8, 2009 SERIAL NO.: 934.

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SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 DRAWING: 3480150487-6100-A206-0000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619
PREPARED/DATE: STR 12/15/16	CHECKED/DATE: NW 01/31/17	

EXHIBIT A-2
TAX MAP
BLOCK 21901, LOT 5
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #6

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Exhibit A-3
Property Map

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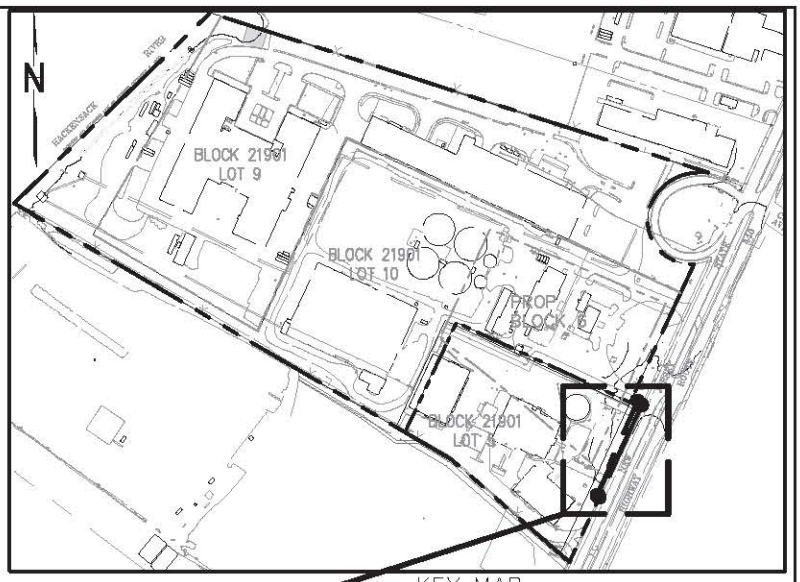
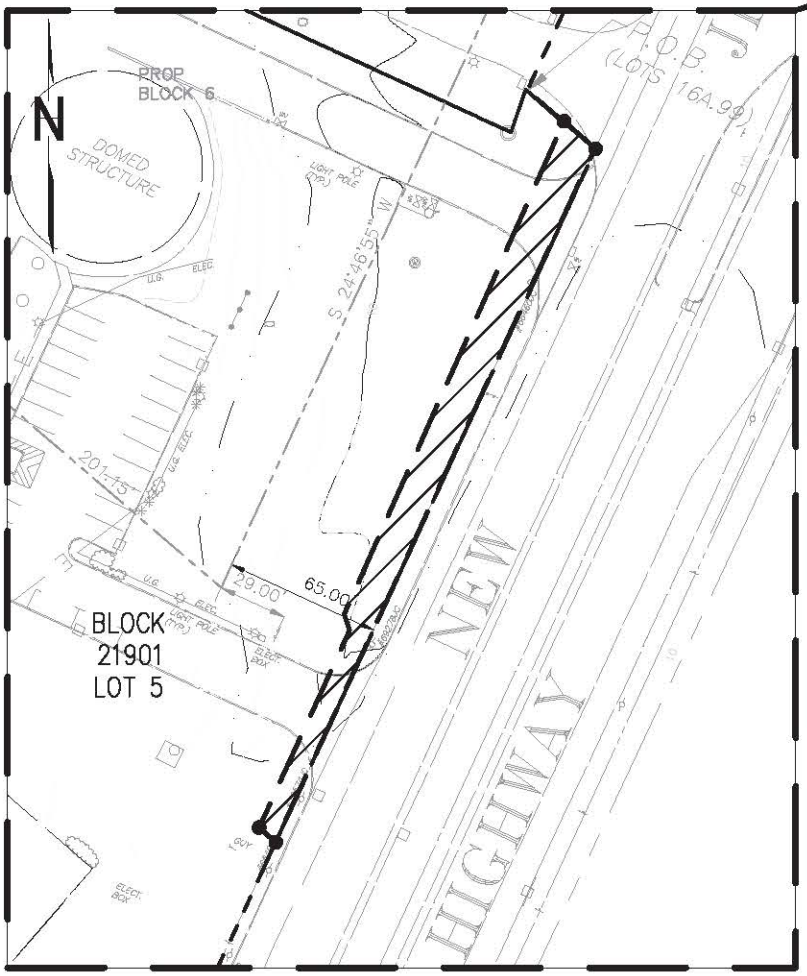
LEGEND

PROPERTY BOUNDARY

RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

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SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A306-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD. SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-3
PROPERTY AREA MAP
BLOCK 21901, LOT 5
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #6

P:\JOBS\PENNELL\JERSEY CITY\36 B HDRFA_NRES\3487\6100\USED HDRES.DIR P:\NRES\3487\6100\USED HDRES\3480150487-6100-A306-0000.dwg Tue, 28 Nov 2017 - 10:25am mcdonaldn Layout: Layout1

EXHIBIT B
Deed Notice #6 SA-6 North Deferred Area Adjacent to Route 440 ROW

B-1 Restricted Area Map
B-2 Restricted Area Data Table
A portion of Block 21901, Lot 5
City of Jersey City, New Jersey

Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area Soil Sample Locations), Exhibit B-1B (Cap System Detail), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of hexavalent chromium remaining above the level established in the New Jersey Department of Environmental Protection's (NJDEP) Chromium Policy of 20 milligrams per kilogram (mg/kg).

Restricted Area Map Notes:

Exhibit B-1 indicates engineering controls. For soils with hexavalent chromium concentrations above 20 mg/kg, the engineering control includes a cap consisting of a geotextile demarcation fabric overlain by 6-inches of gravel.

Exhibit B-1
Restricted Area Maps

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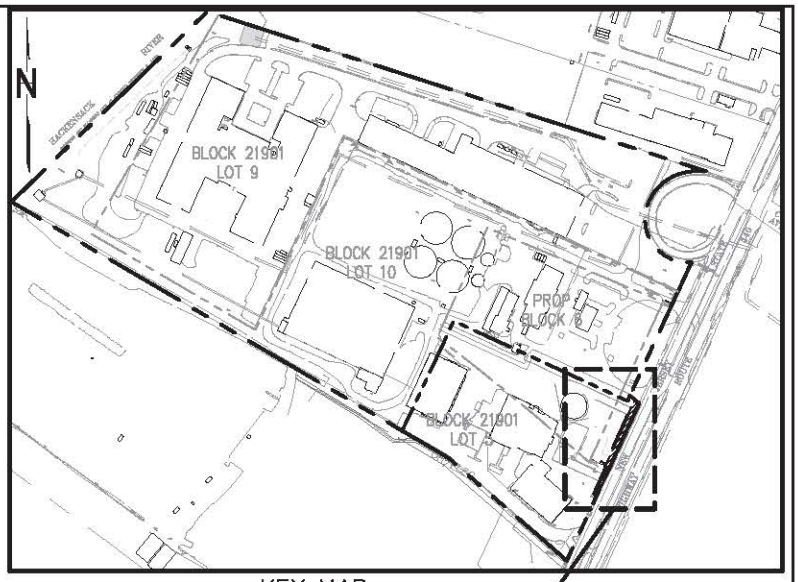
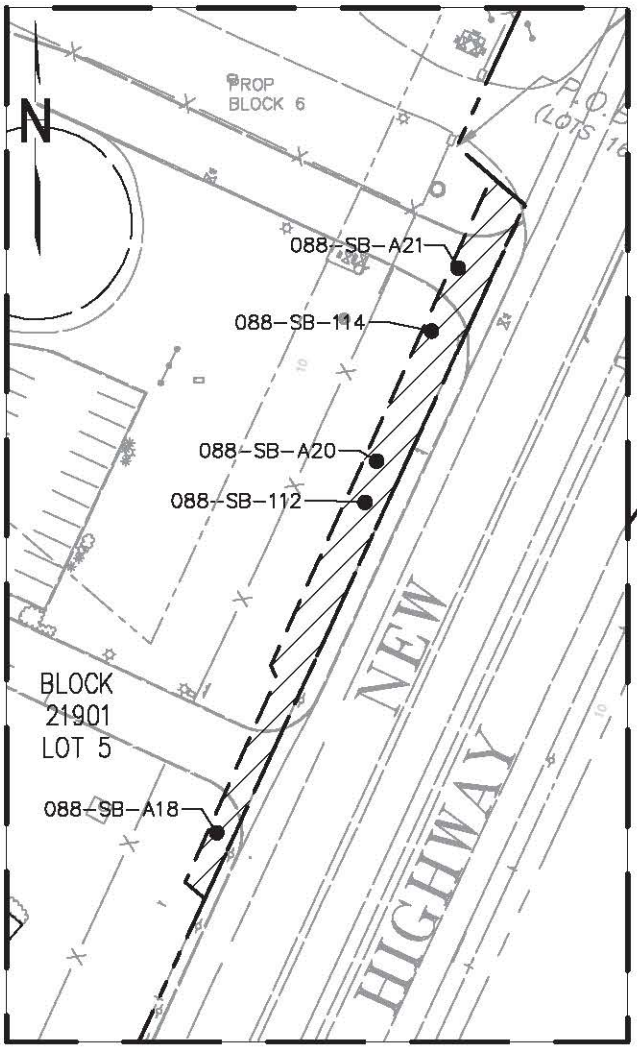
LEGEND

- SOIL SAMPLE LOCATION HEXAVALENT CHROMIUM > 20mg/kg (SEE EXHIBIT B-2)
- PROPERTY BOUNDARY
- RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 40 80 160
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-B106-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1A
RESTRICTED AREA AND
ENGINEERING CONTROL
BLOCK 21901; LOT 5
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #6

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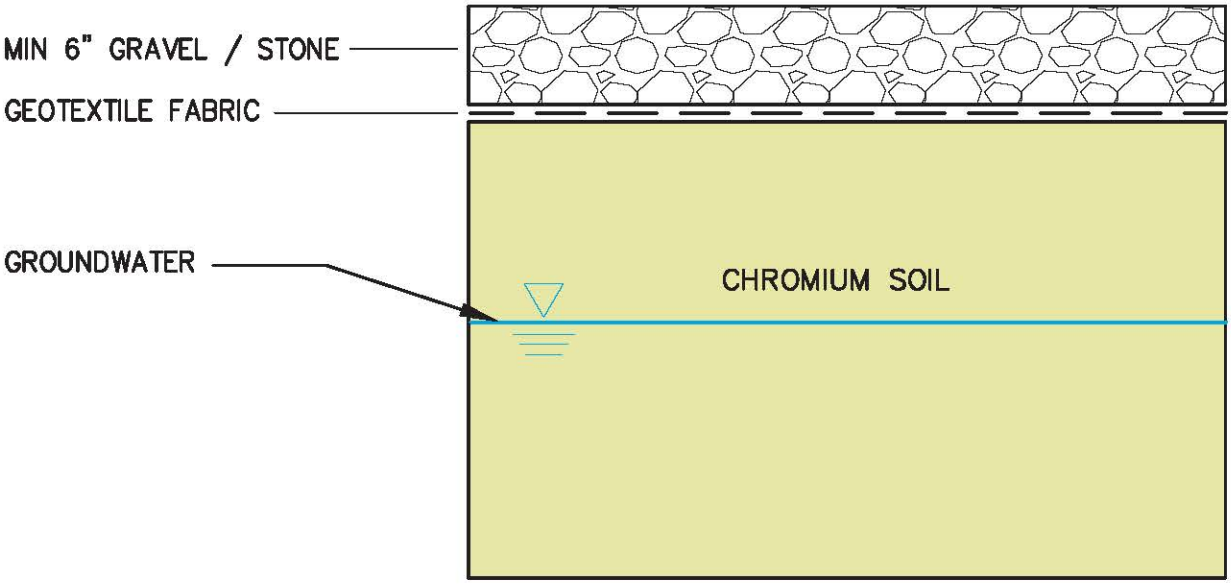
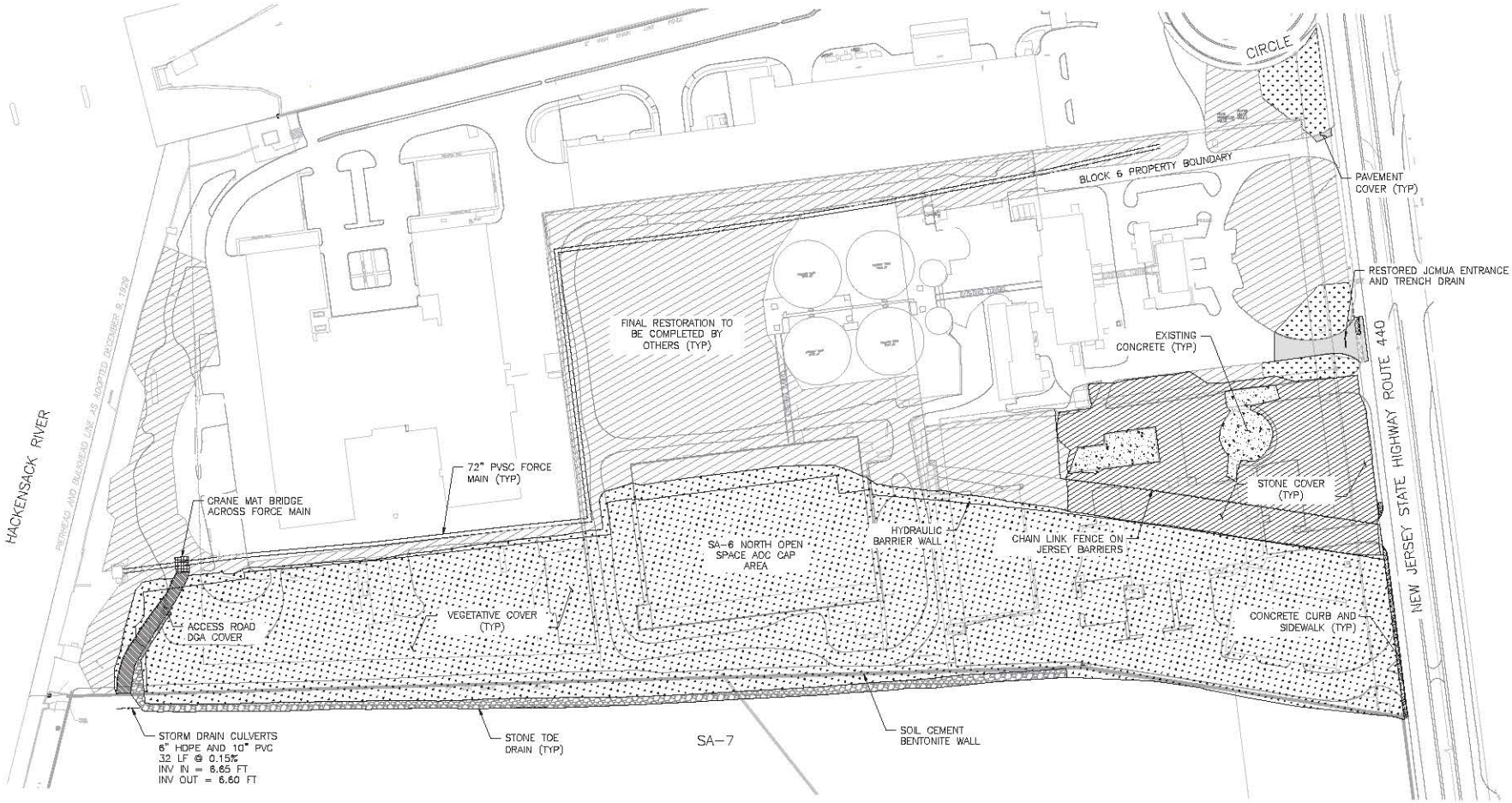


CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150450-6100-B206-0000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 21901; LOT 5 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE # 6
PREPARED/DATE: STR 01/25/17 | *CHECKED/DATE:* NW 01/31/17		



NOTE:

1. REFER TO CONSTRUCTION CONTROL GRID FIGURE AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE WITHIN THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. REMAINING RESTORATION AREAS IDENTIFIED ON THE CHROMIUM REMEDY 100% DESIGN DRAWINGS WILL BE ADDRESSED AS PART OF THE NON CHROMIUM REMEDIATION WORK CURRENTLY BEING COMPLETED. FINAL RESTORATION OF ALL AREAS IS SCHEDULED TO BE COMPLETE IN MARCH 2017.

EXHIBIT B-1C

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
DGA COVER
RESTORATION BY OTHERS
STONE TOE DRAIN
SD STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH - SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

Exhibit B-2: Table B-2
Soil Sample Data Table (Hexavalent Chromium)

EXHIBIT B-2
Restricted Area Data Table
Study Area 6 North
Portions of Block 21901, Lot 5
Deed Notice #6 Deferred Area Adjacent to Route 440 ROW
Jersey City, New Jersey

Location ID	Sample Date	Sample Depth (feet bgs)	Sample Elevation (feet msl NAVD88)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Concentration (mg/kg)	Q
088-SB-A18	05/15/1997	0 - 2	11.37	Hexavalent Chromium	18540-29-9	20	**49.3**	J
088-SB-A18	05/15/1997	10 - 12	1.37	Hexavalent Chromium	18540-29-9	20	**106**	
088-SB-A18	05/15/1997	2 - 4	9.37	Hexavalent Chromium	18540-29-9	20	**57.8**	J
088-SB-A20	05/15/1997	10 - 12	-0.2	Hexavalent Chromium	18540-29-9	20	**28.3**	J
088-SB-A20	05/15/1997	2 - 4	7.8	Hexavalent Chromium	18540-29-9	20	**45.7**	J
088-SB-A20	05/15/1997	6 - 8	3.8	Hexavalent Chromium	18540-29-9	20	**287**	J
088-SB-A20	05/15/1997	8 - 10	1.8	Hexavalent Chromium	18540-29-9	20	**26.6**	J
088-SB-A21	08/20/1997	0 - 2	9.5	Hexavalent Chromium	18540-29-9	20	**27.8**	J
088-SB-A21	08/20/1997	10 - 12	-0.5	Hexavalent Chromium	18540-29-9	20	**1150**	J
088-SB-A21	08/20/1997	4 - 6	5.5	Hexavalent Chromium	18540-29-9	20	**42.5**	J
088-SB-A21	08/20/1997	6 - 8	3.5	Hexavalent Chromium	18540-29-9	20	**4690**	J
088-SB-112	05/21/2008	6.5 - 7	3.3	Hexavalent Chromium	18540-29-9	20	**1640**	
088-SB-114	05/21/2008	6.5 - 7	3	Hexavalent Chromium	18540-29-9	20	**4270**	

Notes:
Results reported in milligrams per kilogram (mg/kg).

Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010
CASR# - Chemical Abstract Service Number

EXHIBIT C
Deed Notice #6 SA-6 North Deferred Area Adjacent to Route 440 ROW

C-1 Institutional Controls
C-2 Engineering Controls
A portion of Block 21901, Lot 5
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree, Zoning as Institutional Controls: Exhibit C-1 (A through C) for that portion of Block 21901, Lot 5, City of Jersey City, New Jersey known as the Deferred Area.

Exhibits C-1A through C-1C. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control: Exhibit C-1C Zoning as Institutional Control: Exhibits C-1A through C-1C include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
"The Deferred Area" is an approximately 4,077 square foot strip of land on SA-6 North adjacent to the Route 440 ROW where a PSE&G gas main is located north of the SA-6 North Open Space Area. PSE&G owns and operates a 24-inch high pressure gas main within the ROW in this area. In the 100% Design Report, Honeywell indicated its intention of deferring excavation of chromium-impacted soil within The Deferred Area footprint until such time that the gas main is relocated during the future Route 440 Road Widening Project. Excavation of residual chromium-impacted soil along the eastern edge of the SA-6 North property line in this area will be coordinated with the relocation of the gas main during the Route 440 Road Widening Project. Once the remediation of this area is complete in accordance with the Redial Action Report, Honeywell will terminate the deed notice with the approval of the Department. The provisions of the LTMP, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes a portion of Block 21901, Lot 5. The estimated size of the area containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) as identified on Exhibit B-1 is estimated at approximately 4,000 square feet or approximately 0.09 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the

terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and the applicable portions of the LTMP developed thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the applicable zoning standards; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice*, and *the applicable zoning standards.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #6 SA-6 North Deferred Area Adjacent to Route 440 ROW

A portion of Block 21901, Lot 5
City of Jersey City, New Jersey

Exhibits C-2A through C: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Control consists of a cap consisting of a geotextile demarcation fabric overlain by 6-inches of gravel.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above 20 mg/kg within the Property. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***

- ***A report to determine whether or not the engineering controls continue to operate as designed.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.***

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5955 Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 NORTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with various properties collectively designated by NJDEP as Study Areas 5, 6 North, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, the property owned by JCIA and JCMUA and collectively the subject of *JCMUA v. Honeywell* and *JCIA v. Honeywell* comprises a part of Study Area 6 North;

Whereas, the City of Jersey City ("Jersey City") also owns property that comprises a part of Study Area 6 North;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* Jersey City, JCMUA, and JCIA (collectively the "Jersey City Entities");

Whereas, the Jersey City Entities and Honeywell also asserted cross-claims against each other in *Riverkeeper v. Honeywell*;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the United States District Court for the District of New Jersey (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, the Jersey City Entities and Riverkeeper have alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 North property;

Whereas, in the Consolidated Litigation, Honeywell has alleged that the Jersey City Entities bear full responsibility for lead and other contamination on the Study Area 6 North property, and also bear an equitable share of liability for the presence and remediation of COPR and chromium in soils and groundwater on the Study Area 6 North property and for chromium and other contamination in Hackensack River sediments in the vicinity of Study Area 6 North;

Whereas, on October 9, 2007, Honeywell and Riverkeeper submitted the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 North that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq.*, as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, the portions of Study Area 6 and Study Area 7 (i) which are owned by the Jersey City Entities, (ii) which are owned by Honeywell, (iii) as to which Honeywell has a purchase and sale agreement with the current owner, or (iv) which hereafter will be acquired by a Jersey City Entity and/or Honeywell are parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 North and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City;

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Parties as a means to accomplish the aforesaid purposes of this settlement;

Whereas, the consent of each of the Jersey City Entities to this Consent Decree was considered at a duly noticed and appropriate meeting of their respective governing bodies, open to the public, at which members of the public were provided an opportunity to comment on all aspects of the settlement, including, without limitation, the commitments made by the Jersey City Entities herein; and

Whereas, Honeywell and the Jersey City Entities are settling their claims, cross-claims, or counter-claims in the Consolidated Litigation against each other in the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with this Consent Decree and attached as Exhibit A to this Consent Decree:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **AOC 1** shall mean that area of Study Area 6 North in which the hexavalent chromium concentration in the top 20 feet of soil below existing ground surfaces exceeds concentrations of 20 mg/kg and the Chromium Remedy will be implemented pursuant to Article III. AOC 1 is shown on Exhibit B.

2. **AOC 1 Additional Excavation Areas** shall mean those areas of Study Area 6 North which require excavation pursuant to paragraph 57. The AOC 1 Additional Excavation Areas are not contiguous to AOC 1. The AOC 1 Additional Excavation Areas are shown on Exhibit B.

3. **AOC 1 Open Space Area** shall mean the AOC 1 Open Space Area, as defined by paragraph 53, consisting of approximately 11 acres enclosed by the hydraulic barrier walls constructed under the Chromium Remedy, and which shall be subject to paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B.

4. **AOC 2** shall mean that area of Study Area 6 North on which the Historic Fill Remedy will be implemented pursuant to Article II.B of the Jersey City/Honeywell Consent Order. AOC 2 is shown on Exhibit B.

5. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

6. **COPR** shall mean Chromite Ore Processing Residue.

7. **Chromium Remedy** or **Chromium Remediation** shall mean the remedy set forth in Article III.

8. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC).

9. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

10. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, and the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, currently pending before the Special Master in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell reach a settlement on source control issues, the Deep Groundwater Remedy shall

include the remedy to which Riverkeeper and Honeywell have agreed. In the event that Riverkeeper and Honeywell do not reach a settlement on source control issues, the Deep Groundwater Remedy shall include the remedy ordered by the Special Master or the Court in *ICO v. Honeywell* for source control.

11. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

12. **Historic Fill** shall have the definition provided in the NJDEP Technical Requirements for Site Remediation.

13. **Historic Fill Remedy or Historic Fill Remediation** shall mean the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order, except that the Historic Fill Remedy shall not be limited to the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order if NJDEP requires a more stringent remedy.

14. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

15. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

16. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

17. **Including** shall mean including, but not limited to.

18. **JCIA** shall mean the Jersey City Incinerator Authority.

19. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

20. **JCRA** shall mean the Jersey City Redevelopment Agency.

21. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

22. **Jersey City/Honeywell Consent Order** shall mean the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* entered in the Consolidated Litigation simultaneously with this Consent Decree.

23. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

24. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit C.

25. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

26. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*, as amended.

27. **Redevelopment Agreement** shall have the meaning set forth in paragraph 4.11(e) of the Jersey City/Honeywell Consent Order.

28. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

29. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. 40A:12A1, *et seq.*, as amended and supplemented.

30. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

31. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

32. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, which the Parties expect will be entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation.

33. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

34. **Site** shall mean Study Area 6 North.

35. **Site Preparation Activities** shall have the meaning set forth in paragraph 3.1 of the Jersey City/Honeywell Consent Order.

36. **Site Preparation Plan** shall have the meaning set forth in paragraph 3.2 of the Jersey City/Honeywell Consent Order.

37. **Soil** shall mean soils, historic fill, and/or COPR.

38. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

39. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

40. **Study Area 6 North** shall mean that property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 41.58 acres and including: (a) all such property owned by JCMUA located at 555 Route 440, Jersey City, New Jersey, (b) all such property owned by JCIA located at 501 Route 440, Jersey City, New Jersey; (c) all such property owned by Jersey City or its Department of Public Works and located at 575 Route 440, Jersey City, New Jersey; and (d) all such property owned by Paul Trenk consisting of Block 1290.1, Lot 2A, Jersey City, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

41. **Study Area 6 South** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Kellogg Street 60 LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Kellogg Street/440 Property LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Cordova Enterprises Ltd located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey, and (g) that property currently owned by Cordova Enterprises Ltd located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

42. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

43. **Study Area 7** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that property currently owned by Roned Realty/Edward Navlen located at 465 Route 440, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

44. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

45. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

46. Except as provided in this paragraph, the terms of the Jersey City/Honeywell Consent Order shall remain in full force and effect. To the extent that any provision in the Jersey City/Honeywell Consent Order refers to the Chromium Remedy or Chromium Remediation, it shall be construed as referring to Article III of this Decree. In the event of any conflict or inconsistency between the terms of this Decree and the Jersey City/Honeywell Consent Order, the terms of this Decree govern. In the event that any action taken pursuant to the Jersey City/Honeywell Consent Order is in conflict with or inconsistent with the terms of this Decree, the terms of this Decree shall govern.

47. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

48. For purposes of this Consent Decree, the Complaints in the Consolidated Litigation each state claims upon which relief may be granted against Honeywell.

49. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 100, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils and shallow groundwater at Study Area 6 North. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 6 South, Study Area 5, or groundwater at Study Area 6 North other than shallow groundwater.

50. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

51. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. Chromium Remedy

52. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 North at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 North shall be undertaken in accordance with the terms of this Consent Decree.

53. **AOC 1 and AOC 2.** For the purposes of remediation, Study Area 6 North shall consist of two Areas of Concern ("AOCs"), designated as AOC 1 and AOC 2 as shown on Exhibit B. AOC 1 is set forth on Exhibit B and consists of that portion of Study Area 6 North for which chromium remediation is required pursuant to paragraphs 55, 56, and 57. AOC 2 consists of the entirety of Study Area 6 North, including AOC 1, to the extent that historic fill is present in any area of Study Area 6 North. For AOC 1, the intended land use will determine the types

of remedial measures taken in the Chromium Remedy. There are two distinct land uses for AOC 1: open space and residential. As a result, AOC 1 will be further subdivided into:

(a) The AOC 1 Open Space Area, which shall comprise that portion of AOC 1 for which future use shall be restricted as provided in paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B;

(b) The AOC 1 Residential Area, which shall comprise that portion of AOC 1 for which future use shall allow for residential and/or commercial and retail uses, but for which the remedial measures shall assume only a residential use . The AOC 1 Residential Area is shown on Exhibit B; and

(c) The AOC 1 Additional Excavation Areas, which consist of those portions of Study Area 6 North that require remediation pursuant to paragraph 57. The planned land use for the AOC 1 Additional Excavation Areas is residential and/or commercial and retail uses, but the remedial measures shall assume only a residential use.

54. **Scope and General Requirements of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and soil containing hexavalent chromium in AOC 1, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow level of groundwater (see paragraph 58). The deep overburden and bedrock groundwater remediation, including source control, shall be addressed in a separate consent order, which shall place these issues within the jurisdiction of the Special Master in conjunction with the groundwater remedies for Study Area 7.

(a) The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and the Remedial Action Work Plan (with addenda) approved by NJDEP on or about February 19, 2008. This Consent Decree shall have precedence

over the Remedial Action Work Plan in the event of any inconsistency.

(b) The Chromium Remedy shall be carried out diligently, and the development and implementation of the Historic Fill Remedy shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Honeywell shall propose a master Schedule for the implementation of the Chromium Remedy within 90 days of the entry of this Consent Decree, which shall include, at a minimum, the following milestones:

(i) Submission to the Special Master for all documents subject to review by the Special Master pursuant to paragraph 72(c);

(ii) Relocation of the Jersey City Entities' Study Area 6 North Operations as shall be required prior to the implementation of the Chromium Remedy;

(iii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy, including remediation of the AOC 1 Additional Excavation Areas;

(iv) A final date for Honeywell's proposal of *in situ* treatment for any part of the AOC 1 Residential Area pursuant to paragraph 55(d) and a date for the final decision as to whether excavation or *in situ* treatment shall be used in the event of such a proposal;

(v) The initiation of work related to the Chromium Remedy;

(vi) The date for completion of the installation of the Chromium Remedy;

(vii) Implementation of the long-term protections of the AOC 1 Open Space Area established pursuant to paragraph 60; and

(viii) Transfer of the AOC 1 Open Space Area to Jersey City pursuant to paragraph 60(a)(iii).

(c) **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community

from airborne dusts and exposures to contaminated soils.

(d) **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

55. **AOC 1 Residential Area Soil Remedy.** In the AOC 1 Residential Area, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive.

(a) Those soils excavated from the AOC 1 Residential Area in which hexavalent chromium concentrations exceed 240 mg/kg shall be disposed of off-site at a waste disposal facility licensed to accept such waste.

(b) Those soils excavated from the AOC 1 Residential Area in which the hexavalent chromium concentration is less than 240 mg/kg, but greater than 20 mg/kg, shall be consolidated within the AOC 1 Open Space Area. However, any such soils which would require venting of gases shall be disposed of off-site.

(c) Soils excavated from the AOC 1 Residential Area shall be replaced with existing soils from AOC 2 or backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

(d) In the AOC 1 Residential Area, excavation of soils containing hexavalent chromium greater than 20 mg/kg shall be the presumptive remedy. Around remaining active underground utilities or other structures, such as the bulkhead, *in situ* treatment may be considered in lieu of excavation only if Honeywell demonstrates, and all Parties, the Special

Master, and NJDEP agree that (1) excavation is technically impracticable and (2) treatment will result in hexavalent chromium concentrations of 20 mg/kg or less and no rebound will occur. If no treatment option is available, Honeywell shall propose an alternative remedial approach, subject to review and comment by the Parties and approval by the Special Master.

(e) Honeywell shall excavate all soils containing hexavalent chromium greater than 20 mg/kg in conjunction with the placement of the piping for the Deep Groundwater Remedy. Honeywell shall not propose treatment in lieu of excavation based on the location of the pipes for the Deep Groundwater Remedy or any apparent impracticability of excavating in conjunction with their installation.

56. **AOC 1 Open Space Area Soil Remedy.** In the AOC 1 Open Space Area, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils, with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is

needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities. Honeywell shall configure the cap so that all active piping for the wastewater treatment system operated by JCMUA, including all force mains and any connections to the emergency outfall, shall be outside the capped area. Honeywell may propose, subject to the review process in paragraph 72, to use treatment in lieu of excavation in the vicinity of the emergency outfall line if the criteria of paragraph 55(d) are satisfied; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the AOC 1 Open Space Area. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the AOC 1 Open Space Area shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the two feet of clean fill required by paragraph 56(c). Excavated hexavalent

chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the AOC 1 Residential Area shall be placed and spread in the AOC 1 Open Space Area under the cap. Excavated hexavalent chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the Study Area 6 South Development AOC (as defined in the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South and including only those portions of Study Area 6 South for which the future uses of the property may include commercial or residential development) may be placed and spread in the AOC 1 Open Space Area under the cap, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

57. **AOC 1 Additional Excavation Areas Remedy.** For those AOC 1 Additional Excavation Areas, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive. Excavation of those areas comprising the AOC 1 Additional Excavation Areas shall initially be conducted in the 50-foot by 50-foot area planned in the RAWP but shall not be so limited in the event that confirmation sampling indicates that hexavalent chromium concentrations continue to exceed 20 mg/kg. Honeywell shall excavate laterally and vertically (to depths of up to 20 feet below current ground surface) until the hexavalent chromium is less than 20 mg/kg based on the results of confirmation sampling. Confirmation sampling for the AOC 1 Additional Excavation Areas shall be taken from the side

walls and bottom of the excavation, in accordance with the Technical Requirements for Site Remediation, to confirm complete removal of contaminated soils.

58. **Shallow Groundwater Remedy.** The shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing above the meadow mat in the AOC 1 Open Space Area. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 North and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the northern, eastern and western sides of the AOC 1 Open Space Area and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that will consist of (i) one or more shallow extraction wells, sumps, or french drains within the AOC 1 Open Space Area; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater (except for shallow groundwater that penetrates the meadow mat and is captured by the Deep Groundwater Remedy);

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP

regulations.

59. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article. The Jersey City Entities agree to cooperate with Honeywell in the applications for any such permits, authorizations, or approvals. Such cooperation shall include providing information or data with respect to permit applications, co-signing permit applications, and allowing access to Study Area 6 North to obtain information necessary for the permits.

B. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

60. **Protection of the AOC 1 Open Space Area.** Except as provided in paragraphs 60(j) and 60(k), development in the AOC 1 Open Space Area shall be prohibited. The AOC 1 Open Space Area shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the AOC 1 Open Space Area pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54(b):

(a) **Ownership of and Access to the AOC 1 Open Space Area.** Ownership of and access to the AOC 1 Open Space Area shall be in accordance with the following:

(i) Pursuant to the terms of this Consent Decree and paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall become the owner in fee simple absolute of all of the property that comprises the AOC 1 Open Space Area and shall not convey any rights or interests in such property except as provided in this Decree. At the time

of the conveyance from JCRA to Bayfront Redevelopment LLC, Bayfront Redevelopment LLC shall give Jersey City an option to buy AOC 1 Open Space Area prior to the planned transfer pursuant to paragraph 60(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall exercise the option to buy the AOC 1 Open Space Area in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 84(c) or 84(d) are met;

(ii) At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall grant a conservation restriction for the AOC 1 Open Space Area pursuant to the requirements of paragraph 60(b);

(iii) Upon the final construction of all roads and utility corridors within the AOC 1 Open Space Area, Bayfront Development LLC shall donate good and marketable title to all the land comprising the AOC 1 Open Space Area to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 North to create a new parcel(s) comprising the AOC 1 Open Space Area. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the AOC 1 Open Space Area by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the AOC 1 Open Space Area unless and until it shall have complied with the requirements of paragraph 60(a)(iv);

(iv) After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the AOC 1 Open Space Area to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the AOC 1 Open Space Area to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the AOC 1 Open Space Area and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the AOC 1 Open Space Area pursuant to this paragraph and routine maintenance of the permissible development in the AOC 1 Open Space Area pursuant to paragraph 64(d); or

(2) The AOC 1 Open Space Area has been remediated such that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, but prior to the grant of the option to buy pursuant to paragraph 60(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the AOC 1 Open Space Area substantially in the form set forth in Exhibit D. Exhibit D is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 60(j) and 60(k), including the construction and

placement of roads and utilities. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the AOC 1 Open Space Area as set forth in paragraphs 60(j) and 60(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph60(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the

levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the AOC 1 Open Space Area shall be subjected to the deed notice substantially in the form set forth in Exhibit E that restricts future activities on the AOC 1 Open Space Area. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the AOC 1 Open Space Area pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 60(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 60(b), and the deed notice imposed pursuant to paragraph 60(c) shall be recorded, pursuant to N.J.S.A. 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the AOC 1 Open Space Area. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the AOC 1 Open Space Area in the real estate records related to the AOC 1 Open Space Area.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the AOC 1 Open Space Area is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 60(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the AOC 1 Open Space, Jersey City shall add those portions of the AOC 1 Open Space Area not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to

roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor, maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 60(j) and 60(k); and (iv) the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the AOC 1 Open Space Area have been added to its ROSI, such that those portions of the AOC 1 Open Space Area shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the AOC 1 Open Space Area is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 60(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the AOC 1 Open Space Area subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the AOC 1 Open Space Area under the statute. If the Parties are unable to reach agreement on establishment of an environmental

covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the AOC 1 Open Space Area. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the AOC 1 Open Space Area if they would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in AOC 1 Open Space Area.** Only development satisfying the requirements of this paragraph and paragraph 60(k) shall be permitted in the AOC 1 Open Space Area. All other development in the AOC 1 Open Space Area shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the AOC 1 Open Space Area regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 60(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the AOC 1 Open Space Area shall be the

development undertaken following the completion of the Chromium Remedy in the AOC 1 Open Space Area. The Initial Development may occur in one or more phases. Honeywell and Bayfront Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 60(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the AOC 1 Open Space Area shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 60(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the AOC 1 Open Space Area, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 60(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 60(b), and the Redevelopment Plan;

however, in the event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the AOC 1 Open Space Area, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 60(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 72(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 72(d) and 72(e) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the AOC 1 Open Space Area shall require the preparation and submission of a Development Plan pursuant

to paragraph 60(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 60(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and the Jersey City Entities. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and the Jersey City Entities for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 60(j)(v) and 60(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 60(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 60(j)(v); or

(3) The development meets the requirements of paragraphs 60(j)(v) and 60(j)(xi), and Jersey City provides notice of its intention to alter or add to the

development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 60(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) with an annual report that describes any alterations or additions, including those activities under paragraph 60(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the AOC 1 Open Space Area.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 60(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the AOC 1 Open Space Area, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 60(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 60(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the AOC 1 Open Space Area of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

61. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a

successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

62. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 56, 58, and 63. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

63. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the AOC 1 Open Space Area.

64. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 63. Honeywell shall provide Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the AOC 1 Open Space Area to ensure that it is not being put to any use that is inconsistent with paragraphs 60(j) and 60(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 60 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the AOC 1 Open Space Area is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the AOC 1 Open Space Area grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii) Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the AOC 1 Open Space Area such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design

and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv) A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the AOC 1 Open Space Area has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 56(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the AOC 1 Open Space Area to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a

minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii) Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 58(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the AOC 1 Open Space Area.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by

the Court.

(c) **Contingency Plan.** As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance.** The title owner of the AOC 1 Open Space Area shall conduct maintenance of the AOC 1 Open Space Area features or facilities that are permissible under paragraphs 60(j) and 60(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the AOC 1 Open Space Area or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of AOC 1 Open Space Area shall annually provide to the other Parties and the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the AOC 1 Open Space Area shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the AOC 1 Open Space Area identified by its workers during routine maintenance.

(e) **Recordkeeping.** Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring

Plan. Such logs shall be provided to Riverkeeper and the Jersey City Entities on a quarterly basis.

65. **Monitoring and Reporting to Riverkeeper and Jersey City Entities.** Riverkeeper and Jersey City Entities shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 72(c).

66. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the AOC 1 Open Space Area; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 64 and annual reports on changes to the Initial Development as required by paragraph 60(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The provision of the maps and documents referred to in paragraph 66(b)(ii) to the public via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

67. **Annual Letter to Riverkeeper and Jersey City Entities on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 66, Honeywell shall provide a letter to the Riverkeeper and the Jersey City Entities documenting its compliance with paragraph 66.

68. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

69. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the

remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

C. Oversight and Enforcement by the Special Master and NJDEP

70. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.C.

71. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the AOC 1 Open Space Area. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of the Historic Fill Remedy, the site preparation activities, and the site redevelopment activities described in the Jersey City/Honeywell Consent Order, Articles II.B, III, and IV, do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

72. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority.** NJDEP shall retain its full statutory and regulatory authority with respect to the Study Area 6 North site, including (i) permitting authority; (ii) authority to review and approve the Remedial Action Work Plan, 100% Design, and final

Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities.** The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting quarterly progress reports to the Court;

(vi) Overseeing the financial assurances established pursuant to paragraphs 77 through 86, and, until the expiration of his term pursuant to paragraph 76, overseeing the financial assurances established pursuant to paragraphs 87 through 98;

(vii) Coordinating review of the documents as provided in paragraphs 72(c) through 72(f);

(viii) Overseeing all development undertaken in the AOC 1 Open Space Area during the Initial Development Period pursuant to paragraph 60(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell.** Honeywell shall submit the following documents to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule");

(ii) Design drawings and specifications at the 50% level;

(iii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(iv) The data validation plan, including quality control and quality assurance protocols;

(v) The site-wide master health and safety plan;

(vi) The Long-Term Monitoring Plan;

(vii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(viii) A report reviewing measured groundwater levels for the groundwater remedy;

(ix) Documents required during the Initial Development Period pursuant to paragraphs 60(j)(vi), 60(j)(vii), and 60(j)(viii) ; and

(x) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Comment on Submitted Documents.** For each of the documents submitted by Honeywell pursuant to paragraph 72(c), the Special Master shall establish a schedule for the submission of comments and responses to comments. For each of the documents submitted, Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all received comments and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 72(e).

(e) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review.** All documents submitted by Honeywell, pursuant to paragraph 72(c) and 72(d), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 72(f). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure.** Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within 30 days of NJDEP's receipt of the notice. NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review.** If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(f) **Schedule and 100% Design Documents.** As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper and the Jersey City Entities shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(g) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less

stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(h) **Changes to the Schedule.** The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54(b); and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

73. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 75.

74. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"). The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

75. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the

oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

76. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 60(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 60(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall

be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

D. Initial Financial Assurances

77. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy;

(ii) The costs of monitoring and maintenance activities, as required by the Long-Term Monitoring Plan, for five years; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 77(a)(i) and 77(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

78. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than 60 days after entry by the Court of this Consent Decree, Honeywell shall submit to Riverkeeper, Jersey City Entities, and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If

Riverkeeper or the Jersey City Entities do not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

79. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 80, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.D, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

80. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper, the Jersey City Entities, and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 77(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.E. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and the Jersey City Entities in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such

terms. If Honeywell is not otherwise in default as provided in Article III.D and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

81. **Bankruptcy Protection.** Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

82. **Exclusive Court Jurisdiction.** The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

83. **Application of New York Law.** The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Chromium Remedy Letter of Credit.

84. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 71, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to

this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 79 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 84(c) above, and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to

carry out the terms of this Consent Decree.

85. **Placement of Proceeds in Court Registry Investment System Account.** In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 77(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 90(b)(v).

86. **Termination of Chromium Remedy Letter of Credit.** The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.E.

E. Long-Term Financial Assurances

87. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 89(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

88. **Resolution of the Amount of Long-Term Financial Assurances.** The Parties have agreed to the following options with regard to how the long-term financial assurances shall be determined:

(a) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less,

and agree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E.

(b) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, but disagree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E except that the dispute as to the amount of the long-term financial assurances shall be submitted to the Special Master pursuant to paragraph 91.

(c) If the Parties do not agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, or the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is greater than $10,000,000, the Parties shall seek resolution by the Court of the long-term financial assurances issues, including (i) the type of financial assurances to be provided; (ii) the scope of the financial assurances; (iii) the amount of the financial assurances; and (iv) the duration of the financial assurances. In the event that the Parties seek resolution by the Court, the provisions of paragraphs 90 through 98 shall not apply.

(d) Within 60 days of the entry of this Consent Decree, the Parties shall determine which option under this paragraph shall apply. In the event that the Parties determine that paragraph 88(c) applies, Riverkeeper shall initiate the proceedings by moving the Court for the imposition of long-term financial assurances.

(e) If the Parties determine that they are proceeding under paragraph 88(c), Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 77 in an amount equal to at least $20,000,000 in 2008 dollars until such time as the long-term financial assurances ordered by the Court are in place. In the event of any default by Honeywell pursuant

to paragraph 84 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 90(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under paragraph 77(a)(i) plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), shall apply.

89. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater pump-and-treat remedy;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) In the event that Honeywell selects a trust fund pursuant to paragraph 90(a), the perpetual administration of the trust fund.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 89(a)(i) through 89(a)(v) plus a 25% contingency when the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of

the estimated future costs of the activities specified in paragraphs 89(a)(i) through 89(a)(v), plus a 25% contingency on those costs.

90. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution managing the trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 89(a)(i) through 89(a)(iv).

(b) **Long-Term Letter of Credit.** In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 90(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 92.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit

and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(iii) The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Long-Term Letter of Credit.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 84. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a). After the Special Master's appointment expires pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws

on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 90(b)(ii), 90(b)(v) or 95 and Honeywell has also selected a trust fund pursuant to paragraph 90(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(c) **Combination.** Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 90(a) and 90(b).

91. **Procedures for Review of the Proposed Long-Term Financial Assurances.** In the event that the Parties have determined that they are proceeding pursuant to paragraph 88(a) or 88(b), no later than 120 days after the determination under paragraph 88(d), Honeywell shall submit to Riverkeeper, the Jersey City Entities, and the Special Master, for their review (a) the

amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper and the Jersey City Entities agree to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances. In any event, until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit and the requirements of paragraphs 88(e) and 90(b)(v) shall apply to the Chromium Remedy Letter of Credit.

92. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 90, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the

cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 90(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 90(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 90(b).

93. **Exclusive Court Jurisdiction.** The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the

trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 90(a), 90(b)(ii), 90(b)(v), or 95.

94. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper or the Jersey City Entities may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 90(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper or the Jersey City Entities to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under

paragraph 94(c), if Honeywell fails to provide assurance to Riverkeeper, the Jersey City Entities, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

95. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or the Jersey City Entities pursuant to paragraph 94 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

96. **Use of the Trust Fund in the Event of Honeywell's Default.** In the event of Honeywell's default, the money in the trust fund established pursuant to paragraph 90(a) shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

97. **Use of a Trust Fund Established Pursuant to Paragraph 85, 90(b)(ii), 90(b)(v), or 95.** In the event that a trust fund is established pursuant to paragraph 85, 90(b)(ii), 90(b)(v), or 95, the money in the trust fund shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

98. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations

under Article III.E shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: IMPLEMENTATION SCHEDULE AND TERMINATION

99. **Schedule for Remedy and Site Preparation Implementation Activities.** The Chromium Remedy under Article III and the Historic Fill Remedy under Article II.B of the Jersey City/Honeywell Consent Order and Site Preparation Activities under Article III of the Jersey City/Honeywell Consent Order shall be undertaken by the Parties in accordance with the following anticipated schedule, recognizing that this schedule may be further modified in writing by agreement of the Parties and with the approval of the Court:

(a) By October 1, 2008, the Jersey City Entities and Honeywell shall develop a Site Preparation Plan, pursuant to paragraph 3.2 of the Jersey City/Honeywell Consent Order, for all Site Preparation Activities necessary to undertake the Chromium Remedy;

(b) No later than June 18, 2009, Honeywell shall submit to NJDEP a remedial design document for the Chromium Remedy;

(c) No later than September 1, 2009, Honeywell shall submit all applications for permits and authorizations for the performance of the Chromium Remedy to all appropriate local, state, and federal government entities;

(d) Honeywell shall use its best efforts to complete the Chromium Remedy no later than four years after all appropriate applications and authorizations for the performance of the Chromium Remedy have been obtained;

(e) By May 1, 2008, Honeywell and the Jersey City Entities shall submit a work plan for further Remedial Investigation for AOC 2 to NJDEP; and

(f) By December 1, 2008, Honeywell and the Jersey City Entities shall submit a Remedial Action Selection Report and Remedial Action Workplan for the Historic Fill Remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order. The Workplan shall contain a schedule for implementation of the Historic Fill Remedy.

100. **Termination of this Consent Decree.** This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 108:

(a) The Court fails to enter the Jersey City/Honeywell Consent Order or this Consent Decree or either the Jersey City/Honeywell Consent Order or this Consent Decree is determined to be invalid on appeal;

(b) JCRA fails to take those actions required under paragraphs 4.11(a), (b), and (c) of the Jersey City/Honeywell Consent Order within nine months of entry of this Consent Decree; or

(c) JCRA fails to approve a Redevelopment Agreement between Bayfront Redevelopment LLC and JCRA pursuant to paragraph 4.11(e) of the Jersey City/Honeywell Consent Order within 12 months of entry of this Consent Decree.

101. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 100 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 100 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

102. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 100.

103. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 100, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 100, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: ADDITIONAL PROVISIONS RELATED TO HISTORIC FILL AND SITE PREPARATION AND REDEVELOPMENT

104. **Historic Fill Remedy**. This Consent Decree shall adopt and incorporate the terms of Article II.B of the Jersey City/Honeywell Consent Order with respect to the Historic Fill Remedy. The Historic Fill Remedy shall not be limited to the activities set forth in Article II.B of the Jersey City/Honeywell Consent Order in the event that NJDEP requires a more extensive remedy. The Historic Fill Remedy shall be compatible with the Chromium Remedy such that no

part of the Historic Fill Remedy shall interfere with the installation, maintenance, and monitoring of the Chromium Remedy. In addition, the Historic Fill Remedy for any discharge of non-chromium contaminants to the Hackensack River shall not interfere with the remedies under the Sediment Consent Order, including the source control remedies. In the event that Jersey City conducts the Historic Fill Remedy instead of Honeywell, the terms of this paragraph shall still apply.

105. **Oversight of Historic Fill Remedy**. Paragraph 2.11 of the Jersey City/Honeywell Consent Order shall apply only to the Historic Fill Remedy, not the Chromium Remedy. The Progress Reports provided for in paragraphs 2.12 and 3.7 of the Jersey City/Honeywell Consent Order shall be provided to Riverkeeper and the Special Master at the time they are submitted.

106. **Transfer of Title of Study Areas 6 North and 7 to and from Bayfront Redevelopment LLC**. The transfer of title of Study Area 6 North and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 North and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 North or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 North and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 North under this

Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell.*

107. **Dispute Resolution Procedures.** The provisions of Article VIII of the Jersey City/Honeywell Consent Order do not apply to any disputes regarding or impacting the Chromium Remedy, which shall be resolved as provided in paragraph 72. The provisions of Article VIII of the Jersey City/Honeywell Consent Order shall apply to disputes between the Jersey City Entities and Honeywell regarding the Historic Fill Remedy and other obligations provided in the Jersey City/Honeywell Consent Order, except to the extent that such disputes may affect the Chromium Remedy. If any such dispute may affect the Chromium Remedy, it shall be resolved as provided in paragraph 72. Honeywell shall provide Riverkeeper with a copy of each notice of any breach provided under paragraph 8.1 of the Jersey City/Honeywell Consent Order within 10 days of Honeywell's receipt or issuance of such notice. Honeywell shall provide Riverkeeper with a copy of any written resolution of a dispute pursuant to paragraph 8.2 within 10 days of the resolution.

ARTICLE XI: NOTICE

108. **Notice.** Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to JCIA:

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

If to JCMUA:

Sam Della Fera Jr.
Trenk, DiPasquale, Webster,
Della Ferra & Sodono, P.C.
347 Mount Pleasant Ave.
West Orange, NJ 07052
(973) 243-8600

If to JCRA:

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE XII: RIVERKEEPER'S ATTORNEYS' FEES

109. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $1,513,217.15 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 North portion of *Riverkeeper v. Honeywell* through March 27, 2008; and

(b) $187,862.27 in out-of-pocket expenses representing 50% of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses to be paid pursuant to the Sediment Consent Order.

Payment of the sum of $1,513,217.15 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $1,556,747.46 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

110. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after March 27, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell are unable to reach a

settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order.

ARTICLE XIII: MISCELLANEOUS PROVISIONS

111. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

112. **JCRA and Bayfront Redevelopment LLC as Parties.** As signatories to this Consent Decree, JCRA and Bayfront Redevelopment LLC subject themselves to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agree to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against JCRA and Bayfront Redevelopment LLC.

113. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

114. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

115. **Reservation of Rights and Claims**. Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

116. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

117. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

118. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

119. **Measures to Effectuate This Consent Decree.** The Jersey City Entities and JCRA shall take all appropriate steps to ensure that this Consent Decree has been (and that actions required hereunder will be) duly considered, ratified, and approved. Such steps include consideration of this Consent Decree at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the Settlement, including the commitments made by Jersey City; and consideration by and approval of the commissioners of the JCIA, JCMUA, and JCRA.

120. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

121. **Severability.** Each of the provisions in paragraph 60 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

122. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/David L. Isabel

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

Counsel for Jersey City Incinerator Authority

s/ Joni Noble McDonnell

Joni Noble McDonnell
Genova, Bruns & Giantomasi
4974 Broad Street
Newark, NJ 07102
973-535-4435

Counsel for Jersey City Municipal Utilities Authority

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Executive Director of Jersey City Redevelopment Agency

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

_____
Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Jersey City/Honeywell Consent Order

Exhibit B: Remedial AOC's and Remedial Approach Map

Exhibit C: NJDEP Chromium Policy

Exhibit D: Conservation Restriction

Exhibit E: Deed Notice

Deed Notice

Dated: _____, 2017

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: _____, Esq

DEED NOTICE #7
SA-6 NORTH TA-10-1

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature]
Global Director - Remediation Design & Construction
[Bayfront Redevelopment, LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]



20171214010145830 1/116
12/14/2017 12:44:34 PM DEED
Bk: 9265 Pg: 32
Diane Coleman
Hudson County, Register of Deeds
Receipt No 1312697

DEED NOTICE CONCERNING CONTROLS INSTALLED FOR CHROMIUM CONTAMINATION UNDERLYING THE PROPERTY

This Deed Notice is made as of the 29th day of November, 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950***. "Owner" shall mean Bayfront Redevelopment LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The "Property" (also referenced herein as the "Restricted Area(s)") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. Bayfront Redevelopment, LLC is the current owner in fee simple of certain real property designated as portions of ***Block 21901, Lot 9 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]. The New Jersey Department of Environmental Protection ("NJDEP") Program Interest ("PI") Number for the contaminated site which includes this property is ***Hudson County Chromate Site No. 087 PI # G000008710*** (NJDEP PI# for non-chromium-related contaminants at the Property is #745719). The Property is also part of the as Site 087 pursuant to the First Amended Consent Decree Regarding the Remediation and Redevelopment of Study Area 6 North ("Consent Decree") which is attached hereto as Appendix I and is entered as an

[1] All references to Block 21901 Lot 9 in this Deed Notice shall mean the applicable portions of Block 21901 Lot 9 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.,* D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The Consent Decree restricts transfer, use and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management ("BCM") is the entity within the Department that is responsible for the oversight of the remediation of the SA-6 North. The matter is Case No. Hudson County Chromate Site No. 087 PI# G000008710. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 North to address chromium-related soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") was approved by the Department on February 19, 2009 for Hudson County Chromate Site Nos. 087 and 088, which included portions of the Property. Remedial actions were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP, soil contamination remains in the Property at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 North was submitted to the Department on March 16, 2017. The Department approved the RAR on June 1, 2017. A Construction Completion Report ("CCR") for SA-6 North to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 North was entered by the Court on December 5, 2017, Docket No. 1528.

The Property includes a portion of the in-situ treatment area 10-1 ("TA-10-1") located north of the SA-6 North Open Space Area northern hydraulic barrier and north of the northern curbline of the future Stegman Boulevard. Due to the proximity of the force main, excavation of impacted soils in TA-10-1 is technically impracticable. Therefore, Honeywell implemented an in-situ treatment in this area in lieu of excavation. The Property is subject to post-remedy confirmation soil sampling. The Property is approximately 800 square feet. If the confirmation sampling demonstrates that hexavalent chromium concentrations are below 20 mg/kg within the Property, this deed notice will be terminated pursuant to Paragraph 13 below. In the meantime, the provisions of the Long Term Monitoring Plan ("LTMP"), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater contaminant concentrations and restrictions for SA-6 North in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater (recent groundwater samples for the Property do not indicate shallow groundwater contamination). As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil remediation for the Property in perpetuity or until remediation is implemented that renders this Deed Notice unnecessary.

4. CONSIDERATION. In accordance with the Department's approval of the chromium RAWP for the remediation for the Hudson County Chromate Site No. 087 which includes the Property, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained at either the onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a child care facility without the Department's prior written approval;

iii. The Consent Decree, paragraph 53, prohibits the unrestricted use of the Property until the Chromium Remedy set forth in Article III of the Consent Decree is implemented and confirmation sampling demonstrates that the concentration of hexavalent chromium in soil is less than 20 mg/kg to a depth of 20 feet below ground surface.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls within the Property. The engineering control includes 12 feet of clean soil and an asphalt cap. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Honeywell has developed an LTMP pursuant to the Consent Decree which sets forth requirements for monitoring, maintaining, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5E. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of known contamination in the Property, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and (b) without first obtaining a Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(b), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements in the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation

and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the Deed Notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 66 and 69 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C

Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. Unless this Deed Notice has been terminated pursuant to Paragraph 13, after development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system including trenches and pumps;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Restricted Area Data Tables - Table for the Property that includes:

(A) Sample location designation from Restricted Area maps (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C-1C. Exhibit C-1-A: Deed Notice as Institutional Control; Exhibit C-1-B: Consent Decree as Institutional Control; and Exhibit C-1C Zoning as Institutional Control: Exhibit C-1 includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
(1) Description and estimated size of the Restricted Areas as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:
(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;
(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and
(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;
(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and

(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2. Exhibit C-2: Engineering Controls:

Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:
(1) Description of the engineering control;
(2) The objective of the engineering control; and
(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:
(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;
(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;
(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;
(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;
(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and
(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;
(2) The engineering control continues to operate as designed; and
(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 29, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 29th day of November 2017.

Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #7 TA-10-1

A-1 Vicinity Map

A-2 Metes and Bounds Description and Tax Map

A-3 Property Map Portions of Block 21901, Lot 9, City of Jersey City, New Jersey

Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of metes and bounds and a tax map for the Property.

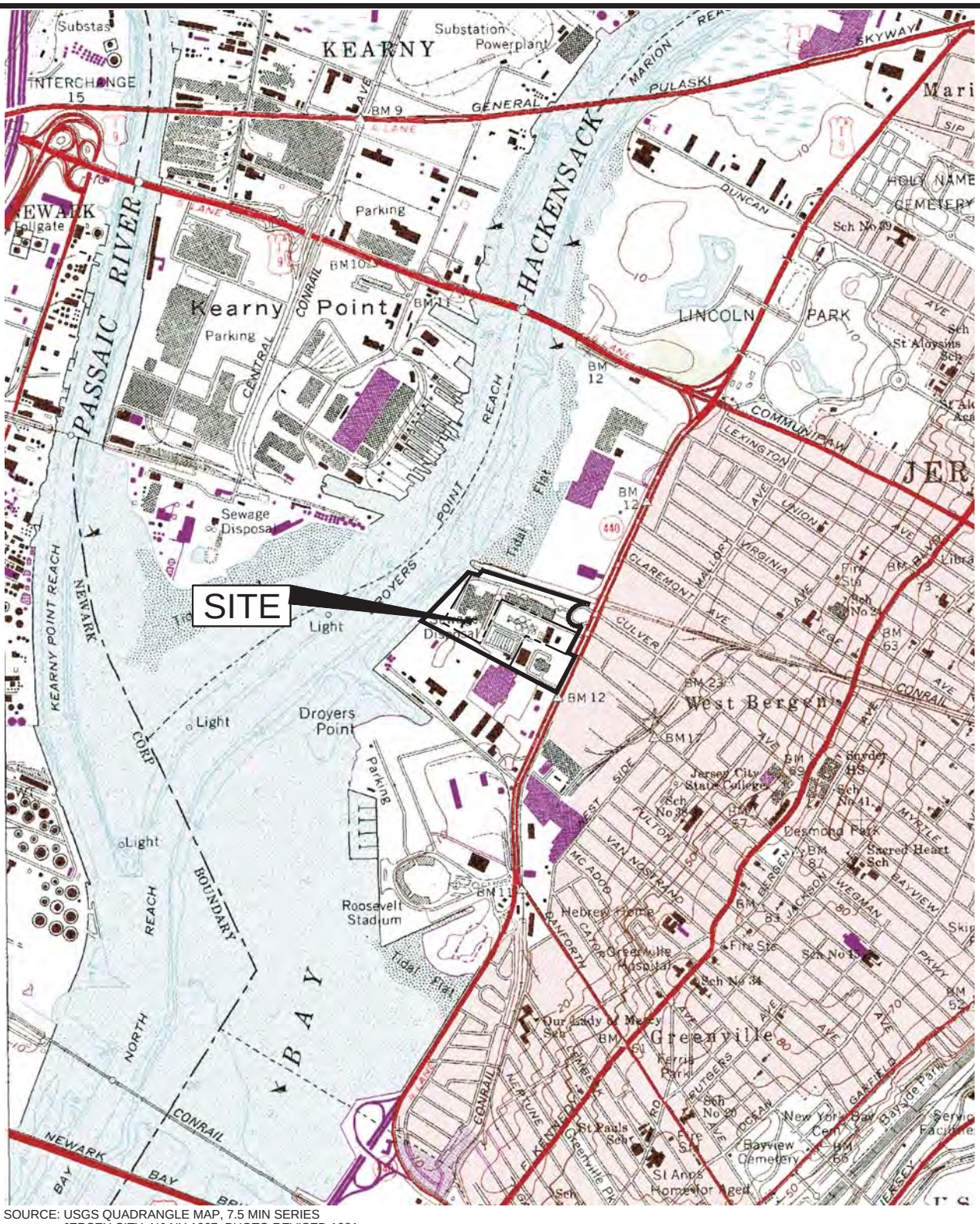
Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering control for the Property. Unless this Deed Notice has been terminated pursuant to Paragraph 13, after development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 6 NORTH SITE 087
JERSEY CITY, NEW JERSEY

CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\6100001\DEED NOTICE\DN_7\3480150487-6100-A107-0000.dwg Tue, 28 Nov 2017 - 10:34am scott.rudkin



SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150487-6100-A107-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-1
VICINITY MAP
BLOCK 21901 LOT 9
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #7

Exhibit A-2
Deed Notice #7 TA-10-1

Metes and Bounds Description of Property: See Attached
Tax Map: See Attached

A-2 Metes and Bounds Description of Property Portions of Block 21901, Lot 9
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map or any of the other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as portions of Block 21901, Lot 9 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment, LLC. A copy of the current tax map which includes the TA-10-1 Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 ▪ Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292R

DEED NOTICE AREA 7
BLOCK 21901 LOT 9
MAY 18, 2016
REVISED: AUGUST 16, 2017

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 9 Block 21901, designated as Deed Notice Area 7 as shown on an exhibit entitled, "Deed Notice Area 7, SA6 North, Block 21901, Lot 9, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated April 12, 2016, revised through August 16, 2017 and being more particularly bounded and described as follows, to wit:

COMENCING at the intersection of the westerly line of Lots 8 and 10, in Block 21901 with the division line between said lots as shown on the aforesaid exhibit; thence –

A. **S59° 39'05"E, 176.32 feet**, along said division line to the intersection of the same with the third course of an area designated as Deed Notice Area 5; thence—

Running along the westerly and northerly lines of said Deed Notice Area 5, the following thirteen (13) courses:

B. **N28° 37' 00"E, 19.46 feet**; thence –
C. **N30° 01' 01"E, 48.06 feet**; thence –
D. **N19° 17' 57"W, 17.97 feet**; thence –
E. **N31° 55' 37"E, 23.15 feet**; thence –
F. **N76° 06' 19"E, 18.87 feet**; thence –
G. **N29° 16' 27"E, 36.41 feet**; thence –
H. **S65° 27' 42"E, 153.93 feet**, through said Lot 10 and beyond, to a point in Lot 9; thence –

Running through said Lot 9 the following six (6) courses:

I. **N24° 46' 55"E, 9.39 feet**; thence –
J. **S63° 20' 43"E, 154.05 feet**; thence –
K. **S64° 10' 53"E, 3.13 feet**; thence –
L. **N89° 06' 30"E, 10.85 feet**; thence –
M. **S71° 33' 46"E, 49.04 feet**; thence –
N. **N64° 44' 16"E, 48.64 feet**, to the 4th True Point of **BEGINNING**, and running; thence –

Continuing through said Lot 9 the following five (5) courses:

1. **N64° 44' 16"E, 2.98 feet**; thence –

2. **S06° 31' 46"E, 21.50 feet**; thence –

3. **S79° 41' 26"E, 32.97 feet**; thence –

4. **S20° 45' 38"W, 27.84 feet** to the aforesaid northerly line of Deed Notice Area 5; thence –

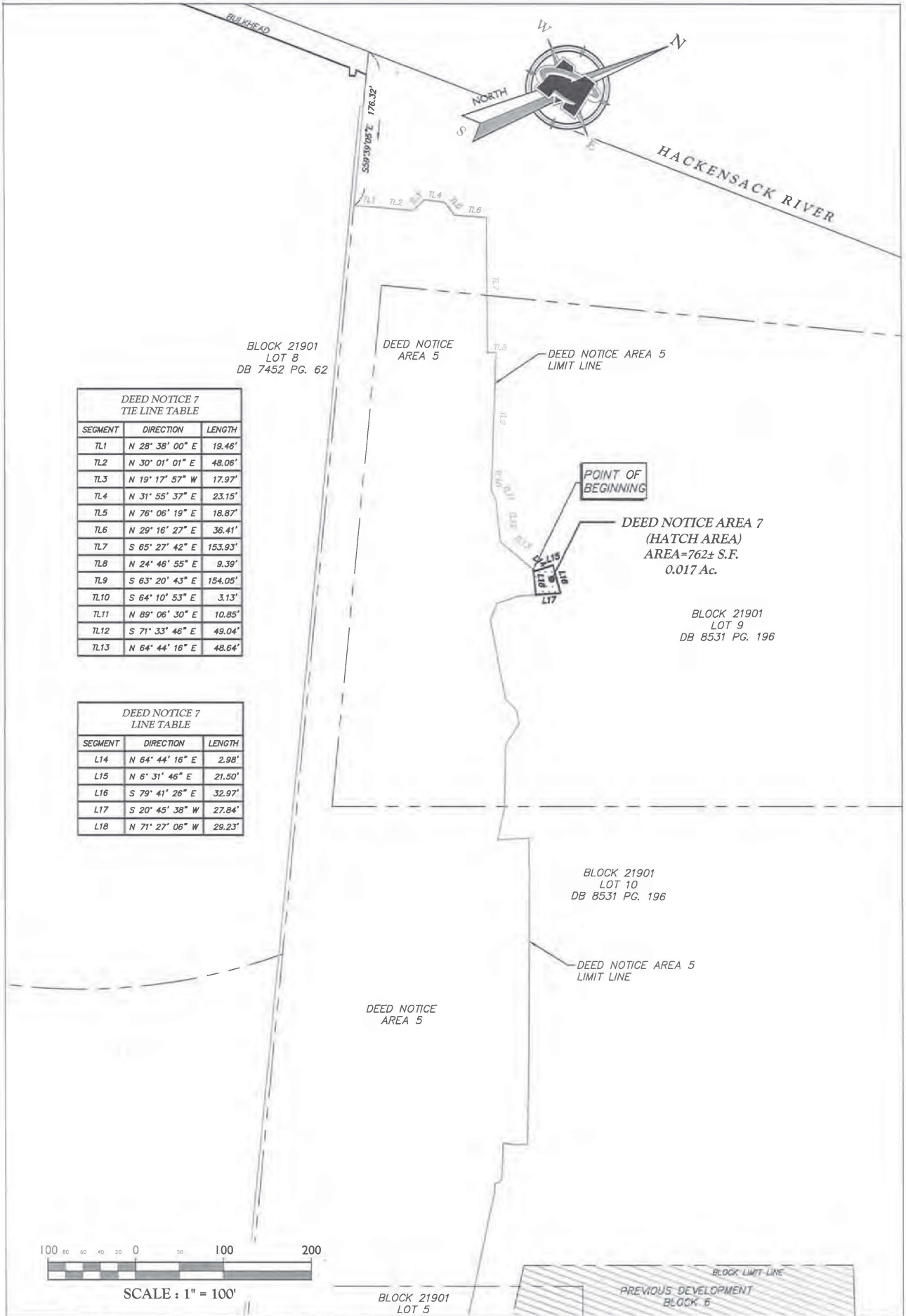
5. **S71° 27' 06"E, 29.23 feet** along said northerly line to the Point and Place of **BEGINNING**.

CONTAINING: 762 S.F. of land more or less or 0.017 acres of land more or less.

08/16/17

GLEN J. LLOYD, P.L.S. DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

R:\General\Projects\2010\10000292R\Survey\Description\Metes & Bounds-Deed Notice 7_REV 08.16.17.docx



DEED NOTICE 7
TIE LINE TABLE

SEGMENT	DIRECTION	LENGTH
TL1	N 28° 38' 00" E	19.46'
TL2	N 30° 01' 01" E	48.06'
TL3	N 19° 17' 57" W	17.97'
TL4	N 31° 55' 37" E	23.15'
TL5	N 76° 06' 19" E	18.87'
TL6	N 29° 16' 27" E	36.41'
TL7	S 65° 27' 42" E	153.93'
TL8	N 24° 46' 55" E	9.39'
TL9	S 63° 20' 43" E	154.05'
TL10	S 64° 10' 53" E	3.13'
TL11	N 89° 06' 30" E	10.85'
TL12	S 71° 33' 46" E	49.04'
TL13	N 64° 44' 16" E	48.64'

DEED NOTICE 7
LINE TABLE

SEGMENT	DIRECTION	LENGTH
L14	N 64° 44' 16" E	2.98'
L15	N 6° 31' 46" E	21.50'
L16	S 79° 41' 26" E	32.97'
L17	S 20° 45' 38" W	27.84'
L18	N 71° 27' 06" W	29.23'

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REV	DATE	DRAWN BY	DESCRIPTION
1	12/7/16	CJK	DIVIDED DN-7 INTO TWO (2) TRACTS
2	1/13/17	KAN	BLOCK 6
3	2/2/17	KAN	BLOCK 6
4	8/16/17	KAN	REVISED DN-7

DEED NOTICE AREA 7
SA6 NORTH

BLOCK 21901
LOT 9

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

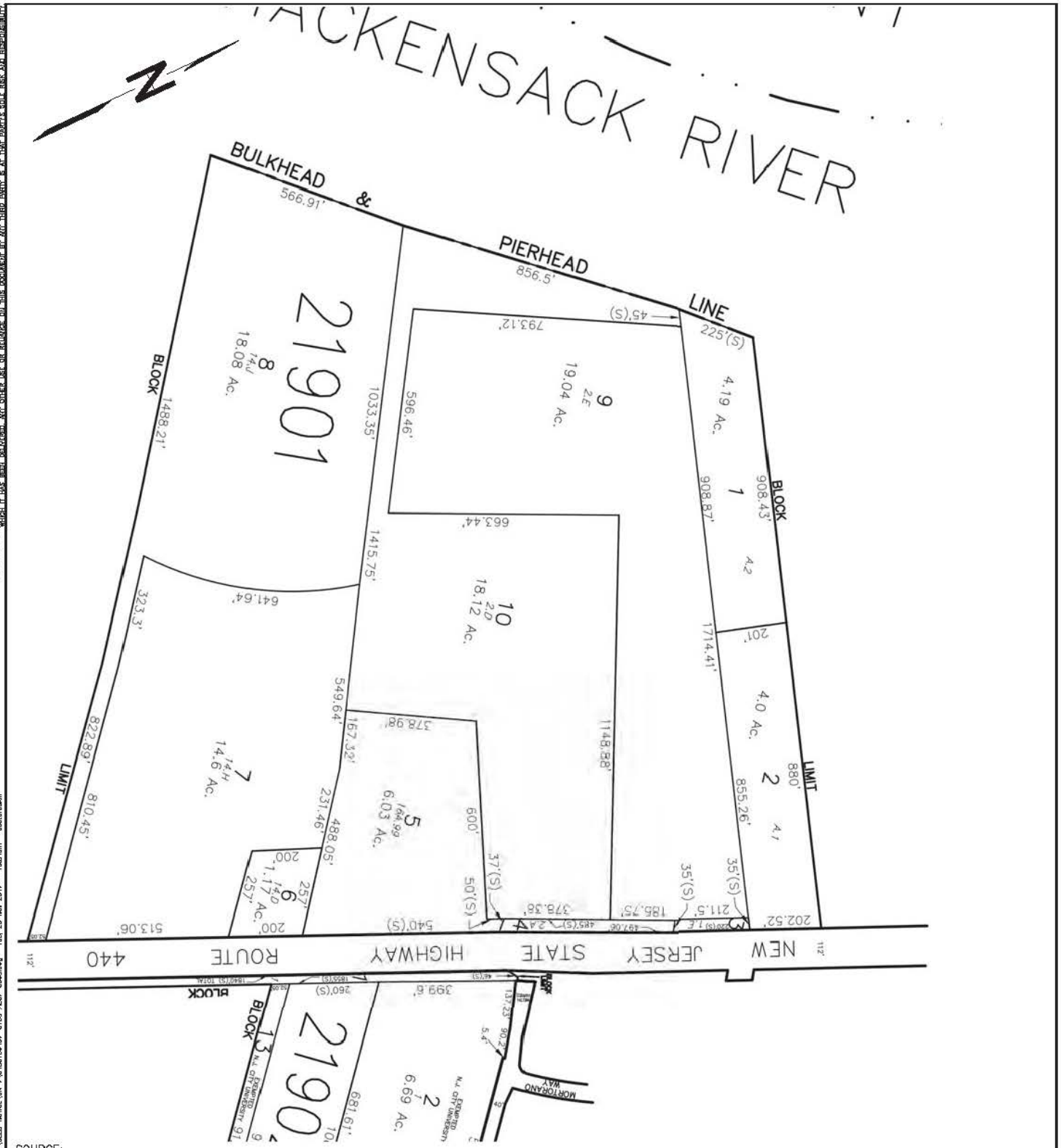
811 PROTECT YOURSELF
NJ STATE LAW(B.56:2-90) REQUIRES ONE CALL NOTIFICATION PRIOR TO EXCAVATION, DISCOVERY OR ANY PERSON WHO PLANS TO DISTURB THE EARTH'S SURFACE ANYWHERE IN NEW JERSEY
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

RED BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1964

SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	05/16/16	KAN	CJK
PROJECT NUMBER	DRAWING NAME		
1000021000	V:\000\T-DN-7_REV		

SHEET TITLE
DEED NOTICE EXHIBIT

SHEET NUMBER
1 of 1



SOURCE:
DRAWING TITLED: "TAX MAP CITY OF JERSEY CITY", PREPARED BY T&M ASSOCIATED, MIDDLETOWN TWP., NJ SHEET 219, DATED AUGUST, 2006; NEW JERSEY DEPARTMENT OF THE TREASURY DIVISION OF TAXATION PROPERTY ADMINISTRATION DATED MAY 8, 2009 SERIAL NO.: 934.

0 150 300 600
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 DRAWING: 3480150487-6100-A207-0000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-2** TAX MAP BLOCK 21901, LOT 9 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE # 7
PREPARED/DATE: STR 12/22/16	CHECKED/DATE: NW 01/31/17		

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P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 7\3480150487-6100-A207-0000.dwg Tue, 28 Nov 2017 - 10:34am scott.rudkin

Exhibit A-3
Property Map

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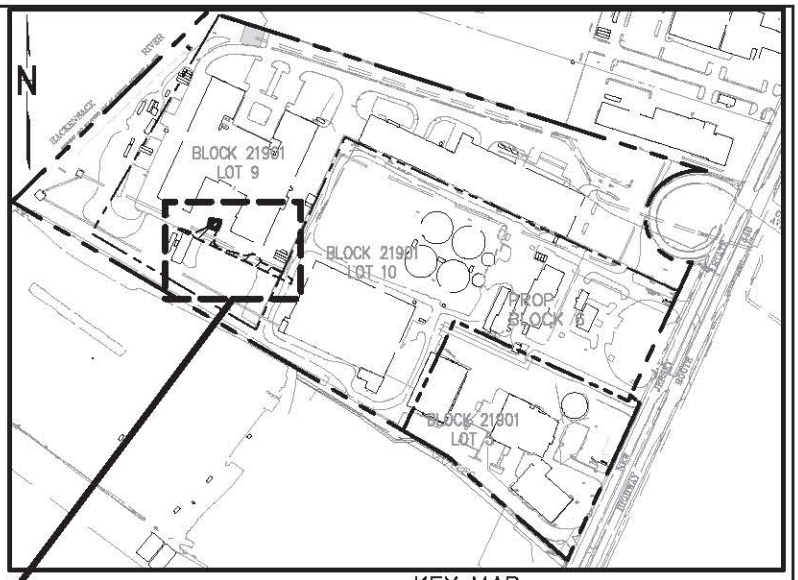
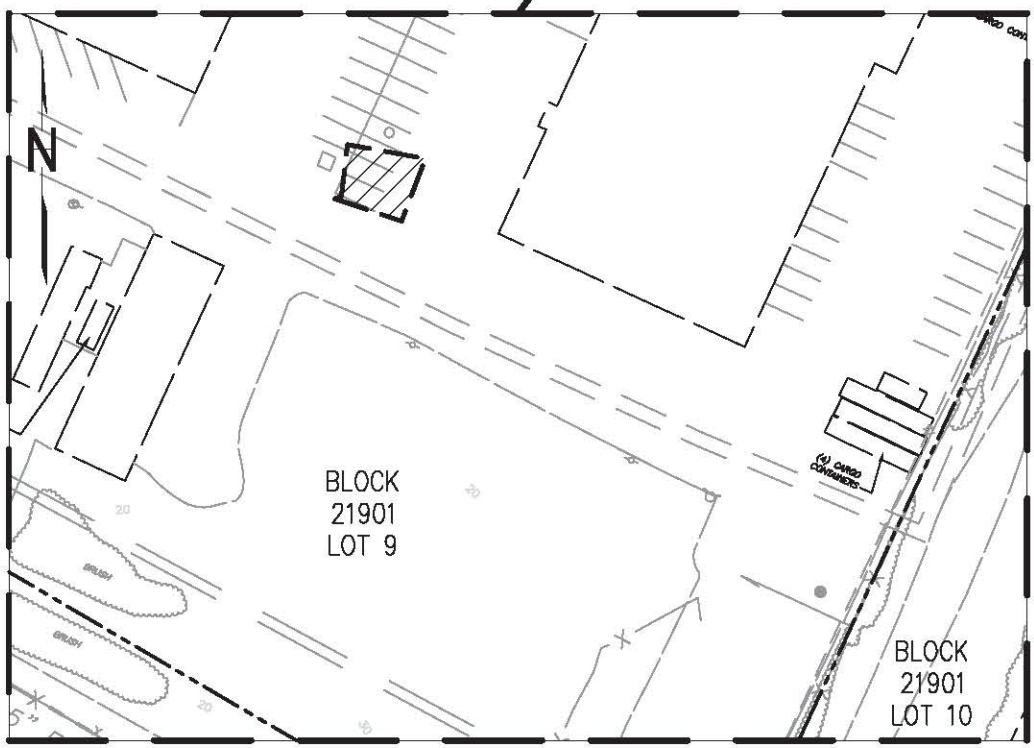
LEGEND

PROPERTY BOUNDARY

RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

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amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-3
PROPERTY AREA MAP
BLOCK 21901, LOT 9
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #7

EXHIBIT B
Deed Notice #7 TA-10-1

B-1 Restricted Area Maps
B-2 Restricted Area Data Table
Portions of Block 21901, Lot 9
City of Jersey City, New Jersey

Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area Soil Sample Locations), Exhibit B-1B (Cap System Detail), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of hexavalent chromium remaining above the level established in the New Jersey Department of Environmental Protection's (NJDEP) Chromium Policy of 20 milligrams per kilogram (mg/kg).

Restricted Area Map Notes:

Exhibit B-1 indicates engineering controls chromium remedy components. For soils with hexavalent chromium concentrations above 20 mg/kg, the engineering control is 12 feet of clean soil and an asphalt cap.

Exhibit B-1
Restricted Area Maps

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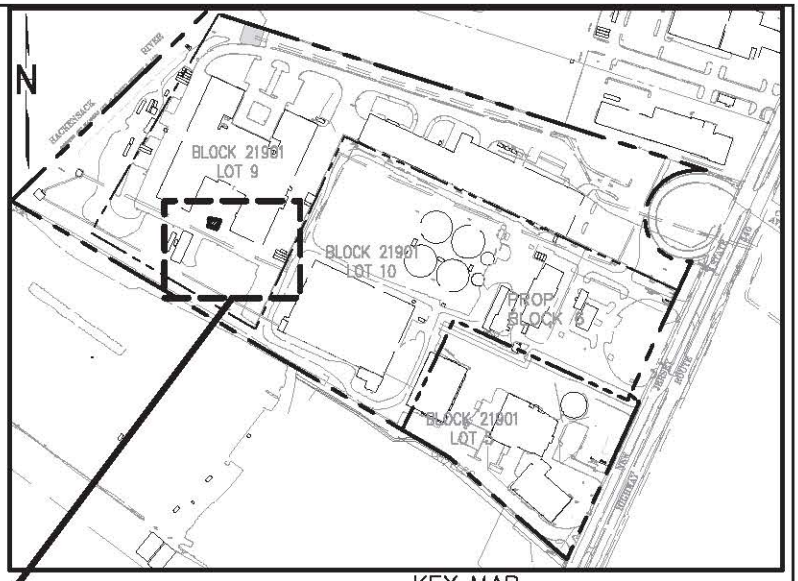
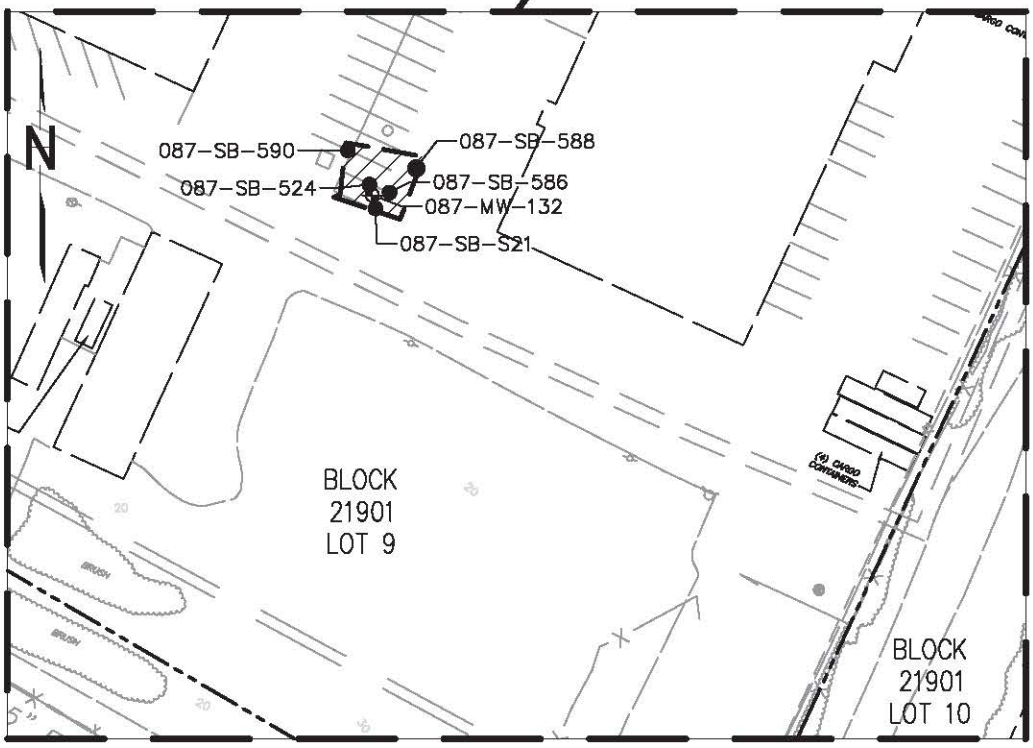
LEGEND

- MONITORING WELL
- MONITORING WELL
- PROPERTY BOUNDARY
- RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



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DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 40 80 160
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PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 12/22/16	

EXHIBIT B-1A
RESTRICTED AREA AND
ENGINEERING CONTROL
BLOCK 21901; LOT 9
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #7

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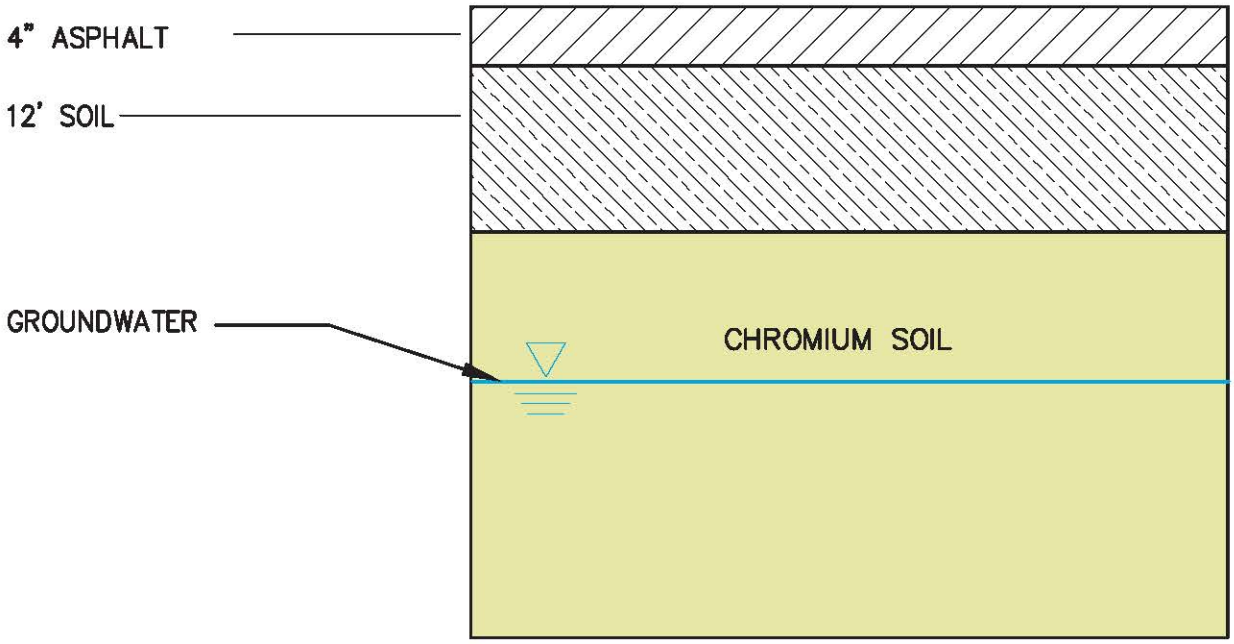
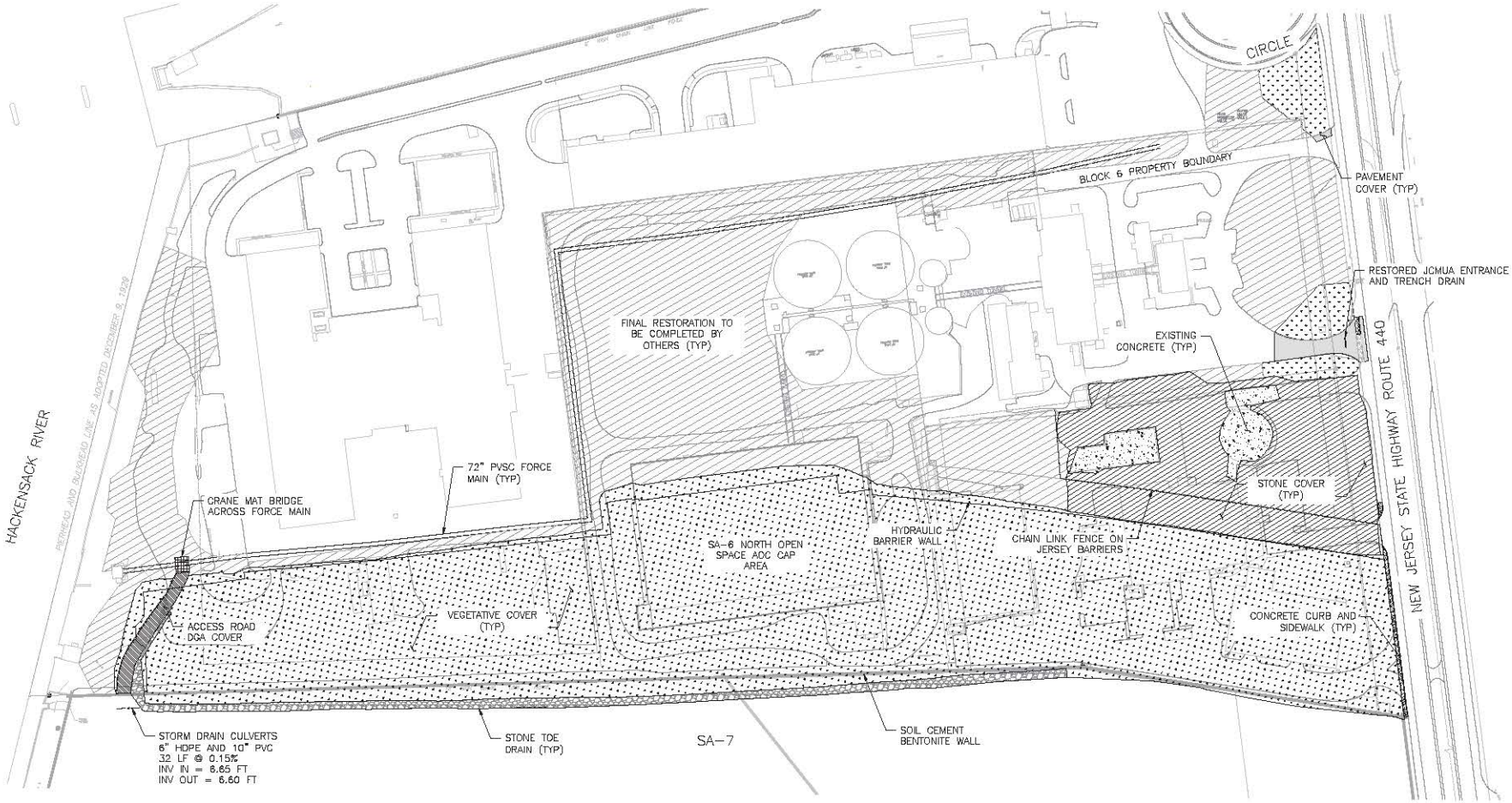


CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150487-6100-B207-0000	
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1B
CAP SYSTEM DETAIL
BLOCK 21901, LOT 9
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE # 7



NOTE:

1. REFER TO CONSTRUCTION CONTROL GRID FIGURE AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE WITHIN THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. REMAINING RESTORATION AREAS IDENTIFIED ON THE CHROMIUM REMEDY 100% DESIGN DRAWINGS WILL BE ADDRESSED AS PART OF THE NON CHROMIUM REMEDIATION WORK CURRENTLY BEING COMPLETED. FINAL RESTORATION OF ALL AREAS IS SCHEDULED TO BE COMPLETE IN MARCH 2017.

EXHIBIT B-1C

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
DGA COVER
RESTORATION BY OTHERS
STONE TOE DRAIN
SD STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH - SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

Exhibit B-2: Table B-2
Soil Sample Data Table (Hexavalent Chromium)

EXHIBIT B-2
Restricted Area Data Table
Study Area 6 North
Portions of Block 21901, Lot 9
Deed Notice #7 TA-10 Area
Jersey City, New Jersey

Location ID	Sample Depth (feet bgs)	Sample Elevation (NAVD88)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Northing	Easting	CONC	Q
087-SB-524	12 - 12.5	2.8	Hexavalent Chromium	18540-29-9	20	685993.297658	602534.809075	**27.6**	J
087-SB-586	13 - 13.5	1.8	Hexavalent Chromium	18540-29-9	20	685989.98	602543.31	**25.1**	
087-SB-588	12-14	2.8	Hexavalent Chromium	18540-29-9	20	686000.3446	602554.3418	**26.7**	J
087-SB-590	13 - 13.5	1.8	Hexavalent Chromium	18540-29-9	20	686007.53	602525.89	**34.5**	
087-SB-S21	12 - 14	2.8	Hexavalent Chromium	18540-29-9	20	685979.7247	602535.8078	**39**	J

Notes:
Results reported in milligrams per kilogram (mg/kg).

Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010
CASR# - Chemical Abstract Service Number

EXHIBIT C
Deed Notice #7 TA-10-1

C-1 Institutional Controls
C-2 Engineering Controls
Portions of Block 21901, Lot 9
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree, Zoning as Institutional Controls: Exhibit C-1 (A through C) for portions of Block 21901, Lot 9, City of Jersey City, New Jersey known as the TA-10 Area

Exhibits C-1A through C-1C. Exhibit C-1-A: Deed Notice as Institutional Control; Exhibit C-1-B: Consent Decree as Institutional Control; Exhibit C-1C Zoning as Institutional Control: Exhibits C-1A through C-1C include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property includes a portion of the in-situ treatment area 10-1 ("TA-10-1") located north of the SA-6 North Open Space Area hydraulic barrier and north of the northern curbline of the future Stegman Boulevard. Due to the proximity of the force main, excavation of impacted soils in TA-10-1 is technically impracticable. Therefore, Honeywell implemented an in-situ treatment in this area in lieu of excavation. The Property is subject to post-remedy confirmation soil sampling. This Property is approximately 800 square feet. If the confirmation sampling demonstrates that hexavalent chromium concentrations are below 20 mg/kg within the Property, this deed notice will be terminated pursuant to Paragraph 13 above. In the meantime, the provisions of the LTMP, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes portions of Block 21901, Lot 9. The estimated size of the Area containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) is identified on Exhibit B-1 is estimated at approximately 800 square feet or approximately 0.017 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the

terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Policy of 20 mg/kg.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and the applicable portions of the LTMP developed thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the applicable zoning standards; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice*, and *the applicable zoning standards.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #7 TA-10-1

Portions of Block 21901, Lot 9
City of Jersey City, New Jersey

Exhibits C-2A through C: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Control consists of 12 feet of clean soil and an asphalt cap.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above 20 mg/kg. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies of this Deed Notice for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***

- ***A report to determine whether or not the engineering controls continue to operate as designed.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.***

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5955 Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 NORTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with various properties collectively designated by NJDEP as Study Areas 5, 6 North, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, the property owned by JCIA and JCMUA and collectively the subject of *JCMUA v. Honeywell* and *JCIA v. Honeywell* comprises a part of Study Area 6 North;

Whereas, the City of Jersey City ("Jersey City") also owns property that comprises a part of Study Area 6 North;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* Jersey City, JCMUA, and JCIA (collectively the "Jersey City Entities");

Whereas, the Jersey City Entities and Honeywell also asserted cross-claims against each other in *Riverkeeper v. Honeywell*;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the United States District Court for the District of New Jersey (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, the Jersey City Entities and Riverkeeper have alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 North property;

Whereas, in the Consolidated Litigation, Honeywell has alleged that the Jersey City Entities bear full responsibility for lead and other contamination on the Study Area 6 North property, and also bear an equitable share of liability for the presence and remediation of COPR and chromium in soils and groundwater on the Study Area 6 North property and for chromium and other contamination in Hackensack River sediments in the vicinity of Study Area 6 North;

Whereas, on October 9, 2007, Honeywell and Riverkeeper submitted the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 North that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq.*, as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, the portions of Study Area 6 and Study Area 7 (i) which are owned by the Jersey City Entities, (ii) which are owned by Honeywell, (iii) as to which Honeywell has a purchase and sale agreement with the current owner, or (iv) which hereafter will be acquired by a Jersey City Entity and/or Honeywell are parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 North and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City;

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Parties as a means to accomplish the aforesaid purposes of this settlement;

Whereas, the consent of each of the Jersey City Entities to this Consent Decree was considered at a duly noticed and appropriate meeting of their respective governing bodies, open to the public, at which members of the public were provided an opportunity to comment on all aspects of the settlement, including, without limitation, the commitments made by the Jersey City Entities herein; and

Whereas, Honeywell and the Jersey City Entities are settling their claims, cross-claims, or counter-claims in the Consolidated Litigation against each other in the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with this Consent Decree and attached as Exhibit A to this Consent Decree:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **AOC 1** shall mean that area of Study Area 6 North in which the hexavalent chromium concentration in the top 20 feet of soil below existing ground surfaces exceeds concentrations of 20 mg/kg and the Chromium Remedy will be implemented pursuant to Article III. AOC 1 is shown on Exhibit B.

2. **AOC 1 Additional Excavation Areas** shall mean those areas of Study Area 6 North which require excavation pursuant to paragraph 57. The AOC 1 Additional Excavation Areas are not contiguous to AOC 1. The AOC 1 Additional Excavation Areas are shown on Exhibit B.

3. **AOC 1 Open Space Area** shall mean the AOC 1 Open Space Area, as defined by paragraph 53, consisting of approximately 11 acres enclosed by the hydraulic barrier walls constructed under the Chromium Remedy, and which shall be subject to paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B.

4. **AOC 2** shall mean that area of Study Area 6 North on which the Historic Fill Remedy will be implemented pursuant to Article II.B of the Jersey City/Honeywell Consent Order. AOC 2 is shown on Exhibit B.

5. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

6. **COPR** shall mean Chromite Ore Processing Residue.

7. **Chromium Remedy** or **Chromium Remediation** shall mean the remedy set forth in Article III.

8. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC).

9. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

10. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, and the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, currently pending before the Special Master in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell reach a settlement on source control issues, the Deep Groundwater Remedy shall

include the remedy to which Riverkeeper and Honeywell have agreed. In the event that Riverkeeper and Honeywell do not reach a settlement on source control issues, the Deep Groundwater Remedy shall include the remedy ordered by the Special Master or the Court in *ICO v. Honeywell* for source control.

11. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

12. **Historic Fill** shall have the definition provided in the NJDEP Technical Requirements for Site Remediation.

13. **Historic Fill Remedy or Historic Fill Remediation** shall mean the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order, except that the Historic Fill Remedy shall not be limited to the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order if NJDEP requires a more stringent remedy.

14. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

15. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

16. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

17. **Including** shall mean including, but not limited to.

18. **JCIA** shall mean the Jersey City Incinerator Authority.

19. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

20. **JCRA** shall mean the Jersey City Redevelopment Agency.

21. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

22. **Jersey City/Honeywell Consent Order** shall mean the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* entered in the Consolidated Litigation simultaneously with this Consent Decree.

23. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

24. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit C.

25. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

26. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*, as amended.

27. **Redevelopment Agreement** shall have the meaning set forth in paragraph 4.11(e) of the Jersey City/Honeywell Consent Order.

28. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

29. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. 40A:12A1, *et seq.*, as amended and supplemented.

30. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

31. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

32. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, which the Parties expect will be entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation.

33. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

34. **Site** shall mean Study Area 6 North.

35. **Site Preparation Activities** shall have the meaning set forth in paragraph 3.1 of the Jersey City/Honeywell Consent Order.

36. **Site Preparation Plan** shall have the meaning set forth in paragraph 3.2 of the Jersey City/Honeywell Consent Order.

37. **Soil** shall mean soils, historic fill, and/or COPR.

38. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

39. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

40. **Study Area 6 North** shall mean that property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 41.58 acres and including: (a) all such property owned by JCMUA located at 555 Route 440, Jersey City, New Jersey, (b) all such property owned by JCIA located at 501 Route 440, Jersey City, New Jersey; (c) all such property owned by Jersey City or its Department of Public Works and located at 575 Route 440, Jersey City, New Jersey; and (d) all such property owned by Paul Trenk consisting of Block 1290.1, Lot 2A, Jersey City, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

41. **Study Area 6 South** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Kellogg Street 60 LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Kellogg Street/440 Property LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Cordova Enterprises Ltd located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey, and (g) that property currently owned by Cordova Enterprises Ltd located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

42. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

43. **Study Area 7** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that property currently owned by Roned Realty/Edward Navlen located at 465 Route 440, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

44. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

45. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

46. Except as provided in this paragraph, the terms of the Jersey City/Honeywell Consent Order shall remain in full force and effect. To the extent that any provision in the Jersey City/Honeywell Consent Order refers to the Chromium Remedy or Chromium Remediation, it shall be construed as referring to Article III of this Decree. In the event of any conflict or inconsistency between the terms of this Decree and the Jersey City/Honeywell Consent Order, the terms of this Decree govern. In the event that any action taken pursuant to the Jersey City/Honeywell Consent Order is in conflict with or inconsistent with the terms of this Decree, the terms of this Decree shall govern.

47. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

48. For purposes of this Consent Decree, the Complaints in the Consolidated Litigation each state claims upon which relief may be granted against Honeywell.

49. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 100, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils and shallow groundwater at Study Area 6 North. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 6 South, Study Area 5, or groundwater at Study Area 6 North other than shallow groundwater.

50. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

51. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. Chromium Remedy

52. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 North at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 North shall be undertaken in accordance with the terms of this Consent Decree.

53. **AOC 1 and AOC 2.** For the purposes of remediation, Study Area 6 North shall consist of two Areas of Concern ("AOCs"), designated as AOC 1 and AOC 2 as shown on Exhibit B. AOC 1 is set forth on Exhibit B and consists of that portion of Study Area 6 North for which chromium remediation is required pursuant to paragraphs 55, 56, and 57. AOC 2 consists of the entirety of Study Area 6 North, including AOC 1, to the extent that historic fill is present in any area of Study Area 6 North. For AOC 1, the intended land use will determine the types

of remedial measures taken in the Chromium Remedy. There are two distinct land uses for AOC 1: open space and residential. As a result, AOC 1 will be further subdivided into:

(a) The AOC 1 Open Space Area, which shall comprise that portion of AOC 1 for which future use shall be restricted as provided in paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B;

(b) The AOC 1 Residential Area, which shall comprise that portion of AOC 1 for which future use shall allow for residential and/or commercial and retail uses, but for which the remedial measures shall assume only a residential use . The AOC 1 Residential Area is shown on Exhibit B; and

(c) The AOC 1 Additional Excavation Areas, which consist of those portions of Study Area 6 North that require remediation pursuant to paragraph 57. The planned land use for the AOC 1 Additional Excavation Areas is residential and/or commercial and retail uses, but the remedial measures shall assume only a residential use.

54. **Scope and General Requirements of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and soil containing hexavalent chromium in AOC 1, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow level of groundwater (see paragraph 58). The deep overburden and bedrock groundwater remediation, including source control, shall be addressed in a separate consent order, which shall place these issues within the jurisdiction of the Special Master in conjunction with the groundwater remedies for Study Area 7.

(a) The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and the Remedial Action Work Plan (with addenda) approved by NJDEP on or about February 19, 2008. This Consent Decree shall have precedence

over the Remedial Action Work Plan in the event of any inconsistency.

(b) The Chromium Remedy shall be carried out diligently, and the development and implementation of the Historic Fill Remedy shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Honeywell shall propose a master Schedule for the implementation of the Chromium Remedy within 90 days of the entry of this Consent Decree, which shall include, at a minimum, the following milestones:

(i) Submission to the Special Master for all documents subject to review by the Special Master pursuant to paragraph 72(c);

(ii) Relocation of the Jersey City Entities' Study Area 6 North Operations as shall be required prior to the implementation of the Chromium Remedy;

(iii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy, including remediation of the AOC 1 Additional Excavation Areas;

(iv) A final date for Honeywell's proposal of *in situ* treatment for any part of the AOC 1 Residential Area pursuant to paragraph 55(d) and a date for the final decision as to whether excavation or *in situ* treatment shall be used in the event of such a proposal;

(v) The initiation of work related to the Chromium Remedy;

(vi) The date for completion of the installation of the Chromium Remedy;

(vii) Implementation of the long-term protections of the AOC 1 Open Space Area established pursuant to paragraph 60; and

(viii) Transfer of the AOC 1 Open Space Area to Jersey City pursuant to paragraph 60(a)(iii).

(c) **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community

from airborne dusts and exposures to contaminated soils.

(d) **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

55. **AOC 1 Residential Area Soil Remedy.** In the AOC 1 Residential Area, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive.

(a) Those soils excavated from the AOC 1 Residential Area in which hexavalent chromium concentrations exceed 240 mg/kg shall be disposed of off-site at a waste disposal facility licensed to accept such waste.

(b) Those soils excavated from the AOC 1 Residential Area in which the hexavalent chromium concentration is less than 240 mg/kg, but greater than 20 mg/kg, shall be consolidated within the AOC 1 Open Space Area. However, any such soils which would require venting of gases shall be disposed of off-site.

(c) Soils excavated from the AOC 1 Residential Area shall be replaced with existing soils from AOC 2 or backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

(d) In the AOC 1 Residential Area, excavation of soils containing hexavalent chromium greater than 20 mg/kg shall be the presumptive remedy. Around remaining active underground utilities or other structures, such as the bulkhead, *in situ* treatment may be considered in lieu of excavation only if Honeywell demonstrates, and all Parties, the Special

Master, and NJDEP agree that (1) excavation is technically impracticable and (2) treatment will result in hexavalent chromium concentrations of 20 mg/kg or less and no rebound will occur. If no treatment option is available, Honeywell shall propose an alternative remedial approach, subject to review and comment by the Parties and approval by the Special Master.

(e) Honeywell shall excavate all soils containing hexavalent chromium greater than 20 mg/kg in conjunction with the placement of the piping for the Deep Groundwater Remedy. Honeywell shall not propose treatment in lieu of excavation based on the location of the pipes for the Deep Groundwater Remedy or any apparent impracticability of excavating in conjunction with their installation.

56. **AOC 1 Open Space Area Soil Remedy.** In the AOC 1 Open Space Area, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils, with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is

needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities. Honeywell shall configure the cap so that all active piping for the wastewater treatment system operated by JCMUA, including all force mains and any connections to the emergency outfall, shall be outside the capped area. Honeywell may propose, subject to the review process in paragraph 72, to use treatment in lieu of excavation in the vicinity of the emergency outfall line if the criteria of paragraph 55(d) are satisfied; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the AOC 1 Open Space Area. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the AOC 1 Open Space Area shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the two feet of clean fill required by paragraph 56(c). Excavated hexavalent

chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the AOC 1 Residential Area shall be placed and spread in the AOC 1 Open Space Area under the cap. Excavated hexavalent chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the Study Area 6 South Development AOC (as defined in the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South and including only those portions of Study Area 6 South for which the future uses of the property may include commercial or residential development) may be placed and spread in the AOC 1 Open Space Area under the cap, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

57. **AOC 1 Additional Excavation Areas Remedy.** For those AOC 1 Additional Excavation Areas, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive. Excavation of those areas comprising the AOC 1 Additional Excavation Areas shall initially be conducted in the 50-foot by 50-foot area planned in the RAWP but shall not be so limited in the event that confirmation sampling indicates that hexavalent chromium concentrations continue to exceed 20 mg/kg. Honeywell shall excavate laterally and vertically (to depths of up to 20 feet below current ground surface) until the hexavalent chromium is less than 20 mg/kg based on the results of confirmation sampling. Confirmation sampling for the AOC 1 Additional Excavation Areas shall be taken from the side

walls and bottom of the excavation, in accordance with the Technical Requirements for Site Remediation, to confirm complete removal of contaminated soils.

58. **Shallow Groundwater Remedy.** The shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing above the meadow mat in the AOC 1 Open Space Area. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 North and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the northern, eastern and western sides of the AOC 1 Open Space Area and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that will consist of (i) one or more shallow extraction wells, sumps, or french drains within the AOC 1 Open Space Area; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater (except for shallow groundwater that penetrates the meadow mat and is captured by the Deep Groundwater Remedy);

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP

regulations.

59. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article. The Jersey City Entities agree to cooperate with Honeywell in the applications for any such permits, authorizations, or approvals. Such cooperation shall include providing information or data with respect to permit applications, co-signing permit applications, and allowing access to Study Area 6 North to obtain information necessary for the permits.

B. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

60. **Protection of the AOC 1 Open Space Area.** Except as provided in paragraphs 60(j) and 60(k), development in the AOC 1 Open Space Area shall be prohibited. The AOC 1 Open Space Area shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the AOC 1 Open Space Area pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54(b):

(a) **Ownership of and Access to the AOC 1 Open Space Area.** Ownership of and access to the AOC 1 Open Space Area shall be in accordance with the following:

(i) Pursuant to the terms of this Consent Decree and paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall become the owner in fee simple absolute of all of the property that comprises the AOC 1 Open Space Area and shall not convey any rights or interests in such property except as provided in this Decree. At the time

of the conveyance from JCRA to Bayfront Redevelopment LLC, Bayfront Redevelopment LLC shall give Jersey City an option to buy AOC 1 Open Space Area prior to the planned transfer pursuant to paragraph 60(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall exercise the option to buy the AOC 1 Open Space Area in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 84(c) or 84(d) are met;

(ii) At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall grant a conservation restriction for the AOC 1 Open Space Area pursuant to the requirements of paragraph 60(b);

(iii) Upon the final construction of all roads and utility corridors within the AOC 1 Open Space Area, Bayfront Development LLC shall donate good and marketable title to all the land comprising the AOC 1 Open Space Area to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 North to create a new parcel(s) comprising the AOC 1 Open Space Area. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the AOC 1 Open Space Area by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the AOC 1 Open Space Area unless and until it shall have complied with the requirements of paragraph 60(a)(iv);

(iv) After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the AOC 1 Open Space Area to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the AOC 1 Open Space Area to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the AOC 1 Open Space Area and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the AOC 1 Open Space Area pursuant to this paragraph and routine maintenance of the permissible development in the AOC 1 Open Space Area pursuant to paragraph 64(d); or

(2) The AOC 1 Open Space Area has been remediated such that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, but prior to the grant of the option to buy pursuant to paragraph 60(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the AOC 1 Open Space Area substantially in the form set forth in Exhibit D. Exhibit D is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 60(j) and 60(k), including the construction and

placement of roads and utilities. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the AOC 1 Open Space Area as set forth in paragraphs 60(j) and 60(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph60(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the

levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the AOC 1 Open Space Area shall be subjected to the deed notice substantially in the form set forth in Exhibit E that restricts future activities on the AOC 1 Open Space Area. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the AOC 1 Open Space Area pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 60(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 60(b), and the deed notice imposed pursuant to paragraph 60(c) shall be recorded, pursuant to N.J.S.A. 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the AOC 1 Open Space Area. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the AOC 1 Open Space Area in the real estate records related to the AOC 1 Open Space Area.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the AOC 1 Open Space Area is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 60(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the AOC 1 Open Space, Jersey City shall add those portions of the AOC 1 Open Space Area not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to

roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor, maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 60(j) and 60(k); and (iv) the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the AOC 1 Open Space Area have been added to its ROSI, such that those portions of the AOC 1 Open Space Area shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the AOC 1 Open Space Area is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 60(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the AOC 1 Open Space Area subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the AOC 1 Open Space Area under the statute. If the Parties are unable to reach agreement on establishment of an environmental

covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the AOC 1 Open Space Area. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the AOC 1 Open Space Area if they would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in AOC 1 Open Space Area.** Only development satisfying the requirements of this paragraph and paragraph 60(k) shall be permitted in the AOC 1 Open Space Area. All other development in the AOC 1 Open Space Area shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the AOC 1 Open Space Area regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 60(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the AOC 1 Open Space Area shall be the

development undertaken following the completion of the Chromium Remedy in the AOC 1 Open Space Area. The Initial Development may occur in one or more phases. Honeywell and Bayfront Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 60(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the AOC 1 Open Space Area shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 60(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the AOC 1 Open Space Area, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 60(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 60(b), and the Redevelopment Plan;

however, in the event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the AOC 1 Open Space Area, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 60(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 72(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 72(d) and 72(e) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the AOC 1 Open Space Area shall require the preparation and submission of a Development Plan pursuant

to paragraph 60(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 60(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and the Jersey City Entities. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and the Jersey City Entities for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 60(j)(v) and 60(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 60(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 60(j)(v); or

(3) The development meets the requirements of paragraphs 60(j)(v) and 60(j)(xi), and Jersey City provides notice of its intention to alter or add to the

development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 60(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) with an annual report that describes any alterations or additions, including those activities under paragraph 60(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the AOC 1 Open Space Area.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 60(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the AOC 1 Open Space Area, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 60(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 60(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the AOC 1 Open Space Area of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

61. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a

successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

62. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 56, 58, and 63. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

63. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the AOC 1 Open Space Area.

64. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 63. Honeywell shall provide Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the AOC 1 Open Space Area to ensure that it is not being put to any use that is inconsistent with paragraphs 60(j) and 60(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 60 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the AOC 1 Open Space Area is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the AOC 1 Open Space Area grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii) Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the AOC 1 Open Space Area such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design

and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv) A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the AOC 1 Open Space Area has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 56(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the AOC 1 Open Space Area to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a

minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii) Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 58(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the AOC 1 Open Space Area.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by

the Court.

(c) **Contingency Plan.** As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance.** The title owner of the AOC 1 Open Space Area shall conduct maintenance of the AOC 1 Open Space Area features or facilities that are permissible under paragraphs 60(j) and 60(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the AOC 1 Open Space Area or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of AOC 1 Open Space Area shall annually provide to the other Parties and the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the AOC 1 Open Space Area shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the AOC 1 Open Space Area identified by its workers during routine maintenance.

(e) **Recordkeeping.** Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring

Plan. Such logs shall be provided to Riverkeeper and the Jersey City Entities on a quarterly basis.

65. **Monitoring and Reporting to Riverkeeper and Jersey City Entities.** Riverkeeper and Jersey City Entities shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 72(c).

66. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the AOC 1 Open Space Area; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 64 and annual reports on changes to the Initial Development as required by paragraph 60(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The provision of the maps and documents referred to in paragraph 66(b)(ii) to the public via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

67. **Annual Letter to Riverkeeper and Jersey City Entities on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 66, Honeywell shall provide a letter to the Riverkeeper and the Jersey City Entities documenting its compliance with paragraph 66.

68. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

69. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the

remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

C. Oversight and Enforcement by the Special Master and NJDEP

70. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.C.

71. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the AOC 1 Open Space Area. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of the Historic Fill Remedy, the site preparation activities, and the site redevelopment activities described in the Jersey City/Honeywell Consent Order, Articles II.B, III, and IV, do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

72. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority.** NJDEP shall retain its full statutory and regulatory authority with respect to the Study Area 6 North site, including (i) permitting authority; (ii) authority to review and approve the Remedial Action Work Plan, 100% Design, and final

Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities.** The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting quarterly progress reports to the Court;

(vi) Overseeing the financial assurances established pursuant to paragraphs 77 through 86, and, until the expiration of his term pursuant to paragraph 76, overseeing the financial assurances established pursuant to paragraphs 87 through 98;

(vii) Coordinating review of the documents as provided in paragraphs 72(c) through 72(f);

(viii) Overseeing all development undertaken in the AOC 1 Open Space Area during the Initial Development Period pursuant to paragraph 60(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell.** Honeywell shall submit the following documents to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule");

(ii) Design drawings and specifications at the 50% level;

(iii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(iv) The data validation plan, including quality control and quality assurance protocols;

(v) The site-wide master health and safety plan;

(vi) The Long-Term Monitoring Plan;

(vii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(viii) A report reviewing measured groundwater levels for the groundwater remedy;

(ix) Documents required during the Initial Development Period pursuant to paragraphs 60(j)(vi), 60(j)(vii), and 60(j)(viii) ; and

(x) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Comment on Submitted Documents.** For each of the documents submitted by Honeywell pursuant to paragraph 72(c), the Special Master shall establish a schedule for the submission of comments and responses to comments. For each of the documents submitted, Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all received comments and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 72(e).

(e) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review.** All documents submitted by Honeywell, pursuant to paragraph 72(c) and 72(d), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 72(f). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure.** Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within 30 days of NJDEP's receipt of the notice. NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review.** If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(f) **Schedule and 100% Design Documents.** As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper and the Jersey City Entities shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(g) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less

stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(h) **Changes to the Schedule.** The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54(b); and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

73. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 75.

74. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"). The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

75. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the

oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

76. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 60(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 60(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall

be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

D. Initial Financial Assurances

77. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy;

(ii) The costs of monitoring and maintenance activities, as required by the Long-Term Monitoring Plan, for five years; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 77(a)(i) and 77(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

78. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than 60 days after entry by the Court of this Consent Decree, Honeywell shall submit to Riverkeeper, Jersey City Entities, and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If

Riverkeeper or the Jersey City Entities do not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

79. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 80, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.D, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

80. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper, the Jersey City Entities, and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 77(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.E. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and the Jersey City Entities in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such

terms. If Honeywell is not otherwise in default as provided in Article III.D and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

81. **Bankruptcy Protection.** Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

82. **Exclusive Court Jurisdiction.** The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

83. **Application of New York Law.** The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Chromium Remedy Letter of Credit.

84. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 71, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to

this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 79 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 84(c) above, and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to

carry out the terms of this Consent Decree.

85. **Placement of Proceeds in Court Registry Investment System Account.** In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 77(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 90(b)(v).

86. **Termination of Chromium Remedy Letter of Credit.** The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.E.

E. Long-Term Financial Assurances

87. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 89(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

88. **Resolution of the Amount of Long-Term Financial Assurances.** The Parties have agreed to the following options with regard to how the long-term financial assurances shall be determined:

(a) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less,

and agree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E.

(b) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, but disagree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E except that the dispute as to the amount of the long-term financial assurances shall be submitted to the Special Master pursuant to paragraph 91.

(c) If the Parties do not agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, or the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is greater than $10,000,000, the Parties shall seek resolution by the Court of the long-term financial assurances issues, including (i) the type of financial assurances to be provided; (ii) the scope of the financial assurances; (iii) the amount of the financial assurances; and (iv) the duration of the financial assurances. In the event that the Parties seek resolution by the Court, the provisions of paragraphs 90 through 98 shall not apply.

(d) Within 60 days of the entry of this Consent Decree, the Parties shall determine which option under this paragraph shall apply. In the event that the Parties determine that paragraph 88(c) applies, Riverkeeper shall initiate the proceedings by moving the Court for the imposition of long-term financial assurances.

(e) If the Parties determine that they are proceeding under paragraph 88(c), Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 77 in an amount equal to at least $20,000,000 in 2008 dollars until such time as the long-term financial assurances ordered by the Court are in place. In the event of any default by Honeywell pursuant

to paragraph 84 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 90(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under paragraph 77(a)(i) plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), shall apply.

89. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater pump-and-treat remedy;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) In the event that Honeywell selects a trust fund pursuant to paragraph 90(a), the perpetual administration of the trust fund.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 89(a)(i) through 89(a)(v) plus a 25% contingency when the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of

the estimated future costs of the activities specified in paragraphs 89(a)(i) through 89(a)(v), plus a 25% contingency on those costs.

90. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution managing the trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 89(a)(i) through 89(a)(iv).

(b) **Long-Term Letter of Credit.** In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 90(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 92.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit

and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(iii) The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Long-Term Letter of Credit.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 84. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a). After the Special Master's appointment expires pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws

on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 90(b)(ii), 90(b)(v) or 95 and Honeywell has also selected a trust fund pursuant to paragraph 90(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(c) **Combination.** Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 90(a) and 90(b).

91. **Procedures for Review of the Proposed Long-Term Financial Assurances.** In the event that the Parties have determined that they are proceeding pursuant to paragraph 88(a) or 88(b), no later than 120 days after the determination under paragraph 88(d), Honeywell shall submit to Riverkeeper, the Jersey City Entities, and the Special Master, for their review (a) the

amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper and the Jersey City Entities agree to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances. In any event, until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit and the requirements of paragraphs 88(e) and 90(b)(v) shall apply to the Chromium Remedy Letter of Credit.

92. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 90, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the

cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 90(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 90(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 90(b).

93. **Exclusive Court Jurisdiction.** The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the

trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 90(a), 90(b)(ii), 90(b)(v), or 95.

94. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper or the Jersey City Entities may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 90(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper or the Jersey City Entities to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under

paragraph 94(c), if Honeywell fails to provide assurance to Riverkeeper, the Jersey City Entities, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

95. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or the Jersey City Entities pursuant to paragraph 94 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

96. **Use of the Trust Fund in the Event of Honeywell's Default.** In the event of Honeywell's default, the money in the trust fund established pursuant to paragraph 90(a) shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

97. **Use of a Trust Fund Established Pursuant to Paragraph 85, 90(b)(ii), 90(b)(v), or 95.** In the event that a trust fund is established pursuant to paragraph 85, 90(b)(ii), 90(b)(v), or 95, the money in the trust fund shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

98. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations

under Article III.E shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: IMPLEMENTATION SCHEDULE AND TERMINATION

99. **Schedule for Remedy and Site Preparation Implementation Activities.** The Chromium Remedy under Article III and the Historic Fill Remedy under Article II.B of the Jersey City/Honeywell Consent Order and Site Preparation Activities under Article III of the Jersey City/Honeywell Consent Order shall be undertaken by the Parties in accordance with the following anticipated schedule, recognizing that this schedule may be further modified in writing by agreement of the Parties and with the approval of the Court:

(a) By October 1, 2008, the Jersey City Entities and Honeywell shall develop a Site Preparation Plan, pursuant to paragraph 3.2 of the Jersey City/Honeywell Consent Order, for all Site Preparation Activities necessary to undertake the Chromium Remedy;

(b) No later than June 18, 2009, Honeywell shall submit to NJDEP a remedial design document for the Chromium Remedy;

(c) No later than September 1, 2009, Honeywell shall submit all applications for permits and authorizations for the performance of the Chromium Remedy to all appropriate local, state, and federal government entities;

(d) Honeywell shall use its best efforts to complete the Chromium Remedy no later than four years after all appropriate applications and authorizations for the performance of the Chromium Remedy have been obtained;

(e) By May 1, 2008, Honeywell and the Jersey City Entities shall submit a work plan for further Remedial Investigation for AOC 2 to NJDEP; and

(f) By December 1, 2008, Honeywell and the Jersey City Entities shall submit a Remedial Action Selection Report and Remedial Action Workplan for the Historic Fill Remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order. The Workplan shall contain a schedule for implementation of the Historic Fill Remedy.

100. **Termination of this Consent Decree.** This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 108:

(a) The Court fails to enter the Jersey City/Honeywell Consent Order or this Consent Decree or either the Jersey City/Honeywell Consent Order or this Consent Decree is determined to be invalid on appeal;

(b) JCRA fails to take those actions required under paragraphs 4.11(a), (b), and (c) of the Jersey City/Honeywell Consent Order within nine months of entry of this Consent Decree; or

(c) JCRA fails to approve a Redevelopment Agreement between Bayfront Redevelopment LLC and JCRA pursuant to paragraph 4.11(e) of the Jersey City/Honeywell Consent Order within 12 months of entry of this Consent Decree.

101. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 100 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 100 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

102. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 100.

103. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 100, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 100, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: ADDITIONAL PROVISIONS RELATED TO HISTORIC FILL AND SITE PREPARATION AND REDEVELOPMENT

104. **Historic Fill Remedy**. This Consent Decree shall adopt and incorporate the terms of Article II.B of the Jersey City/Honeywell Consent Order with respect to the Historic Fill Remedy. The Historic Fill Remedy shall not be limited to the activities set forth in Article II.B of the Jersey City/Honeywell Consent Order in the event that NJDEP requires a more extensive remedy. The Historic Fill Remedy shall be compatible with the Chromium Remedy such that no

part of the Historic Fill Remedy shall interfere with the installation, maintenance, and monitoring of the Chromium Remedy. In addition, the Historic Fill Remedy for any discharge of non-chromium contaminants to the Hackensack River shall not interfere with the remedies under the Sediment Consent Order, including the source control remedies. In the event that Jersey City conducts the Historic Fill Remedy instead of Honeywell, the terms of this paragraph shall still apply.

105. **Oversight of Historic Fill Remedy**. Paragraph 2.11 of the Jersey City/Honeywell Consent Order shall apply only to the Historic Fill Remedy, not the Chromium Remedy. The Progress Reports provided for in paragraphs 2.12 and 3.7 of the Jersey City/Honeywell Consent Order shall be provided to Riverkeeper and the Special Master at the time they are submitted.

106. **Transfer of Title of Study Areas 6 North and 7 to and from Bayfront Redevelopment LLC**. The transfer of title of Study Area 6 North and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 North and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 North or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 North and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 North under this

Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell.*

107. **Dispute Resolution Procedures.** The provisions of Article VIII of the Jersey City/Honeywell Consent Order do not apply to any disputes regarding or impacting the Chromium Remedy, which shall be resolved as provided in paragraph 72. The provisions of Article VIII of the Jersey City/Honeywell Consent Order shall apply to disputes between the Jersey City Entities and Honeywell regarding the Historic Fill Remedy and other obligations provided in the Jersey City/Honeywell Consent Order, except to the extent that such disputes may affect the Chromium Remedy. If any such dispute may affect the Chromium Remedy, it shall be resolved as provided in paragraph 72. Honeywell shall provide Riverkeeper with a copy of each notice of any breach provided under paragraph 8.1 of the Jersey City/Honeywell Consent Order within 10 days of Honeywell's receipt or issuance of such notice. Honeywell shall provide Riverkeeper with a copy of any written resolution of a dispute pursuant to paragraph 8.2 within 10 days of the resolution.

ARTICLE XI: NOTICE

108. **Notice.** Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to JCIA:

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

If to JCMUA:

Sam Della Fera Jr.
Trenk, DiPasquale, Webster,
Della Ferra & Sodono, P.C.
347 Mount Pleasant Ave.
West Orange, NJ 07052
(973) 243-8600

If to JCRA:

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE XII: RIVERKEEPER'S ATTORNEYS' FEES

109. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $1,513,217.15 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 North portion of *Riverkeeper v. Honeywell* through March 27, 2008; and

(b) $187,862.27 in out-of-pocket expenses representing 50% of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses to be paid pursuant to the Sediment Consent Order.

Payment of the sum of $1,513,217.15 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $1,556,747.46 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

110. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after March 27, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell are unable to reach a

settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order.

ARTICLE XIII: MISCELLANEOUS PROVISIONS

111. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

112. **JCRA and Bayfront Redevelopment LLC as Parties.** As signatories to this Consent Decree, JCRA and Bayfront Redevelopment LLC subject themselves to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agree to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against JCRA and Bayfront Redevelopment LLC.

113. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

114. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

115. **Reservation of Rights and Claims**. Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

116. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

117. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

118. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

119. **Measures to Effectuate This Consent Decree.** The Jersey City Entities and JCRA shall take all appropriate steps to ensure that this Consent Decree has been (and that actions required hereunder will be) duly considered, ratified, and approved. Such steps include consideration of this Consent Decree at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the Settlement, including the commitments made by Jersey City; and consideration by and approval of the commissioners of the JCIA, JCMUA, and JCRA.

120. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

121. **Severability.** Each of the provisions in paragraph 60 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

122. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/David L. Isabel

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

Counsel for Jersey City Incinerator Authority

s/ Joni Noble McDonnell

Joni Noble McDonnell
Genova, Bruns & Giantomasi
4974 Broad Street
Newark, NJ 07102
973-535-4435

Counsel for Jersey City Municipal Utilities Authority

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Executive Director of Jersey City Redevelopment Agency

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

_____
Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Jersey City/Honeywell Consent Order

Exhibit B: Remedial AOC's and Remedial Approach Map

Exhibit C: NJDEP Chromium Policy

Exhibit D: Conservation Restriction

Exhibit E: Deed Notice

Deed Notice

Dated: _____, 2017

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: _____, Esq

DEED NOTICE #9
SA-6 NORTH FORMER TRENK

Deed Notice #9
SA-6 North, Deferred Area (Former Trenk Property)
Portions of Block 21901 Lot 4

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature]
Global Director - Remediation Design & Construction
[Bayfront Redevelopment, LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

20171214010145840 1/117
12/14/2017 12:50:04 PM DEED
Bk: 9265 Pg: 148
Diane Coleman
Hudson County, Register of Deeds
Receipt No 1312716

DEED NOTICE CONCERNING CONTROLS INSTALLED FOR CHROMIUM CONTAMINATION UNDERLYING THE PROPERTY

This Deed Notice is made as of the 29th day of November, 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950.*** "Owner" shall mean Bayfront Redevelopment, LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. Block 21901 Lot 5 is currently owned by Bayfront Redevelopment, LLC. The "Property" (also referenced herein as the "Deferred Area" or the "Restricted Area(s)") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. Bayfront Redevelopment, LLC is the current owner in fee simple of certain real property designated the Deferred Area as portions of ***Block 21901, Lot 4 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]. The New Jersey Department of Environmental Protection (NJDEP) Program Interest Number for the contaminated site which includes this property is ***Hudson County Chromate Site No. 087 Program Interest ("PI") # G000008710*** (NJDEP PI# for non-chromium-related contaminants at the Property is #745719). The Property is part of Site 087 pursuant to the Consent Decree Regarding Remediation and Redevelopment of

[1] All references to Block 21901 Lot 4 in this Deed Notice shall mean the applicable portions of Block 21901 Lot 4 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

Study Area 6 North ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.,* D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097).

2. REMEDIATION.

i. The Department's Bureau of State Case Management (BCM) is the entity within the Department that is responsible for the oversight of the remediation of the SA-6 North. The matter was Case No. Hudson County Chromate Site No. 087 PI# G000008710. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 North to address chromium-related soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") was approved by the Department on February 19, 2009 for Hudson County Chromate Site Nos. 087 and 088, which included the Property. Remedial actions were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP soil contamination remains in the Property which contains contaminants in concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 North was submitted to the Department on March 16, 2017. The Department approved the RAR on June 1, 2017. A Construction Completion Report ("CCR") for SA-6 North to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 North was entered by the Court on December 5, 2017, Docket No. 1528.

The Property consists of two small areas on SA-6 North adjacent to the Route 440 Right-Of-Way ("ROW") where the Public Service Electric & Gas ("PSE&G") gas main is located north and east of the SA-6 North Open Space Area. The Property is comprised of two tracts of land; Tract 1 is near Culver Circle at the Route 440 ROW and Tract 2 is further south along the Route 440 ROW closer to the SA-6 North Open Space Area. Tract 1 is an approximately 1,408 square foot area. Tract 2 is an approximately 971 square foot area. Both tracts include chromium only. Excavations in this part of SA-6 North were limited in these areas by the PSE&G gas main and will be deferred until after the Route 440 ROW widening project. Thus, these areas are termed "Deferred Areas." This deed notice is for both Tracts 1 and 2 together. Once the remediation of these areas is completed consistent with Article III of the Consent Decree, Honeywell will terminate this Deed

Notice pursuant to Paragraph 13 below. In the meantime, the provisions of the Long Term Monitoring Plan ("LTMP"), developed pursuant to the Consent Decree, will apply to the Property.

It is not anticipated that implementation of the Bayfront I Redevelopment Plan will impact the Property. Because this area is so narrow, is proximate to the Route 440 ROW, and the gas main is located within the area, remediation of the Property will need to be deferred until the gas main is relocated.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater contaminant concentrations and restrictions for SA-6 North in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater (recent groundwater samples from the Property do not indicate shallow groundwater contamination). As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil remediation for the Property in perpetuity or until remediation is implemented that renders this Deed Notice unnecessary.

4. CONSIDERATION. In accordance with the Department's approval of the chromium RAWP for the remediation of Hudson County Chromate Site Nos. 087 and 088 which includes the Property, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of contamination remaining at concentrations that do not allow for unrestricted use, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained at either the onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a child care facility without the Department's prior written approval; and

iii. The Consent Decree, paragraph 53, prohibits the unrestricted use of the Property until the Chromium Remedy set forth in Article III of the Consent Decree is implemented and the concentration of hexavalent chromium in soil is less than 20 mg/kg to a depth of 20 feet below ground surface.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls within the Property. The engineering controls include a cap consisting of 1 foot of clean soil at the northern-most restricted area and a cap consisting of a geotextile demarcation fabric overlain by 6-inches of gravel at the southern-most restricted area. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, the LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has developed a LTMP which sets forth requirements for monitoring, maintaining, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5F. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of known contamination in the Property, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and (b) without first obtaining a Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(b), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment, pursuant to Paragraph 8B below; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment, pursuant to Paragraph 8B below; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded, pursuant to Paragraph 8B below.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 66 and 69 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. Unless this Deed Notice has been terminated pursuant to Paragraph 13, after development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system including trenches and pumps;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Restricted Area Data Tables - Table for the Property that includes:

(A) Sample location designation from Restricted Area maps (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C-1C. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control; Exhibit C-1C: Zoning as Institutional Control: Exhibit C-1 includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
(1) Description and estimated size of the Restricted Areas as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:
(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;
(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;
(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and
(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2. Exhibit C-2: Engineering Controls:

Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:
(1) Description of the engineering control;
(2) The objective of the engineering control; and
(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:
(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;
(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;
(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;
(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;
(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and
(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering control continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on November 29, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 29th day of November, 2017.

Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #9 SA-6 North Deferred Area (Former Trenk Property)

A-1 Vicinity Map

A-2 Metes and Bounds Description and Tax Map

A-3 Property Map Portions of Block 21901, Lot 4, City of Jersey City, New Jersey

Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of metes and bounds and a tax map for the Property.

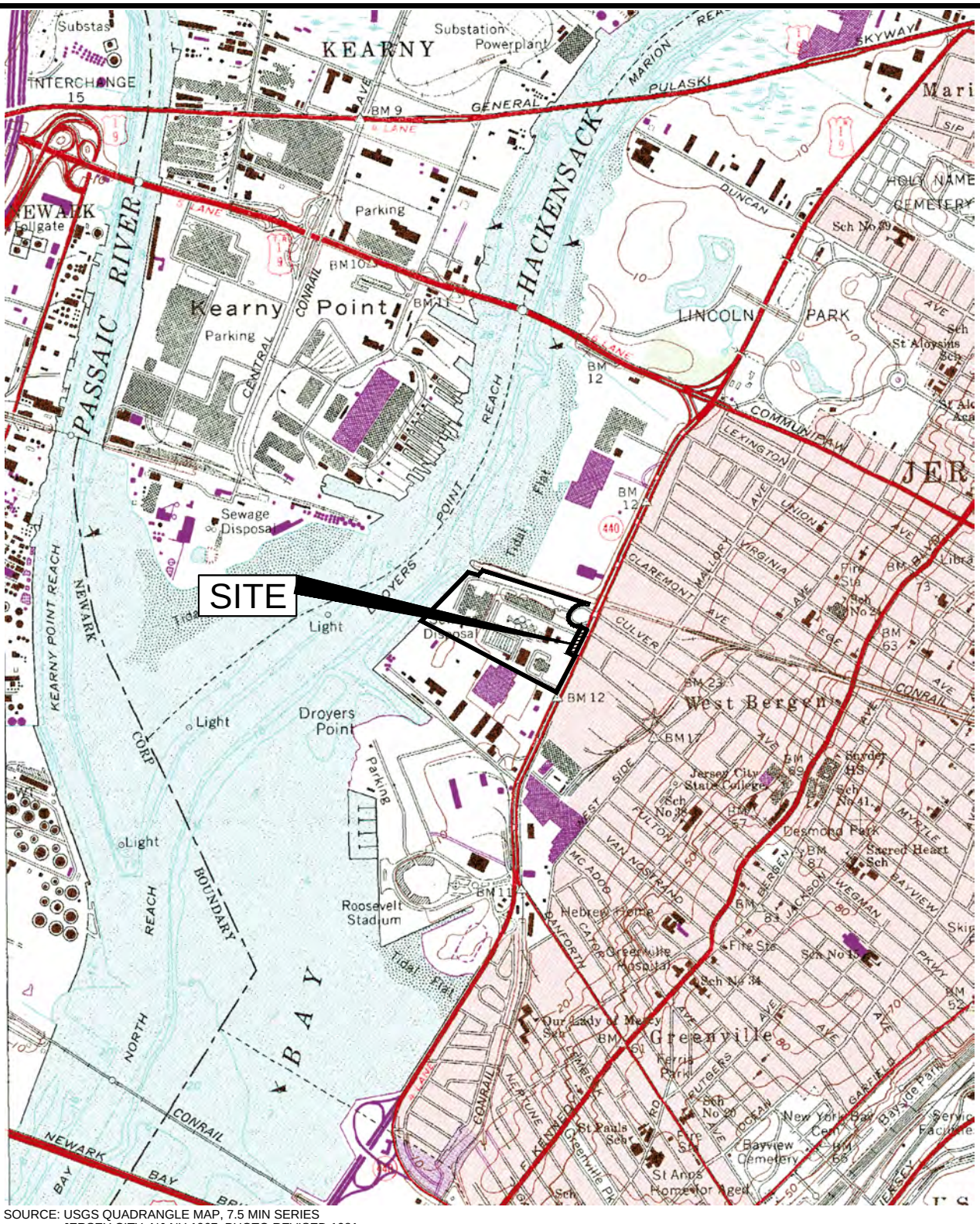
Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering control for the Property. Unless this Deed Notice has been terminated pursuant to Paragraph 13, after development of this Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 6 NORTH SITE 087
JERSEY CITY, NEW JERSEY

CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\6100011\DEED NOTICE\DN 9\3480150487-6100-A109-0000.dwg Tue, 28 Nov 2017 - 10:35am scott.rudkin



SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 *DRAWING:* 3480150487-6100-A109-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-1
VICINITY MAP
BLOCK 21901 LOT 4
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #9

Exhibit A-2
Deed Notice #9 SA-6 North Deferred Area (Former Trenk Property)

Metes and Bounds Description of Property: See Attached

A-2 Metes and Bounds Description of Property Portions of Block 21901, Lot 4
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map or any other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as portions of Block 21901, Lot 4 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment, LLC. A copy of the current tax map which includes the Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners • Surveyors • Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 • Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292R

DEED NOTICE AREA 9
BLOCK 21901, LOT 4
MAY 18, 2016
REVISED OCTOBER 13, 2016

All those certain lots, tracts or parcels of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 4 in Block 21901, designated as Deed Notice Area 9 as shown on an exhibit entitled, "Deed Notice Area 9, SA6 North, Block 21901, Lot 4, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated May 12, 2016, last revised October 7, 2016 and being more particularly bounded and described as follows, to wit:

TRACT I

COMMENCING at the intersection of the westerly line of New Jersey State Highway Route 440 (112 foot wide right of way), with the northeasterly corner of Lot 4 in Block 21901, lands now or formerly of Paul Trenk; thence –

A) **S 24° 46' 55" W, 22.21 feet** along said westerly line to the True Point of **BEGINNING**, as shown on the aforesaid exhibit and running; thence –

1. Along said westerly line of Route 440, **S 24° 46' 55" W, 137.98 feet**; thence –

Running through a portion of Lot 4 in Block 21601, the following four (4) courses:

2. **N 39° 23' 38" W, 11.11 feet**; thence –
3. **N 24° 46' 55" E, 138.43 feet**; thence –
4. **N 84° 58' 58" E, 5.43 feet;** thence –
5. **S 08° 44' 20" E, 9.57 feet,** to the Point and Place of **BEGINNING.**

CONTAINING: 1,408 S.F. of land more or less or 0.032 acre of land more or less.

TRACT II

BEGINNING at the intersection of the westerly line of New Jersey State Highway Route 440 (112 foot wide right of way), with the southeasterly corner of Lot 4 in Block 21901, lands now or formerly of Paul Trenk and running; thence –

1. Along the southerly line of Lot 4 in Block 21901, **N 49° 08' 25" W, 15.61 feet**; thence –

Running through a portion of said Lot 4 in Block 21601, the following four (4) courses:

2. **N 24° 46' 55" E, 67.80 feet**; thence –

3. **S 18° 52' 12" E, 8.39 feet**; thence –

4. **S 59° 15' 07" E, 9.26 feet**, to the aforesaid westerly line of New Jersey State Highway Route 440; thence –

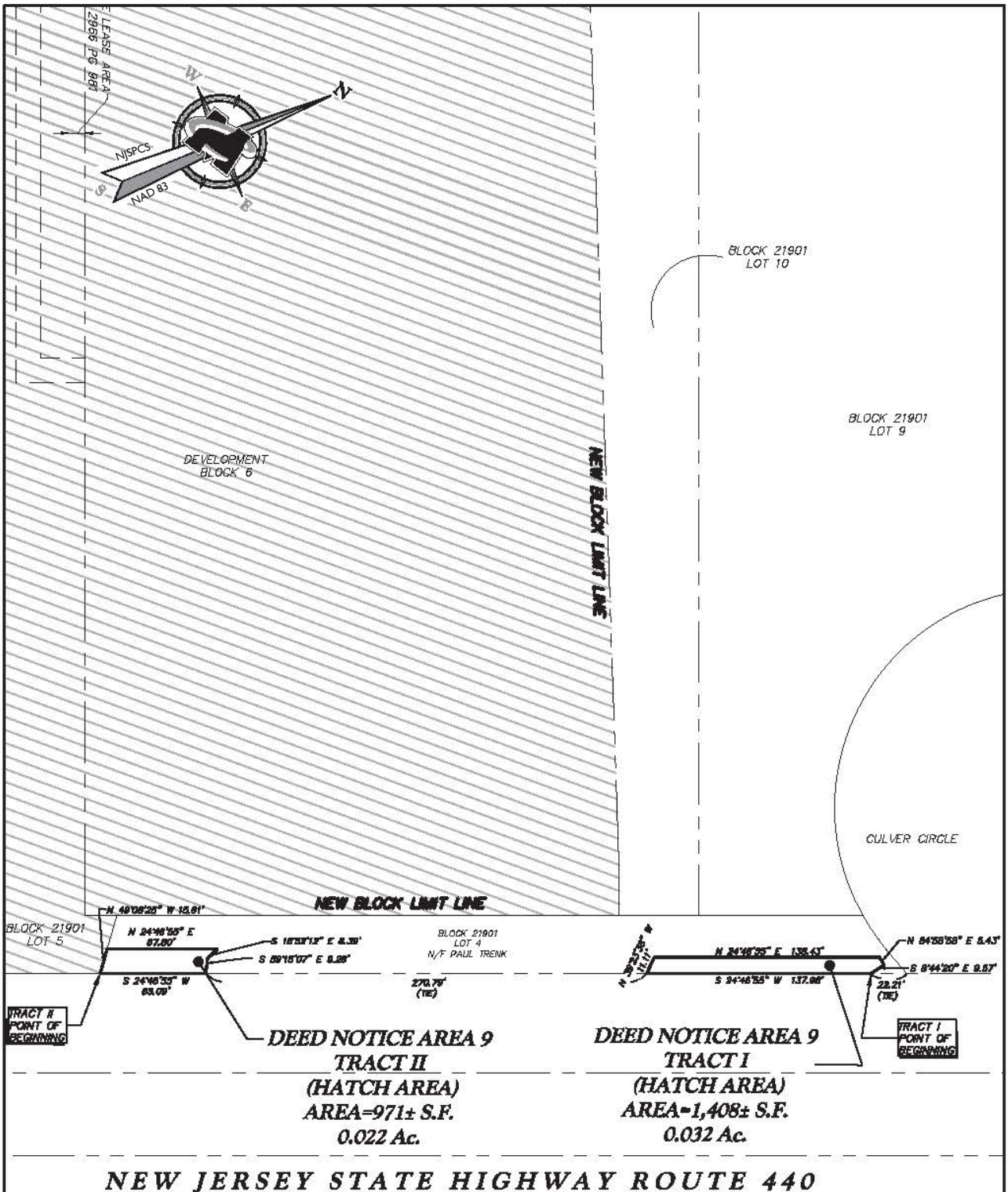
6. Along said westerly line of Route 440, **S 24° 46' 55" W, 65.09 feet,** to the Point and Place of **BEGINNING.**

CONTAINING: 971 S.F. of land more or less or 0.022 acre of land more or less.

10/13/16

GLEN J. LLOYD, P.L.S. — DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

\\HQFAS1\General\Projects\2010\10000292R\Survey\Description\Metes & Bounds-Deed Notice 9_REV.docx



60 48 36 24 12 0 30 60 120

SCALE : 1" = 60'

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REV	DATE	DRAWN BY	DESCRIPTION
1	10/7/16	KAN	ADD PORTION FROM DN 6 TO DN 9 AS REQUESTED
2	1/11/17	KAN	REVISED BLOCK 6
.	.	.	.
.	.	.	.
.	.	.	.

DEED NOTICE AREA 9
SA6 NORTH

BLOCK 21901
LOT 4

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

RED BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1984

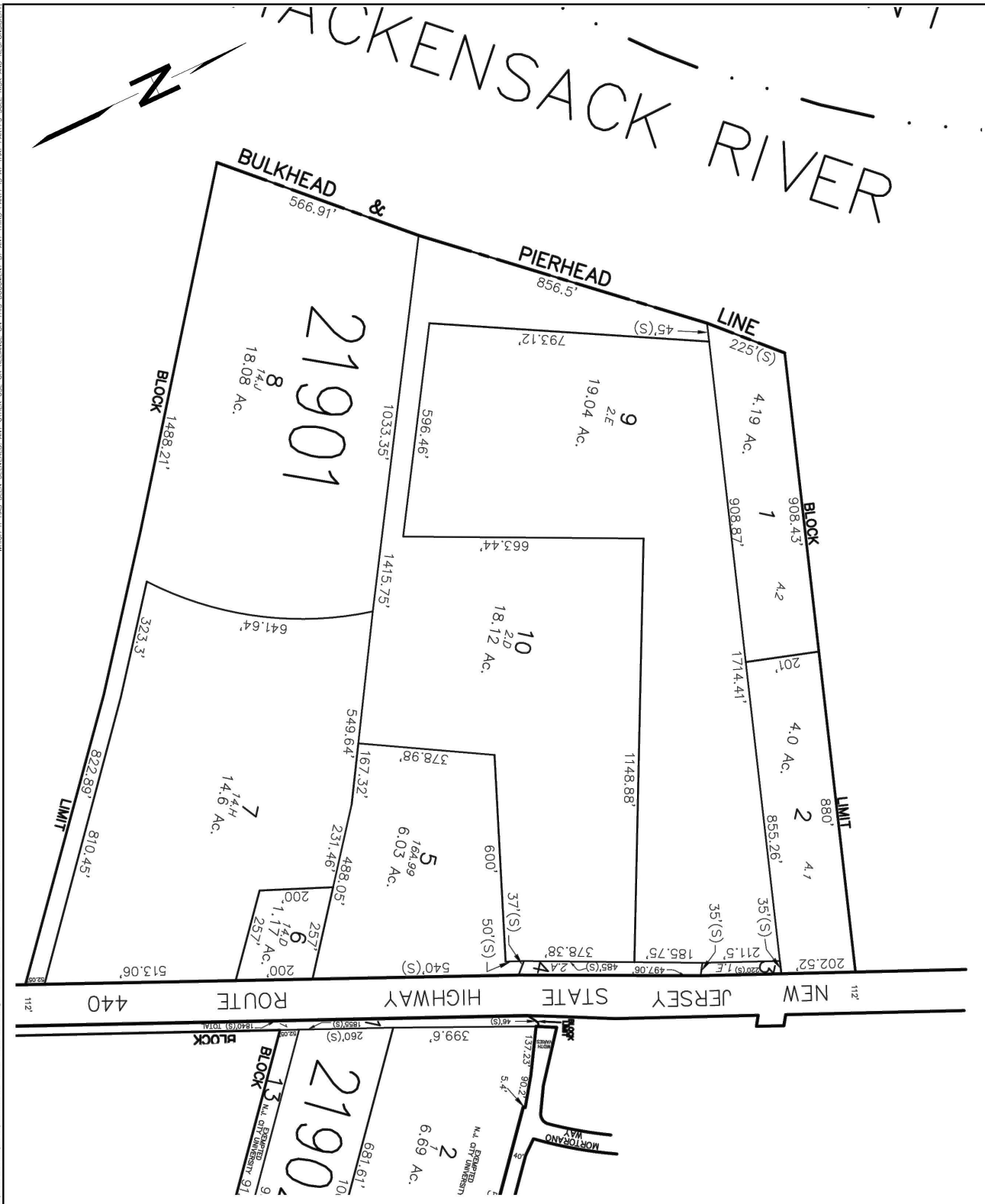
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/12/16	KAN	CJK

PROJECT NUMBER:	DRAWING NAME:
2010\1000	V-EXBT-DN-9-REV

SHEET TITLE:
DEED NOTICE EXHIBIT

SHEET NUMBER:
1 of 1

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (i) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT WAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.



SOURCE:
DRAWING TITLED: "TAX MAP CITY OF JERSEY CITY", PREPARED BY T&M ASSOCIATED, MIDDLETOWN TWP., NJ SHEET 219, DATED AUGUST, 2006; NEW JERSEY DEPARTMENT OF THE TREASURY DIVISION OF TAXATION PROPERTY ADMINISTRATION DATED MAY 8, 2009 SERIAL NO.: 934.

0 150 300 600
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150487-6100-A209-0000	
PREPARED/DATE: STR 09/07/16	CHECKED/DATE: NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-2
TAX MAP
BLOCK 21901, LOT 4
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #9

P:\CADD\HONEWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\6100\01\DEED NOTICE\DN 01\3480150487-6100-4209-0000.dwg Tue, 28 Nov 2017 - 10:37am scott.rudkin

Exhibit A-3
Property Map

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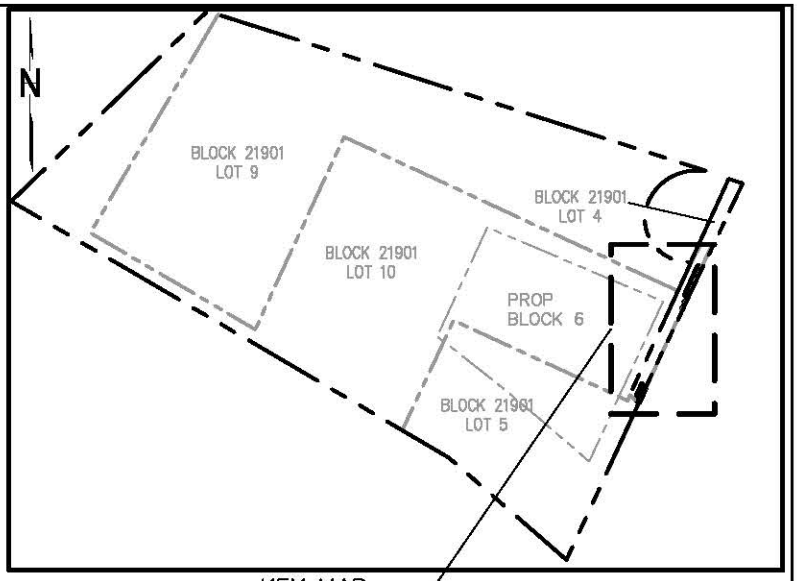
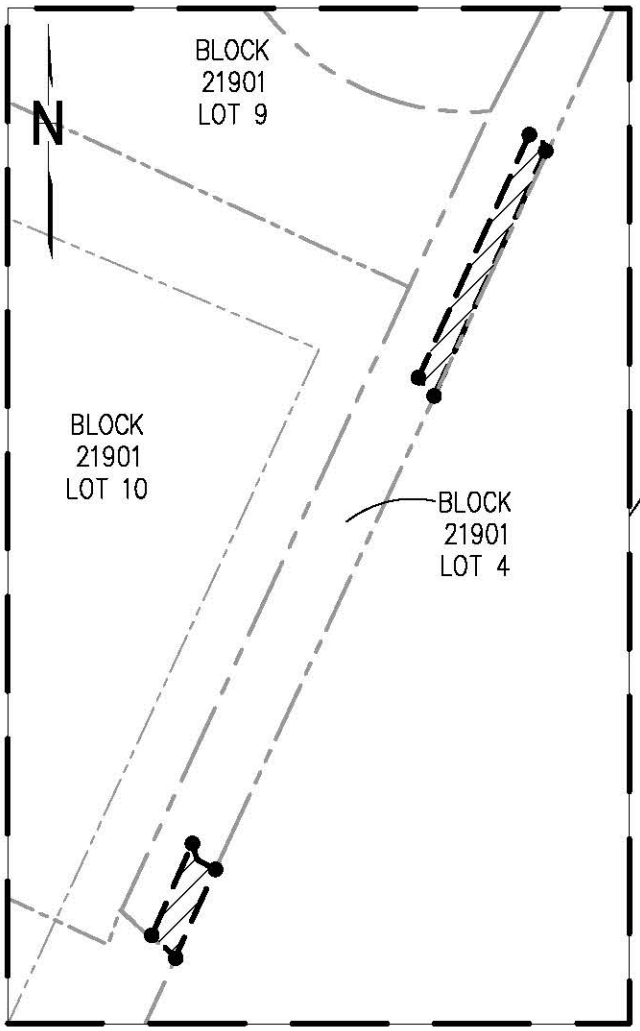
LEGEND

PROPERTY BOUNDARY

RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

0 50 100 200
SCALE IN FEET

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A309-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-3
PROPERTY AREA MAP
BLOCK 21901, LOT 4
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #9

EXHIBIT B
Deed Notice #9 SA-6 North Deferred Area (Former Trenk Property)

B-1 Restricted Area Maps
B-2 Restricted Area Data Table
Portions of Block 21901, Lot 4
City of Jersey City, New Jersey

Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area Soil Sample Locations), Exhibit B-2B (Cap System Detail), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of hexavalent chromium remaining above the level established in the New Jersey Department of Environmental Protection's (NJDEP) Chromium Policy of 20 milligrams per kilogram (mg/kg).

Restricted Area Map Notes:

Exhibit B-1 indicates engineering controls. For soils with hexavalent chromium concentrations above 20 mg/kg, the engineering controls include a cap consisting of 1 foot of clean soil at the northern-most restricted area and a cap consisting of a geotextile demarcation fabric overlain by 6-inches of gravel at the southern-most restricted area.

Exhibit B-1
Restricted Area Maps

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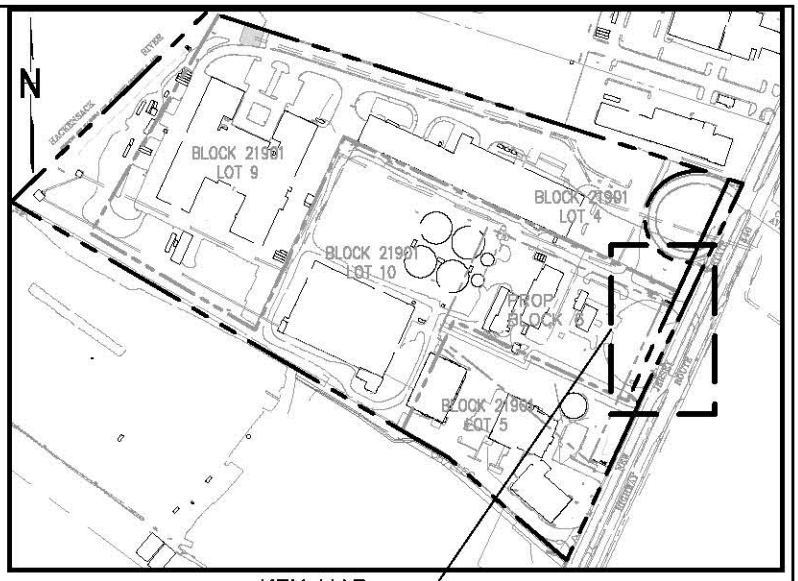
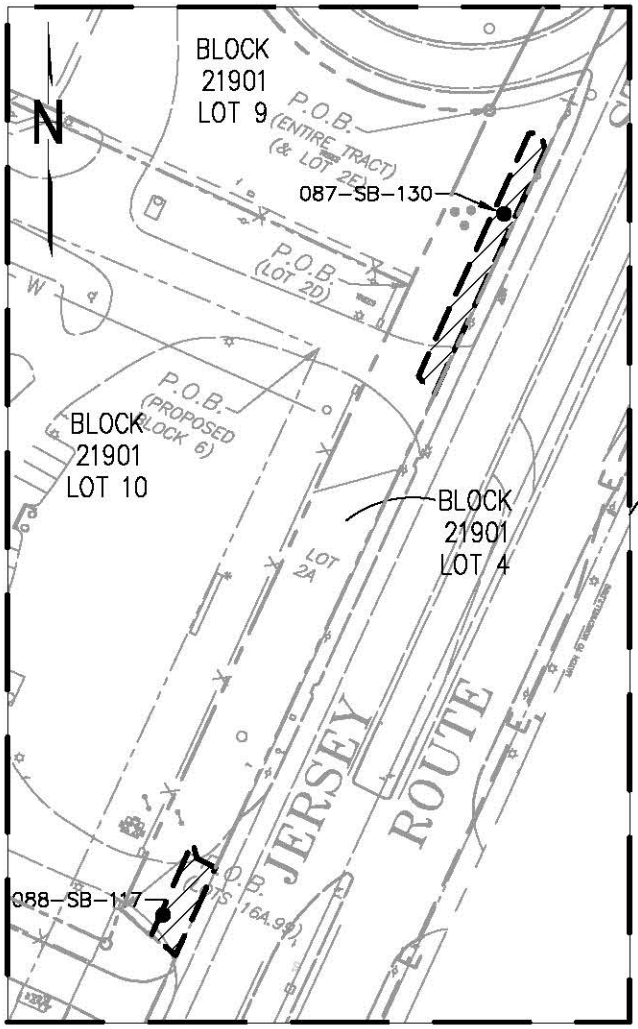
LEGEND

- SOIL SAMPLE LOCATION HEXAVALENT CHROMIUM > 20mg/kg (SEE EXHIBIT B-2)
- PROPERTY BOUNDARY
- RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

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0 50 100 200
SCALE IN FEET

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-B009-0000		
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17	

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1A
RESTRICTED AREA MAP
BLOCK 21901, LOT 4
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE #9

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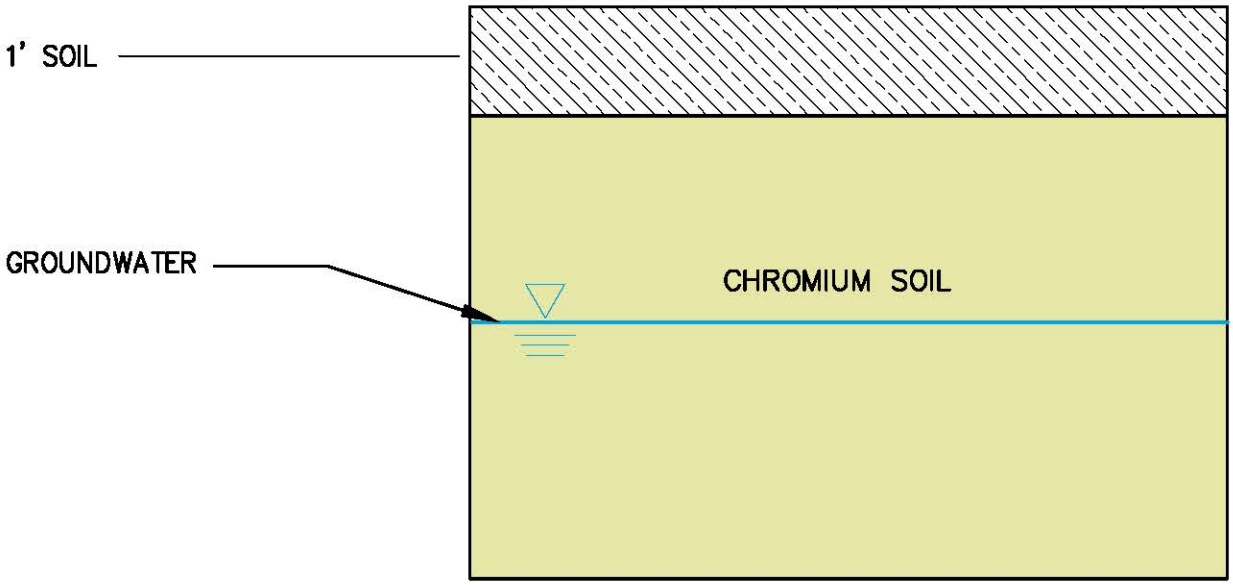
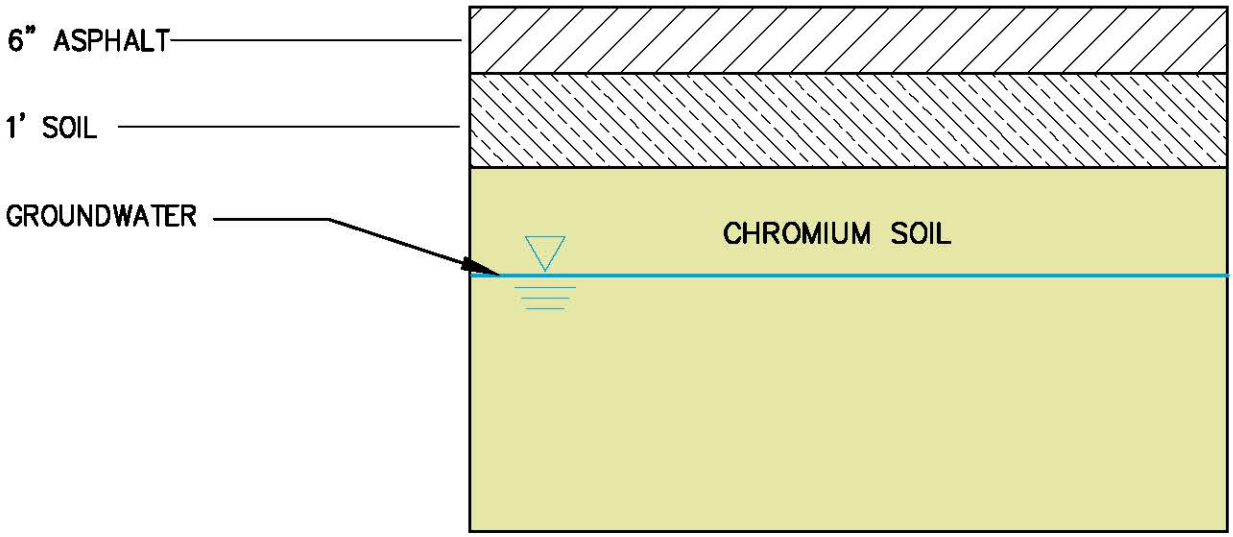
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610D01\DEED NOTICE\DN 9\3480150487-6100-B209-0000.dwg Tue, 28 Nov 2017 - 10:44am scott.rudkin

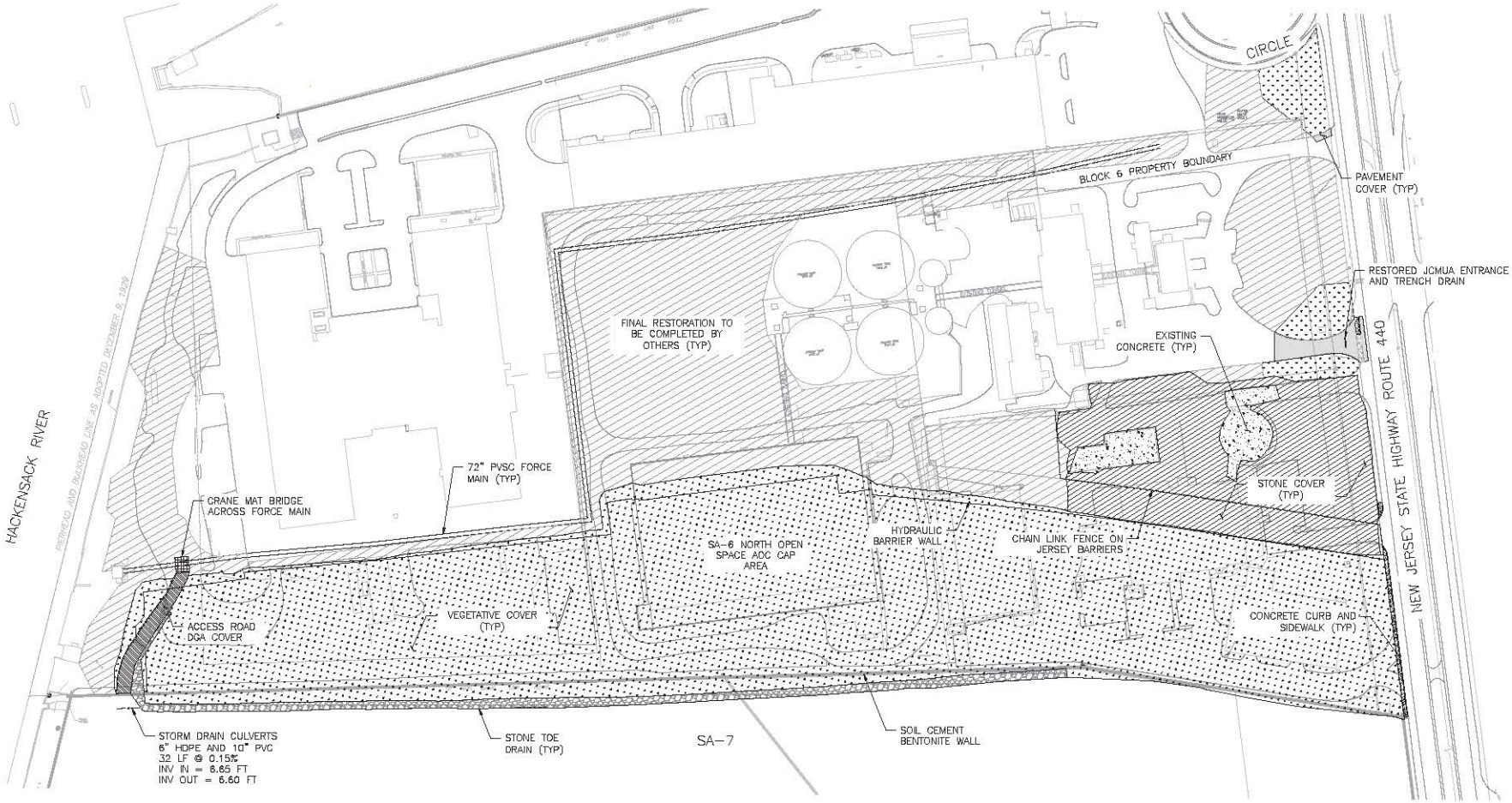


CAP SYSTEM DETAIL
(NORTHERN PARCEL)
NTS



CAP SYSTEM DETAIL
(SOUTHERN PARCEL)
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150487-6100-B209-0000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 21901; LOT 4 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #9
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 10/24/17		



NOTE:

1. REFER TO CONSTRUCTION CONTROL GRID FIGURE AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE WITHIN THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. REMAINING RESTORATION AREAS IDENTIFIED ON THE CHROMIUM REMEDY 100% DESIGN DRAWINGS WILL BE ADDRESSED AS PART OF THE NON CHROMIUM REMEDIATION WORK CURRENTLY BEING COMPLETED. FINAL RESTORATION OF ALL AREAS IS SCHEDULED TO BE COMPLETE IN MARCH 2017.

EXHIBIT B-1C

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
DGA COVER
RESTORATION BY OTHERS
STONE TOE DRAIN
SD STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH - SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

Exhibit B-2: Table B-2
Soil Sample Data Table (Hexavalent Chromium)

EXHIBIT B-2
Restricted Area Data Table
Study Area 6 North
Portions of Block 21901, Lot 4
Deed Notice 9, SA-6 North, Deferred Area (Former Trenk Property)
Jersey City, New Jersey

Location ID	Sample Date	Sample Depth (feet bgs)	Sample Elevation (feet msl NAVD88)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	CONC	Q
087-SB-130	06/02/2008	1 - 1.5	0	Hexavalent Chromium	18540-29-9	20	**24.3**	
088-SB-117	06/02/2008	6.5 - 7	0	Hexavalent Chromium	18540-29-9	20	**4670**	

Notes:
Results reported in mg/kg.

Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
mg/kg - milligrams per kilogram
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010

EXHIBIT C
Deed Notice #9 SA-6 North Route 440 Deferred Area (Former Trenk Property)

C-1 Institutional Controls
C-2 Engineering Controls
Portions of Block 21901, Lot 4
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree, Zoning as Institutional Controls: Exhibit C-1 (A through C) for portions of Block 21901, Lot 4, City of Jersey City, New Jersey known as the Deferred Area

i. Exhibits C-1A through C-1C. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Consent Decree as Institutional Control; Exhibit C-1C Zoning as Institutional Control Exhibits C-1 include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property consists of two small areas on SA-6 North adjacent to the Route 440 ROW where the PSE&G gas main is located north of the SA-6 North Open Space Area. The Property is comprised of two tracts of land; Tract 1 is near Culver Circle at the Route 440 ROW and Tract 2 is further south along the Route 440 ROW closer to the SA-6 North Open Space Area. Tract 1 is an approximately 1,408 square foot area. Tract 2 is an approximately 971 square foot area. Both tracts include chromium only. Excavations in this part of SA-6 North were limited in these areas by the PSE&G gas main and will be deferred until after the Route 440 ROW widening project. Thus, these areas are termed "Deferred Areas." This deed notice is for both Tracts 1 and 2 together. Once the remediation of these areas is completed consistent with Article III of the Consent Decree, Honeywell will terminate this Deed Notice pursuant to Paragraph 13 above. In the meantime, the provisions of the LTMP, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes portions of Block 21901, Lot 4. The estimated size of the Area containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) as identified on Exhibit B-1 is estimated at approximately 2,370 square feet or approximately 0.05 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in

Exhibit C-2) will not be permitted on the Property except in compliance with the terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and the applicable portions of the LTMP developed thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the applicable zoning standards; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice*, and *the applicable zoning standards.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #9 SA-6 North Route 440 Deferred Area

Portions of Block 21901, Lot 4
City of Jersey City, New Jersey

ii. Exhibits C-2A through C: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Controls consist of a cap consisting of 1 foot of clean soil at the northern-most restricted area and a cap consisting of a geotextile demarcation fabric overlain by 6-inches of gravel at the southern-most restricted area.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above 20 mg/kg within the Property. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine***

whether or not the engineering controls are continuing to meet the original objective and intended function.

- ***A report to determine whether or not the engineering controls continue to operate as designed.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.***

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5955 Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 NORTH

TABLE OF CONTENTS

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with various properties collectively designated by NJDEP as Study Areas 5, 6 North, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, the property owned by JCIA and JCMUA and collectively the subject of *JCMUA v. Honeywell* and *JCIA v. Honeywell* comprises a part of Study Area 6 North;

Whereas, the City of Jersey City ("Jersey City") also owns property that comprises a part of Study Area 6 North;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* Jersey City, JCMUA, and JCIA (collectively the "Jersey City Entities");

Whereas, the Jersey City Entities and Honeywell also asserted cross-claims against each other in *Riverkeeper v. Honeywell*;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the United States District Court for the District of New Jersey (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, the Jersey City Entities and Riverkeeper have alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 North property;

Whereas, in the Consolidated Litigation, Honeywell has alleged that the Jersey City Entities bear full responsibility for lead and other contamination on the Study Area 6 North property, and also bear an equitable share of liability for the presence and remediation of COPR and chromium in soils and groundwater on the Study Area 6 North property and for chromium and other contamination in Hackensack River sediments in the vicinity of Study Area 6 North;

Whereas, on October 9, 2007, Honeywell and Riverkeeper submitted the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 North that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq*., as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, the portions of Study Area 6 and Study Area 7 (i) which are owned by the Jersey City Entities, (ii) which are owned by Honeywell, (iii) as to which Honeywell has a purchase and sale agreement with the current owner, or (iv) which hereafter will be acquired by a Jersey City Entity and/or Honeywell are parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 North and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City;

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Parties as a means to accomplish the aforesaid purposes of this settlement;

Whereas, the consent of each of the Jersey City Entities to this Consent Decree was considered at a duly noticed and appropriate meeting of their respective governing bodies, open to the public, at which members of the public were provided an opportunity to comment on all aspects of the settlement, including, without limitation, the commitments made by the Jersey City Entities herein; and

Whereas, Honeywell and the Jersey City Entities are settling their claims, cross-claims, or counter-claims in the Consolidated Litigation against each other in the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with this Consent Decree and attached as Exhibit A to this Consent Decree:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **AOC 1** shall mean that area of Study Area 6 North in which the hexavalent chromium concentration in the top 20 feet of soil below existing ground surfaces exceeds concentrations of 20 mg/kg and the Chromium Remedy will be implemented pursuant to Article III. AOC 1 is shown on Exhibit B.

2. **AOC 1 Additional Excavation Areas** shall mean those areas of Study Area 6 North which require excavation pursuant to paragraph 57. The AOC 1 Additional Excavation Areas are not contiguous to AOC 1. The AOC 1 Additional Excavation Areas are shown on Exhibit B.

3. **AOC 1 Open Space Area** shall mean the AOC 1 Open Space Area, as defined by paragraph 53, consisting of approximately 11 acres enclosed by the hydraulic barrier walls constructed under the Chromium Remedy, and which shall be subject to paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B.

4. **AOC 2** shall mean that area of Study Area 6 North on which the Historic Fill Remedy will be implemented pursuant to Article II.B of the Jersey City/Honeywell Consent Order. AOC 2 is shown on Exhibit B.

5. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

6. **COPR** shall mean Chromite Ore Processing Residue.

7. **Chromium Remedy** or **Chromium Remediation** shall mean the remedy set forth in Article III.

8. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC).

9. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

10. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, and the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, currently pending before the Special Master in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell reach a settlement on source control issues, the Deep Groundwater Remedy shall

include the remedy to which Riverkeeper and Honeywell have agreed. In the event that Riverkeeper and Honeywell do not reach a settlement on source control issues, the Deep Groundwater Remedy shall include the remedy ordered by the Special Master or the Court in *ICO v. Honeywell* for source control.

11. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

12. **Historic Fill** shall have the definition provided in the NJDEP Technical Requirements for Site Remediation.

13. **Historic Fill Remedy or Historic Fill Remediation** shall mean the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order, except that the Historic Fill Remedy shall not be limited to the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order if NJDEP requires a more stringent remedy.

14. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

15. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

16. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

17. **Including** shall mean including, but not limited to.

18. **JCIA** shall mean the Jersey City Incinerator Authority.

19. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

20. **JCRA** shall mean the Jersey City Redevelopment Agency.

21. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

22. **Jersey City/Honeywell Consent Order** shall mean the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* entered in the Consolidated Litigation simultaneously with this Consent Decree.

23. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

24. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit C.

25. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

26. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*, as amended.

27. **Redevelopment Agreement** shall have the meaning set forth in paragraph 4.11(e) of the Jersey City/Honeywell Consent Order.

28. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

29. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. 40A:12A1, *et seq.*, as amended and supplemented.

30. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

31. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

32. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, which the Parties expect will be entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation.

33. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

34. **Site** shall mean Study Area 6 North.

35. **Site Preparation Activities** shall have the meaning set forth in paragraph 3.1 of the Jersey City/Honeywell Consent Order.

36. **Site Preparation Plan** shall have the meaning set forth in paragraph 3.2 of the Jersey City/Honeywell Consent Order.

37. **Soil** shall mean soils, historic fill, and/or COPR.

38. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

39. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

40. **Study Area 6 North** shall mean that property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 41.58 acres and including: (a) all such property owned by JCMUA located at 555 Route 440, Jersey City, New Jersey, (b) all such property owned by JCIA located at 501 Route 440, Jersey City, New Jersey; (c) all such property owned by Jersey City or its Department of Public Works and located at 575 Route 440, Jersey City, New Jersey; and (d) all such property owned by Paul Trenk consisting of Block 1290.1, Lot 2A, Jersey City, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

41. **Study Area 6 South** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Kellogg Street 60 LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Kellogg Street/440 Property LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Cordova Enterprises Ltd located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey, and (g) that property currently owned by Cordova Enterprises Ltd located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

42. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

43. **Study Area 7** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that property currently owned by Roned Realty/Edward Navlen located at 465 Route 440, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

44. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

45. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

46. Except as provided in this paragraph, the terms of the Jersey City/Honeywell Consent Order shall remain in full force and effect. To the extent that any provision in the Jersey City/Honeywell Consent Order refers to the Chromium Remedy or Chromium Remediation, it shall be construed as referring to Article III of this Decree. In the event of any conflict or inconsistency between the terms of this Decree and the Jersey City/Honeywell Consent Order, the terms of this Decree govern. In the event that any action taken pursuant to the Jersey City/Honeywell Consent Order is in conflict with or inconsistent with the terms of this Decree, the terms of this Decree shall govern.

47. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

48. For purposes of this Consent Decree, the Complaints in the Consolidated Litigation each state claims upon which relief may be granted against Honeywell.

49. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 100, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils and shallow groundwater at Study Area 6 North. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 6 South, Study Area 5, or groundwater at Study Area 6 North other than shallow groundwater.

50. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

51. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. Chromium Remedy

52. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 North at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 North shall be undertaken in accordance with the terms of this Consent Decree.

53. **AOC 1 and AOC 2.** For the purposes of remediation, Study Area 6 North shall consist of two Areas of Concern ("AOCs"), designated as AOC 1 and AOC 2 as shown on Exhibit B. AOC 1 is set forth on Exhibit B and consists of that portion of Study Area 6 North for which chromium remediation is required pursuant to paragraphs 55, 56, and 57. AOC 2 consists of the entirety of Study Area 6 North, including AOC 1, to the extent that historic fill is present in any area of Study Area 6 North. For AOC 1, the intended land use will determine the types

of remedial measures taken in the Chromium Remedy. There are two distinct land uses for AOC 1: open space and residential. As a result, AOC 1 will be further subdivided into:

(a) The AOC 1 Open Space Area, which shall comprise that portion of AOC 1 for which future use shall be restricted as provided in paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B;

(b) The AOC 1 Residential Area, which shall comprise that portion of AOC 1 for which future use shall allow for residential and/or commercial and retail uses, but for which the remedial measures shall assume only a residential use . The AOC 1 Residential Area is shown on Exhibit B; and

(c) The AOC 1 Additional Excavation Areas, which consist of those portions of Study Area 6 North that require remediation pursuant to paragraph 57. The planned land use for the AOC 1 Additional Excavation Areas is residential and/or commercial and retail uses, but the remedial measures shall assume only a residential use.

54. **Scope and General Requirements of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and soil containing hexavalent chromium in AOC 1, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow level of groundwater (see paragraph 58). The deep overburden and bedrock groundwater remediation, including source control, shall be addressed in a separate consent order, which shall place these issues within the jurisdiction of the Special Master in conjunction with the groundwater remedies for Study Area 7.

(a) The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and the Remedial Action Work Plan (with addenda) approved by NJDEP on or about February 19, 2008. This Consent Decree shall have precedence

over the Remedial Action Work Plan in the event of any inconsistency.

(b) The Chromium Remedy shall be carried out diligently, and the development and implementation of the Historic Fill Remedy shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Honeywell shall propose a master Schedule for the implementation of the Chromium Remedy within 90 days of the entry of this Consent Decree, which shall include, at a minimum, the following milestones:

(i) Submission to the Special Master for all documents subject to review by the Special Master pursuant to paragraph 72(c);

(ii) Relocation of the Jersey City Entities' Study Area 6 North Operations as shall be required prior to the implementation of the Chromium Remedy;

(iii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy, including remediation of the AOC 1 Additional Excavation Areas;

(iv) A final date for Honeywell's proposal of *in situ* treatment for any part of the AOC 1 Residential Area pursuant to paragraph 55(d) and a date for the final decision as to whether excavation or *in situ* treatment shall be used in the event of such a proposal;

(v) The initiation of work related to the Chromium Remedy;

(vi) The date for completion of the installation of the Chromium Remedy;

(vii) Implementation of the long-term protections of the AOC 1 Open Space Area established pursuant to paragraph 60; and

(viii) Transfer of the AOC 1 Open Space Area to Jersey City pursuant to paragraph 60(a)(iii).

(c) **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community

from airborne dusts and exposures to contaminated soils.

(d) **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

55. **AOC 1 Residential Area Soil Remedy.** In the AOC 1 Residential Area, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive.

(a) Those soils excavated from the AOC 1 Residential Area in which hexavalent chromium concentrations exceed 240 mg/kg shall be disposed of off-site at a waste disposal facility licensed to accept such waste.

(b) Those soils excavated from the AOC 1 Residential Area in which the hexavalent chromium concentration is less than 240 mg/kg, but greater than 20 mg/kg, shall be consolidated within the AOC 1 Open Space Area. However, any such soils which would require venting of gases shall be disposed of off-site.

(c) Soils excavated from the AOC 1 Residential Area shall be replaced with existing soils from AOC 2 or backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

(d) In the AOC 1 Residential Area, excavation of soils containing hexavalent chromium greater than 20 mg/kg shall be the presumptive remedy. Around remaining active underground utilities or other structures, such as the bulkhead, *in situ* treatment may be considered in lieu of excavation only if Honeywell demonstrates, and all Parties, the Special

Master, and NJDEP agree that (1) excavation is technically impracticable and (2) treatment will result in hexavalent chromium concentrations of 20 mg/kg or less and no rebound will occur. If no treatment option is available, Honeywell shall propose an alternative remedial approach, subject to review and comment by the Parties and approval by the Special Master.

(e) Honeywell shall excavate all soils containing hexavalent chromium greater than 20 mg/kg in conjunction with the placement of the piping for the Deep Groundwater Remedy. Honeywell shall not propose treatment in lieu of excavation based on the location of the pipes for the Deep Groundwater Remedy or any apparent impracticability of excavating in conjunction with their installation.

56. **AOC 1 Open Space Area Soil Remedy.** In the AOC 1 Open Space Area, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils, with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is

needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities. Honeywell shall configure the cap so that all active piping for the wastewater treatment system operated by JCMUA, including all force mains and any connections to the emergency outfall, shall be outside the capped area. Honeywell may propose, subject to the review process in paragraph 72, to use treatment in lieu of excavation in the vicinity of the emergency outfall line if the criteria of paragraph 55(d) are satisfied; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the AOC 1 Open Space Area. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the AOC 1 Open Space Area shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the two feet of clean fill required by paragraph 56(c). Excavated hexavalent

chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the AOC 1 Residential Area shall be placed and spread in the AOC 1 Open Space Area under the cap. Excavated hexavalent chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the Study Area 6 South Development AOC (as defined in the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South and including only those portions of Study Area 6 South for which the future uses of the property may include commercial or residential development) may be placed and spread in the AOC 1 Open Space Area under the cap, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

57. **AOC 1 Additional Excavation Areas Remedy.** For those AOC 1 Additional Excavation Areas, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive. Excavation of those areas comprising the AOC 1 Additional Excavation Areas shall initially be conducted in the 50-foot by 50-foot area planned in the RAWP but shall not be so limited in the event that confirmation sampling indicates that hexavalent chromium concentrations continue to exceed 20 mg/kg. Honeywell shall excavate laterally and vertically (to depths of up to 20 feet below current ground surface) until the hexavalent chromium is less than 20 mg/kg based on the results of confirmation sampling. Confirmation sampling for the AOC 1 Additional Excavation Areas shall be taken from the side

walls and bottom of the excavation, in accordance with the Technical Requirements for Site Remediation, to confirm complete removal of contaminated soils.

58. **Shallow Groundwater Remedy.** The shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing above the meadow mat in the AOC 1 Open Space Area. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 North and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the northern, eastern and western sides of the AOC 1 Open Space Area and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that will consist of (i) one or more shallow extraction wells, sumps, or french drains within the AOC 1 Open Space Area; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater (except for shallow groundwater that penetrates the meadow mat and is captured by the Deep Groundwater Remedy);

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP

regulations.

59. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article. The Jersey City Entities agree to cooperate with Honeywell in the applications for any such permits, authorizations, or approvals. Such cooperation shall include providing information or data with respect to permit applications, co-signing permit applications, and allowing access to Study Area 6 North to obtain information necessary for the permits.

B. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

60. **Protection of the AOC 1 Open Space Area.** Except as provided in paragraphs 60(j) and 60(k), development in the AOC 1 Open Space Area shall be prohibited. The AOC 1 Open Space Area shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the AOC 1 Open Space Area pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54(b):

(a) **Ownership of and Access to the AOC 1 Open Space Area.** Ownership of and access to the AOC 1 Open Space Area shall be in accordance with the following:

(i) Pursuant to the terms of this Consent Decree and paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall become the owner in fee simple absolute of all of the property that comprises the AOC 1 Open Space Area and shall not convey any rights or interests in such property except as provided in this Decree. At the time

of the conveyance from JCRA to Bayfront Redevelopment LLC, Bayfront Redevelopment LLC shall give Jersey City an option to buy AOC 1 Open Space Area prior to the planned transfer pursuant to paragraph 60(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall exercise the option to buy the AOC 1 Open Space Area in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 84(c) or 84(d) are met;

(ii) At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall grant a conservation restriction for the AOC 1 Open Space Area pursuant to the requirements of paragraph 60(b);

(iii) Upon the final construction of all roads and utility corridors within the AOC 1 Open Space Area, Bayfront Development LLC shall donate good and marketable title to all the land comprising the AOC 1 Open Space Area to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 North to create a new parcel(s) comprising the AOC 1 Open Space Area. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the AOC 1 Open Space Area by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the AOC 1 Open Space Area unless and until it shall have complied with the requirements of paragraph 60(a)(iv);

(iv) After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the AOC 1 Open Space Area to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the AOC 1 Open Space Area to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the AOC 1 Open Space Area and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the AOC 1 Open Space Area pursuant to this paragraph and routine maintenance of the permissible development in the AOC 1 Open Space Area pursuant to paragraph 64(d); or

(2) The AOC 1 Open Space Area has been remediated such that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, but prior to the grant of the option to buy pursuant to paragraph 60(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the AOC 1 Open Space Area substantially in the form set forth in Exhibit D. Exhibit D is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 60(j) and 60(k), including the construction and

placement of roads and utilities. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the AOC 1 Open Space Area as set forth in paragraphs 60(j) and 60(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph60(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the

levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the AOC 1 Open Space Area shall be subjected to the deed notice substantially in the form set forth in Exhibit E that restricts future activities on the AOC 1 Open Space Area. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the AOC 1 Open Space Area pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 60(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 60(b), and the deed notice imposed pursuant to paragraph 60(c) shall be recorded, pursuant to N.J.S.A. 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the AOC 1 Open Space Area. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the AOC 1 Open Space Area in the real estate records related to the AOC 1 Open Space Area.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the AOC 1 Open Space Area is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 60(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the AOC 1 Open Space, Jersey City shall add those portions of the AOC 1 Open Space Area not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to

roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor, maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 60(j) and 60(k); and (iv) the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the AOC 1 Open Space Area have been added to its ROSI, such that those portions of the AOC 1 Open Space Area shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the AOC 1 Open Space Area is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 60(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the AOC 1 Open Space Area subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the AOC 1 Open Space Area under the statute. If the Parties are unable to reach agreement on establishment of an environmental

covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the AOC 1 Open Space Area. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the AOC 1 Open Space Area if they would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in AOC 1 Open Space Area.** Only development satisfying the requirements of this paragraph and paragraph 60(k) shall be permitted in the AOC 1 Open Space Area. All other development in the AOC 1 Open Space Area shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the AOC 1 Open Space Area regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 60(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the AOC 1 Open Space Area shall be the

development undertaken following the completion of the Chromium Remedy in the AOC 1 Open Space Area. The Initial Development may occur in one or more phases. Honeywell and Bayfront Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 60(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the AOC 1 Open Space Area shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 60(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the AOC 1 Open Space Area, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 60(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 60(b), and the Redevelopment Plan;

however, in the event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the AOC 1 Open Space Area, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 60(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 72(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 72(d) and 72(e) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the AOC 1 Open Space Area shall require the preparation and submission of a Development Plan pursuant

to paragraph 60(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 60(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and the Jersey City Entities. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and the Jersey City Entities for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 60(j)(v) and 60(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 60(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 60(j)(v); or

(3) The development meets the requirements of paragraphs 60(j)(v) and 60(j)(xi), and Jersey City provides notice of its intention to alter or add to the

development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 60(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) with an annual report that describes any alterations or additions, including those activities under paragraph 60(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the AOC 1 Open Space Area.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 60(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the AOC 1 Open Space Area, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 60(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 60(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the AOC 1 Open Space Area of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

61. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a

successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

62. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 56, 58, and 63. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

63. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the AOC 1 Open Space Area.

64. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 63. Honeywell shall provide Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the AOC 1 Open Space Area to ensure that it is not being put to any use that is inconsistent with paragraphs 60(j) and 60(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 60 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the AOC 1 Open Space Area is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the AOC 1 Open Space Area grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii) Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the AOC 1 Open Space Area such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design

and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv) A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the AOC 1 Open Space Area has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 56(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the AOC 1 Open Space Area to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a

minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii) Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 58(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the AOC 1 Open Space Area.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by

the Court.

(c) **Contingency Plan.** As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance.** The title owner of the AOC 1 Open Space Area shall conduct maintenance of the AOC 1 Open Space Area features or facilities that are permissible under paragraphs 60(j) and 60(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the AOC 1 Open Space Area or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of AOC 1 Open Space Area shall annually provide to the other Parties and the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the AOC 1 Open Space Area shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the AOC 1 Open Space Area identified by its workers during routine maintenance.

(e) **Recordkeeping.** Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring

Plan. Such logs shall be provided to Riverkeeper and the Jersey City Entities on a quarterly basis.

65. **Monitoring and Reporting to Riverkeeper and Jersey City Entities.** Riverkeeper and Jersey City Entities shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 72(c).

66. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the AOC 1 Open Space Area; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 64 and annual reports on changes to the Initial Development as required by paragraph 60(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The provision of the maps and documents referred to in paragraph 66(b)(ii) to the public via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

67. **Annual Letter to Riverkeeper and Jersey City Entities on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 66, Honeywell shall provide a letter to the Riverkeeper and the Jersey City Entities documenting its compliance with paragraph 66.

68. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

69. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the

remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

C. Oversight and Enforcement by the Special Master and NJDEP

70. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.C.

71. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the AOC 1 Open Space Area. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of the Historic Fill Remedy, the site preparation activities, and the site redevelopment activities described in the Jersey City/Honeywell Consent Order, Articles II.B, III, and IV, do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

72. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority.** NJDEP shall retain its full statutory and regulatory authority with respect to the Study Area 6 North site, including (i) permitting authority; (ii) authority to review and approve the Remedial Action Work Plan, 100% Design, and final

Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities.** The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting quarterly progress reports to the Court;

(vi) Overseeing the financial assurances established pursuant to paragraphs 77 through 86, and, until the expiration of his term pursuant to paragraph 76, overseeing the financial assurances established pursuant to paragraphs 87 through 98;

(vii) Coordinating review of the documents as provided in paragraphs 72(c) through 72(f);

(viii) Overseeing all development undertaken in the AOC 1 Open Space Area during the Initial Development Period pursuant to paragraph 60(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell.** Honeywell shall submit the following documents to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule");

(ii) Design drawings and specifications at the 50% level;

(iii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(iv) The data validation plan, including quality control and quality assurance protocols;

(v) The site-wide master health and safety plan;

(vi) The Long-Term Monitoring Plan;

(vii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(viii) A report reviewing measured groundwater levels for the groundwater remedy;

(ix) Documents required during the Initial Development Period pursuant to paragraphs 60(j)(vi), 60(j)(vii), and 60(j)(viii) ; and

(x) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Comment on Submitted Documents.** For each of the documents submitted by Honeywell pursuant to paragraph 72(c), the Special Master shall establish a schedule for the submission of comments and responses to comments. For each of the documents submitted, Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all received comments and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 72(e).

(e) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review.** All documents submitted by Honeywell, pursuant to paragraph 72(c) and 72(d), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 72(f). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure.** Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within 30 days of NJDEP's receipt of the notice. NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review.** If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(f) **Schedule and 100% Design Documents.** As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper and the Jersey City Entities shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(g) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less

stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(h) **Changes to the Schedule.** The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54(b); and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

73. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 75.

74. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"). The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

75. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the

oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

76. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 60(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 60(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall

be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

D. Initial Financial Assurances

77. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy;

(ii) The costs of monitoring and maintenance activities, as required by the Long-Term Monitoring Plan, for five years; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 77(a)(i) and 77(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

78. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than 60 days after entry by the Court of this Consent Decree, Honeywell shall submit to Riverkeeper, Jersey City Entities, and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If

Riverkeeper or the Jersey City Entities do not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

79. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 80, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.D, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

80. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper, the Jersey City Entities, and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 77(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.E. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and the Jersey City Entities in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such

terms. If Honeywell is not otherwise in default as provided in Article III.D and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

81. **Bankruptcy Protection.** Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

82. **Exclusive Court Jurisdiction.** The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

83. **Application of New York Law.** The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Chromium Remedy Letter of Credit.

84. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 71, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to

this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 79 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 84(c) above, and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to

carry out the terms of this Consent Decree.

85. **Placement of Proceeds in Court Registry Investment System Account.** In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 77(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 90(b)(v).

86. **Termination of Chromium Remedy Letter of Credit.** The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.E.

E. Long-Term Financial Assurances

87. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 89(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

88. **Resolution of the Amount of Long-Term Financial Assurances.** The Parties have agreed to the following options with regard to how the long-term financial assurances shall be determined:

(a) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less,

and agree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E.

(b) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, but disagree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E except that the dispute as to the amount of the long-term financial assurances shall be submitted to the Special Master pursuant to paragraph 91.

(c) If the Parties do not agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, or the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is greater than $10,000,000, the Parties shall seek resolution by the Court of the long-term financial assurances issues, including (i) the type of financial assurances to be provided; (ii) the scope of the financial assurances; (iii) the amount of the financial assurances; and (iv) the duration of the financial assurances. In the event that the Parties seek resolution by the Court, the provisions of paragraphs 90 through 98 shall not apply.

(d) Within 60 days of the entry of this Consent Decree, the Parties shall determine which option under this paragraph shall apply. In the event that the Parties determine that paragraph 88(c) applies, Riverkeeper shall initiate the proceedings by moving the Court for the imposition of long-term financial assurances.

(e) If the Parties determine that they are proceeding under paragraph 88(c), Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 77 in an amount equal to at least $20,000,000 in 2008 dollars until such time as the long-term financial assurances ordered by the Court are in place. In the event of any default by Honeywell pursuant

to paragraph 84 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 90(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under paragraph 77(a)(i) plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), shall apply.

89. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater pump-and-treat remedy;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) In the event that Honeywell selects a trust fund pursuant to paragraph 90(a), the perpetual administration of the trust fund.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 89(a)(i) through 89(a)(v) plus a 25% contingency when the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of

the estimated future costs of the activities specified in paragraphs 89(a)(i) through 89(a)(v), plus a 25% contingency on those costs.

90. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution managing the trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 89(a)(i) through 89(a)(iv).

(b) **Long-Term Letter of Credit.** In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 90(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 92.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit

and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(iii) The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Long-Term Letter of Credit.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 84. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a). After the Special Master's appointment expires pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws

on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 90(b)(ii), 90(b)(v) or 95 and Honeywell has also selected a trust fund pursuant to paragraph 90(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(c) **Combination.** Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 90(a) and 90(b).

91. **Procedures for Review of the Proposed Long-Term Financial Assurances.** In the event that the Parties have determined that they are proceeding pursuant to paragraph 88(a) or 88(b), no later than 120 days after the determination under paragraph 88(d), Honeywell shall submit to Riverkeeper, the Jersey City Entities, and the Special Master, for their review (a) the

amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper and the Jersey City Entities agree to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances. In any event, until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit and the requirements of paragraphs 88(e) and 90(b)(v) shall apply to the Chromium Remedy Letter of Credit.

92. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 90, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the

cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 90(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 90(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 90(b).

93. **Exclusive Court Jurisdiction.** The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the

trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 90(a), 90(b)(ii), 90(b)(v), or 95.

94. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper or the Jersey City Entities may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 90(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper or the Jersey City Entities to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under

paragraph 94(c), if Honeywell fails to provide assurance to Riverkeeper, the Jersey City Entities, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

95. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or the Jersey City Entities pursuant to paragraph 94 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

96. **Use of the Trust Fund in the Event of Honeywell's Default**. In the event of Honeywell's default, the money in the trust fund established pursuant to paragraph 90(a) shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

97. **Use of a Trust Fund Established Pursuant to Paragraph 85, 90(b)(ii), 90(b)(v), or 95.** In the event that a trust fund is established pursuant to paragraph 85, 90(b)(ii), 90(b)(v), or 95, the money in the trust fund shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

98. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations

under Article III.E shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: IMPLEMENTATION SCHEDULE AND TERMINATION

99. **Schedule for Remedy and Site Preparation Implementation Activities.** The Chromium Remedy under Article III and the Historic Fill Remedy under Article II.B of the Jersey City/Honeywell Consent Order and Site Preparation Activities under Article III of the Jersey City/Honeywell Consent Order shall be undertaken by the Parties in accordance with the following anticipated schedule, recognizing that this schedule may be further modified in writing by agreement of the Parties and with the approval of the Court:

(a) By October 1, 2008, the Jersey City Entities and Honeywell shall develop a Site Preparation Plan, pursuant to paragraph 3.2 of the Jersey City/Honeywell Consent Order, for all Site Preparation Activities necessary to undertake the Chromium Remedy;

(b) No later than June 18, 2009, Honeywell shall submit to NJDEP a remedial design document for the Chromium Remedy;

(c) No later than September 1, 2009, Honeywell shall submit all applications for permits and authorizations for the performance of the Chromium Remedy to all appropriate local, state, and federal government entities;

(d) Honeywell shall use its best efforts to complete the Chromium Remedy no later than four years after all appropriate applications and authorizations for the performance of the Chromium Remedy have been obtained;

(e) By May 1, 2008, Honeywell and the Jersey City Entities shall submit a work plan for further Remedial Investigation for AOC 2 to NJDEP; and

(f) By December 1, 2008, Honeywell and the Jersey City Entities shall submit a Remedial Action Selection Report and Remedial Action Workplan for the Historic Fill Remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order. The Workplan shall contain a schedule for implementation of the Historic Fill Remedy.

100. **Termination of this Consent Decree.** This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 108:

(a) The Court fails to enter the Jersey City/Honeywell Consent Order or this Consent Decree or either the Jersey City/Honeywell Consent Order or this Consent Decree is determined to be invalid on appeal;

(b) JCRA fails to take those actions required under paragraphs 4.11(a), (b), and (c) of the Jersey City/Honeywell Consent Order within nine months of entry of this Consent Decree; or

(c) JCRA fails to approve a Redevelopment Agreement between Bayfront Redevelopment LLC and JCRA pursuant to paragraph 4.11(e) of the Jersey City/Honeywell Consent Order within 12 months of entry of this Consent Decree.

101. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 100 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 100 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

102. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 100.

103. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 100, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 100, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: ADDITIONAL PROVISIONS RELATED TO HISTORIC FILL AND SITE PREPARATION AND REDEVELOPMENT

104. **Historic Fill Remedy**. This Consent Decree shall adopt and incorporate the terms of Article II.B of the Jersey City/Honeywell Consent Order with respect to the Historic Fill Remedy. The Historic Fill Remedy shall not be limited to the activities set forth in Article II.B of the Jersey City/Honeywell Consent Order in the event that NJDEP requires a more extensive remedy. The Historic Fill Remedy shall be compatible with the Chromium Remedy such that no

part of the Historic Fill Remedy shall interfere with the installation, maintenance, and monitoring of the Chromium Remedy. In addition, the Historic Fill Remedy for any discharge of non-chromium contaminants to the Hackensack River shall not interfere with the remedies under the Sediment Consent Order, including the source control remedies. In the event that Jersey City conducts the Historic Fill Remedy instead of Honeywell, the terms of this paragraph shall still apply.

105. **Oversight of Historic Fill Remedy**. Paragraph 2.11 of the Jersey City/Honeywell Consent Order shall apply only to the Historic Fill Remedy, not the Chromium Remedy. The Progress Reports provided for in paragraphs 2.12 and 3.7 of the Jersey City/Honeywell Consent Order shall be provided to Riverkeeper and the Special Master at the time they are submitted.

106. **Transfer of Title of Study Areas 6 North and 7 to and from Bayfront Redevelopment LLC**. The transfer of title of Study Area 6 North and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 North and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 North or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 North and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 North under this

Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell.*

107. **Dispute Resolution Procedures.** The provisions of Article VIII of the Jersey City/Honeywell Consent Order do not apply to any disputes regarding or impacting the Chromium Remedy, which shall be resolved as provided in paragraph 72. The provisions of Article VIII of the Jersey City/Honeywell Consent Order shall apply to disputes between the Jersey City Entities and Honeywell regarding the Historic Fill Remedy and other obligations provided in the Jersey City/Honeywell Consent Order, except to the extent that such disputes may affect the Chromium Remedy. If any such dispute may affect the Chromium Remedy, it shall be resolved as provided in paragraph 72. Honeywell shall provide Riverkeeper with a copy of each notice of any breach provided under paragraph 8.1 of the Jersey City/Honeywell Consent Order within 10 days of Honeywell's receipt or issuance of such notice. Honeywell shall provide Riverkeeper with a copy of any written resolution of a dispute pursuant to paragraph 8.2 within 10 days of the resolution.

ARTICLE XI: NOTICE

108. **Notice.** Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to JCIA:

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

If to JCMUA:

Sam Della Fera Jr.
Trenk, DiPasquale, Webster,
Della Ferra & Sodono, P.C.
347 Mount Pleasant Ave.
West Orange, NJ 07052
(973) 243-8600

If to JCRA:

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE XII: RIVERKEEPER'S ATTORNEYS' FEES

109. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $1,513,217.15 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 North portion of *Riverkeeper v. Honeywell* through March 27, 2008; and

(b) $187,862.27 in out-of-pocket expenses representing 50% of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses to be paid pursuant to the Sediment Consent Order.

Payment of the sum of $1,513,217.15 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $1,556,747.46 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

110. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after March 27, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell are unable to reach a

settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order.

ARTICLE XIII: MISCELLANEOUS PROVISIONS

111. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

112. **JCRA and Bayfront Redevelopment LLC as Parties.** As signatories to this Consent Decree, JCRA and Bayfront Redevelopment LLC subject themselves to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agree to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against JCRA and Bayfront Redevelopment LLC.

113. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

114. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

115. **Reservation of Rights and Claims**. Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

116. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

117. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

118. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

119. **Measures to Effectuate This Consent Decree.** The Jersey City Entities and JCRA shall take all appropriate steps to ensure that this Consent Decree has been (and that actions required hereunder will be) duly considered, ratified, and approved. Such steps include consideration of this Consent Decree at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the Settlement, including the commitments made by Jersey City; and consideration by and approval of the commissioners of the JCIA, JCMUA, and JCRA.

120. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

121. **Severability.** Each of the provisions in paragraph 60 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

122. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/David L. Isabel

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

Counsel for Jersey City Incinerator Authority

s/ Joni Noble McDonnell

Joni Noble McDonnell
Genova, Bruns & Giantomasi
4974 Broad Street
Newark, NJ 07102
973-535-4435

Counsel for Jersey City Municipal Utilities Authority

Robert Antonichello
~~Executive Director~~
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Executive Director of Jersey City Redevelopment Agency

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

_____
Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Jersey City/Honeywell Consent Order

Exhibit B: Remedial AOC's and Remedial Approach Map

Exhibit C: NJDEP Chromium Policy

Exhibit D: Conservation Restriction

Exhibit E: Deed Notice

Deed Notice

Dated: _____, 2017

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: _____, Esq

DEED NOTICE #10
TA-7

Hudson County Recording Data Page Honorable Diane Coleman Hudson County Register	*Official Use Only – Barcode*
Official Use Only – Record & Return	*Official Use Only – Realty Transfer Fee*
Date of Document: January 10, 2018	Type of Document: Deed Notice
First Party Name: Jersey City Municipal Utilities Authority	Second Party Name:
Additional Parties:	

20180111010003720 1/115
01/11/2018 11:26:36 AM DEED
Bk: 9272 Pg: 481
Diane Coleman
Hudson County, Register of Deeds
Receipt No. 1319952

THE FOLLOWING SECTION IS REQUIRED FOR DEEDS ONLY	
Block:	Lot:
Municipality:	
Consideration:	
Mailing Address of Grantee:	

THE FOLLOWING SECTION IS FOR ORIGINAL MORTGAGE BOOKING & PAGING INFORMATION FOR ASSIGNMENTS, RELEASES, SATISFACTIONS, DISCHARGES & OTHER ORIGINAL MORTGAGE AGREEMENTS ONLY	
Original Book:	Original Page:

HUDSON COUNTY RECORDING DATA PAGE

Please do not detach this page from the original document as it contains important recording information and is part of the permanent record.

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature]
Global Director - Design & Construction
[Bayfront Redevelopment, LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

DEED NOTICE CONCERNING CONTROLS INSTALLED FOR CHROMIUM CONTAMINATION UNDERLYING THE PROPERTY

This Deed Notice is made as of the 31st day of December, 2017, by ***Jersey City Municipal Utilities Authority ("JCMUA") whose mailing address is 555 NJ Route 440, Jersey City, NJ 07304.*** "Owner" shall mean JCMUA, together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The "Property" (also referenced herein as the "Restricted Area(s)") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. JCMUA is the current owner in fee simple of certain real property designated as a portion of ***Block 21901, Lot 10 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]. The New Jersey Department of Environmental Protection ("NJDEP") Program Interest ("PI") Number for the contaminated site which includes this property is ***Hudson County Chromate Site No. 087 PI # G000008710*** (NJDEP PI# for non-chromium-related contaminants at the Property is #745719). The Property is also part of the as Site 087 pursuant to the First Amended Consent Decree Regarding the Remediation and Redevelopment of Study Area 6 North ("Consent Decree") which is attached hereto as Appendix I and is entered as an order of

[1] All references to Block 21901 Lot 10 in this Deed Notice shall mean the applicable portions of Block 21901 Lot 10 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

the Court in the following consolidated actions *JCMUA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-05955; *JCIA v. Honeywell International, Inc.,* D.N.J., Civ. No. 05-5993; and *Hackensack Riverkeeper, Inc. v. Honeywell International, Inc.,* D.N.J., Civ. No. 06-22 (consolidated under Civ. No. 95-2097). The Consent Decree restricts transfer, use and development of the Property. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department's Bureau of State Case Management ("BCM") is the entity within the Department that is responsible for the oversight of the remediation of the SA-6 North. The matter is Case No. Hudson County Chromate Site No. 087 PI# G000008710. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International Inc. ("Honeywell"), to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-6 North to address chromium-related soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented. The Remedial Action Work Plan ("RAWP") was approved by the Department on February 19, 2009 for Hudson County Chromate Site Nos. 087 and 088, which included portions of the Property. Remedial actions were further approved pursuant to the Consent Decree.

Under both the Consent Decree and the RAWP soil contamination remains in the Property at concentrations that do not allow for the unrestricted use of the Property. A Remedial Action Report ("RAR") for SA-6 North was submitted to the Department on March 16, 2017. The Department approved the RAR on June 1, 2017. A Construction Completion Report ("CCR") for SA-6 North to document the implementation of the Chromium Remedy pursuant to Article III of the Consent Decree (the "Chromium Remedy") to address chromium-impacted soil and groundwater for SA-6 North was entered by the Court on December 5, 2017, Docket No. 1528.

The Property encompasses the In-situ Treatment Area 7 ("TA-7"), an area where a limited amount of shallow soils exceeds 20 milligrams per kilogram ("mg/kg") for hexavalent chromium. This area includes chromium only. This area consists of aboveground storage tanks connected by underground piping to a pump island with fuel-dispensing cabinets/pumps which JCMUA uses to fuel vehicles. To prevent disruption to the JCMUA fueling system and due to the depth of chromium-impacted soil and the proximity of the nearby 72-inch forcemain, in-situ treatment was implemented in this area in lieu of excavation. The in-situ treatment reduced the chromium-impacted soils to below 20 mg/kg for hexavalent chromium throughout the area except for at one recalcitrant location which is an approximately 559 square foot area. As part of facility upgrades, JCMUA plans on relocating their fueling system. Once they do, the limited area where hexavalent

chromium soil remains above 20 mg/kg will be excavated and the deed notice terminated consistent with paragraph 13 below. In the meantime, the provisions of the Long Term Monitoring Plan ("LTMP"), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. Groundwater contaminant concentrations and restrictions for SA-6 North in its entirety are addressed in the Classification Exception Area (CEA) approved by the NJDEP on February 16, 2012 and in a forthcoming Remedial Action Permit for Groundwater (recent groundwater samples for the Property do not indicate shallow groundwater contamination). As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Under the terms of the Consent Decree and this Deed Notice, Honeywell is responsible for monitoring and maintaining the soil remediation for the Property in perpetuity or until remediation is implemented that renders this Deed Notice unnecessary.

4. CONSIDERATION. In accordance with the Department's approval of the chromium RAWP for the remediation for the Hudson County Chromate Site Nos. 087 and 088 which includes the Property, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained at either the onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented;

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a child care facility without the Department's prior written approval; and

iii. The Consent Decree, paragraph 53, prohibits the unrestricted use of the Property until the Chromium Remedy set forth in Article III of the Consent Decree is implemented and the concentration of hexavalent chromium in soil is less than 20 mg/kg to a depth of 20 feet below ground surface.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls within the Property. The engineering controls consist of 2 feet of clean soil and an asphalt/concrete cap. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the Consent Decree, LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Pursuant to the Consent Decree, Honeywell has developed an LTMP pursuant to the Consent Decree which sets forth requirements for monitoring, maintaining, and repairing or replacing the soil and groundwater chromium remedial measures including engineering controls within the Property, and requirements for notification and reporting pursuant to the Consent Decree, Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5F. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees, and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person of whom it has knowledge, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of known contamination in the Property, and, of the precautions necessary to protect the engineering controls and minimize potential human exposure to contaminants.

ii. Except as provided in the Consent Decree and Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) permitted in the Consent Decree and (b) without first obtaining a Soil Remedial Action Permit modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. Notwithstanding subparagraph 7A.ii.(b), above, a Soil Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) Such action is taken in conformance with the Consent Decree and this Deed Notice; and

(B) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(C) Honeywell is notified of the activity by calling 855-727-2658; and

(D) Honeywell and/or the owner restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the Consent Decree and LTMP, within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(E) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(F) Appropriate measures are taken so that human exposure and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(G) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Immediately after notifying NJDEP, Honeywell is notified of the emergency by calling 855-727-2658; and

iii. Both the actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions, consistent with the requirements of the Consent Decree and LTMP, as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future. Honeywell shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program

P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Article III of the Consent Decree and Exhibit C herein, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, so that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Article III of the Consent Decree, the LTMP, and Exhibit C herein, so that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment; and

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to

the Department pursuant to iii, below, so that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owner, subsequent owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the Owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and, of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property. Any such conveyance, grant or gift must be consistent with the terms of the Consent Decree.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. Any such rezoning must be consistent with the terms of the Consent Decree. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program

P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

iii. This Deed Notice is also enforceable in the United States District Court for the District of New Jersey by all residents, owners, lessees, and all commercial tenants on Study Areas 6 and 7 pursuant to paragraphs 66 and 69 of the Consent Decree.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate, provided that any such modification is consistent with the requirements of the Consent Decree.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Any person seeking a modification or termination of this Deed Notice must also have such modification approved by the United States District Court for the District of New Jersey pursuant to the Consent Decree until such time as the Consent Decree terminates with regard to the Property pursuant to the Consent Decree.

iv. If the United States District Court for the District of New Jersey and NJDEP have concluded that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraphs 13v above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. Unless this Deed Notice has been terminated pursuant to Paragraph 13, after development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, ground water monitoring wells, and ground water pumping system including trenches and pumps;

(B) As-built diagrams of any buildings, roads, parking lots, utility corridors, and other structures that function as engineering controls; and

(C) Designation of all soil and/or sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Restricted Area Data Tables - Table for the Property that includes:

(A) Sample location designation from Restricted Area maps (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C-1C. Exhibit C-1-A: Deed Notice as Institutional Control; Exhibit C-1-B: Consent Decree as Institutional Control; and Exhibit C-1C Zoning as Institutional Control: Exhibit C-1 includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
(1) Description and estimated size of the Restricted Areas as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:
(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;
(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and
(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;
(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and
(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2. Exhibit C-2: Engineering Controls:

Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:
(1) Description of the engineering control;
(2) The objective of the engineering control; and
(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:
(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;
(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;
(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;
(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;
(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and
(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:
(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;
(2) The engineering control continues to operate as designed; and
(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

[If Owner is a corporation]

ATTEST:

Francis J. Borin, Esq., General Counsel
[Print name and title]

[Jersey City Municipal Utilities Authority]

By: Jeremy Farrell, Acting Executive Director

[Signature]

STATE OF NEW JERSEY SS.:
COUNTY OF HUDSON

I certify that on Jan 5, 2018 Jeremy Farrell personally came before me, and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Acting Executive Director of Jersey City Municipal Utilities Authority, the Municipal Corporation named in this document;

(b) this person is the attesting witness to the signing of this document by the proper corporate officer who is the General Counsel of the Municipal Corporation;

(c) this document was signed and delivered by the Municipal Corporation as its voluntary act and was duly authorized;

(d) this person knows the proper seal of the Municipal Corporation which was affixed to this document; and

(e) this person signed this proof to attest to the truth of these facts.

[Signature]

Francis J. Borin, Esq., General Counsel
[Print name and title of attesting witness]

Signed and sworn before me on January 5th, 2018

Ketia N. Solis, Notary Public

Ketia N. Solis
[Print name and title]

KETIA N. SOLIS
Notary Public of New Jersey
My Commission Expires Sept. 5, 2018

EXHIBIT A
Deed Notice #10 SA-6 North TA-7 (JCMUA)

A-1 Vicinity Map

A-2 Metes and Bounds Description and Tax Map

A-3 Property Map Portions of Block 21901, Lot 10, City of Jersey City, New Jersey

Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

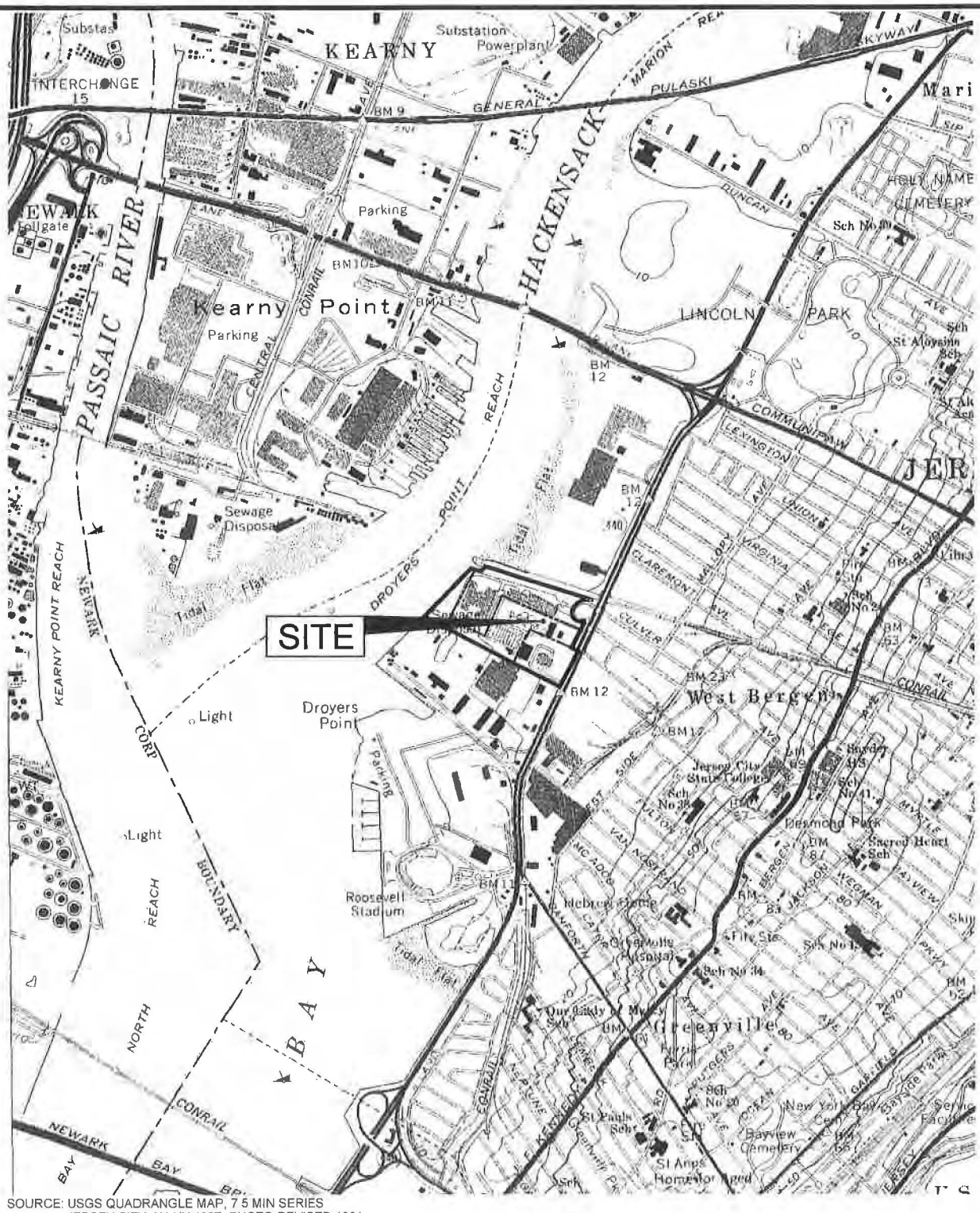
Exhibit A-2 consists of metes and bounds and a tax map for the Property.

Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering control for the Property. Unless this Deed Notice has been terminated pursuant to Paragraph 13, after development of the Property, this Deed Notice shall be modified to show topographical features constructed on the Property such as buildings, roads, and parking lots.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 6 NORTH SITE 087
JERSEY CITY, NEW JERSEY

CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED AND (2) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.



SOURCE: USGS QUADRANGLE MAP, 7 5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150483 *DRAWING:* 3480150487-6100-A110-0000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-1** VICINITY MAP BLOCK 21901, LOT 10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #10
PREPARED/DATE: STR 12/15/16 | *CHECKED/DATE:* NW 01/31/17		

P:\CAD\HONEYWELL\JERSEY CITY SA 6 NORTH\3480150487\6100\61001\DEED NOTICE\DN 10\3480150487-6100-A110-0000.dwg Tue, 29 Nov 2017 - 10:45am scott.willis

Exhibit A-2
Deed Notice #10 SA-6 North TA-7 (JCMUA)

Metes and Bounds Description of Property: See Attached
Tax Map: See Attached

A-2 Metes and Bounds Description of Property Portions of Block 21901, Lot 10
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map or any other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as a portion of Block 21901, Lot 10 on the City of Jersey City tax maps, the Property being presently owned by JCMUA. A copy of the current tax map which includes the TA-7 Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners • Surveyors • Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 • Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292R

DEED NOTICE AREA 10
LOT 10 BLOCK 21901
OCTOBER 13, 2016

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 10 in Block 21901, designated as Deed Notice Area 10 as shown on an exhibit entitled, "Deed Notice Area 10, SA6 North, Block 21901 Lot 10, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated October 12, 2016 and being more particularly bounded and described as follows, to wit:

COMMENCING at the intersection of the division line between Lots 9 and 10 in Block 21901 with the northwesterly line of Lot 4 in Block 21901, as shown on the aforesaid exhibit; thence-

A. **S 24° 46'55" W, 49.08 feet**, along said northwesterly line to the intersection of the same with the northerly line of proposed Block 6; thence-

B. **N 67° 01'59" E, 567.84 feet**, along said northerly line; thence-

C. **S 22° 52' 09" W, 1.33 feet**, running through said proposed Block 6 to the True Point of **BEGINNING**, and running; thence-

Continuing through said proposed Block 6 the following four (4) courses:

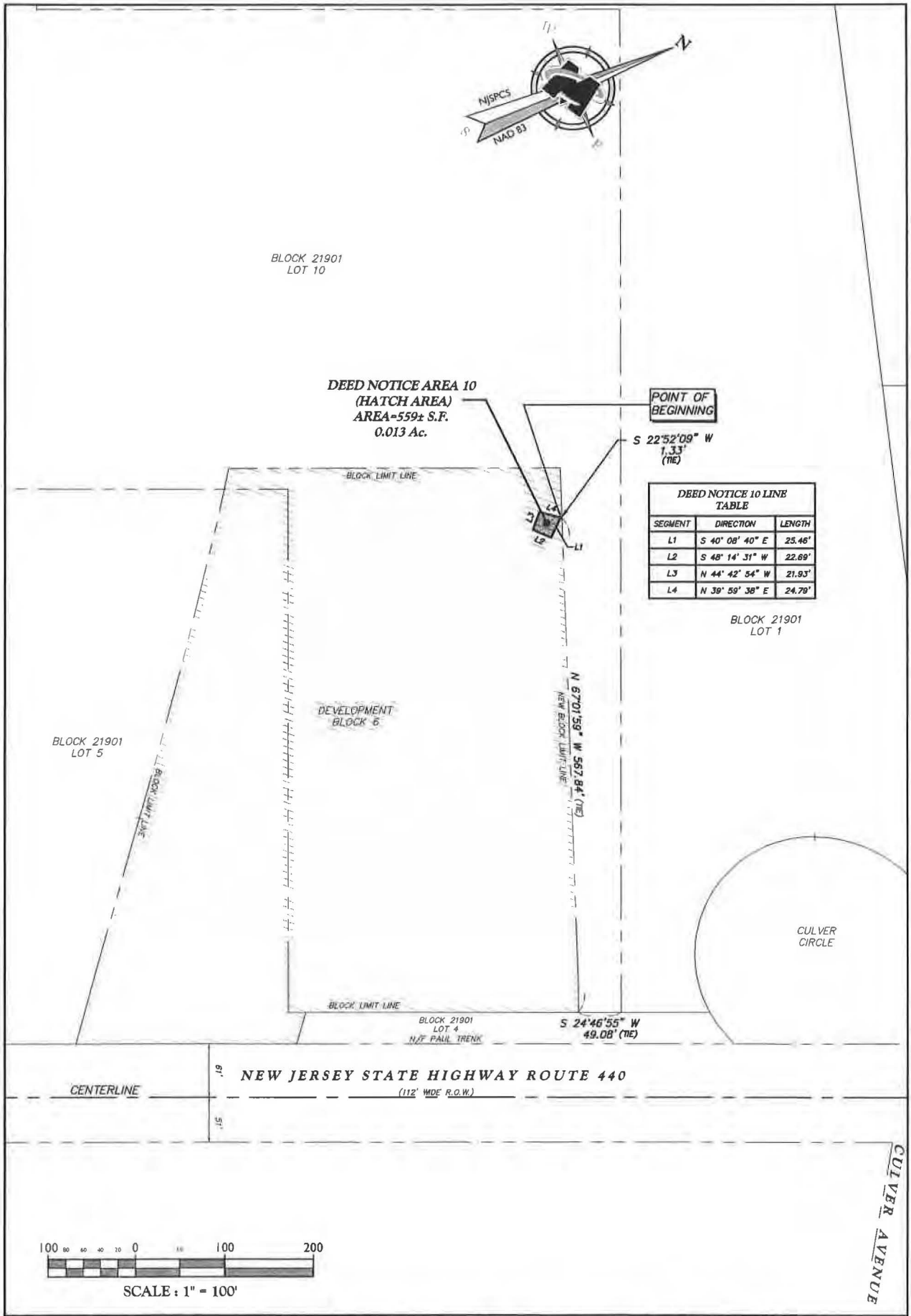
1. **S 40° 08' 40" E, 25.46 feet**; thence-
2. **S 48° 14' 31" W, 22.69 feet,** thence -
3. **N 44° 42' 54" W, 21.93 feet,** thence –
4. **N 39° 59' 38" E, 24.79 feet,** to the Point and Place of **BEGINNING.**

CONTAINING: 559 S.F. of land more or less or 0.013 acre of land more or less.

10/13/16

GLEN J. LLOYD, P.L.S. — DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

\\HQFAS1\General\Projects\2010\10000292R\Survey\Description\Metes & Bounds-Deed Notice 10.docx



DEED NOTICE 10 LINE TABLE

SEGMENT	DIRECTION	LENGTH
L1	S 40° 08' 40" E	25.46'
L2	S 48° 14' 31" W	22.69'
L3	N 44° 42' 54" W	21.93'
L4	N 39° 59' 38" E	24.79'

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- Albany, NY
- Chestnut Ridge, NY
- Newburgh, NY
- Hawthorne, NY
- Lehigh Valley, PA
- Exeter, PA
- Philadelphia, PA
- Columbia, MD
- Tampa, FL

REV	DATE	DRAWN BY	DESCRIPTION
1	[illegible]	KAN	BLOCK 6

DEED NOTICE AREA 10 SA6
NORTH

BLOCK 21901
LOT 10

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

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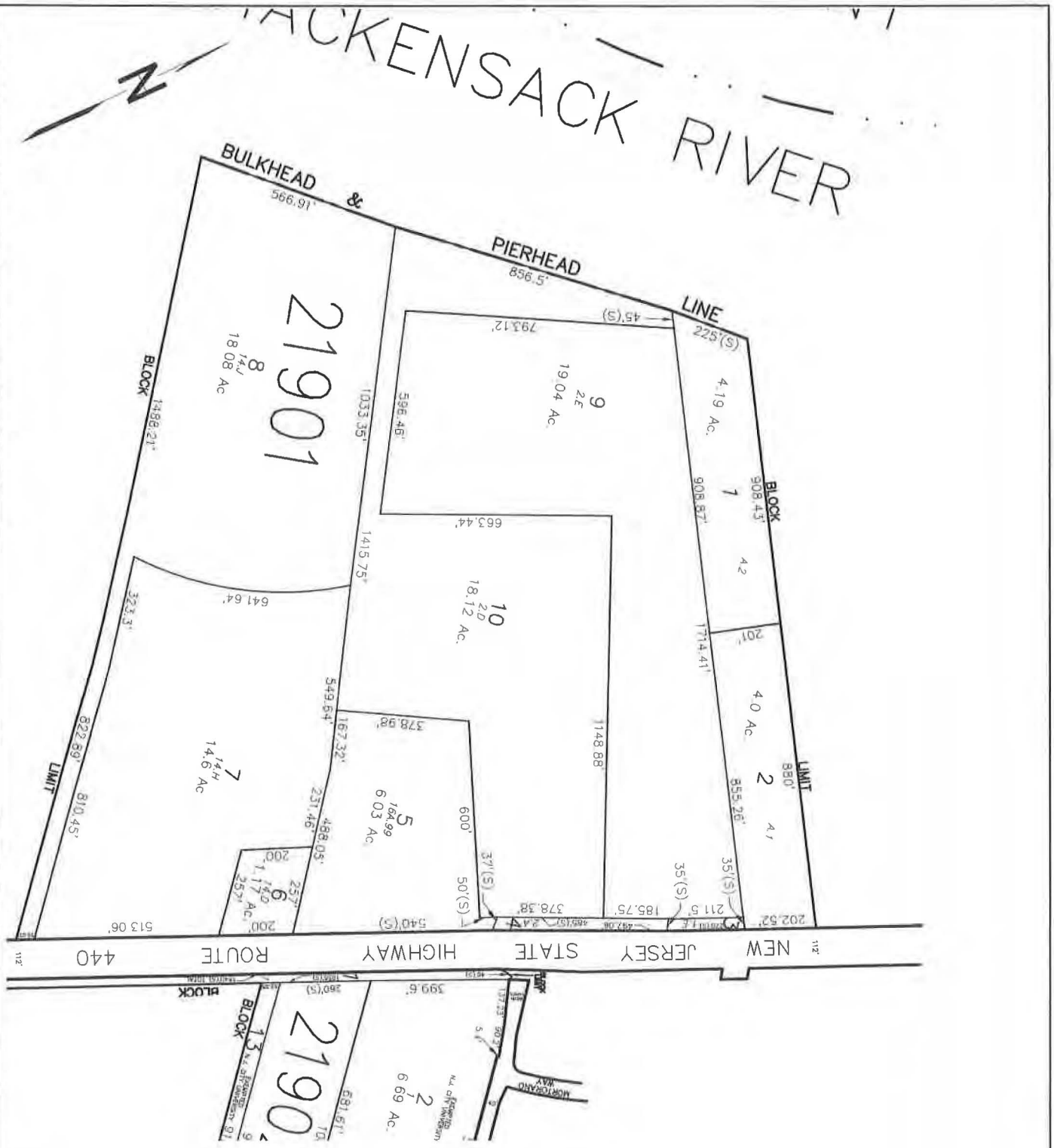
SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	[illegible]	KAN	RJL

PROJECT NUMBER: 201011000
DRAWING NAME: 9-EXIST-EXH-10

SHEET TITLE: DEED NOTICE EXHIBIT

SHEET NUMBER: 1 of 1



SOURCE:
DRAWING TITLED: "TAX MAP CITY OF JERSEY CITY", PREPARED BY T&M ASSOCIATED, MIDDLETOWN TWP., NJ SHEET 219, DATED AUGUST, 2006; NEW JERSEY DEPARTMENT OF THE TREASURY DIVISION OF TAXATION PROPERTY ADMINISTRATION DATED MAY 8, 2009 SERIAL NO.: 934

0 150 300 600
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 DRAWING: 3480150487-6100-A210-0000		amec foster wheeler	**EXHIBIT A-2** TAX MAP BLOCK 21901, LOT 10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #10
PREPARED/DATE: STR 12/15/16	CHECKED/DATE: NW 01/31/17	ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	

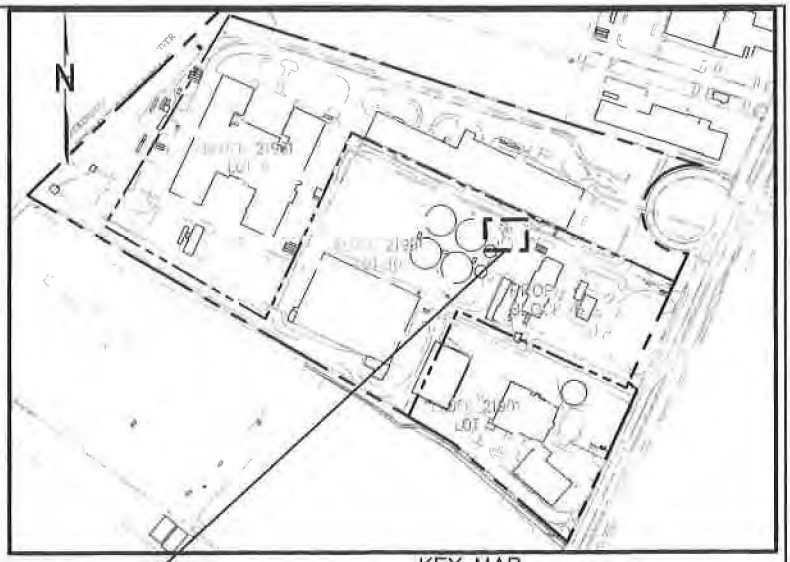
Exhibit A-3
Property Map

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY CREDIT, USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

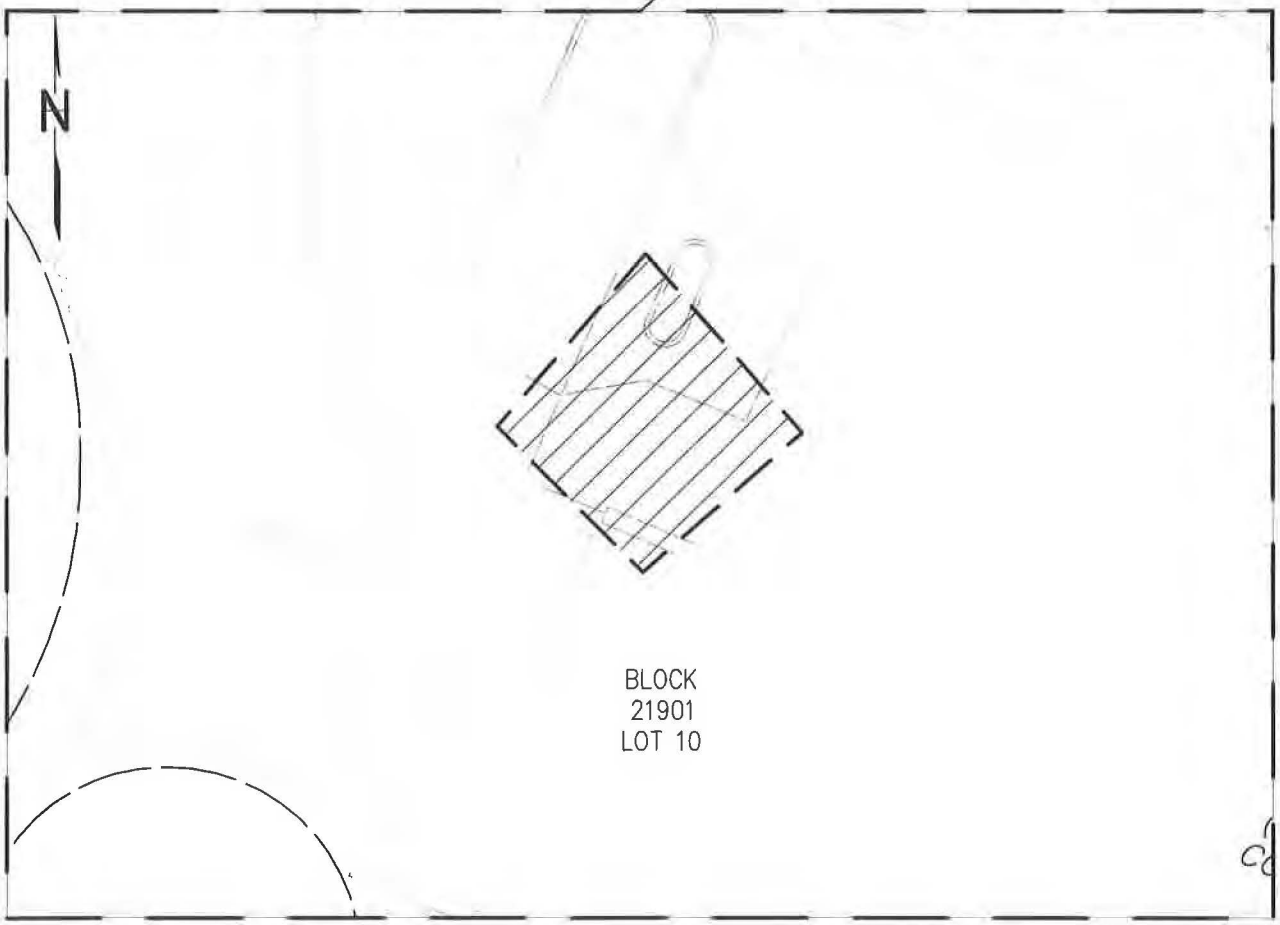
LEGEND

PROPERTY BOUNDARY

RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 10 20 40
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A310-0000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT A-3** PROPERTY AREA MAP BLOCK 21901, LOT 10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #10
PREPARED/DATE: STR 12/15/16 | *CHECKED/DATE:* NW 01/31/17		

EXHIBIT B
Deed Notice #10 SA-6 North TA-7 (JCMUA)

B-1 Restricted Area Maps
B-2 Restricted Area Data Table
Portions of Block 21901, Lot 10
City of Jersey City, New Jersey

Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area Soil Sample Locations), Exhibit B-1B (Cap System Detail), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of hexavalent chromium remaining above the level established in the New Jersey Department of Environmental Protection's (NJDEP) Chromium Policy of 20 milligrams per kilogram (mg/kg).

Restricted Area Map Notes:

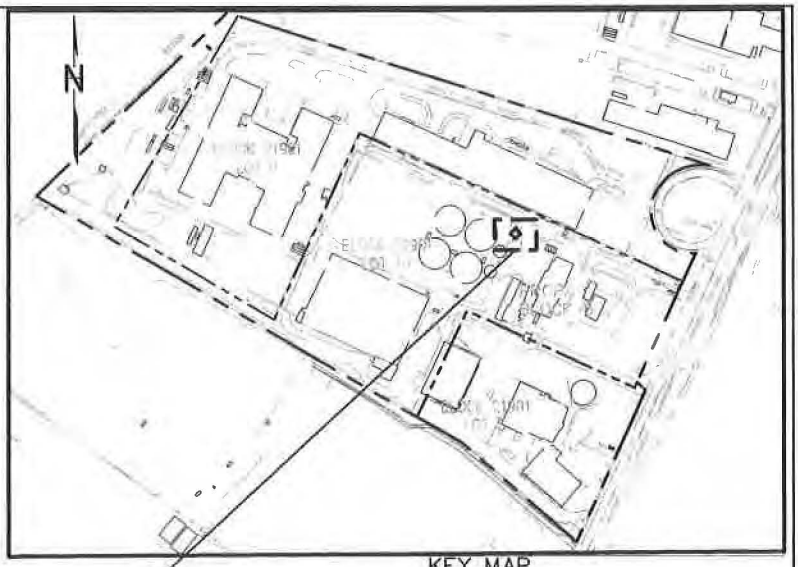
Exhibit B-1 indicates engineering controls chromium remedy components. For soils with hexavalent chromium concentrations above 20 mg/kg, the engineering control consists of 2 feet of clean soil and an asphalt/concrete cap.

Exhibit B-1
Restricted Area Maps

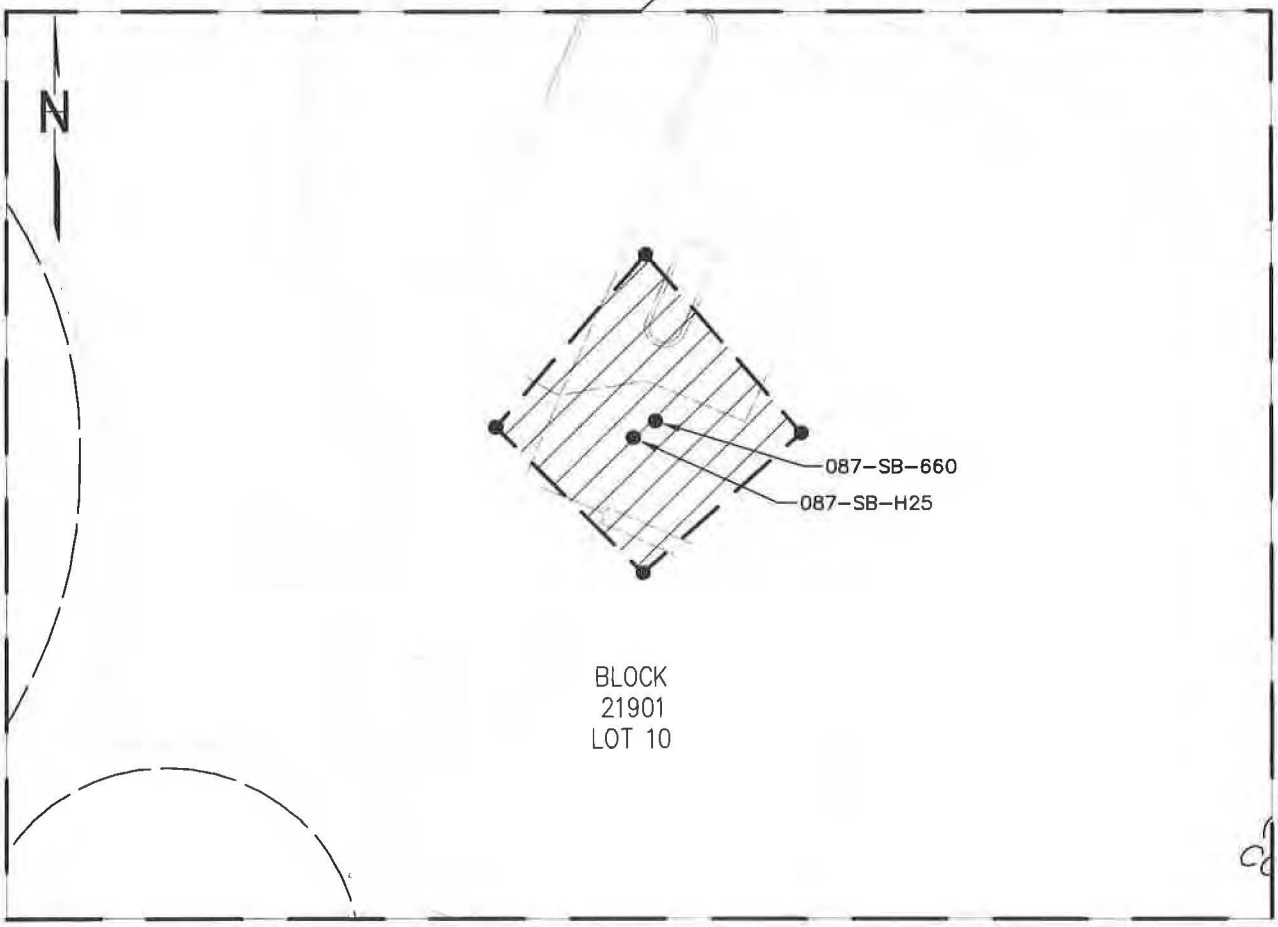
UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT, (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED, AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

LEGEND

- SOIL SAMPLE LOCATION HEXAVALENT CHROMIUM > 20 mg/kg (SEE EXHIBIT B–2)
- PROPERTY BOUNDARY
- RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 10 20 40
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487–6100–B010–0000		amec foster wheeler	**EXHIBIT B-1A** RESTRICTED AREA MAP BLOCK 21901; LOT 10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #10
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17	ENVIRONMENT & INFRASTRUCTURE, Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	

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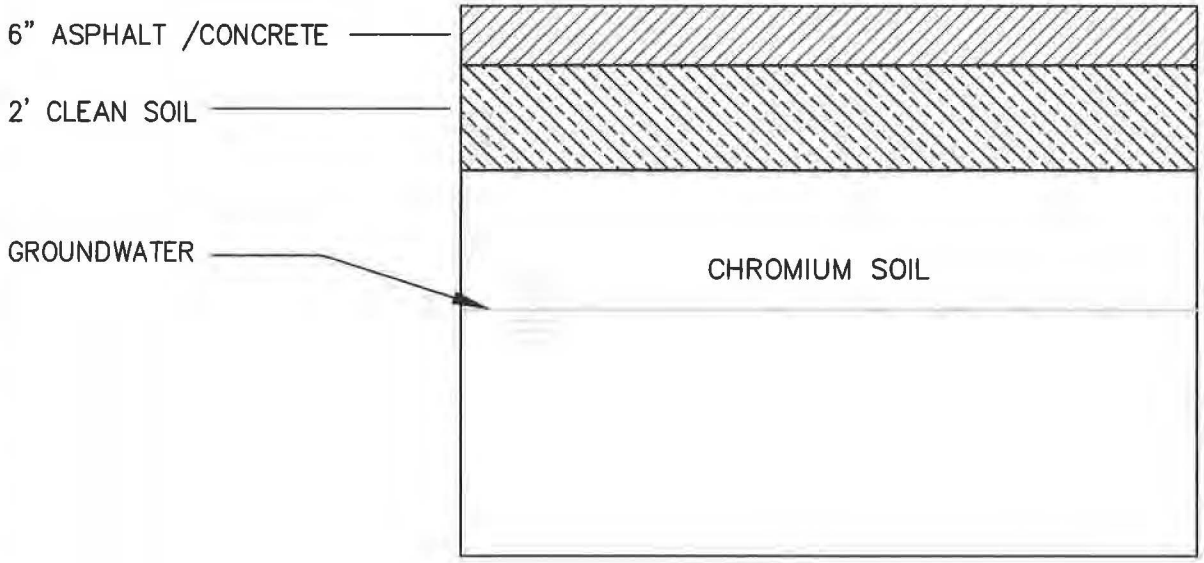
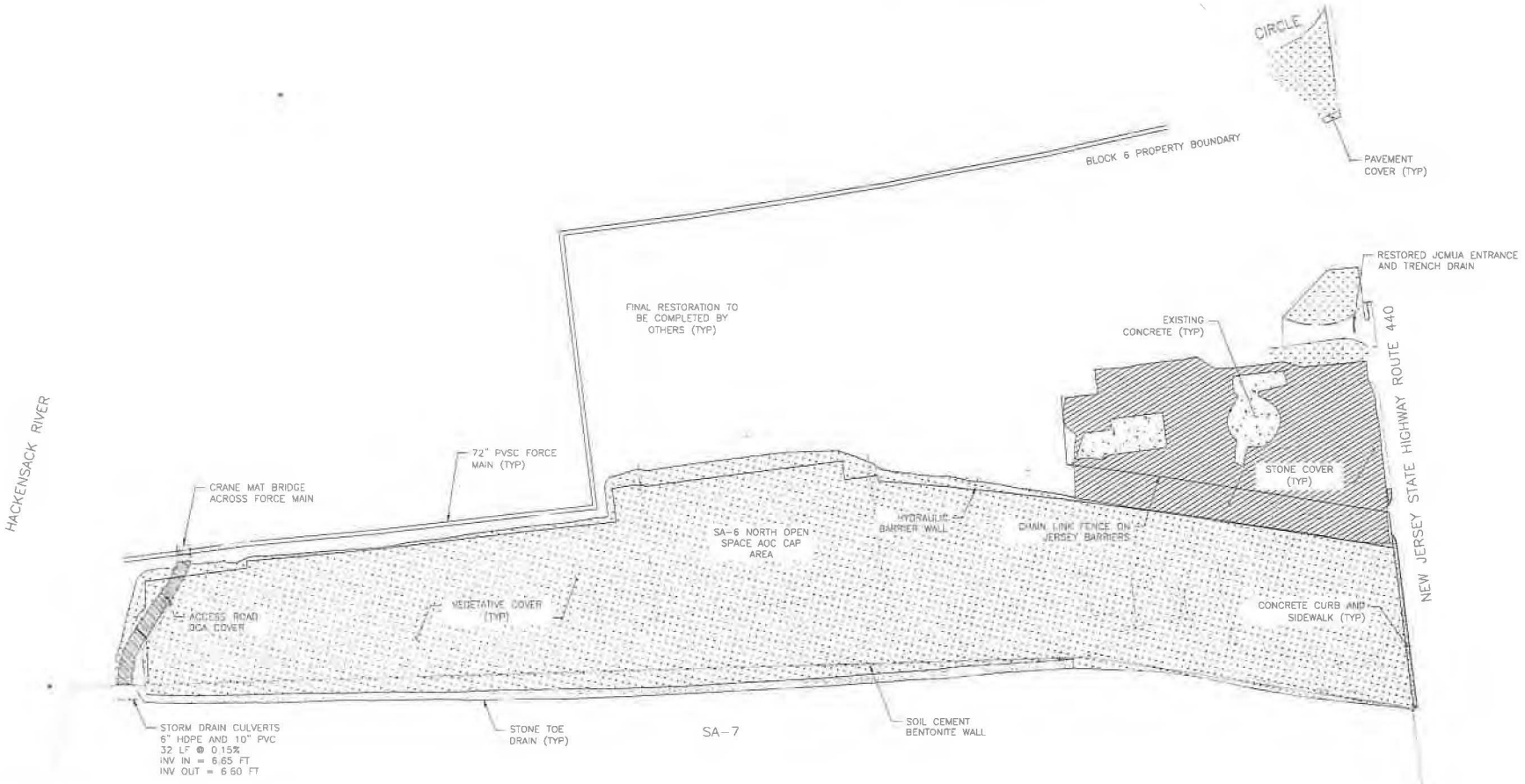
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 10\3480150487-6100-B210-0000.dwg Tue, 28 Nov 2017 - 10:51am scott.nydun



CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150487-6100-B210-0000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE Inc 200 AMERICAN METRO BLVD. SUITE 112 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 21901; LOT 10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #10
PREPARED/DATE: STR 01/25/17	CHECKED/DATE: NW 01/31/17		



NOTE:

1. REFER TO CONSTRUCTION CONTROL GRID FIGURE AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH CREAM, HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE WITHIN THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. REMAINING RESTORATION AREAS IDENTIFIED ON THE CHROMIUM REMEDY 100% DESIGN DRAWINGS WILL BE ADDRESSED AS PART OF THE NON CHROMIUM REMEDIATION WORK CURRENTLY BEING COMPLETED. FINAL RESTORATION OF ALL AREAS IS SCHEDULED TO BE COMPLETE IN MARCH 2017.

EXHIBIT B-1C

STONE COVER
DCA COVER
VEGETATED COVER
RESTORATION BY OTHERS
PAVEMENT COVER
STONE TOE DRAIN
CONCRETE COVER
SD — STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
B	1/6/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: AS BUILT RESTORATION PLAN SA-6 NORTH – SHEET 001 1/6/17

PROJECT NAME & LOCATION: HONEYWELL SA-6 REMEDIATION JERSEY CITY, NJ

Exhibit B-2: Table B-2
Soil Sample Data Table (Hexavalent Chromium)

EXHIBIT B-2
Restricted Area Data Table
Study Area 6 North
Portions of Block 21901, Lot 10
Deed Notice #10 TA-7 (JCMUA)
Jersey City, New Jersey

Location ID	Sample Depth (feet bgs)	Sample Elevation (feet msl NAVD88)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Concentration (mg/kg)	Q
087-SB-660	2-3	10	Hexavalent Chromium	18540-29-9	20	**26.3**	
087-SB-H25	2-3	10	Hexavalent Chromium	18540-29-9	20	**43.6**	J

Notes:
Results reported in milligrams/kilogram (mg/kg).

Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

Abbreviations:
Feet bgs - Feet below ground surface
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010
CASR# - Chemical Abstract Service Number

EXHIBIT C
Deed Notice #10 SA-6 North TA-7

C-1 Institutional Controls
C-2 Engineering Controls
Portion of Block 21901, Lot 10
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice, Consent Decree, Zoning as Institutional Controls: Exhibit C-1 (A through C) for that portion of Block 21901, Lot 10, City of Jersey City, New Jersey known as the Deferred Area

Exhibits C-1A through C-1C. Exhibit C-1-A: Deed Notice as Institutional Control; Exhibit C-1-B: Consent Decree as Institutional Control; Exhibit C-1C Zoning as Institutional Control: Exhibits C-1A through C-1C include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
The Property encompasses the In-situ Treatment Area 7 ("TA-7"), an area where a limited amount of shallow soils exceeds 20 mg/kg for hexavalent chromium. This deed notice area includes chromium only. This area consists of aboveground storage tanks connected by underground piping to a pump island with fuel-dispensing cabinets/pumps which JCMUA uses to fuel vehicles. To prevent disruption to the JCMUA fueling system and due to the depth of chromium-impacted soil and the proximity of the nearby 72-inch forcemain, in-situ treatment was implemented in this area in lieu of excavation. The in-situ treatment implemented reduced the chromium-impacted soils to below 20 mg/kg for hexavalent chromium throughout the area except for one approximately 559 square foot area. As part of facility upgrades, JCMUA plans on relocating their fueling system. Once they do, the limited area where hexavalent chromium soil remains above 20 mg/kg will be excavated and the deed notice terminated consistent with paragraph 13 above. In the meantime, the provisions of the LTMP, developed pursuant to the Consent Decree, will apply to the Property.

(1) Description and estimated size of the Restricted Areas as described above;

The Property constitutes a portion of Block 21901, Lot 10. The estimated size of the Area containing chromium-impacted soils (hexavalent chromium above 20 mg/kg) is identified on Exhibit B-1 is estimated at approximately 560 square feet or approximately 0.013 acres.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(3) The objective of the restrictions;

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas resulted in the unacceptable exposure to the soil contamination;

Visual inspections of the Property and other monitoring as set forth in the Consent Decree and the applicable portions of the LTMP developed thereunder.

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in the Consent Decree, this Deed Notice, the applicable zoning standards; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in the Consent Decree, this Deed Notice*, and *the applicable zoning standards.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #10 SA-6 North TA-7

Portion of Block 21901, Lot 10
City of Jersey City, New Jersey

ii. Exhibits C-2A through C: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Control consists of 2 feet of clean soil and an asphalt/concrete cap.

(2) The objective of the engineering controls; and

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(3) How the engineering controls are intended to function.

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above20 mg/kg within the Property. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to the Consent Decree. Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***

- ***A report to determine whether or not the engineering controls continue to operate as designed.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment***

Appendix I
Consent Decree

APPENDIX I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5955 Consolidated under Docket No. 95-2097 (DMC)
JERSEY CITY INCINERATOR AUTHORITY Plaintiff, v. HONEYWELL INTERNATIONAL INC., Defendant.	Civil Action No. 05-5993 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)
HACKENSACK RIVERKEEPER, INC., *et al.* Plaintiffs, v. HONEYWELL INTERNATIONAL INC., *et al.* Defendants.	Civil Action No. 06-22 Consolidated under Docket No. 05-5955 (DMC) under Docket No. 95-2097 (DMC)

FIRST AMENDED CONSENT DECREE REGARDING REMEDIATION AND REDEVELOPMENT OF STUDY AREA 6 NORTH

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RECITALS

Whereas, on June 30, 2003, the district court for the District of New Jersey issued a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097 (DMC) (*"ICO v. Honeywell"*), ordering the remediation of an area designated by the New Jersey Department of Environmental Protection ("NJDEP") as Study Area 7 by excavation of all chromium contamination on the property, under the oversight of a court-appointed Special Master;

Whereas, on or about December 23, 2005, the Jersey City Municipal Utilities Authority ("JCMUA") filed litigation styled *Jersey City Municipal Utilities Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5955 (DMC), bringing claims against Honeywell International Inc. ("Honeywell") under, *inter alia*, Section 6972 of the Resource Conservation and Recovery Act ("RCRA"), and seeking remediation of chromium contamination on property owned by JCMUA and other relief;

Whereas, on or about December 28, 2005, the Jersey City Incinerator Authority ("JCIA") filed litigation styled *Jersey City Incinerator Authority v. Honeywell International Inc.*, D.N.J., Civ. No. 05-5993 (DMC), bringing claims against Honeywell under, *inter alia*, Section 6972 of RCRA, and seeking remediation of chromium contamination on property owned by JCIA and other relief;

Whereas, on or about January 4, 2006, the Hackensack Riverkeeper, Inc., Captain William Sheehan, Reverend Winston Clarke, and Lawrence Baker ("Riverkeeper") filed litigation styled *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-022 (DMC), bringing a claim against Honeywell under RCRA and seeking remediation of chromium contamination to soils, groundwater, surface waters, and sediments associated with various properties collectively designated by NJDEP as Study Areas 5, 6 North, and 6 South;

Whereas, Study Areas 6 North and South are directly adjacent to Study Area 7 on the north and south sides, respectively;

Whereas, Study Area 5 is comprised of properties to the east of Study Areas 6 North, 6 South, and 7 across Route 440;

Whereas, the property owned by JCIA and JCMUA and collectively the subject of *JCMUA v. Honeywell* and *JCIA v. Honeywell* comprises a part of Study Area 6 North;

Whereas, the City of Jersey City ("Jersey City") also owns property that comprises a part of Study Area 6 North;

Whereas, Riverkeeper also named as defendants in *Riverkeeper v. Honeywell* Jersey City, JCMUA, and JCIA (collectively the "Jersey City Entities");

Whereas, the Jersey City Entities and Honeywell also asserted cross-claims against each other in *Riverkeeper v. Honeywell*;

Whereas, *JCMUA v. Honeywell*, *JCIA v. Honeywell,* and *Riverkeeper v. Honeywell* were consolidated by the United States District Court for the District of New Jersey (hereinafter the "Consolidated Litigation");

Whereas, in the Consolidated Litigation, the Jersey City Entities and Riverkeeper have alleged that Honeywell bears responsibility for the presence and remediation of chromite ore processing residue ("COPR") and chromium in soils and groundwater on the Study Area 6 North property;

Whereas, in the Consolidated Litigation, Honeywell has alleged that the Jersey City Entities bear full responsibility for lead and other contamination on the Study Area 6 North property, and also bear an equitable share of liability for the presence and remediation of COPR and chromium in soils and groundwater on the Study Area 6 North property and for chromium and other contamination in Hackensack River sediments in the vicinity of Study Area 6 North;

Whereas, on October 9, 2007, Honeywell and Riverkeeper submitted the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"), resolving issues related to the remediation of chromium contaminated sediments in the Hackensack River in the vicinity of Study Areas 5, 6, and 7;

Whereas, the Parties to this Consent Decree each believe that it is in their mutual interest to move forward productively to resolve their differences so that they can implement environmental remediation at Study Area 6 North that ensures the continued protection of human health and the environment and so that Study Area 6 and Study Area 7 can be redeveloped in keeping with Jersey City's vision for a revitalized West Side;

Whereas, the Local Redevelopment and Housing Law, N.J.S.A. 40A:12A-1, *et seq.*, as amended and supplemented (the "Redevelopment Law") provides for municipalities to participate in the redevelopment and improvement of areas in need of redevelopment;

Whereas, the portions of Study Area 6 and Study Area 7 (i) which are owned by the Jersey City Entities, (ii) which are owned by Honeywell, (iii) as to which Honeywell has a purchase and sale agreement with the current owner, or (iv) which hereafter will be acquired by a Jersey City Entity and/or Honeywell are parcels which by ordinance adopted by the City Council of Jersey City on February 27, 2008, have been determined to be "areas in need of redevelopment" under the criteria of the Redevelopment Law because of conditions prevalent on those parcels;

Whereas, the settlement which is the subject matter of this Consent Decree contemplates the environmental remediation of Study Area 6 North and redevelopment of the parcels that comprise Study Areas 6 and 7 to create a major mixed use project in an important section of Jersey City;

Whereas, each of the actions to implement this Consent Decree have been fully considered by the Parties as a means to accomplish the aforesaid purposes of this settlement;

Whereas, the consent of each of the Jersey City Entities to this Consent Decree was considered at a duly noticed and appropriate meeting of their respective governing bodies, open to the public, at which members of the public were provided an opportunity to comment on all aspects of the settlement, including, without limitation, the commitments made by the Jersey City Entities herein; and

Whereas, Honeywell and the Jersey City Entities are settling their claims, cross-claims, or counter-claims in the Consolidated Litigation against each other in the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* (hereafter "Jersey City/Honeywell Consent Order"), filed in the Consolidated Litigation simultaneously with this Consent Decree and attached as Exhibit A to this Consent Decree:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DECREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For purposes of this Consent Decree, the following terms shall have the meanings set forth in this Article:

1. **AOC 1** shall mean that area of Study Area 6 North in which the hexavalent chromium concentration in the top 20 feet of soil below existing ground surfaces exceeds concentrations of 20 mg/kg and the Chromium Remedy will be implemented pursuant to Article III. AOC 1 is shown on Exhibit B.

2. **AOC 1 Additional Excavation Areas** shall mean those areas of Study Area 6 North which require excavation pursuant to paragraph 57. The AOC 1 Additional Excavation Areas are not contiguous to AOC 1. The AOC 1 Additional Excavation Areas are shown on Exhibit B.

3. **AOC 1 Open Space Area** shall mean the AOC 1 Open Space Area, as defined by paragraph 53, consisting of approximately 11 acres enclosed by the hydraulic barrier walls constructed under the Chromium Remedy, and which shall be subject to paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B.

4. **AOC 2** shall mean that area of Study Area 6 North on which the Historic Fill Remedy will be implemented pursuant to Article II.B of the Jersey City/Honeywell Consent Order. AOC 2 is shown on Exhibit B.

5. **Bayfront Redevelopment LLC** shall have the meaning set forth in paragraph 4.1 of the Jersey City/Honeywell Consent Order.

6. **COPR** shall mean Chromite Ore Processing Residue.

7. **Chromium Remedy** or **Chromium Remediation** shall mean the remedy set forth in Article III.

8. **Consolidated Litigation** shall mean *Jersey City Municipal Utility Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5955 (DMC), *Jersey City Incinerator Authority v. Honeywell International Inc.,* D.N.J., Civ. No. 05-5993 (DMC), and *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.,* D.N.J., Civ. No. 06-022 (DMC).

9. The **Court** shall mean the United States District Court of the District of New Jersey, which has jurisdiction over the Consolidated Litigation.

10. **Deep Groundwater Remedy** shall mean the deep overburden and bedrock groundwater pump and treat remedy as required by the Order Approving the Deep Overburden Groundwater Remediation, entered on October 6, 2006, and the Stipulation on Consent Regarding the Schedule for Implementation of Deep Groundwater Remedial Actions, currently pending before the Special Master in *ICO v. Honeywell.* In the event that Riverkeeper and Honeywell reach a settlement on source control issues, the Deep Groundwater Remedy shall

include the remedy to which Riverkeeper and Honeywell have agreed. In the event that Riverkeeper and Honeywell do not reach a settlement on source control issues, the Deep Groundwater Remedy shall include the remedy ordered by the Special Master or the Court in *ICO v. Honeywell* for source control.

11. **Hackensack River Watershed Land Trust** shall mean the dedicated fund of the Hackensack Riverkeeper, Inc., established under Section 501(c) of the Internal Revenue Code for the purpose of acquiring and preserving open space within the Hackensack River watershed and administered by the Board of Trustees of the Hackensack Riverkeeper, Inc.

12. **Historic Fill** shall have the definition provided in the NJDEP Technical Requirements for Site Remediation.

13. **Historic Fill Remedy or Historic Fill Remediation** shall mean the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order, except that the Historic Fill Remedy shall not be limited to the remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order if NJDEP requires a more stringent remedy.

14. **Honeywell** shall mean Honeywell International Inc. and its affiliates, including Kellogg Street 80 Property LLC, Kellogg Street 60 Property LLC, and Kellogg Street/440 Property LLC.

15. **Honeywell's Treatment Plant** shall mean the treatment plant currently located at 80 Kellogg Street that is used to treat, *inter alia*, chromium contaminated groundwater.

16. ***ICO v. Honeywell*** shall mean *Interfaith Community Organization v. Honeywell International Inc.*, D.N.J., Civ. No. 95-2097 (DMC).

17. **Including** shall mean including, but not limited to.

18. **JCIA** shall mean the Jersey City Incinerator Authority.

19. **JCMUA** shall mean the Jersey City Municipal Utilities Authority.

20. **JCRA** shall mean the Jersey City Redevelopment Agency.

21. **Jersey City Entities** shall mean the City of Jersey City, including the Department of Public Works ("DPW") and other agencies and branches thereof, the JCIA, and the JCMUA.

22. **Jersey City/Honeywell Consent Order** shall mean the *Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc.* entered in the Consolidated Litigation simultaneously with this Consent Decree.

23. **NJDEP** shall mean the New Jersey Department of Environmental Protection.

24. **NJDEP Chromium Directive** shall mean the Chromium Directive issued by NJDEP on February 8, 2007, and attached as Exhibit C.

25. **Party or Parties** shall mean any one or all of the signatories to this Consent Decree.

26. **RCRA** shall mean the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*, as amended.

27. **Redevelopment Agreement** shall have the meaning set forth in paragraph 4.11(e) of the Jersey City/Honeywell Consent Order.

28. **Redevelopment Area** shall mean Study Area 6 North, Study Area 6 South, and Study Area 7, collectively.

29. **Redevelopment Law** shall mean the New Jersey Local Redevelopment and Housing Law, N.J.S.A. 40A:12A1, *et seq.*, as amended and supplemented.

30. **Redevelopment Plan** shall mean the Bayfront I Redevelopment Plan as adopted by Jersey City on March 12, 2008.

31. **Riverkeeper** shall mean the plaintiffs in *Hackensack Riverkeeper, Inc. v. Honeywell International Inc.*, D.N.J., Civ. No. 06-22 (DMC), and includes the Hackensack Riverkeeper, Inc., William Sheehan, Reverend Winston Clarke, and Lawrence Baker.

32. **Sediment Consent Order** shall mean the Consent Order on Sediment Remediation and Financial Assurances, which the Parties expect will be entered by the Court in *ICO v. Honeywell* and this Consolidated Litigation.

33. **Shallow Groundwater** or **Shallow Level of Groundwater** shall mean groundwater above the meadow mat, groundwater at stratigraphically equivalent depths in locations where there is no meadow mat, and groundwater that is contaminated by recent contact with COPR or other chromium soil contamination above the meadow mat and subsequently flows downward through or past the meadow mat into the upper portion of the lacustrine sediments. This does not include groundwater found in the bedrock, the deep zone, or any plume of contamination that is in both the intermediate and deep zones, as those zones are defined in the Final Groundwater Investigation Report, prepared in *ICO v. Honeywell*, dated February 2007, p. 1-2.

34. **Site** shall mean Study Area 6 North.

35. **Site Preparation Activities** shall have the meaning set forth in paragraph 3.1 of the Jersey City/Honeywell Consent Order.

36. **Site Preparation Plan** shall have the meaning set forth in paragraph 3.2 of the Jersey City/Honeywell Consent Order.

37. **Soil** shall mean soils, historic fill, and/or COPR.

38. The **Special Master** shall mean Senator Robert G. Torricelli, appointed as the Special Master in *ICO v. Honeywell* and the Consolidated Litigation, and his successors or whomever the Court may appoint as Special Master.

39. **Stratum O** shall mean the layer composed of soft brown silty fine sand interlayered with soft gray silty clay and fine sandy to clayey silt generally located above the meadow mat below the Historic Fill and/or COPR.

40. **Study Area 6 North** shall mean that property comprising Sites 87 and 88 of the Chromate Chemical Production Waste Sites designated by NJDEP, comprising approximately 41.58 acres and including: (a) all such property owned by JCMUA located at 555 Route 440, Jersey City, New Jersey, (b) all such property owned by JCIA located at 501 Route 440, Jersey City, New Jersey; (c) all such property owned by Jersey City or its Department of Public Works and located at 575 Route 440, Jersey City, New Jersey; and (d) all such property owned by Paul Trenk consisting of Block 1290.1, Lot 2A, Jersey City, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

41. **Study Area 6 South** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC consisting of Site 73, located at 200 Kellogg Street Jersey City, Hudson County, New Jersey; (b) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 134, located at 100 Kellogg Street Jersey City, Hudson County, New Jersey; (c) that property currently owned by Kellogg Street 80 Property LLC consisting of Site 140 located at 80 Kellogg Street Jersey City, Hudson County, New Jersey; (d) that property currently owned by Kellogg Street 60 LLC consisting of Site 125, located at 60 Kellogg Street Jersey City, Hudson County, New Jersey; (e) that property currently owned by Kellogg Street/440 Property LLC consisting of Site 124, Jersey City, Hudson County, New Jersey; (f) that property currently owned by Kellogg St/Harsimus Cove Realty located at 150 Kellogg Street, Jersey City, Hudson County, New Jersey, (g) that property currently owned by Cordova Enterprises Ltd located at 38 Kellogg Street, Jersey City, Hudson County, New Jersey, and (g) that property currently owned by Cordova Enterprises Ltd located at 28 Kellogg Street, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

42. **Study Area 6** shall mean Study Area 6 North and Study Area 6 South, collectively.

43. **Study Area 7** shall mean (a) that property currently owned by 425/445 Route 440 Property LLC located at 425 and 445 Route 440, Jersey City, Hudson County, New Jersey, and (b) that property currently owned by Roned Realty/Edward Navlen located at 465 Route 440, Jersey City, Hudson County, New Jersey. Such properties are more fully described in Exhibit H to the Jersey City/Honeywell Consent Order.

44. **Technical Requirements for Site Remediation** shall mean the NJDEP Technical Requirements for Site Remediation, N.J.A.C. Chapter 26E, as duly and properly promulgated and amended.

45. **Unrestricted Use** shall mean that the contaminated medium is restored to a condition or quality suitable for all uses.

ARTICLE II: SCOPE OF THE CONSENT DECREE, JURISDICTION, AND CLAIMS RESOLVED

46. Except as provided in this paragraph, the terms of the Jersey City/Honeywell Consent Order shall remain in full force and effect. To the extent that any provision in the Jersey City/Honeywell Consent Order refers to the Chromium Remedy or Chromium Remediation, it shall be construed as referring to Article III of this Decree. In the event of any conflict or inconsistency between the terms of this Decree and the Jersey City/Honeywell Consent Order, the terms of this Decree govern. In the event that any action taken pursuant to the Jersey City/Honeywell Consent Order is in conflict with or inconsistent with the terms of this Decree, the terms of this Decree shall govern.

47. This Court has jurisdiction over the Parties and subject matter of the Consolidated Litigation pursuant to Section 6972 of RCRA.

48. For purposes of this Consent Decree, the Complaints in the Consolidated Litigation each state claims upon which relief may be granted against Honeywell.

49. In the event that this Decree is not terminated by one or more Parties pursuant to paragraph 100, this Consent Decree resolves, settles, and satisfies all claims by Riverkeeper against Honeywell with respect to soils and shallow groundwater at Study Area 6 North. This Consent Decree does not resolve any claims by Riverkeeper against Honeywell with respect to Study Area 6 South, Study Area 5, or groundwater at Study Area 6 North other than shallow groundwater.

50. Nothing in this Consent Decree shall be construed or interpreted to waive any claim or defense any Party has asserted or may assert against any third party in the Consolidated Litigation except as explicitly stated herein.

51. This Consent Decree does not constitute an admission of liability on the part of any Party with respect to any claims, cross-claims, or counter-claims in the Consolidated Litigation.

ARTICLE III: CHROMIUM REMEDIATION

A. Chromium Remedy

52. **Responsibility for Implementation of Chromium Remediation.** As between the Parties, Honeywell shall be responsible for and shall undertake remediation of COPR and chromium present in Study Area 6 North at Honeywell's sole cost and expense. Remediation of COPR and chromium present in Study Area 6 North shall be undertaken in accordance with the terms of this Consent Decree.

53. **AOC 1 and AOC 2.** For the purposes of remediation, Study Area 6 North shall consist of two Areas of Concern ("AOCs"), designated as AOC 1 and AOC 2 as shown on Exhibit B. AOC 1 is set forth on Exhibit B and consists of that portion of Study Area 6 North for which chromium remediation is required pursuant to paragraphs 55, 56, and 57. AOC 2 consists of the entirety of Study Area 6 North, including AOC 1, to the extent that historic fill is present in any area of Study Area 6 North. For AOC 1, the intended land use will determine the types

of remedial measures taken in the Chromium Remedy. There are two distinct land uses for AOC 1: open space and residential. As a result, AOC 1 will be further subdivided into:

(a) The AOC 1 Open Space Area, which shall comprise that portion of AOC 1 for which future use shall be restricted as provided in paragraph 60. The AOC 1 Open Space Area is shown on Exhibit B;

(b) The AOC 1 Residential Area, which shall comprise that portion of AOC 1 for which future use shall allow for residential and/or commercial and retail uses, but for which the remedial measures shall assume only a residential use . The AOC 1 Residential Area is shown on Exhibit B; and

(c) The AOC 1 Additional Excavation Areas, which consist of those portions of Study Area 6 North that require remediation pursuant to paragraph 57. The planned land use for the AOC 1 Additional Excavation Areas is residential and/or commercial and retail uses, but the remedial measures shall assume only a residential use.

54. **Scope and General Requirements of the Chromium Remedy.** The Chromium Remedy shall address shallow groundwater and soil containing hexavalent chromium in AOC 1, and shall be consistent with the requirements set forth in this Article. The Chromium Remedy set forth in this Consent Decree addresses only the shallow level of groundwater (see paragraph 58). The deep overburden and bedrock groundwater remediation, including source control, shall be addressed in a separate consent order, which shall place these issues within the jurisdiction of the Special Master in conjunction with the groundwater remedies for Study Area 7.

(a) The Chromium Remedy shall be consistent with the NJDEP Technical Requirements for Site Remediation, the Chromium Directive as issued by NJDEP on February 8, 2007 ("the NJDEP Chromium Directive"), and the Remedial Action Work Plan (with addenda) approved by NJDEP on or about February 19, 2008. This Consent Decree shall have precedence

over the Remedial Action Work Plan in the event of any inconsistency.

(b) The Chromium Remedy shall be carried out diligently, and the development and implementation of the Historic Fill Remedy shall not delay satisfaction of the milestones in the Schedule established pursuant to this paragraph. Honeywell shall propose a master Schedule for the implementation of the Chromium Remedy within 90 days of the entry of this Consent Decree, which shall include, at a minimum, the following milestones:

(i) Submission to the Special Master for all documents subject to review by the Special Master pursuant to paragraph 72(c);

(ii) Relocation of the Jersey City Entities' Study Area 6 North Operations as shall be required prior to the implementation of the Chromium Remedy;

(iii) Completion of those Site Preparation Activities necessary for the implementation of the Chromium Remedy, including remediation of the AOC 1 Additional Excavation Areas;

(iv) A final date for Honeywell's proposal of *in situ* treatment for any part of the AOC 1 Residential Area pursuant to paragraph 55(d) and a date for the final decision as to whether excavation or *in situ* treatment shall be used in the event of such a proposal;

(v) The initiation of work related to the Chromium Remedy;

(vi) The date for completion of the installation of the Chromium Remedy;

(vii) Implementation of the long-term protections of the AOC 1 Open Space Area established pursuant to paragraph 60; and

(viii) Transfer of the AOC 1 Open Space Area to Jersey City pursuant to paragraph 60(a)(iii).

(c) **Demolition and Grading Activities.** During demolition and grading activities, adequate protective measures shall be taken to protect site workers and the community

from airborne dusts and exposures to contaminated soils.

(d) **Vegetation of Clean Fill.** All clean soil fill in areas that will not involve paved roads, sidewalks, paths, walkways, or building structures shall be vegetated in such a manner to protect and maintain the required depth of clean soil fill.

55. **AOC 1 Residential Area Soil Remedy.** In the AOC 1 Residential Area, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive.

(a) Those soils excavated from the AOC 1 Residential Area in which hexavalent chromium concentrations exceed 240 mg/kg shall be disposed of off-site at a waste disposal facility licensed to accept such waste.

(b) Those soils excavated from the AOC 1 Residential Area in which the hexavalent chromium concentration is less than 240 mg/kg, but greater than 20 mg/kg, shall be consolidated within the AOC 1 Open Space Area. However, any such soils which would require venting of gases shall be disposed of off-site.

(c) Soils excavated from the AOC 1 Residential Area shall be replaced with existing soils from AOC 2 or backfill soil. Any backfill soil brought to the Site shall either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master.

(d) In the AOC 1 Residential Area, excavation of soils containing hexavalent chromium greater than 20 mg/kg shall be the presumptive remedy. Around remaining active underground utilities or other structures, such as the bulkhead, *in situ* treatment may be considered in lieu of excavation only if Honeywell demonstrates, and all Parties, the Special

Master, and NJDEP agree that (1) excavation is technically impracticable and (2) treatment will result in hexavalent chromium concentrations of 20 mg/kg or less and no rebound will occur. If no treatment option is available, Honeywell shall propose an alternative remedial approach, subject to review and comment by the Parties and approval by the Special Master.

(e) Honeywell shall excavate all soils containing hexavalent chromium greater than 20 mg/kg in conjunction with the placement of the piping for the Deep Groundwater Remedy. Honeywell shall not propose treatment in lieu of excavation based on the location of the pipes for the Deep Groundwater Remedy or any apparent impracticability of excavating in conjunction with their installation.

56. **AOC 1 Open Space Area Soil Remedy.** In the AOC 1 Open Space Area, the soil remedy shall consist of an engineered RCRA cap to isolate contaminated soils, with gas venting, if necessary, to address the generation of methane and other naturally occurring gases in the Stratum O and/or Stratum D in the Open Space AOC. Soils consolidated under the cap, shall not require gas venting and shall not be the basis for the inclusion of gas venting as a component of the cap. The cap shall be designed and constructed so that:

(a) The cap shall consist of gas collection system, if gas venting is necessary, a base protective layer, an impervious geomembrane liner with a minimum thickness of 40 mil; a geocomposite drainage layer; a filter fabric; and a distinctive colored warning layer with markings in English and Spanish that would deter penetration of the cap in the event that digging occurred in the vicinity of the cap;

(b) All utilities, including those supporting the pump-and-treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the cap (but may be below the ground surface and/or contained within utility corridors). In the event that above-cap-grade gas collection and treatment is selected or is

needed to meet current or future regulatory requirements, such collection and treatment facilities are prohibited in the Open Space AOC, except for piping to connect the sub-liner collection system with the treatment facilities. Honeywell shall configure the cap so that all active piping for the wastewater treatment system operated by JCMUA, including all force mains and any connections to the emergency outfall, shall be outside the capped area. Honeywell may propose, subject to the review process in paragraph 72, to use treatment in lieu of excavation in the vicinity of the emergency outfall line if the criteria of paragraph 55(d) are satisfied; and

(c) Exclusive of roadways, the cap shall be overlain by layers of clean fill, backfill and/or overburden with an average depth of at least three feet and a minimum depth of at least two feet provided that any layer that incorporates overburden shall be below at least two feet of clean fill. Any clean fill or backfill soil brought to the Site will either meet all applicable federal and NJDEP criteria, including NJDEP residential soil criteria, or comply with a beneficial soil reuse plan that is approved by NJDEP and subject to review and comment by the Parties and approval by the Special Master. One foot of clean fill, covered with bituminous blacktop, shall be sufficient cover where roads, walkways, or other paved surfaces are located within the AOC 1 Open Space Area. All clean soil fill in areas that will not involve paved roads, walkways, or other paved surfaces shall be vegetated in such a manner as to protect and maintain the required depth of the clean soil fill and to ensure that such vegetation shall not cause any interference with or penetration of the cap.

(d) The existing overburden soils in the AOC 1 Open Space Area shall first be stripped off and set aside for use. If hexavalent chromium concentrations in the overburden exceed 20 mg/kg, the overburden shall be placed under the cap. If hexavalent chromium concentrations in the overburden do not exceed 20 mg/kg, the overburden may be placed above the cap but below the two feet of clean fill required by paragraph 56(c). Excavated hexavalent

chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the AOC 1 Residential Area shall be placed and spread in the AOC 1 Open Space Area under the cap. Excavated hexavalent chromium impacted soils (with concentrations between 20 mg/kg and 240 mg/kg) from the Study Area 6 South Development AOC (as defined in the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South and including only those portions of Study Area 6 South for which the future uses of the property may include commercial or residential development) may be placed and spread in the AOC 1 Open Space Area under the cap, provided that such soils do not require venting of gases and shall not serve as the basis for the inclusion of gas venting as part of the Study Area 6 North AOC 1 Open Space Area remedy. Both the chromium impacted soils and the previously stripped overburden shall be suitably compacted according to design specifications. Debris, to the extent it would interfere with the compaction specification requirements of the 100% Design, shall not be placed under the cap. The engineered cap shall be installed over the chromium-impacted soils exceeding 20 mg/kg hexavalent chromium.

57. **AOC 1 Additional Excavation Areas Remedy.** For those AOC 1 Additional Excavation Areas, soils containing hexavalent chromium at concentrations greater than 20 mg/kg shall be excavated to a depth of 20 feet below the current ground surface in accordance with the NJDEP Chromium Directive. Excavation of those areas comprising the AOC 1 Additional Excavation Areas shall initially be conducted in the 50-foot by 50-foot area planned in the RAWP but shall not be so limited in the event that confirmation sampling indicates that hexavalent chromium concentrations continue to exceed 20 mg/kg. Honeywell shall excavate laterally and vertically (to depths of up to 20 feet below current ground surface) until the hexavalent chromium is less than 20 mg/kg based on the results of confirmation sampling. Confirmation sampling for the AOC 1 Additional Excavation Areas shall be taken from the side

walls and bottom of the excavation, in accordance with the Technical Requirements for Site Remediation, to confirm complete removal of contaminated soils.

58. **Shallow Groundwater Remedy.** The shallow groundwater remedy shall consist of hydraulic barriers with a pump-and-treat system designed to isolate shallow groundwater and to intercept and treat shallow groundwater flowing above the meadow mat in the AOC 1 Open Space Area. The shallow groundwater remedy shall consist of the following:

(a) The existing soil/cement/bentonite wall on the boundary of Study Area 6 North and Study Area 7 shall be incorporated into the other engineering controls;

(b) Subterranean slurry walls or other hydraulic barriers shall be installed along the northern, eastern and western sides of the AOC 1 Open Space Area and keyed into the meadow mat or Stratum O or to comparable depths below ground surface;

(c) A groundwater extraction system shall be established that will consist of (i) one or more shallow extraction wells, sumps, or french drains within the AOC 1 Open Space Area; (ii) pumps; and (iii) underground piping to convey any extracted water to Honeywell's Treatment Plant;

(d) The capture zone for the shallow groundwater remedy shall include at least the entire area of contaminated shallow groundwater (except for shallow groundwater that penetrates the meadow mat and is captured by the Deep Groundwater Remedy);

(e) A plan for control of water levels shall be developed;

(f) In the event that underground structures are demolished, the plans shall address the need for special attention for structures that extend below the meadow mat in order to control needed water levels; and

(g) Honeywell shall submit such information as is required to allow NJDEP to establish a classification exception area for groundwater at the Site, in accordance with NJDEP

regulations.

59. **Permits and Authorizations.** Honeywell shall obtain all necessary federal, state, and local permits and authorizations to carry out the Chromium Remedy as set forth in this Article. The Jersey City Entities agree to cooperate with Honeywell in the applications for any such permits, authorizations, or approvals. Such cooperation shall include providing information or data with respect to permit applications, co-signing permit applications, and allowing access to Study Area 6 North to obtain information necessary for the permits.

B. Long-Term Monitoring, Maintenance, and Protection of Engineering and Institutional Controls

60. **Protection of the AOC 1 Open Space Area.** Except as provided in paragraphs 60(j) and 60(k), development in the AOC 1 Open Space Area shall be prohibited. The AOC 1 Open Space Area shall be protected against activities that may jeopardize the integrity of the cap and/or the groundwater remedial measures that shall be installed in the AOC 1 Open Space Area pursuant to the Chromium Remedy or that may impede the long-term monitoring and maintenance of the cap and/or groundwater remedial measures. It is the intention of the Parties to implement different layers of protection, which alone or in concert, impose restrictions on development, run with the land, and survive all parties. Accordingly, the following actions shall be taken pursuant to the Schedule provided in paragraph 54(b):

(a) **Ownership of and Access to the AOC 1 Open Space Area.** Ownership of and access to the AOC 1 Open Space Area shall be in accordance with the following:

(i) Pursuant to the terms of this Consent Decree and paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall become the owner in fee simple absolute of all of the property that comprises the AOC 1 Open Space Area and shall not convey any rights or interests in such property except as provided in this Decree. At the time

of the conveyance from JCRA to Bayfront Redevelopment LLC, Bayfront Redevelopment LLC shall give Jersey City an option to buy AOC 1 Open Space Area prior to the planned transfer pursuant to paragraph 60(a)(iii). Such option to buy shall be subject to the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall exercise the option to buy the AOC 1 Open Space Area in the event that the conditions allowing for withdrawal of funds from the financial assurance mechanisms under paragraphs 84(c) or 84(d) are met;

(ii) At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, Bayfront Redevelopment LLC shall grant a conservation restriction for the AOC 1 Open Space Area pursuant to the requirements of paragraph 60(b);

(iii) Upon the final construction of all roads and utility corridors within the AOC 1 Open Space Area, Bayfront Development LLC shall donate good and marketable title to all the land comprising the AOC 1 Open Space Area to Jersey City. In conjunction with such donation, Bayfront Redevelopment LLC shall petition to subdivide the properties within Study Area 6 North to create a new parcel(s) comprising the AOC 1 Open Space Area. At the time of the donation, Jersey City shall grant Honeywell an easement for the purpose of monitoring and maintaining the Chromium Remedy. Jersey City shall also grant Honeywell all necessary access to the AOC 1 Open Space Area by license or such other mechanisms as may be appropriate for purposes of monitoring and maintaining the Chromium Remedy. After it acquires title pursuant to this paragraph, Jersey City shall retain ownership of the AOC 1 Open Space Area unless and until it shall have complied with the requirements of paragraph 60(a)(iv);

(iv) After it acquires title pursuant to this paragraph, Jersey City shall not convey or enter into any lease of the AOC 1 Open Space Area to any other person or entity unless it has first satisfied either of the following conditions:

(1) Jersey City has obtained the Special Master's (or if the Special Master's appointment has expired, the Court's) approval to convey the AOC 1 Open Space Area to a government entity that has the capacity and willingness to fulfill Jersey City's obligations under the Consent Decree with respect to the AOC 1 Open Space Area and such entity agrees to submit to the Court's jurisdiction and to be bound by the requirements of the Consent Decree that Jersey City has committed to fulfill with respect to protection of the AOC 1 Open Space Area pursuant to this paragraph and routine maintenance of the permissible development in the AOC 1 Open Space Area pursuant to paragraph 64(d); or

(2) The AOC 1 Open Space Area has been remediated such that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive, and Jersey City has demonstrated to the Special Master and/or the Court, as appropriate, that such remediation has been completed in accordance with all applicable requirements.

(b) **Conservation Restriction.** At the time the JCRA conveys the Study Area 6 North property to Bayfront Redevelopment LLC pursuant to paragraph 4.3 of the Jersey City/Honeywell Consent Order, but prior to the grant of the option to buy pursuant to paragraph 60(a)(i), Bayfront Redevelopment LLC shall grant an open space conservation restriction, pursuant to N.J.S.A. 13:8-B-1, *et seq.*, over the AOC 1 Open Space Area substantially in the form set forth in Exhibit D. Exhibit D is a conservation restriction that is consistent with the terms of this paragraph and this Consent Decree. The conservation restriction shall allow for the implementation, maintenance, monitoring, repair and replacement of the Chromium Remedy and development consistent with paragraphs 60(j) and 60(k), including the construction and

placement of roads and utilities. The Hackensack River Watershed Land Trust shall be the primary holder of the conservation restriction, with all rights of monitoring and enforcement. Riverkeeper shall propose an entity to serve as the secondary holder of the conservation restriction subject to comment by the Parties and review by the Special Master. The secondary holder shall have secondary rights of monitoring and enforcement.

(i) The conservation restriction shall be incorporated into this Consent Decree and made part of this Consent Decree. The final, executed conservation restriction shall be lodged with the Court and entered as an order of the Court. The conservation restriction shall be enforceable in this Court, in the same manner as this Consent Decree.

(ii) The conservation restrictions provided under this Consent Decree shall be consistent with the prohibited and permitted development of the AOC 1 Open Space Area as set forth in paragraphs 60(j) and 60(k) below.

(iii) Jersey City shall not take any action, whether through exercise of any power of eminent domain, application to the State of New Jersey for approval of a diversion of public park or recreation land, legal challenge to the validity or enforceability of the conservation restriction, or otherwise, the effect of which would be to in any way terminate, abrogate, or diminish the terms, conditions, or purposes of the conservation restriction. If, notwithstanding the preceding sentence, Jersey City proceeds with a condemnation or other action, the result of which would be to terminate, abrogate, or otherwise diminish the terms, conditions, or purposes of the conservation restriction, Jersey City shall, before taking any such action satisfy all of the conditions set forth in paragraph60(a)(iv)(2).

(iv) Notwithstanding the foregoing, the conservation restriction may be terminated upon application of any Party when no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area, whether in soils or in groundwater, in excess of the

levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive.

(c) **Deed Notice.** Upon completion of the Chromium Remedy, the AOC 1 Open Space Area shall be subjected to the deed notice substantially in the form set forth in Exhibit E that restricts future activities on the AOC 1 Open Space Area. Nothing in the deed notice shall be construed as preventing the imposition of more stringent restrictions on the development allowed in the AOC 1 Open Space Area pursuant to this paragraph and, in particular, the conservation restriction provided for in paragraph 60(b).

(d) **Recording of the Consent Decree, Conservation Restriction, and Deed Notice.** This Consent Decree, the conservation restriction imposed pursuant to paragraph 60(b), and the deed notice imposed pursuant to paragraph 60(c) shall be recorded, pursuant to N.J.S.A. 46:15-1.1, 46:16-1.1, and 46:16-2, in the office of the Hudson County Register and a conspicuous reference to the Consent Decree, conservation restriction, and deed notice shall be included in all instruments concerning title to the AOC 1 Open Space Area. Any Party shall have the right, periodically, but no more than once every 25 years, to record memoranda or other instruments that reference, incorporate, or attach this Consent Decree, the conservation restriction, the deed notice, and/or any further orders of the Court related to the AOC 1 Open Space Area in the real estate records related to the AOC 1 Open Space Area.

(e) **Zoning.** Pursuant to the Redevelopment Plan, the AOC 1 Open Space Area is designated for open space and park. Jersey City shall not amend or change this designation unless it first satisfies the requirements of paragraph 60(a)(iv)(2).

(f) **Recreation and Open Space Inventory.** Upon acquiring fee simple absolute title to the AOC 1 Open Space, Jersey City shall add those portions of the AOC 1 Open Space Area not covered by roads, the pedestrian thoroughfare, and utility corridors adjacent to

roads onto its Green Acres Program Recreation and Open Space Inventory ("ROSI") pursuant to N.J.A.C. 7:36 and shall specify in such listing that it is subject to (i) Honeywell's prior easement to monitor, maintain, repair, and replace the Chromium Remedy; (ii) the actions necessary to implement, monitor, maintain, repair, and replace the Chromium Remedy; (iii) the actions necessary to install any development permissible under paragraphs 60(j) and 60(k); and (iv) the conservation restriction imposed pursuant to paragraph 60(b). Jersey City shall also take all steps necessary or appropriate to notify the New Jersey Green Acres Program that such portions of the AOC 1 Open Space Area have been added to its ROSI, such that those portions of the AOC 1 Open Space Area shall thereafter be subject to all procedural and regulatory requirements applicable under the Green Acres Program, including prohibitions against diversion.

(g) **Eminent Domain.** If all or part of the AOC 1 Open Space Area is taken in exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, by any public, corporate, or other authority so as to terminate, abrogate, or limit the restrictions created by this Consent Decree or the conservation restriction imposed pursuant to paragraph 60(b), in whole or in part, any Party may take appropriate actions to challenge such taking if there is a reasonable legal basis for doing so. In the event that the Parties are unable to prevent a taking notwithstanding their reasonable and appropriate efforts, any Party may take appropriate actions to recover the full value of the interests in the AOC 1 Open Space Area subject to the taking or in lieu purchase, and all direct and incidental damages, costs, and fees occasioned thereby.

(h) **Environmental Covenant.** In the event that New Jersey enacts the Uniform Environmental Covenants Act or its substantial equivalent, the Parties shall address the issue of whether an environmental covenant shall be established for the AOC 1 Open Space Area under the statute. If the Parties are unable to reach agreement on establishment of an environmental

covenant, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of an environmental covenant if it would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(i) **Future Protections.** Any Party shall have the right to propose consideration of additional or substitute protections for the AOC 1 Open Space Area. If the Parties are unable to reach agreement with regard to the proposal, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. The Special Master shall recommend adoption of additional or substitute protections for the AOC 1 Open Space Area if they would provide substantial additional protection for the AOC 1 Open Space Area without unreasonably harming the interests of any Party. Any Party shall have the right to seek review by the Court of the Special Master's recommendation or consideration by the Court of the dispute in the event that the Special Master's appointment has expired.

(j) **Prohibited Development in AOC 1 Open Space Area.** Only development satisfying the requirements of this paragraph and paragraph 60(k) shall be permitted in the AOC 1 Open Space Area. All other development in the AOC 1 Open Space Area shall be prohibited.

(i) Honeywell shall establish Open Space Design Standards that shall govern all development in the AOC 1 Open Space Area regardless of when the construction or installation of permissible development occurs. The Open Space Design Standards shall satisfy each of the requirements set forth in paragraph 60(j)(v) and shall set forth the requirements for development that are necessary for the protection of the integrity of the Chromium Remedy.

(ii) The Initial Development in the AOC 1 Open Space Area shall be the

development undertaken following the completion of the Chromium Remedy in the AOC 1 Open Space Area. The Initial Development may occur in one or more phases. Honeywell and Bayfront Redevelopment LLC shall prepare a Development Plan before the initiation of each phase of the Initial Development. The Initial Development Period for each phase shall consist of the period covered by the Initial Development, plus a period of 10 years following the submission of the as-built documentation for the phase pursuant to paragraph 60(j)(viii).

(iii) The Special Master shall have jurisdiction to review the Open Space Design Standards and the Development Plan(s) solely for the purpose of ensuring that any development undertaken during the Initial Development Period is consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy. The Special Master's jurisdiction with regard to development in the AOC 1 Open Space Area shall run through the Initial Development Period for each phase.

(iv) Honeywell shall ensure that the requirements of this paragraph and paragraph 60(k) are satisfied with regard to any development undertaken within the Initial Development Period. Honeywell shall also ensure that any development undertaken within the Initial Development Period is designed and installed in a manner consistent with this Consent Decree and with protection of the integrity of the Chromium Remedy.

(v) Any development undertaken in the AOC 1 Open Space Area, regardless of when undertaken, shall satisfy each of the following requirements:

(1) It shall not jeopardize the integrity of the Chromium Remedy;

(2) It shall be limited to the types of development permitted under paragraph 60(k);

(3) It shall be consistent with this Consent Decree, including the conservation restriction imposed pursuant to paragraph 60(b), and the Redevelopment Plan;

however, in the event of any conflict or inconsistency between this Decree and the Redevelopment Plan, this Decree shall govern;

(4) In total, at least 75% of the AOC 1 Open Space Area, exclusive of the acreage used for roads and the pedestrian thoroughfare, shall be comprised of landscaping, as defined by paragraph 60(k)(xi);

(5) The portion of the Open Space Design Standards necessary for protection of the Chromium Remedy as related to all roads, the pedestrian thoroughfare and associated utility corridors as well as the general location of such items shall be included in the 100% Design of the Chromium Remedy;

(6) If the lowest elevation for the bedding for any utility line, including irrigation or sprinkler lines, is two feet from the top of the warning layer of the cap, the utility line shall be placed in a utility corridor;

(7) In any event, there shall be two feet of soil or more between the warning layer of the cap and the lowest elevation of the bedding for any irrigation or sprinkler lines; and

(8) No permanent concession facilities shall be permitted.

(vi) Honeywell shall submit the Open Space Design Standards and the Development Plan(s) for any development undertaken during the Initial Development Period pursuant to the requirements of paragraph 72(c), except that such documents need not be submitted to NJDEP. Following Honeywell's submission of such documents, the procedures of paragraphs 72(d) and 72(e) shall apply, except that the Special Master need not provide notice to NJDEP.

(vii) During the Initial Development Period, any development in the AOC 1 Open Space Area shall require the preparation and submission of a Development Plan pursuant

to paragraph 60(j)(vi) and such Development Plan shall be subject to review by the Special Master pursuant to paragraph 60(j)(iii).

(viii) Upon completion of each phase of the Initial Development, Honeywell shall provide as-built documentation for the Initial Development to the Special Master, Riverkeeper, and the Jersey City Entities. Upon completion of any further development during the Initial Development Period for the phase, Honeywell shall also provide as-built documentation to the Special Master, Riverkeeper, and the Jersey City Entities for the additional development. Such additional as-built documentation for a phase shall not affect the running of the Initial Development Period for the phase.

(ix) During the Initial Development Period, replacement in-kind of development features or facilities included in the Initial Development or minor modifications to the development features or facilities included in the Initial Development shall not require the preparation of a Development Plan or be subject to review by the Special Master, provided that such replacement or modification satisfies the requirements of the Open Space Design Standards, the applicable Development Plan, and paragraphs 60(j)(v) and 60(j)(x)(3)(notice requirement).

(x) After the Initial Development Period, all development is prohibited unless one of the following conditions is met:

(1) Jersey City satisfies the conditions set forth in paragraph 60(a)(iv)(2);

(2) The development is a replacement in-kind and such replacement is made in conformance with the specifications of the Open Space Design Standards, the applicable Development Plan, and paragraph 60(j)(v); or

(3) The development meets the requirements of paragraphs 60(j)(v) and 60(j)(xi), and Jersey City provides notice of its intention to alter or add to the

development undertaken in the Initial Development Period. Such notice shall be provided in writing to Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) at least 30 days prior to Jersey City's alteration or addition to development undertaken in the Initial Development Period. Honeywell, Riverkeeper, or any holder of the conservation restriction shall have the right to move the Court to prohibit such alteration or addition.

(xi) If any of the development features or facilities that Jersey City seeks to add pursuant to paragraph 60(j)(x) require utilities that would require utility corridors other than the utility corridors installed during the Initial Development Period, Jersey City shall obtain approval from the Court before installing such new utility corridors.

(xii) Jersey City shall provide Honeywell, Riverkeeper, and the holders of the conservation restriction established pursuant to paragraph 60(b) with an annual report that describes any alterations or additions, including those activities under paragraph 60(j)(x)(2), to the development undertaken during the Initial Development Period.

(xiii) All development features or facilities, whether included in the Initial Development or added subsequent thereto, are subject to demolition and/or removal to the extent necessary to maintain, replace, or repair the Chromium Remedy.

(k) **Permissible Development in the AOC 1 Open Space Area.** The Initial Development or any subsequent addition or alteration thereto may include any or all of the following types of development features or facilities, provided that such development features or facilities satisfy the conditions set forth in paragraph 60(j)(v):

(i) Roads and the pedestrian thoroughfare -- both crossing and running along the AOC 1 Open Space Area, but no more extensive than provided for in the diagram on page 39 of the Redevelopment Plan;

(ii) Curbing and fences;

(iii) Sidewalks, paths, walkways, and nature trails;

(iv) Utilities and utility corridors, lighting, and restrooms;

(v) Irrigation or sprinkler components or systems;

(vi) Water features;

(vii) Above-ground storm water cisterns;

(viii) Signs, including the signs or display required by paragraph 60(l);

(ix) Benches, trash receptacles, and bicycle racks;

(x) Recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields; and

(xi) Landscaping, including natural grasses, small trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy. Any portion of an athletic field that is covered in natural grass shall be considered landscaping for purposes of the percentage set forth in paragraph 60(j)(v)(4).

(l) **Signs or Displays.** Honeywell shall develop a permanent plan for informing visitors to the AOC 1 Open Space Area of the history of the chromium production, contamination, and its remediation. Such plan shall provide for appropriate signs or displays that communicate this information. Such plan shall be subject to review and comment by the Parties and approval by the Special Master.

61. **Honeywell's Ongoing Responsibility.** Honeywell shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy in perpetuity. Honeywell shall satisfy this responsibility through establishment and implementation of a Long-Term Monitoring Plan. In the event that Honeywell ceases to exist without a

successor-in-interest or its obligations under this Consent Decree are stayed or limited due to a bankruptcy petition, the Court shall appoint an independent third-party fiduciary who shall be responsible for implementing, monitoring, maintaining, repairing and replacing the Chromium Remedy pursuant to the requirements of this Consent Decree and the Long-Term Monitoring Plan, unless Jersey City volunteers to assume these responsibilities for the Chromium Remedy.

62. **Long-Term Monitoring Plan.** In consultation with the Parties, and subject to approval by the Special Master and NJDEP, Honeywell shall develop a Long-Term Monitoring Plan to ensure the ongoing effectiveness of the Chromium Remedy to meet the objectives set forth in paragraphs 56, 58, and 63. The Long-Term Monitoring Plan shall be consistent with the applicable EPA policies and guidance, including, among others, EPA's Comprehensive Five Year Review Guidance (2001) (or any subsequent revision) and with NJDEP's Technical Requirements for Site Remediation (or any subsequent revision).

63. **Long-Term Monitoring Plan Objectives.** Honeywell shall design the Long-Term Monitoring Plan to satisfy each of the following objectives:

(a) Provide monitoring to ensure that the integrity and effectiveness of the Chromium Remedy are maintained; and

(b) Provide monitoring to ensure that the restrictions of the institutional controls are being satisfied, including the prohibition on development in the AOC 1 Open Space Area.

64. **Monitoring and Remediation Under the Long-Term Monitoring Plan.** The Long-Term Monitoring Plan shall include the monitoring and remediation activities set forth in this paragraph and other monitoring and remediation activities, if necessary, to meet the objectives of paragraph 63. Honeywell shall provide Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP with annual reports on activities conducted under the Long-Term Monitoring Plan.

(a) **Monitoring Activities in the Long-Term Monitoring Plan.** Honeywell shall undertake the following monitoring activities at intervals to be specified in the Long-Term Monitoring Plan, but no less frequently than set forth below, and, if the monitoring shows it is necessary, Honeywell shall also undertake the remediation activities as set forth below:

(i) Quarterly visual inspection monitoring of the AOC 1 Open Space Area to ensure that it is not being put to any use that is inconsistent with paragraphs 60(j) and 60(k) or any use that may compromise the integrity of the Chromium Remedy. The Long-Term Monitoring Plan shall include an inventory of the prohibited and permissible uses pursuant to paragraph 60 and a corresponding checklist to be used by the individuals conducting the monitoring. If Honeywell determines that the AOC 1 Open Space Area is being used in a manner inconsistent with the protections or the integrity and effectiveness of the Chromium Remedy, Honeywell shall act as soon as possible to cause such use to cease and, if there has been damage to the Chromium Remedy, to repair or replace it to original specifications or to a level of protection equivalent to the original Chromium Remedy;

(ii) Quarterly visual inspection monitoring of the AOC 1 Open Space Area grade and slope to identify whether erosion has occurred or is occurring. Honeywell shall remediate any significant erosion.

(iii) Quarterly visual inspection monitoring to determine whether noticeable differential settlement or subsidence has occurred or is occurring in the AOC 1 Open Space Area such that the integrity of the Chromium Remedy may be materially impaired. If evidence of differential settlement or subsidence is found, Honeywell shall propose further investigative measures. Honeywell shall remediate any differential settlement or subsidence that is beyond the degree of differential settlement/subsidence allowed for in the 100% Design

and repair the cap and/or the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(iv) A baseline topographic survey at the completion of the Chromium Remedy and three additional surveys conducted at five-year intervals beginning five years after the conduct of the baseline survey. The topographic survey shall be of sufficient precision and accuracy to present the results as one-foot contours;

(v) Quarterly visual inspection monitoring to determine whether the Chromium Remedy in the AOC 1 Open Space Area has been disturbed. Any evidence of the distinctive warning layer materials or any other cap materials as described in paragraph 56(a) at the surface is an indication that the cap has been disturbed. In such an event, Honeywell shall propose further investigative measures to evaluate whether the integrity of the cap has been compromised. In the event that the investigative measures show that the cap integrity has been compromised, Honeywell shall repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vi) Quarterly visual inspection monitoring to ensure that burrowing animals are not materially impairing the integrity of the Chromium Remedy. If evidence of burrowing animals is found, Honeywell shall follow humane removal procedures and repair or replace the cap and the overlying layers to original 100% Design specifications or to a level of protection at least equivalent to the original Chromium Remedy;

(vii) Quarterly visual inspection monitoring of the vegetative cover in the AOC 1 Open Space Area to ensure that vegetative cover is in conformance with the landscaping provisions of the 100% Design and the Redevelopment Plan and will not materially impair the integrity of the Chromium Remedy. Maintenance of the vegetative cover shall include, at a

minimum, mowing to ensure that tree species cannot become established and removal of any other vegetation with the potential to damage the Chromium Remedy;

(viii) Quarterly groundwater monitoring to ensure that groundwater levels are maintained in accordance with the requirement to maintain an outward gradient from Study Area 7 and in accordance with the water level control plan developed pursuant to paragraph 58(e);

(ix) Monitoring of vented gases and the gas venting system to ensure proper operation of the system, to evaluate any degradation of the system, to assess the need for treatment of vented gases, either initial, subsequent, or further depending on whether treatment has been previously provided, and to detect any condition that might endanger public health or safety. Such monitoring shall be conducted on a monthly basis for at least one year and, if the readings are stable, such monitoring may be conducted thereafter on a quarterly basis; and

(x) Any additional monitoring as required by specific details added in the design phase of the AOC 1 Open Space Area.

(b) **Procedures for Proposing Changes to the Long-Term Monitoring Plan.** Any Party may, from time to time, propose changes to the scope of the monitoring activities under the Long-Term Monitoring Plan. If the Parties agree, the Long-Monitoring Plan shall be so changed subject to approval by NJDEP and by the Special Master, if his appointment has not terminated, or otherwise, by the Court. If the Parties are unable to reach agreement over alterations to the monitoring and the Special Master's appointment has not terminated under this Consent Decree, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation. In the event that the dispute arises after the Special Master's appointment has terminated, any Party may file a motion seeking a resolution of the dispute by

the Court.

(c) **Contingency Plan.** As part of the Long-Term Monitoring Plan, Honeywell shall develop a contingency plan to ensure the integrity of the remediation in the event of any planned penetration of the cap or otherwise planned activity that compromises the cap or any unplanned event or accident that penetrates the cap or otherwise compromises the integrity of the Chromium Remedy. The contingency plan shall include, at a minimum, an annually updated plan to notify the relevant persons, including the Special Master, NJDEP, and the Parties, of (i) the event penetrating the cap, compromising the cap, or compromising the integrity of the Chromium Remedy; (ii) the general steps to be taken to identify the extent of the problem; and (iii) the standards for remedying the problem.

(d) **Routine Maintenance.** The title owner of the AOC 1 Open Space Area shall conduct maintenance of the AOC 1 Open Space Area features or facilities that are permissible under paragraphs 60(j) and 60(k). The maintenance workers shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. The training shall include the identification and reporting of any uses or features that are not permissible in the AOC 1 Open Space Area or that may jeopardize the integrity of the Chromium Remedy. Honeywell shall provide all training materials. The title owner of AOC 1 Open Space Area shall annually provide to the other Parties and the Special Master a report describing the training which has been provided to its maintenance workers. The title owner of the AOC 1 Open Space Area shall also provide to the Parties and the Special Master notice of any violations of the restrictions relating to the AOC 1 Open Space Area identified by its workers during routine maintenance.

(e) **Recordkeeping.** Honeywell shall maintain written logs or other records of those monitoring and remediation activities undertaken pursuant to the Long-Term Monitoring

Plan. Such logs shall be provided to Riverkeeper and the Jersey City Entities on a quarterly basis.

65. **Monitoring and Reporting to Riverkeeper and Jersey City Entities.** Riverkeeper and Jersey City Entities shall be provided with all documents submitted to NJDEP and/or the Special Master with respect to the Chromium Remedy, including the documents identified in paragraph 72(c).

66. **Notice to Stakeholders.** All residents, regardless of whether they are owners or lessees, and all commercial tenants on Study Areas 6 and 7 are hereby deemed stakeholders. Honeywell shall ensure that all stakeholders shall be provided at the time of their purchase or lease with notice of the contamination, the remedial actions that have been undertaken or are planned, and the importance of reporting activities that may appear to jeopardize the integrity of the engineering controls. Notice shall be accomplished in the following manner:

(a) Bold or otherwise conspicuous language on the first page of the deed provided to all purchasers in the Residential Area;

(b) A summary notice of the Chromium Remedy which:

(i) Has been subject to review and comment by the Parties and approval by the Special Master; and

(ii) Provides a reference to public websites and libraries and/or the future equivalents thereof, where the following can be found:

(1) Zoning and other Jersey City maps showing the AOC 1 Open Space Area; and

(2) Documents describing the contamination and the remediation, including:

(a) This Consent Decree;

(b) The Remedial Investigation Report and the Final Remedial Action Report,

(c) The annual reports on long-term monitoring and maintenance and repair activities as required by paragraph 64 and annual reports on changes to the Initial Development as required by paragraph 60(j)(xii); and

(d) The Long-Term Monitoring Plan.

(c) The provision of the maps and documents referred to in paragraph 66(b)(ii) to the public via websites and libraries and/or the future equivalents thereof; and

(d) Notices to lessees and commercial tenants in all lease documents.

67. **Annual Letter to Riverkeeper and Jersey City Entities on Notice to Stakeholders.** Each year beginning one year after the issuance of the first notice in a deed or lease pursuant to paragraph 66, Honeywell shall provide a letter to the Riverkeeper and the Jersey City Entities documenting its compliance with paragraph 66.

68. **Future Notice to Stakeholders.** Honeywell shall ensure that all stakeholders are provided with notice, at least annually, of long-term monitoring activities and any additional remediation activities undertaken with respect to the Chromium Remedy. Such notice shall be accomplished by notices on websites or future equivalents thereof, including Jersey City websites, any websites created to provide information about the Chromium Remediation or redevelopment of the Redevelopment Area, and one or more of the following:

(a) Any community message board or other similar site used and/or maintained by stakeholders or the manager(s) of the Redevelopment Area;

(b) Mailings to all stakeholders; and

(c) Posters and flyers throughout the Redevelopment Area.

69. **Stakeholder Enforcement.** Any stakeholder shall have the right to enforce the

remedial obligations of this Consent Decree in the Court, including post-implementation monitoring and maintenance obligations, and the terms of any deed notice or use restriction.

C. Oversight and Enforcement by the Special Master and NJDEP

70. **Federal Court Jurisdiction.** The Court shall retain jurisdiction for the purpose of overseeing and enforcing this Consent Decree and to review any issue or dispute which is not resolved through the oversight process described in Article III.C.

71. **Appointment and Jurisdiction of the Special Master.** The Chromium Remedy provided for in this Consent Decree is hereby referred to a Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure. The Special Master is appointed in the Consolidated Litigation for the purpose of overseeing and enforcing the Chromium Remedy, the first five years of long-term monitoring of the Chromium Remedy, financial assurances for the Chromium Remedy, and the Initial Development Period for each phase of development in the AOC 1 Open Space Area. The Special Master is also appointed in the Consolidated Litigation for the limited purpose of ensuring that the scheduling and implementation of the Historic Fill Remedy, the site preparation activities, and the site redevelopment activities described in the Jersey City/Honeywell Consent Order, Articles II.B, III, and IV, do not undermine the integrity of, unreasonably interfere with, or unnecessarily delay the effectuation of the Chromium Remedy, the Study Area 7 remedies, and other remedies within his jurisdiction as of the date of entry of this Consent Decree. The Special Master shall have jurisdiction over all matters for which he is appointed.

72. **Oversight of the Chromium Remedy.**

(a) **NJDEP Authority.** NJDEP shall retain its full statutory and regulatory authority with respect to the Study Area 6 North site, including (i) permitting authority; (ii) authority to review and approve the Remedial Action Work Plan, 100% Design, and final

Remedial Action Report for the Chromium Remedy; and (iii) authority to issue a no further action letter.

(b) **Special Master Responsibilities.** The Special Master shall have the following responsibilities:

(i) Ensuring that Honeywell's implementation of the Chromium Remedy satisfies the requirements of this Consent Decree;

(ii) Ensuring that Honeywell's implementation of the Chromium Remedy conforms with federal, state, and local permit requirements;

(iii) Establishing a reasonable schedule for the implementation of the Chromium Remedy and monitoring conformance with it;

(iv) Reviewing monthly progress reports and conducting periodic meetings with the Parties to review the progress of the implementation of the Chromium Remedy. NJDEP shall be invited, but not required, to participate in these meetings and the decision as to whether to participate shall be left to NJDEP's sole discretion;

(v) Submitting quarterly progress reports to the Court;

(vi) Overseeing the financial assurances established pursuant to paragraphs 77 through 86, and, until the expiration of his term pursuant to paragraph 76, overseeing the financial assurances established pursuant to paragraphs 87 through 98;

(vii) Coordinating review of the documents as provided in paragraphs 72(c) through 72(f);

(viii) Overseeing all development undertaken in the AOC 1 Open Space Area during the Initial Development Period pursuant to paragraph 60(j)(iii); and

(ix) To the extent that, in matters within the jurisdiction of the Special Master as set forth herein, a dispute arises between the Parties with respect to implementation of the Chromium Remedy, issuing a recommendation to the Court with respect to the dispute.

(c) **Submission of Documents by Honeywell.** Honeywell shall submit the following documents to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP:

(i) An overall schedule with milestones for the design and implementation of the remedy ("Schedule");

(ii) Design drawings and specifications at the 50% level;

(iii) Design drawings and specifications at the 100% level (after selection of the contractor) (hereafter "100% Design");

(iv) The data validation plan, including quality control and quality assurance protocols;

(v) The site-wide master health and safety plan;

(vi) The Long-Term Monitoring Plan;

(vii) The final Remedial Action Report or final construction report (including as-built drawings and such other reports as may be prepared of the remedy as implemented);

(viii) A report reviewing measured groundwater levels for the groundwater remedy;

(ix) Documents required during the Initial Development Period pursuant to paragraphs 60(j)(vi), 60(j)(vii), and 60(j)(viii) ; and

(x) Other post-implementation monitoring reports as required by the Long-Term Monitoring Plan.

(d) **Comment on Submitted Documents.** For each of the documents submitted by Honeywell pursuant to paragraph 72(c), the Special Master shall establish a schedule for the submission of comments and responses to comments. For each of the documents submitted, Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP shall have the right to submit comments to Honeywell. Honeywell shall address all received comments and submit a revised document. The revised document shall be submitted by Honeywell to Riverkeeper, the Jersey City Entities, the Special Master, and NJDEP. The revised document shall be subject to review and approval pursuant to paragraph 72(e).

(e) **Review and Approval of the Submitted/Revised Document**

(i) **Scope of Review.** All documents submitted by Honeywell, pursuant to paragraph 72(c) and 72(d), shall be subject to review and approval by the Special Master in accordance with the following procedure. All such documents, except the Schedule and the 100% Design, shall be subject to the review and approval process and shall not require an order of the Court. The Schedule and 100% Design documents shall be subject to the review and approval process, but shall also require an order of the Court as provided in paragraph 72(f). A document shall be approved if the document (1) complies with this Consent Decree; (2) complies with the Remedial Action Work Plan for the Chromium Remedy; and (3) complies with the Schedule and 100% Design.

(ii) **Procedure.** Prior to making a decision on a document, the Special Master shall notify NJDEP of his intention to rule on the document or make a recommendation to the Court on the document. Such notice shall notify NJDEP that the Special Master will consider any comments NJDEP wishes to submit on the document if such comments are submitted within 30 days of NJDEP's receipt of the notice. NJDEP shall in its sole discretion determine whether to submit comments to the Special Master.

(iii) **Court Review.** If any Party objects to the Special Master's recommendation to the Court or approval of any document pursuant to this paragraph, that Party may seek further relief from the Court with respect to the document.

(f) **Schedule and 100% Design Documents.** As to the Schedule and the 100% Design documents, Honeywell shall have the responsibility, within 30 days of the Special Master's approval of each document, of (i) moving for entry of an order by the Court approving the document as approved by the Special Master; or (ii) filing objections with the Court to the Special Master's approval (and any recommendations contained therein) and moving for entry of the Schedule or 100% Design (including any such recommendations of the Special Master to which Honeywell agrees). Riverkeeper and the Jersey City Entities shall have the right in these proceedings to raise any objections they might have to the Schedule or 100% Design as approved by the Special Master or to the submission by Honeywell to the Court. NJDEP shall receive notice of any motion filed with respect to the Schedule or the 100% Design.

(g) **Flexibility in 50% and 100% Design Documents**. The Parties recognize that work conducted to implement the Chromium Remedy may be conducted by Honeywell contractors and that Honeywell may establish performance-based criteria or specifications for its contractors. As a result, the Parties recognize that the 50% Design and 100% Design documents for the Chromium Remedy may include performance-based standards, criteria, and specifications. These documents shall be sufficiently prescriptive to enable the Parties and the Special Master to evaluate their conformance with the Remedial Action Work Plan and this Consent Decree. The Parties also recognize that the 100% Design will be completed after Honeywell has selected a contractor. The Parties further recognize that completing the 100% Design after the selection of the contractor(s) shall not make the 100% Design subject to any less

stringent or more deferential review. Honeywell's commitment to the contractor(s) shall not be cause to limit review by the Parties and the Special Master.

(h) **Changes to the Schedule**. The Parties recognize that changes to individual line items in the Schedule will occur. To the extent that (i) the Parties and the Special Master agree that such changes do not have a material impact on satisfaction of the Schedule milestones established for items set forth in paragraph 54(b); and (ii) such changes do not require modifications to any necessary permits or authorizations for the Chromium Remedy, such changes may be made upon agreement of the Parties and the Special Master without further order of the Court.

73. **Retention of Professionals.** The Special Master may retain the services of professionals and/or other technical personnel, as reasonably needed, to fulfill his obligations under this Consent Decree, and for which he will be reimbursed pursuant to paragraph 75.

74. **Insurance for the Special Master.** The Special Master shall obtain insurance coverage relating to the performance of the Special Master's duties and responsibilities under this Consent Decree. Such coverage shall be similar to the Special Master's existing coverage in *ICO v. Honeywell*, procured pursuant to the Court's November 11, 2005 Stipulation and Order Regarding Special Master's Application to Procure Insurance Coverage, and as extended to the Consolidated Litigation by the Consent Order on Sediment Remediation and Financial Assurances ("Sediment Consent Order"). The insurance coverage shall be sufficiently extended in duration and scope to cover all additional duties and responsibilities as set forth hereunder. Honeywell shall pay the premiums and other administrative costs of the Special Master's insurance.

75. **Reimbursement of Special Master Fees and Expenses.** The Special Master shall submit fee applications to the Court for approval of reasonable fees and expenses incurred in the

oversight of matters referred to him pursuant to this Consent Decree. Any Party may raise with the Court objections to such fee applications. Upon approval of a fee application by the Court, the reimbursement of the Special Master's fees and expenses shall be made from the escrow fund previously established by Honeywell for the purpose of paying the Special Master's fees and expenses in *ICO v. Honeywell* pursuant to this Court's September 15, 2003 Order Setting Financial Assurances and extended to the Consolidated Litigation by the Sediment Consent Order.

76. **Expiration of Special Master's Appointment.** The Special Master's appointment under this Consent Decree shall expire after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy and the Initial Development Period for each phase of development has been concluded as provided in paragraph 60(j)(ii). However, solely to the extent that the Special Master is still supervising other portions of the Consolidated Litigation or *ICO v. Honeywell* after Honeywell has completed the first five years of long-term monitoring of the Chromium Remedy or the Initial Development Period for each phase of development as provided in paragraph 60(j)(ii), whichever is later, the Special Master shall continue to have jurisdiction under this Consent Decree until he has completed his specifically enumerated responsibilities under the Final Judgment in *ICO v. Honeywell*, the Sediment Consent Order, the Deep Groundwater Consent Order, and any other future orders, decrees, or judgments in *ICO v. Honeywell* and the Consolidated Litigation. Enumerated responsibilities under any order, decree, or judgment shall include only those tasks specifically assigned to the Special Master in the order, decree, or judgment. Enumerated responsibilities shall not include any continued jurisdiction exercised over long-term monitoring beyond the initial period specified in the order, decree, or judgment. For example, the Special Master has jurisdiction over the first five years of long-term monitoring under the Sediment Consent Order. Oversight during these five years shall

be an enumerated responsibility, but any continued oversight of long-term monitoring, pursuant to the extension of the Special Master's jurisdiction beyond the first five years, as provided in paragraph 60 of the Sediment Consent Order, shall not be an enumerated responsibility. Such extensions of jurisdiction shall be effective only so long as specific enumerated responsibilities in any order, decree, or judgment have not been fulfilled.

D. Initial Financial Assurances

77. **Chromium Remedy Letter of Credit.** Honeywell shall obtain a one-year, irrevocable letter of credit (the "Chromium Remedy Letter of Credit") to be automatically renewed annually in an amount equal to the "Remedial Costs Subject to Financial Assurance."

(a) Remedial Costs Subject to Financial Assurance shall mean:

(i) The costs of implementing the Chromium Remedy;

(ii) The costs of monitoring and maintenance activities, as required by the Long-Term Monitoring Plan, for five years; and

(iii) A contingency of 25% with respect to those costs listed in paragraphs 77(a)(i) and 77(a)(ii).

(b) The Chromium Remedy Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution, provided that in either case, the financial institution shall be acceptable to the Special Master.

78. **Procedures for Review of the Proposed Chromium Remedy Letter of Credit.** No later than 60 days after entry by the Court of this Consent Decree, Honeywell shall submit to Riverkeeper, Jersey City Entities, and the Special Master for their review the proposed (a) amount of the Chromium Remedy Letter of Credit; (b) form of the Chromium Remedy Letter of Credit; and (c) name of the institution that will issue the Chromium Remedy Letter of Credit. If

Riverkeeper or the Jersey City Entities do not agree to the terms of the Chromium Remedy Letter of Credit, the Parties shall meet and confer in an effort to resolve their differences. If the Parties are unable to reach agreement over the terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the Chromium Remedy Letter of Credit.

79. **Automatic Renewal.** The Chromium Remedy Letter of Credit shall be automatically renewed annually unless (a) no later than 120 days prior to the anniversary of the Chromium Remedy Letter of Credit issue date, the issuer provides notice of nonrenewal or (b) Honeywell seeks a reduction in the Chromium Remedy Letter of Credit, pursuant to paragraph 80, to correspond to the reduced estimate of Remedial Costs Subject to Financial Assurances. If the issuer provides notice of nonrenewal, Honeywell shall obtain a replacement irrevocable Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit. If Honeywell is not otherwise in default as provided in Article III.D, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit within 91 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit. In the event that the Special Master is entitled to draw upon a Chromium Remedy Letter of Credit because there are two Chromium Remedy Letters of Credit currently in place, the Special Master shall not draw an aggregate amount in excess of the highest valued Chromium Remedy Letter of Credit. Upon Honeywell's request, the Special Master may, at his option, decide not to require overlapping letters of credit in any year based on Honeywell's financial strength in that year, provided that Honeywell has submitted all necessary information so that the Special Master can make his determination at least 150 days prior to the expiration of the Chromium Remedy Letter of Credit.

80. **Annual Right to Seek Reduction in Amount of Chromium Remedy Letter of Credit.** Honeywell shall have the right annually to seek a reduction in the Chromium Remedy Letter of Credit. At the time of seeking such reduction, Honeywell shall submit to the Riverkeeper, the Jersey City Entities, and the Special Master an estimate of the remaining Remedial Costs Subject to Financial Assurance, including the contingency as described in paragraph 77(a)(iii), and shall seek adjustment of the Chromium Remedy Letter of Credit so that the total estimated amount of remaining Remedial Costs Subject to Financial Assurance are covered by the Chromium Remedy Letter of Credit. However, the adjustment shall not result in reducing the Chromium Remedy Letter of Credit to an amount below the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), plus a contingency of 25% of the remaining estimated costs under paragraphs 77(a)(i) and 77(a)(ii), and shall not result in reducing the Chromium Remedy Letter of Credit to an amount less than $20,000,000 as expressed in 2008 dollars unless long-term financial assurances are in place pursuant to Article III.E. Before making any request to reduce the amount or modify the terms of the Chromium Remedy Letter of Credit, Honeywell shall first confer with the Riverkeeper and the Jersey City Entities in an effort to reach agreement on the modified amount or terms of the Chromium Remedy Letter of Credit. If the Parties are unable to reach agreement over the modified amount or terms of the Chromium Remedy Letter of Credit, the Parties shall submit the dispute to the Special Master, who shall resolve the dispute. Any Party shall have the right to seek review by the Court of the Special Master's decision regarding the modified amount or terms of the Chromium Remedy Letter of Credit. Upon agreement on the amount of the reduction or modified terms of the Chromium Remedy Letter of Credit (or upon order of the Court directing that the Chromium Remedy Letter of Credit be reduced to an identified amount or otherwise modified), Honeywell shall obtain a replacement Chromium Remedy Letter of Credit in such amount and with such

terms. If Honeywell is not otherwise in default as provided in Article III.D and the issuer of the primary Chromium Remedy Letter of Credit has not provided notice of non-renewal, within 30 days after delivery to the Special Master of any replacement of a Chromium Remedy Letter of Credit, the Special Master shall direct the cancellation of the prior Chromium Remedy Letter of Credit.

81. **Bankruptcy Protection.** Neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy. The Chromium Remedy Letter of Credit shall contain the language necessary to assure that neither the Chromium Remedy Letter of Credit nor the proceeds of the Chromium Remedy Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

82. **Exclusive Court Jurisdiction.** The Chromium Remedy Letter of Credit shall recite that the issuer submits to the exclusive jurisdiction of this Court for any and all disputes arising under the Letter of Credit.

83. **Application of New York Law.** The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Chromium Remedy Letter of Credit.

84. **Procedures upon Honeywell's Material Default of Its Obligations.** During the period in which the Special Master has jurisdiction pursuant to paragraph 71, the Chromium Remedy Letter of Credit shall be payable to the Special Master and shall not, prior to its expiration date, be revoked or terminated except consistent with this Consent Decree and with the consent of the Special Master and approval by the Court. The Special Master's ability to draw upon the Chromium Remedy Letter of Credit shall not be limited by any agreement between Honeywell and the issuer. The Special Master may, without further order or notice to

this Court, draw upon the Chromium Remedy Letter of Credit upon the occurrence of default by Honeywell, which shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 79 to deliver a replacement Chromium Remedy Letter of Credit at least 95 days prior to the expiration date of the existing Chromium Remedy Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 15 days after written notice to Honeywell thereof and either (i) Honeywell, in the opinion of the Special Master without further input from the Parties, shall have failed to cure the breach; (ii) during the 15-day period, the Court has not entered an order to prevent the Special Master from drawing on the Chromium Remedy Letter of Credit; or (iii) the Court or the Special Master has not granted Honeywell additional time to cure the breach;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if involuntary filing has not been dismissed within 60 days; the appointment of a custodian, receiver, liquidator, or trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under paragraph 84(c) above, and the failure of Honeywell to provide assurance to the Special Master, within 15 days after written notice, that such an event will not impair Honeywell's ability to

carry out the terms of this Consent Decree.

85. **Placement of Proceeds in Court Registry Investment System Account.** In the event that the Special Master draws upon the Chromium Remedy Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Chromium Remedy Letter of Credit which represent the remaining estimated Chromium Remedy costs under paragraphs 77(a)(i), plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), in an account with the Court Registry Investment System in accordance with Local Civil Rule 67.1 and not expend the proceeds of the Letter of Credit without further order of this Court. The Special Master shall place all additional proceeds of the Chromium Remedy Letter of Credit in a trust fund pursuant to paragraph 90(b)(v).

86. **Termination of Chromium Remedy Letter of Credit.** The Chromium Remedy Letter of Credit may be withdrawn in its entirety upon the satisfaction of all of the following:

(a) The implementation of the Chromium Remedy; and

(b) Establishment of long-term financial assurance pursuant to Article III.E.

E. Long-Term Financial Assurances

87. **Long-Term Financial Assurances.** Honeywell shall fund long-term financial assurances to ensure that the activities set forth in paragraph 89(a) are carried out regardless of whether Honeywell is financially able to carry out such activities in perpetuity.

88. **Resolution of the Amount of Long-Term Financial Assurances.** The Parties have agreed to the following options with regard to how the long-term financial assurances shall be determined:

(a) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less,

and agree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E.

(b) If the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, but disagree on the amount of funding needed, Honeywell shall provide long-term financial assurances as required by Article III.E except that the dispute as to the amount of the long-term financial assurances shall be submitted to the Special Master pursuant to paragraph 91.

(c) If the Parties do not agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is $10,000,000 or less, or the Parties agree that the current amount necessary to cover the costs to be subject to long-term financial assurances, as set forth in paragraph 89(b), is greater than $10,000,000, the Parties shall seek resolution by the Court of the long-term financial assurances issues, including (i) the type of financial assurances to be provided; (ii) the scope of the financial assurances; (iii) the amount of the financial assurances; and (iv) the duration of the financial assurances. In the event that the Parties seek resolution by the Court, the provisions of paragraphs 90 through 98 shall not apply.

(d) Within 60 days of the entry of this Consent Decree, the Parties shall determine which option under this paragraph shall apply. In the event that the Parties determine that paragraph 88(c) applies, Riverkeeper shall initiate the proceedings by moving the Court for the imposition of long-term financial assurances.

(e) If the Parties determine that they are proceeding under paragraph 88(c), Honeywell shall maintain the Chromium Remedy Letter of Credit required by paragraph 77 in an amount equal to at least $20,000,000 in 2008 dollars until such time as the long-term financial assurances ordered by the Court are in place. In the event of any default by Honeywell pursuant

to paragraph 84 while the Chromium Remedy Letter of Credit is in place, the provisions of paragraph 90(b)(v) for the placement of the proceeds that exceed the remaining estimated Chromium Remedy costs under paragraph 77(a)(i) plus a contingency of 25% of the remaining estimated costs under paragraph 77(a)(i), shall apply.

89. **Costs Subject to Long-Term Financial Assurances.**

(a) Long-term financial assurances shall provide enough funds to cover the costs of the following activities:

(i) Perpetual monitoring and maintenance of the Chromium Remedy, including installation, operation and monitoring of any above-cap-grade gas collection and/or treatment system as may be necessary, but such system is not part of the 100% Design;

(ii) Perpetual operation of the shallow groundwater pump-and-treat remedy;

(iii) Perpetual repair of the cap;

(iv) Perpetual replacement of the cap on a 75-year replacement interval; and

(v) In the event that Honeywell selects a trust fund pursuant to paragraph 90(a), the perpetual administration of the trust fund.

(b) The costs that shall be subject to financial assurances is an amount that will provide the full payment for each of the activities set forth in paragraphs 89(a)(i) through 89(a)(v) plus a 25% contingency when the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to be performed. The costs subject to financial assurances are forward looking because they state an amount valued at the time the funds are needed. As such, they shall be stated in contemporary time as the present value (calculated on the basis of a discount rate of 4.75%) of

the estimated future costs of the activities specified in paragraphs 89(a)(i) through 89(a)(v), plus a 25% contingency on those costs.

90. **Long-Term Financial Assurance Mechanisms.** Honeywell shall provide long-term financial assurances in the amount of the costs subject to long-term financial assurances in the form of a trust fund, a letter of credit, or some combination of the two. The selected mechanism(s) shall satisfy the following requirements:

(a) **Trust Fund.** In the event that Honeywell selects a trust fund, Honeywell shall create a trust fund such that it can provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(i) The trust fund shall be at arm's length from Honeywell and shall not be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The trust fund agreement shall contain the language necessary to assure that neither the trust fund nor the earnings of the trust fund shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The trust fund shall be managed by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution managing the trust fund declares bankruptcy, the Court shall withdraw the funds and appoint another financial institution meeting the requirements of this paragraph to manage the trust.

(iii) No more frequently than once per year, Honeywell may apply to the Court for an order directing the trust manager to reimburse Honeywell for any costs that it has incurred to carry out the activities set forth in paragraphs 89(a)(i) through 89(a)(iv).

(b) **Long-Term Letter of Credit.** In the event that Honeywell selects a letter of credit, Honeywell shall obtain a one-year irrevocable letter of credit (the "Long-Term Letter of Credit") to be automatically renewed annually in an amount that provides sufficient funds such that a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a), could be created. The Long-Term Letter of Credit-funded trust, plus any trust fund established under paragraph 90(a), shall provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The amount of any Long-Term Letter of Credit shall therefore be adjusted periodically as the cap replacement interval is approached because, for example, the money needed in the 10th year to fund a trust that can provide for replacement of the cap in the 75th year is much less than the money that would be needed in the 40th year. Such periodic adjustments shall be proposed and approved by the Court in conjunction with the adjustments under paragraph 92.

(i) Neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be considered the property of Honeywell or property of the estate in the event of Honeywell's bankruptcy, dissolution, privatization, or sale. The Long-Term Letter of Credit shall contain the language necessary to assure that neither the Long-Term Letter of Credit nor the proceeds of the Long-Term Letter of Credit shall be affected or restricted in any way by operation of the automatic stay in 11 U.S.C. 362.

(ii) The Long-Term Letter of Credit shall be issued by a financial institution domiciled in the United States or by a United States subsidiary of a non-U.S. financial institution acceptable to Riverkeeper and the Jersey City Entities or approved by the Court. In the event that the financial institution issuing the Long-Term Letter of Credit declares bankruptcy, the Court shall authorize the drawing of funds from the Long-Term Letter of Credit

and shall deposit those funds in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(iii) The provisions of the Uniform Customs and Practice ("UCP") for Documentary Credits (1993 Revision) International Chamber of Commerce Publication #500 and New York law shall apply to the Long-Term Letter of Credit.

(iv) The Long-Term Letter of Credit shall be automatically renewed annually, unless, no later than 120 days prior to the anniversary of the Long-Term Letter of Credit issue date, the issuer provides notice of non-renewal. If the issuer provides notice of non-renewal, Honeywell shall obtain a replacement irrevocable Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit. If Honeywell is not otherwise in default as provided in this Article, the Court shall direct the cancellation of the prior Long-Term Letter of Credit within 91 days after delivery to the Court of any replacement of a Long-Term Letter of Credit. In the event that the Court is entitled to draw upon a Long-Term Letter of Credit when there are two Letters of Credit currently in place, the Court shall not draw an aggregate amount in excess of the highest valued Long-Term Letter of Credit.

(v) Prior to the expiration of the Special Master's appointment pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Special Master. During the time the Long-Term Letter of Credit is payable to the Special Master, the Special Master may draw on the Long-Term Letter of Credit as provided in paragraph 84. In the event that the Special Master draws upon the Long-Term Letter of Credit due to an event of default, the Special Master shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a). After the Special Master's appointment expires pursuant to paragraph 76, the Long-Term Letter of Credit shall be payable to the Court and, in the event that the Court draws

on the Long-Term Letter of Credit, the Court shall place the proceeds of the Long-Term Letter of Credit in a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

(vi) Whether the Long-Term Letter of Credit is payable to the Special Master or the Court, it shall not, prior to its expiration date, be revoked or terminated by Honeywell except consistent with this Consent Decree and with the approval of the Court. The ability of the Special Master or the Court to draw upon the Long-Term Letter of Credit shall not be limited by any agreement between Honeywell and the issuer.

(vii) In the event that the Long-Term Letter of Credit is drawn upon and invested pursuant to paragraph 90(b)(ii), 90(b)(v) or 95 and Honeywell has also selected a trust fund pursuant to paragraph 90(a), resulting in the existence of two trust funds, the two trust funds shall be managed so as to ensure that the combined amount of the trust funds is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary.

(c) **Combination.** Honeywell may use some combination of a trust fund and a letter of credit to achieve the requirements of this paragraph. However, if a combination is used, Honeywell shall ensure that the combined amount of financial assurances is sufficient to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. The trust fund and the letter of credit shall otherwise satisfy all the requirements of paragraphs 90(a) and 90(b).

91. **Procedures for Review of the Proposed Long-Term Financial Assurances.** In the event that the Parties have determined that they are proceeding pursuant to paragraph 88(a) or 88(b), no later than 120 days after the determination under paragraph 88(d), Honeywell shall submit to Riverkeeper, the Jersey City Entities, and the Special Master, for their review (a) the

amount of the proposed long-term financial assurances; (b) the form(s) of the proposed long-term financial assurance mechanisms; and (c) the name(s) of the institution proposed to manage or issue the long-term financial assurances. If Riverkeeper and the Jersey City Entities agree to the terms of the proposed long-term financial assurances, within 60 days of such agreement, Honeywell shall create a trust fund and/or secure a Long-Term Letter of Credit on those terms. If the Parties are unable to reach agreement over the terms of the long-term financial assurances, the Parties shall submit the dispute to the Special Master, who shall recommend a resolution of the dispute. Any Party shall have the right to seek review by the Court of the Special Master's recommendation regarding the terms of the financial assurances. In any event, until the long-term financial assurances have been put into place, Honeywell shall maintain the Chromium Remedy Letter of Credit and the requirements of paragraphs 88(e) and 90(b)(v) shall apply to the Chromium Remedy Letter of Credit.

92. **Adjustment of Amount Held in Long-Term Financial Assurances.** Every five years as marked from the establishment of the first long-term financial assurances pursuant to paragraph 90, the Parties shall report to the Court whether the long-term financial assurances are adequately funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. At such time as the Parties report to the Court, any Party may seek an adjustment in the amount of the long-term financial assurances. The Party seeking an adjustment must demonstrate that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Such demonstration shall reflect the actual costs of implementing the remedy and/or any replacement of the remedy, once such actual costs are available. The demonstration shall also reflect the costs of work completed to date and the actual lifetime of the cap, once the

cap has been replaced or has passed a replacement interval without requiring replacement. The demonstration shall further reflect the actual performance of the fund and its ability to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary. Any demonstration shall be forward looking and shall be based upon estimates of what the activities in paragraphs 89(a)(i) through 89(a)(v) are expected to cost at the time they must be performed and the amount of funding projected to be available to undertake such activities at the time they must be performed. If, after reviewing the submission(s) received from the Parties, the Court determines that the long-term financial assurances are under-funded or over-funded to provide the full amount of the costs subject to long-term financial assurances, as set forth in paragraph 89(b), at the time those funds are necessary, the Court shall order an adjustment in the amount held in the long-term financial assurances to overcome the shortage or overage. In the event that the Court determines that the long-term financial assurances are under-funded, it shall order Honeywell to increase the amount held in the long-term financial assurances. In the event that the Court determines that any trust fund established pursuant to paragraph 90(a) is over-funded, the Court shall issue an order directing the trust manager to pay the overage to Honeywell. In the event that the Court determines that the Long-Term Letter of Credit is over-funded, the Court shall issue an order permitting Honeywell to reduce the amount covered during the next annual renewal of the Long-Term Letter of Credit pursuant to paragraph 90(b)(iv). Any adjustment to the amount of the Long-Term Letter of Credit pursuant to this paragraph shall be in addition to any adjustment of the amount of the Long-Term Letter of Credit required pursuant to paragraph 90(b).

93. **Exclusive Court Jurisdiction.** The trust fund agreement and/or the Long-Term Letter of Credit shall recite that the trust fund manager and/or issuer of the Long-Term Letter of Credit submit to the exclusive jurisdiction of this Court for any and all disputes arising under the

trust fund or the Long-Term Letter of Credit. The requirements of this paragraph shall apply whether the trust fund is established pursuant to paragraph 90(a), 90(b)(ii), 90(b)(v), or 95.

94. **Procedures upon Honeywell's Material Default of Its Obligations after the Special Master's Appointment Has Expired.** Upon the occurrence of default by Honeywell, after the Special Master's appointment has expired, Riverkeeper or the Jersey City Entities may move the Court on an expedited basis for an order to withdraw funds from the trust fund or to draw on the Long-Term Letter of Credit. Default shall include:

(a) The failure of Honeywell, in the event that notice is given pursuant to paragraph 90(b)(iv) to deliver a replacement Long-Term Letter of Credit at least 95 days prior to the expiration date of the existing Long-Term Letter of Credit;

(b) The material failure of Honeywell to proceed with diligence and in good faith to carry out the terms of this Consent Decree and the continuance of such a material breach for a period of 30 days after written notice by Riverkeeper or the Jersey City Entities to Honeywell of the alleged material failure, unless Honeywell cures the alleged breach within the 30-day notice period or such longer period as the Parties may agree to or the Court may order;

(c) The filing by Honeywell of a petition seeking relief, or the granting of relief, under the Federal Bankruptcy Code or any similar federal or state statute; any assignment for the benefit of creditors made by Honeywell; the involuntary filing of any of the foregoing against Honeywell if the involuntary filing is not dismissed within 60 days; the appointment of a custodian, receiver, liquidator, trustee, or other similar official for Honeywell or for a substantial part of Honeywell's property; any action by Honeywell to effect any of the foregoing; or if Honeywell becomes insolvent as defined in Section 101(32) of the Federal Bankruptcy Code; or

(d) The dissolution, liquidation, merger, consolidation, or reorganization of Honeywell or the institution of any proceeding to effect any of the foregoing, other than under

paragraph 94(c), if Honeywell fails to provide assurance to Riverkeeper, the Jersey City Entities, and the Court, within 15 days after written notice, that such an event will not impair Honeywell's ability to carry out the terms of this Consent Decree.

95. **Drawing on the Long-Term Letter of Credit in the Event of Honeywell's Default.** If the Court grants any motion by Riverkeeper or the Jersey City Entities pursuant to paragraph 94 to draw on the Long-Term Letter of Credit, the sum approved by the Court's order granting the motion shall be paid from the Long-Term Letter of Credit into a trust fund, separate from any trust fund created under paragraph 90(a) but satisfying the requirements of paragraph 90(a).

96. **Use of the Trust Fund in the Event of Honeywell's Default**. In the event of Honeywell's default, the money in the trust fund established pursuant to paragraph 90(a) shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

97. **Use of a Trust Fund Established Pursuant to Paragraph 85, 90(b)(ii), 90(b)(v), or 95.** In the event that a trust fund is established pursuant to paragraph 85, 90(b)(ii), 90(b)(v), or 95, the money in the trust fund shall be available to meet the obligations of paragraph 89(a). Riverkeeper and/or the Jersey City Entities shall file motions with the Court seeking orders directing how the money in the trust fund shall be used. The Court shall consider motions on an expedited basis and shall enter appropriate orders. The Court may enter an order allowing for automatic withdrawal of regular expenses without separate motion to the Court by Riverkeeper or the Jersey City Entities.

98. **Termination of the Long-Term Financial Assurances.** Honeywell's obligations

under Article III.E shall be terminated and the long-term financial assurance mechanisms shall be terminated when the Court finds that no hexavalent or total chromium contamination remains in the AOC 1 Open Space Area or on the Site, whether in soils or in groundwater, in excess of the levels specified for Unrestricted Use in the NJDEP Chromium Directive or any more restrictive standards for Unrestricted Use in place at the time, whichever is more restrictive. Upon determining that long-term financial assurances may be terminated, the Court shall order that any Long-Term Letter of Credit may be withdrawn in its entirety and any trust fund may be terminated. In conjunction with its order terminating any trust fund, the Court in its discretion shall designate a recipient(s) of any remaining trust funds.

ARTICLE IV: IMPLEMENTATION SCHEDULE AND TERMINATION

99. **Schedule for Remedy and Site Preparation Implementation Activities.** The Chromium Remedy under Article III and the Historic Fill Remedy under Article II.B of the Jersey City/Honeywell Consent Order and Site Preparation Activities under Article III of the Jersey City/Honeywell Consent Order shall be undertaken by the Parties in accordance with the following anticipated schedule, recognizing that this schedule may be further modified in writing by agreement of the Parties and with the approval of the Court:

(a) By October 1, 2008, the Jersey City Entities and Honeywell shall develop a Site Preparation Plan, pursuant to paragraph 3.2 of the Jersey City/Honeywell Consent Order, for all Site Preparation Activities necessary to undertake the Chromium Remedy;

(b) No later than June 18, 2009, Honeywell shall submit to NJDEP a remedial design document for the Chromium Remedy;

(c) No later than September 1, 2009, Honeywell shall submit all applications for permits and authorizations for the performance of the Chromium Remedy to all appropriate local, state, and federal government entities;

(d) Honeywell shall use its best efforts to complete the Chromium Remedy no later than four years after all appropriate applications and authorizations for the performance of the Chromium Remedy have been obtained;

(e) By May 1, 2008, Honeywell and the Jersey City Entities shall submit a work plan for further Remedial Investigation for AOC 2 to NJDEP; and

(f) By December 1, 2008, Honeywell and the Jersey City Entities shall submit a Remedial Action Selection Report and Remedial Action Workplan for the Historic Fill Remedy set forth in Article II.B of the Jersey City/Honeywell Consent Order. The Workplan shall contain a schedule for implementation of the Historic Fill Remedy.

100. **Termination of this Consent Decree.** This Consent Decree shall terminate upon the withdrawal of any Party as provided for in this paragraph. Any Party may elect to withdraw from this Consent Decree due to the occurrence of one or more of the following events, provided that such Party provides written notice of withdrawal to the other Parties pursuant to paragraph 108:

(a) The Court fails to enter the Jersey City/Honeywell Consent Order or this Consent Decree or either the Jersey City/Honeywell Consent Order or this Consent Decree is determined to be invalid on appeal;

(b) JCRA fails to take those actions required under paragraphs 4.11(a), (b), and (c) of the Jersey City/Honeywell Consent Order within nine months of entry of this Consent Decree; or

(c) JCRA fails to approve a Redevelopment Agreement between Bayfront Redevelopment LLC and JCRA pursuant to paragraph 4.11(e) of the Jersey City/Honeywell Consent Order within 12 months of entry of this Consent Decree.

101. **Procedures for Withdrawal and Termination.** Any Party electing to withdraw pursuant to paragraph 100 and thereby terminate this Consent Decree shall provide written notice of such withdrawal and termination to all other Parties within 30 days of the occurrence giving rise to the decision to withdraw. If any Party objects to termination of the Consent Decree, or believes that the conditions set forth in paragraph 100 have not been met, such objecting Party may move the Court for an expedited hearing on the issue of whether the conditions for termination have been effectuated.

102. **Good-Faith Obligation to Avoid Termination.** The Parties agree that they will each endeavor to fulfill the terms of this Consent Decree, that they will work diligently and in good faith to meet their obligations hereunder, and that they will promptly and timely take all reasonable steps to give effect to this Consent Decree and to avoid termination under paragraph 100.

103. **Effect of Termination.** If this Consent Decree is terminated pursuant to paragraph 100, the Consent Decree shall no longer be binding on the Parties and shall be of no further effect. In the event that this Consent Decree is terminated by one or more Parties pursuant to paragraph 100, each Party to this Consent Decree reserves all of its rights, claims, and defenses (both legal and factual) against the other Parties with respect to the matters at issue in the Consolidated Litigation and each Party remains free to pursue such rights, claims, and defenses.

ARTICLE V: ADDITIONAL PROVISIONS RELATED TO HISTORIC FILL AND SITE PREPARATION AND REDEVELOPMENT

104. **Historic Fill Remedy**. This Consent Decree shall adopt and incorporate the terms of Article II.B of the Jersey City/Honeywell Consent Order with respect to the Historic Fill Remedy. The Historic Fill Remedy shall not be limited to the activities set forth in Article II.B of the Jersey City/Honeywell Consent Order in the event that NJDEP requires a more extensive remedy. The Historic Fill Remedy shall be compatible with the Chromium Remedy such that no

part of the Historic Fill Remedy shall interfere with the installation, maintenance, and monitoring of the Chromium Remedy. In addition, the Historic Fill Remedy for any discharge of non-chromium contaminants to the Hackensack River shall not interfere with the remedies under the Sediment Consent Order, including the source control remedies. In the event that Jersey City conducts the Historic Fill Remedy instead of Honeywell, the terms of this paragraph shall still apply.

105. **Oversight of Historic Fill Remedy**. Paragraph 2.11 of the Jersey City/Honeywell Consent Order shall apply only to the Historic Fill Remedy, not the Chromium Remedy. The Progress Reports provided for in paragraphs 2.12 and 3.7 of the Jersey City/Honeywell Consent Order shall be provided to Riverkeeper and the Special Master at the time they are submitted.

106. **Transfer of Title of Study Areas 6 North and 7 to and from Bayfront Redevelopment LLC.** The transfer of title of Study Area 6 North and Study Area 7 properties to Bayfront Redevelopment LLC pursuant to the Jersey City/Honeywell Consent Order and any subsequent transfers shall not impede Honeywell's obligations to (a) complete the remediation of Study Area 7 and implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or (b) complete the Chromium Remedy and conduct long-term monitoring and fulfill its other obligations set forth in this Consent Decree. Such transfers of Study Areas 6 North and Study Area 7 shall not include a transfer of Honeywell's obligations to implement the Final Judgment and subsequent orders in *ICO v. Honeywell* or a transfer of Honeywell's obligations under this Consent Decree, but shall include a right of access or any other right required by Honeywell to complete the remediation. Any subsequent transfer of Study Area 6 North or Study Area 7 from Bayfront Redevelopment LLC to a redeveloper or other party shall provide all necessary agreements to allow Honeywell all necessary access to Study Area 6 North and Study Area 7 for purposes of completing Honeywell's obligations with respect to Study Area 6 North under this

Consent Decree and completing the Study Area 7 remediation and implementing the Final Judgment and subsequent orders in *ICO v. Honeywell*.

107. **Dispute Resolution Procedures.** The provisions of Article VIII of the Jersey City/Honeywell Consent Order do not apply to any disputes regarding or impacting the Chromium Remedy, which shall be resolved as provided in paragraph 72. The provisions of Article VIII of the Jersey City/Honeywell Consent Order shall apply to disputes between the Jersey City Entities and Honeywell regarding the Historic Fill Remedy and other obligations provided in the Jersey City/Honeywell Consent Order, except to the extent that such disputes may affect the Chromium Remedy. If any such dispute may affect the Chromium Remedy, it shall be resolved as provided in paragraph 72. Honeywell shall provide Riverkeeper with a copy of each notice of any breach provided under paragraph 8.1 of the Jersey City/Honeywell Consent Order within 10 days of Honeywell's receipt or issuance of such notice. Honeywell shall provide Riverkeeper with a copy of any written resolution of a dispute pursuant to paragraph 8.2 within 10 days of the resolution.

ARTICLE XI: NOTICE

108. **Notice.** Any and all notices given in connection with this Consent Decree shall be deemed adequately given only if in writing and addressed to the Party for whom such notices are intended at the addresses set forth in this paragraph. All notices shall be sent by Federal Express or other nationally recognized overnight messenger service or by first-class registered or certified mail, postage prepaid, return receipt requested. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it shall be delivered to the address set forth in this paragraph; (b) the date delivery shall have been refused at the address set forth in this paragraph; or (c) with respect to notices sent by mail, the date as of which the postal service shall have indicated such notice to be undeliverable at the address set forth in this paragraph.

Any and all notices referred to in this Consent Decree, or which any Party desires to give to the other, shall be addressed as follows:

If to Honeywell and/or
Bayfront Redevelopment LLC :

Tom Byrne, Esq.
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-2775

With copies to:

John Morris
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962
(973) 455-4003

If to Riverkeeper:

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th St., N.W.
Washington, DC 20005-4632
(202) 682-2100

If to Jersey City:

William Matsikoudis
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NJ 07305
(201) 547-4667

If to JCIA:

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

If to JCMUA:

Sam Della Fera Jr.
Trenk, DiPasquale, Webster,
Della Ferra & Sodono, P.C.
347 Mount Pleasant Ave.
West Orange, NJ 07052
(973) 243-8600

If to JCRA:

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Any party may change its designated recipients or addresses for notice in this paragraph by providing written notice of such change to all other Parties.

ARTICLE XII: RIVERKEEPER'S ATTORNEYS' FEES

109. **Payment of Past Fees and Expenses.** Within 30 days of the entry of this Consent Decree, Honeywell shall pay Terris, Pravlik & Millian, LLP the sum of $1,513,217.15 which represents the following:

(a) A compromise of the attorneys' fees incurred by Riverkeeper in the litigation of Study Area 6 North portion of *Riverkeeper v. Honeywell* through March 27, 2008; and

(b) $187,862.27 in out-of-pocket expenses representing 50% of the expenses incurred by Riverkeeper in *Riverkeeper v. Honeywell* from the inception of the litigation after deducting the expenses to be paid pursuant to the Sediment Consent Order.

Payment of the sum of $1,513,217.15 shall be in full satisfaction of all obligations, duties, and responsibilities of Honeywell with respect to the $1,556,747.46 in fees and expenses that Riverkeeper claimed with regard to the above described fees and expenses.

110. **Future Fees and Expenses.** Honeywell shall reimburse Riverkeeper's attorneys for reasonable fees and expenses incurred: (a) in negotiating this Consent Decree after March 27, 2008; (b) in the monitoring and enforcement of this Consent Decree; and (c) in participation in the Special Master process established pursuant to this Consent Decree. Honeywell shall also reimburse Riverkeeper for reasonable attorneys' fees and expenses for Riverkeeper's review of and participation in the Long-Term Monitoring Plan and monitoring and enforcement of this Consent Decree following the term of the Special Master. In the event that any dispute arises between the Parties under this Consent Decree that must be resolved by the Court, Riverkeeper shall be entitled to recover its attorneys' fees and expenses for litigation of the dispute to the extent allowed by federal law. Riverkeeper and Honeywell shall use the same informal procedure for attempting to settle fees issues as has been used for post-judgment monitoring fees in *ICO v. Honeywell*. In the event that Riverkeeper and Honeywell are unable to reach a

settlement on fees, Riverkeeper shall apply to the Court for an award of attorneys' fees and expenses. If Honeywell objects to only a portion of the Riverkeeper's statement of attorneys' fees and expenses, Honeywell shall pay the undisputed portion within 60 days of Riverkeeper's submittal of the statement to Honeywell. The Court shall resolve any objections to Riverkeeper's statement of attorneys' fees and expenses and shall enter an appropriate Order.

ARTICLE XIII: MISCELLANEOUS PROVISIONS

111. **Force Majeure.** Force Majeure, for the purposes of this Consent Decree, is defined as an event arising from causes beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable diligence and which delays or prevents the performance of any obligation under this Consent Decree. Examples of events which may constitute force majeure include the refusal of any federal or state governmental authority to grant a permit or authorization necessary for the completion of actions required by this Consent Decree, floods, hurricanes, tornadoes, and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war, and other national emergencies. Examples of events that are not force majeure events include normal inclement weather, increased costs or expense, the failure to timely and fully apply for a permit or authorization necessary for the completion of actions required by this Consent Decree, or financial difficulty of any Party. The Party claiming force majeure shall bear the burden of showing an event was a force majeure event.

112. **JCRA and Bayfront Redevelopment LLC as Parties.** As signatories to this Consent Decree, JCRA and Bayfront Redevelopment LLC subject themselves to the Court's jurisdiction for the purpose of enforcing this Consent Decree and agree to be bound by this Consent Decree. This Consent Decree shall be fully enforceable against JCRA and Bayfront Redevelopment LLC.

113. **Successors and Assigns.** This Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, heirs, corporate parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations hereunder shall release the assigning Party from its obligations under this Consent Decree.

114. **Successors to Hackensack Riverkeeper, Inc.** In the event that Hackensack Riverkeeper, Inc. disbands or otherwise ceases operations, it shall assign its rights under this Consent Decree to another qualified nonprofit organization. A nonprofit organization shall be qualified for assignment under this Consent Decree if it is a charitable organization under Section 501(c)(3) of the Internal Revenue Code or its substantial equivalent and has an established record of working to enhance or preserve the ecology, natural habitat, or environment. Any such assignment shall be subject to approval by the Court and Honeywell shall have the right to object to any proposed assignment. Any successor organization shall have the duty to assign its rights under this Consent Decree to another qualified nonprofit organization in the event that the successor disbands or otherwise ceases operations. In the event that a successor is not appointed at any given time, the New Jersey Attorney General or equivalent officer shall appoint a successor subject to approval by the Court and objection by Honeywell.

115. **Reservation of Rights and Claims**. Except as set forth expressly herein, this Consent Decree does not affect in any way any of the Parties' claims or defenses against third parties who have not signed the Consent Decree.

116. **Governing Law and Continuing Jurisdiction.** The Court shall retain jurisdiction over the matters addressed in this Consent Decree for purposes of enabling the Parties to apply to the Court for any further order as may be necessary to construe, carry out, or enforce the terms of this Consent Decree. This Consent Decree shall be interpreted and enforced under the laws of

the United States and the State of New Jersey by the United States District Court for the District of New Jersey.

117. **Construction.** Questions regarding the interpretation of this Consent Decree shall not be resolved against any Party on the ground that this Consent Decree has been drafted by that Party. This Consent Decree is the result of review, negotiation, and compromise by each Party.

118. **Authority to Enter into Agreement.** The undersigned representative for each Party represents, certifies, and warrants that he or she is duly authorized by the Party whom he or she represents to enter into the terms of this Consent Decree and bind such Party legally to this Consent Decree.

119. **Measures to Effectuate This Consent Decree.** The Jersey City Entities and JCRA shall take all appropriate steps to ensure that this Consent Decree has been (and that actions required hereunder will be) duly considered, ratified, and approved. Such steps include consideration of this Consent Decree at a meeting of the City Council, open to the public, at which members of the public have the opportunity to comment on all aspects of the Settlement, including the commitments made by Jersey City; and consideration by and approval of the commissioners of the JCIA, JCMUA, and JCRA.

120. **Modifications.** This Consent Decree may be modified by mutual agreement of the Parties but such agreement must be in writing, duly and properly signed by all Parties, and shall be submitted to the Court for approval.

121. **Severability.** Each of the provisions in paragraph 60 of this Consent Decree shall be deemed severable and, in the event that one or more of such provisions is deemed invalid or unenforceable, it shall not affect the validity or enforceability of the other provisions of the Consent Decree.

122. **Signatures.** This Consent Decree may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories. This Consent Decree may be signed electronically by any or all signatories, and such electronic signature shall be as fully valid and binding as a hand-written signature.

Consented to and approved for entry:

s/Aurelio Vincitore

William Matsikoudis
Aurelio Vincitore
Corporation Counsel
City of Jersey City
280 Grove Street
Jersey City, NY 07305
(201) 547-4667

Counsel for the City of Jersey City

s/David L. Isabel

David L. Isabel
Golub & Isabel, PC
160 Littleton Road
Parsippany, NJ 07054
(973) 968-3377

Counsel for Jersey City Incinerator Authority

s/ Joni Noble McDonnell

Joni Noble McDonnell
Genova, Bruns & Giantomasi
4974 Broad Street
Newark, NJ 07102
973-535-4435

Counsel for Jersey City Municipal Utilities Authority

Robert Antonichello
Executive Director
30 Montgomery Street
Jersey City, NJ 07302
(201) 547-5810

Executive Director of Jersey City Redevelopment Agency

s/ David Sheehan

David Sheehan
Baker Hostetler
45 Rockefeller Plaza
11th Floor
New York, NY 10111
(212) 589-4200

Michael D. Daneker
Arnold & Porter LLP
555 12th Street N.W.
Washington, DC 20004
(202) 942-5000

Counsel for Honeywell International Inc. and Bayfront Redevelopment LLC

s/ Edward Lloyd

Edward Lloyd
Columbia Law School
435 West 116th Street, Room 831
New York, NY 10027
(212) 854-4376

Bruce J. Terris
Carolyn Smith Pravlik
Kathleen L. Millian
Terris, Pravlik & Millian, LLP
1121 12th Street N.W.
Washington, DC 20005-4632
(202) 682-2100

Counsel for the Hackensack Riverkeeper, William Sheehan, Reverend Winston Clarke, and Lawrence Baker

APPROVED AND ENTERED as an Order of this Court this ___ day of _____, 2012.

_____
Hon. Dennis M. Cavanaugh
United States District Judge

EXHIBITS

Exhibit A: Jersey City/Honeywell Consent Order

Exhibit B: Remedial AOC's and Remedial Approach Map

Exhibit C: NJDEP Chromium Policy

Exhibit D: Conservation Restriction

Exhibit E: Deed Notice

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DEED
NUMBER OF PAGES : 115
LHIGHSMITH

Deed Notice

Dated: January 10, 2018

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560
ATT: Perry Florio, Esq.

DEED NOTICE #14
SA-7 PERIMETER POOL

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature] Global Director - Remediation Design and Construction
[Bayfront Redevelopment LLC]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

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12/14/2017 02:35:28 PM DEED
Bk: 9265 Pg: 471
Diane Coleman
Hudson County, Register of Deeds
Receipt No. 1312787

DEED NOTICE CONCERNING CONTROLS INSTALLED TO CONTAIN CHROMIUM CONTAMINATION UNDERLYING THE PROPERTY AND RESTRICTIONS CONCERNING THE USE OF THE PROPERTY

This Deed Notice is made as of the 4th day of December, 2017, by ***Bayfront Redevelopment LLC, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950***. "Owner" shall mean Bayfront Redevelopment LLC together with its successors and assigns, including all successors in interest in the Property which is the subject of this Deed Notice as described fully below. The "Property" (also referenced herein as the "Restricted Area(s)") shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached hereto.

1. THE PROPERTY. Bayfront Redevelopment LLC is the current owner in fee simple of certain real property designated as portions of ***Block 21901, Lots 6, 7, and 8 on the tax map of the City of Jersey City, Hudson County, New Jersey***[1]. The New Jersey Department of Environmental Protection ("NJDEP") Program Interest ("PI") Number for the contaminated site which includes this property is ***Hudson County Chromate Site No. 115 PI# G000002548***. The Property is part of

[1] All references to Block 21901 Lots 6 through 8 in this Deed Notice shall mean the applicable portions of Block 21901 Lots 6 through 8 as shown in the metes and bounds description, regardless of whether the word "portion(s)" is specifically called out or not.

the site referred to as Study Area 7 (Site 115), and is the subject of an Administrative Consent Order ("ACO") between Honeywell International Inc. ("Honeywell") and the Department dated June 17, 1993; and a Court-Ordered Remedy pursuant to the U.S. District Court of New Jersey ("Court") Final Judgment in *Interfaith Community Organization v. Honeywell International Inc*., Case No. 95-2097, entered on June 30, 2003, and amended by Modified Order Amending Injunction dated January 13, 2012 (ECF No. 1116). Study Area 7 has been remediated by Honeywell and received a No Further Action/Covenant Not to Sue for Soils letter from NJDEP, dated December 23, 2010. The Modified Order Amending Injunction, paragraphs 4-5, requires hydraulic controls in the vicinity of the eastern border of SA-7 in order to prevent re-contamination of SA-7 by groundwater flow from the area to the east known as Study Area 5.

2. REMEDIATION.

i. The Bureau of State Case Management ("BCM") is the Department's program that is responsible for the oversight of the remediation of the SA-7 Property. The matter was Case No. Hudson County Chromate Site No. 115 PI# G000002548. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26-C-7 requires the Owner, among other persons, including the responsible party Honeywell International, Inc. ("Honeywell"), to obtain a remedial action permit for the remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL AND GROUNDWATER CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey, whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated the Property to address chromium-related soil and shallow groundwater contamination.

The Court Remedy 100% Design for SA-7 was approved by the Court on March 14, 2005. Remediation was completed at SA-7 to comply with the court order to remove all materials containing hexavalent chromium in excess of 240 milligrams per kilogram (mg/kg). The remedial action achieved compliance with the Department's current most stringent soil cleanup criteria of 20 mg/kg, with the exception of a small portion of SA-7 at the bulkhead along the Hackensack River that is subject to a separate Deed Notice (Deed Notice #4). Honeywell submitted to the Special Master, and filed with the Court, Excavation Declarations, which documented the successful excavation, removal and off-site disposal of chromium contaminated soils on Study Area 7, and the backfilling of Study Area 7 with clean soil. See Amended Order Modifying Injunction (ECF No. 1116). Remedial actions for soils are also documented in a Remedial Action Report for Soils submitted to the New Jersey Department of Environmental Protection during December 2010. The Department issued a No Further Action/Covenant Not to Sue letter, dated December 23, 2010.

As documented in the Remedial Action Report for Soils, the Property encompasses the eastern portion of the Soil-Cement-Bentonite (SCB) underground hydraulic barrier wall of SA-7 ("Eastern SCB Wall") and the associated eastern perimeter pool which, together, serve as a portion of the chromium remedy for SA-7 in order to protect SA-7 from re-contamination in accordance with the Amended Order Modifying Injunction (ECF No. 1116). The Property is approximately 26,000 square feet. One area of the Property along the western face of the Eastern SCB Wall contains

contaminants in concentrations that do not allow for the unrestricted use of the Property. This contamination is described, including the type, concentration and specific location, in Exhibit B, which is attached hereto and made a part hereof.

4. CONSIDERATION. In accordance with the remedial actions implemented by Honeywell at Hudson County Chromate Site 115 which included portions of the Property, and the Department's issuance of the No Further Action/Covenant Not to Sue letter for SA-7, and in consideration of the terms and conditions of that approval, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of the Eastern SCB Wall and associated eastern perimeter pool of SA-7 and contamination at one location of Eastern SCB Wall remaining at concentrations that do not allow for unrestricted use, Owner has agreed, as part of the remedial action for the Property, to restrict the use of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. Owner will develop a binder containing a list of these restrictions which will be maintained at either the onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following statutory land use restrictions apply to the Property:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented; and

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a child care facility without the Department's prior written approval.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of the on-site contaminants and off-site chromium-contaminated groundwater to the east, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls on the Property, including the Eastern SCB Wall and eastern perimeter pools and associated piezometers, and, in the area along the face of the Eastern SCB Wall with contamination, 4 feet of clean cover (crushed stone) and an asphalt cap. A narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as

specified in the Integrated Groundwater Sampling and Analysis Plan for Study Areas 5, 6 and 7, dated April 29, 2014, and Paragraphs 7A&B, and Exhibit C herein.[2]

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within thirty (30) calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees and operators while each is an owner, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners and lessees shall notify any person, including, without limitation, tenants, employees of tenants, developers, and contractors, intending to conduct invasive work or excavate within the Property, of the nature and location of contamination and engineering controls within the Property, and, of the precautions necessary to minimize 1) potential human exposure, and exposure of the environment, to contaminants, and 2) damage to the engineering controls.

ii. Except as provided in Paragraph 7B below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property except as (a) without first obtaining a Soil Remedial Action Permit Modification from the Department. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

[2] The Integrated Groundwater Sampling and Analysis Plan is available at the following website: http://www.jerseycitychromiumcleanup.com/.

iii. Notwithstanding subparagraph 7A.ii., above, a Remedial Action Permit modification is not required for any alteration, improvement, or disturbance provided that:

(A) The Department of Environmental Protection is notified of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance; and

(B) Honeywell is notified of the activity by calling 855-727-2658; and

(C) Honeywell restores any disturbance of an engineering control to pre-disturbance conditions within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

(D) All applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration; and

(E) Appropriate measures are taken so that human exposure, and exposure of the environment outside the containment of the engineering controls, to contamination in excess of the applicable remediation standards does not occur; and

(F) The next biennial certification includes a description of the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that:

i. The Department of Environmental Protection is immediately notified of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

ii. Honeywell is immediately notified of the emergency by calling 855-727-2658; and

iii. The actual disturbance and the time needed for the disturbance are limited to the minimum reasonably necessary to adequately respond to the emergency; and

iv. All measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination are implemented; and

v. The Department of Environmental Protection is notified when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Honeywell is notified when the emergency has ended by calling 855-727-2658; and

vii. Honeywell restores the engineering control to the pre-emergency conditions as soon as possible, and submits a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control, including: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent recurrence of such conditions in the future.

8A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, Honeywell, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. Honeywell shall certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Exhibit C, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment;

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, in order to ensure that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment.

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

8B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. Honeywell shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Exhibit C herein, and the Integrated Groundwater Sampling and Analysis Plan, to ensure that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment;

ii. Conducting any additional remedial investigations and implementing any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, in order to ensure that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment; and

iii. Certifying to the Department of Environmental Protection the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the Deed Notice that indicates when the Deed Notice was recorded.

9. ACCESS. The Owners, lessees, and operators, agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 8, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring that all holders thereof provide such access to the Department.

10. NOTICES.

i. Owner shall cause all leases, grants, and other written transfers of an interest in the Property to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Honeywell or the owner shall notify any person intending to conduct invasive work or excavate within the Property of the nature and location of contamination and the engineering controls, and of the precautions necessary to minimize potential human exposure, and exposure of the environment outside the containment of the engineering controls, to contaminants and to protect the engineering controls.

iii. Owner shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Property.

iv. Owner shall provide written notice to the Department within thirty (30) calendar days following the Owner's receiving notice of any petition for a rezoning of the Property. The Owner shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

11. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed on this Property.

ii. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

12. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as if the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate and would be consistent with Honeywell's continuing obligation to maintain compliance with the requirements of the Amended Order Modifying Injunction, ECF No. 1116, in *Interfaith Community Organization v. Honeywell International Inc*., D.N.J., Case No. 95-2097.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. Notice of any requested modification or termination of this Deed Notice shall be given to Honeywell. Within five (5) business days of receiving notice, Honeywell must provide written notice to the plaintiffs in *Interfaith Community Organization v. Honeywell International Inc*., D.N.J., Case No. 95-2097.

iv. If NJDEP concludes that this Deed Notice shall be modified or terminated, such modification or termination will only be effective upon the filing of a Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds of Hudson County, New Jersey, expressly modifying or terminating this Deed Notice.

v. Within thirty (30) calendar days after the filing of a Termination of Deed Notice, the owner of the Property shall apply to the Department for modification or termination of the Soil Remedial Action Permit pursuant to N.J.A.C. 7:26C-7.

vi. This Deed Notice may be modified only if it has first been terminated pursuant to subparagraph 13iii above, and upon filing of a modified Deed Notice, executed by the Owner of the Property, in the office of the Register of Deeds of Hudson County, New Jersey.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property;

ii. Exhibit A-2: Metes and Bounds Description of the Property - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property and a Tax Map;

iii. Exhibit A-3: Property Map - Scaled maps of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; the map(s) shall include diagrams of major surface topographical features such as buildings, roads, and parking lots. After any development of the Property, this Deed Notice shall be modified to show new or modified topographical features constructed on the Property such as buildings, roads and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Property:

i. Exhibit B-1 (Exhibits B-1A, B-1B, B-1C, and B-1D): Property Maps - Maps for the Property that include, as applicable:

(A) As-built diagrams of each engineering control, including caps, fences, hydraulic barrier walls, eastern perimeter pools, ground water monitoring wells, and ground water pumping system;

(B) As-built diagrams of any buildings, roads, parking lots and other structures that function as engineering controls; and

(C) Designation of the Eastern SCB Wall sample location within the Property that exceeds any standard that is keyed into one of the tables described below.

ii. Exhibit B-2 (Table B-2): Property Data Tables - A separate table for each restricted area that includes either (A) or (B) through (F):

(A) Only for historic fill extending over the entire site or a portion of the site and for which analytical data are limited or do not exist, a narrative that states that historic fill is present at the site, a description of the fill material (e.g., ash, cinders, brick, dredge material), and a statement that such material may include, but is not limited to, contaminants such as PAHs and metals;

(B) Sample location designation from Property map (Exhibit B-1);

(C) Sample elevation based upon mean sea level;

(D) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(E) The restricted and unrestricted use standards for each contaminant in the table; and

(F) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1A through C-1B. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Zoning as Institutional Control: Exhibit C-1 includes a narrative description of the restrictions and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:
(1) Description and estimated size of the Property as described above;
(2) Description of the restrictions on the Property by operation of this Deed Notice and the other Institutional Controls; and
(3) The objective of the restrictions;

(B) Description of the monitoring necessary to determine whether:
(1) Any disturbances of the Property resulted in the unacceptable exposure to the contamination or damage to the engineering controls;
(2) There have been any land use changes subsequent to the filing of this Deed Notice and the other Institutional Controls or the most recent biennial certification, whichever is more recent;
(3) The current land use on the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls;

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the Property; and

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice and the other Institutional Controls, and conduct the necessary sampling; and

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice and the other Institutional Controls;

(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the other Institutional Controls; and

(3) The remedial action that includes this Deed Notice and the other Institutional Controls continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2A through C-2C:

Exhibit C-2 includes a narrative description of the engineering controls as follows:

(A) General Description of the engineering control:

(1) Description of the engineering control;

(2) The objective of the engineering control; and

(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;

(4) The engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering control; and

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering control continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

Print name: Stephanie Frank

BAYFRONT REDEVELOPMENT, LLC

By _____
William J. Hague
Global Director-Remediation
Design & Construction

STATE OF NEW JERSEY)
)SS.:
COUNTY OF Morris)

I CERTIFY that on December 4, 2017, William J. Hague, personally appeared before me and that this person acknowledged under oath, to my satisfaction, that:

(a) this person is the Global Director-Remediation Design & Construction, an authorized representative of Bayfront Redevelopment, LLC, the limited liability company named in the attached document;

(b) this person executed and delivered the attached document as the voluntary act and deed of the limited liability company; and

(c) this person was authorized by the members of the limited liability company to execute and deliver the attached document on behalf of the limited liability company.

Sworn to and subscribed before me
on this 4th day of December 2017.

Notary Public

CHERYL LYNN TOLES
My Comm. Exp. 10-27-2020
NOTARY PUBLIC
No. 2336504
NEW JERSEY

EXHIBIT A
Deed Notice #14 SA-7 Eastern Perimeter Pool

A-1 Vicinity Map

A-2 Metes and Bounds Description and Tax Map

A-3 Portions of Block 21901 Lots 6, 7, and 8, City of Jersey City, New Jersey

Exhibit A-1 Vicinity Map consists of a road map for the vicinity of the Property.

Exhibit A-2 consists of the metes and bounds and a tax map for the Property.

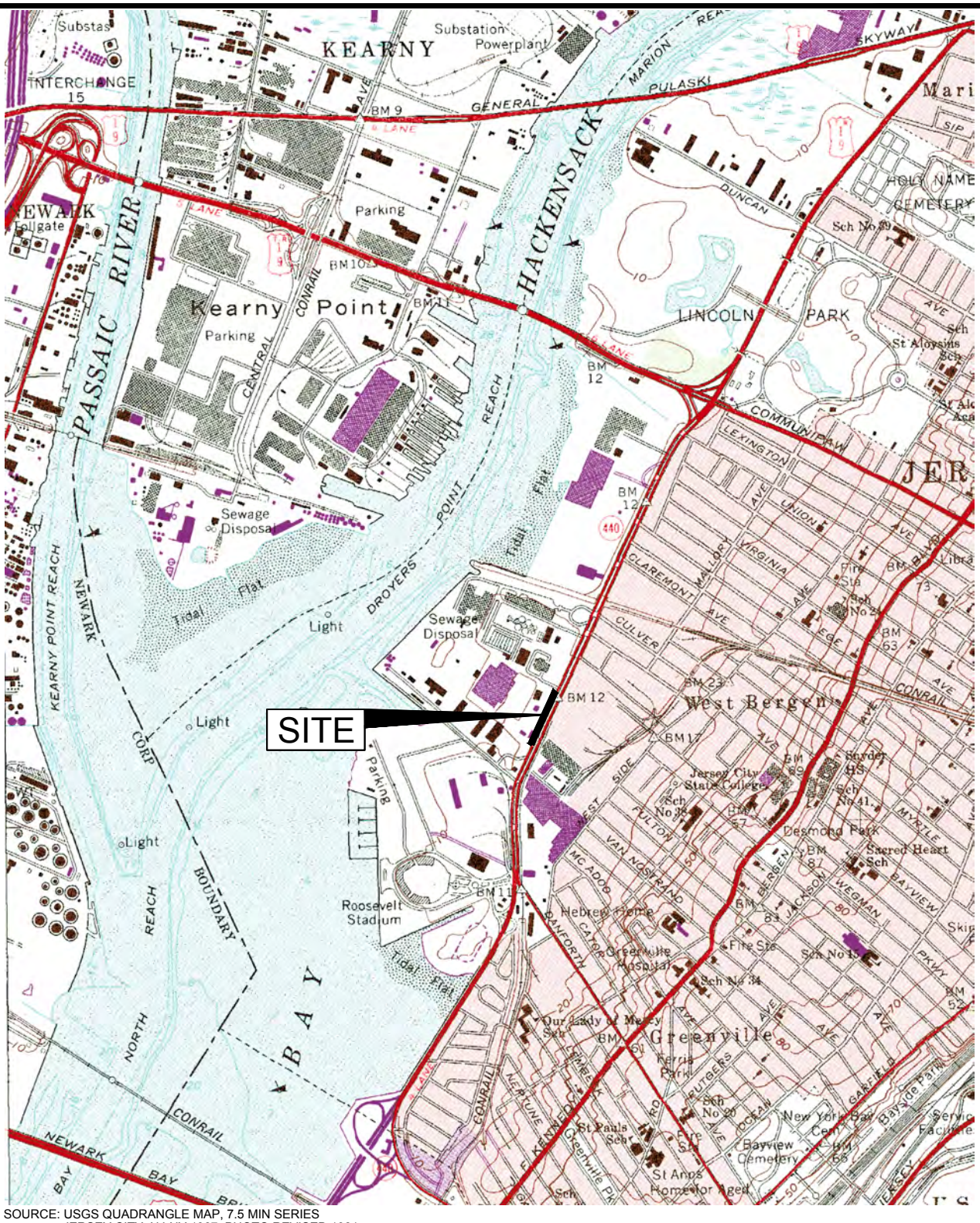
Exhibit A-3 Property Map consists of a figure indicating major surface features and engineering controls for the Property. After any development of the Property, this Deed Notice shall be modified to show all modified or new topographical features constructed on the Property, such as buildings, roads and parking lots.

Exhibit A-1
Site Vicinity Map
Jersey City, New Jersey

EXHIBIT A-1
SITE VICINITY MAP
PORTIONS OF STUDY AREA 7 SITE 115
JERSEY CITY, NEW JERSEY

CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 14\3480150487-6100-A114-0000.dwg Tue, 28 Nov 2017 - 10:57am scott.rudkin



SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

RESTRICTED AREA

0 1000 2000 4000
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150483 *DRAWING:* 3480150487-6100-A114-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-1
VICINITY MAP
BLOCK 21901, LOTS 6, 7 & 8
SA-7
JERSEY CITY, NEW JERSEY
DEED NOTICE #14

Exhibit A-2
Deed Notice #14 SA-7 Eastern Perimeter Pool

Metes and Bounds Description of Property: See Attached
Tax Map: See Attached

A-2 Metes and Bounds Description of Property Block 21901 Lots 6, 7, 8
City of Jersey City, New Jersey

If there is any discrepancy between the Metes and Bounds and the tax map or any other maps attached hereto, the Metes and Bounds prevails.

The Property is identified as portions of Block 21901 Lots 6, 7, 8 on the City of Jersey City tax maps, the Property being presently owned by Bayfront Redevelopment LLC. A copy of the current tax map which includes the Property is attached as Exhibit A-2.

MASER CONSULTING P.A.
Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 ▪ Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292R

DEED NOTICE AREA 14
BLOCK 21901 LOTS 6, 7 & 8
DECEMBER 15, 2016

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lots 6, 7 & 8 Block 21901, designated as Deed Notice Area 14 as shown on an exhibit entitled, "Deed Notice Area 14, SA7, Block 21901, Lots 6, 7 & 8, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated December 8, 2016 and being more particularly bounded and described as follows, to wit:

BEGINNING at the intersection of the westerly line of New Jersey State Highway Route 440 (112 foot wide right of way), said line being 61.00 feet westward at right angles to the centerline thereof, and the division line between Lot 8 in Block 21901, and Lot 8 Block 24601, and running; thence-

1. **N 49°06'05" W, 9.97 feet,** along said division line between Lot 8 in Block 21901 and Lot 8 in Block 24601, to a point in the easterly face of the hydraulic barrier wall; thence-

   Running through said Lot 8 Block 21901, along the easterly and northerly face of said hydraulic barrier wall the following two (2) courses:

2. **N 44°21'39" E, 3.70 feet**; thence-

3. **N 49°10'40" W, 26.70 feet**; thence-

4. **N 24°46'55" E, 757.13 feet,** to the southerly line of Deed Notice Area 5; thence-

5. **S 49°06'51" E, 35.39 feet**, to the aforesaid westerly line of New Jersey State Highway Route 440; thence-

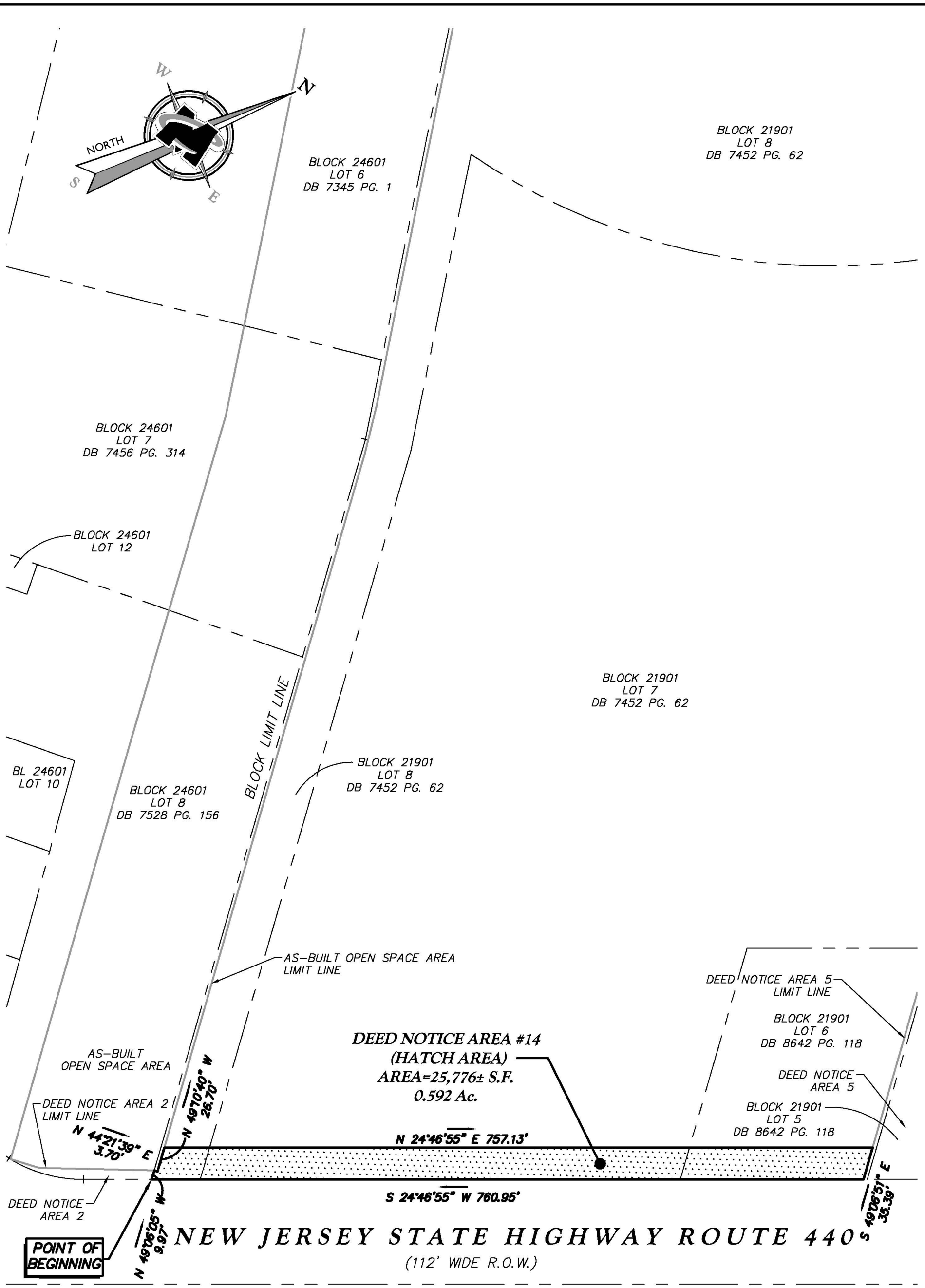
6. **S 24°46'55" W, 760.95 feet** to the point and place of **BEGINNING**.

CONTAINING: 25,776 S.F. of land more or less or 0.592 acres of land more or less.

12/15/16

GLEN J. LLOYD, P.L.S. — DATE SIGNED
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598

R:\General\Projects\2010\10000292R\Survey\Description\Metes & Bounds-Deed Notice 14.docx



SCALE : 1" = 100'

MASER CONSULTING P.A.

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Engineers ■ Planners ■ Surveyors
Landscape Architects ■ Environmental Scientists
State of N.J. Cert. of Authorization: 24GA27986500

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REV	DATE	DRAWN BY	DESCRIPTION
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DEED NOTICE AREA 14
SA7

BLOCK 21901
LOTS 6, 7 & 8

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

RED BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1984

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	12/8/16	HA	CJK

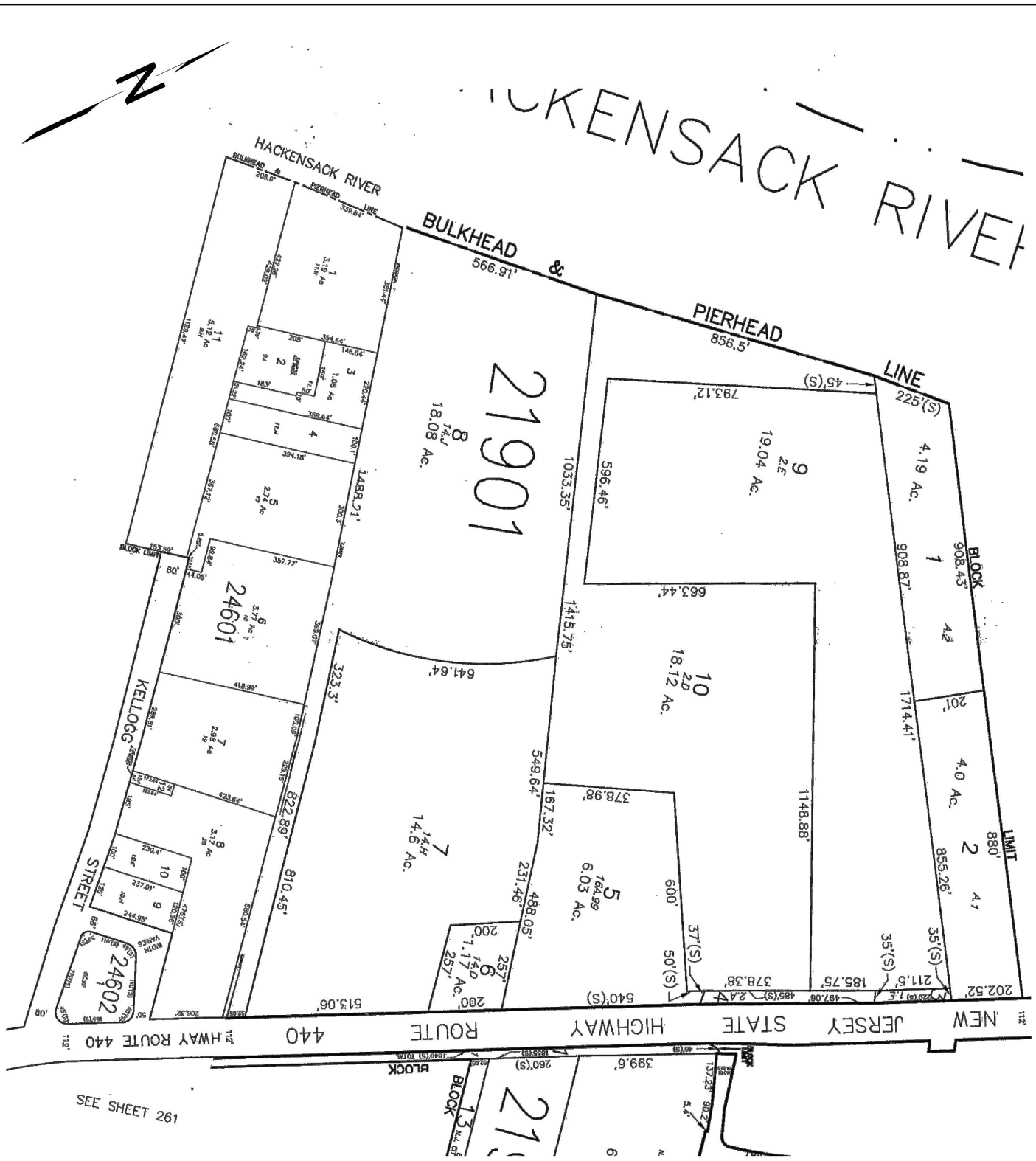
PROJECT NUMBER: 10000292Q
DRAWING NAME: V-EXBT-DN-14

SHEET TITLE:
DEED NOTICE AREA 14

SHEET NUMBER:
1 of 1

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (i) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED, AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\VONCTWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 14\3480150487-6100-A214-0000.dwg Tue, 28 Nov 2017 - 10:58am scott.rudkin



SOURCE:
DRAWING TITLED: "TAX MAP CITY OF JERSEY CITY", PREPARED BY T&M ASSOCIATED, MIDDLETOWN TWP., NJ SHEETS 219 & 246, DATED AUGUST, 2006; NEW JERSEY DEPARTMENT OF THE TREASURY DIVISION OF TAXATION PROPERTY ADMINISTRATION DATED MAY 8, 2009 SERIAL NO.: 934.

0 150 300 600
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 DRAWING: 3480150487-6100-A214-0000	
PREPARED/DATE: STR 12/15/16	CHECKED/DATE: NW 01/31/17

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-2
TAX MAP
BLOCK 21901, LOTS 6, 7 & 8
SA-7
JERSEY CITY, NEW JERSEY
DEED NOTICE #14

Exhibit A-3
Property Map

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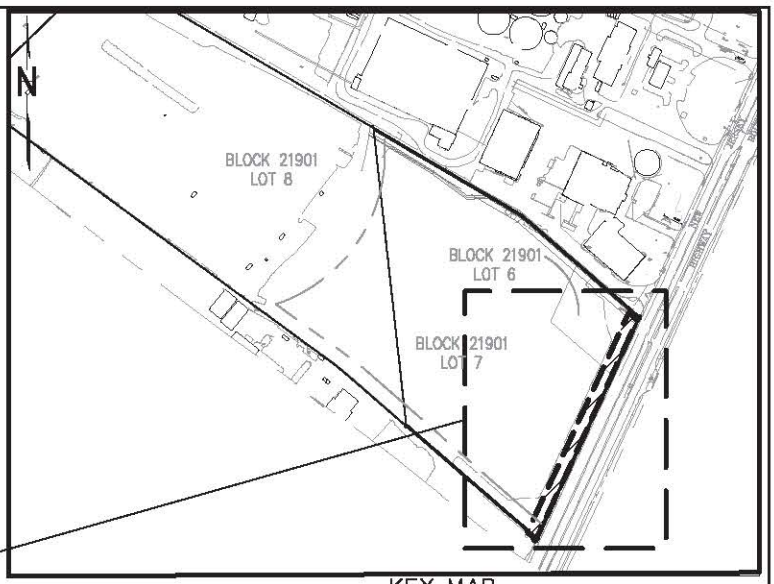
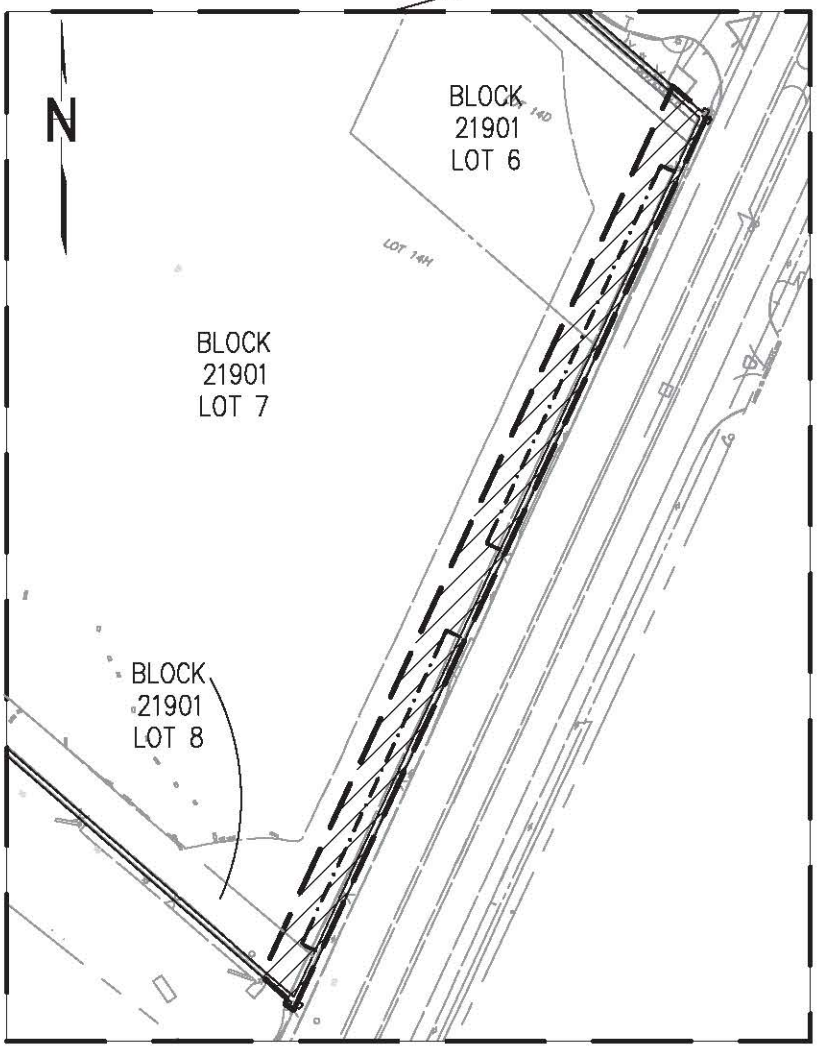
LEGEND

PROPERTY BOUNDARY

RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

0 10 20 40
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487-6100-A314-0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT A-3
PROPERTY AREA MAP
BLOCK 21901, LOTS 6, 7 & 8
SA-7
JERSEY CITY, NEW JERSEY
DEED NOTICE #14

P:\3409-WICHELL\PROJECT CITY\34 & HORIZ\3480150487-BYDR\BYDR\DEED NOTICE\DWG 34\3480150487-BYDR-A314-2000.dwg Tue, 28 Nov 2017 - 10:56am eurlcadkin Layout: Layout1

EXHIBIT B
Deed Notice #14 SA-7 Eastern Perimeter Pool

B-1 Property Maps
B-2 Property Data Table
Portions of Block 21901 Lots 6, 7, 8
City of Jersey City, New Jersey

Exhibit B-1 Property Maps include Exhibit B-1A (Property and Eastern SCB Wall Sample Location), Exhibit B-1B (Record Plan Perimeter Pool), Exhibit B-1C (Modified Perimeter Detail Typical Section and Sequence Notes), and Exhibit B-1D (Final Site Plan).

Exhibit B-2 is a Property Data Table indicating Eastern SCB Wall sample location with concentrations of contaminants remaining above the level established in the New Jersey Department of Environmental Protection (NJDEP) Chromium Policy.

Property Map Notes:

Exhibit B-1 indicates engineering controls that are chromium remedy components. For the Eastern SCB Wall location with hexavalent chromium concentrations above 20 mg/kg, the engineering controls include an asphalt cap and minimum of 4 feet of clean soil cover. The chromium remedy groundwater hydraulic controls for the eastern boundary of SA-7 engineering controls include the Eastern SCB Wall, the eastern perimeter pool, and associated piezometers, all of which are included in this deed notice.

Exhibit B-1
Property Maps

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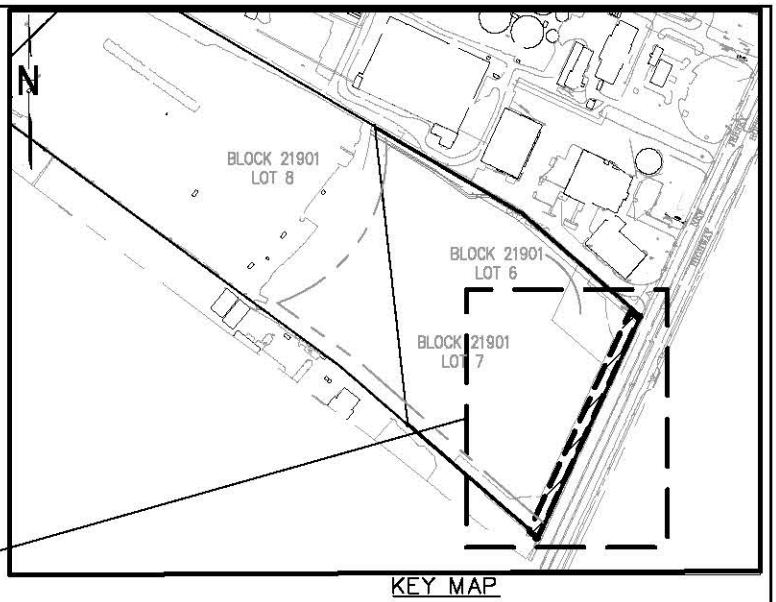
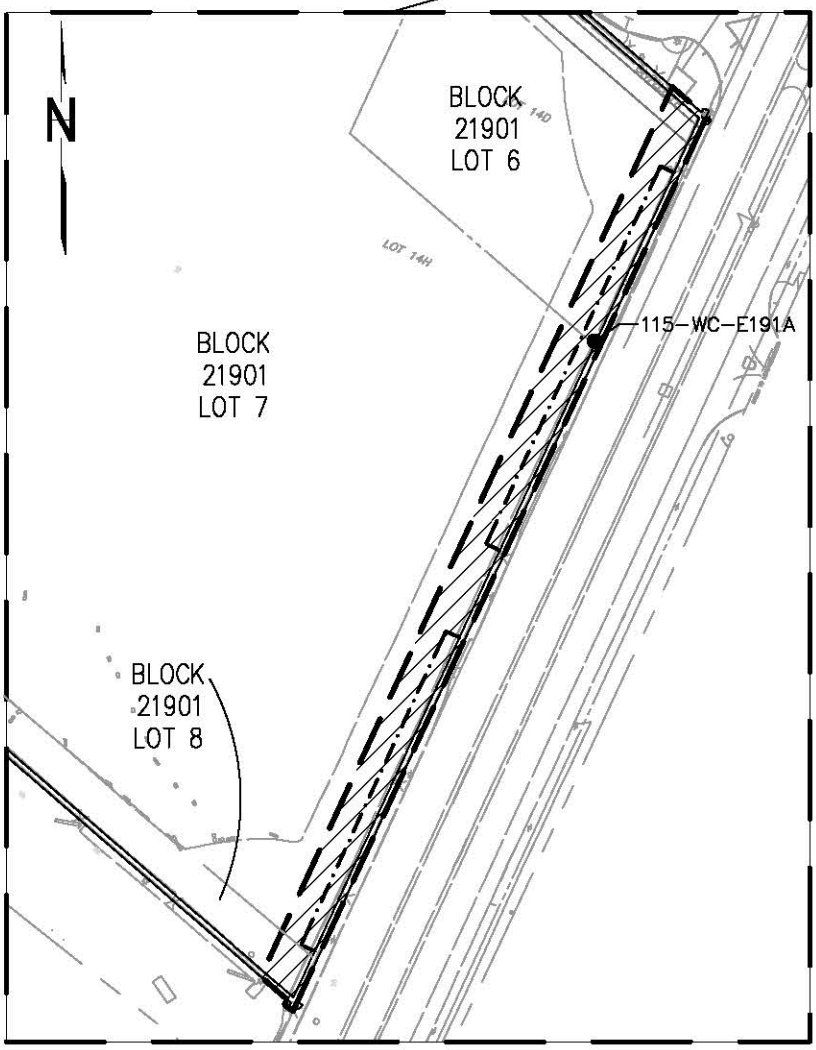
LEGEND

- SOIL SAMPLE LOCATION HEXAVALENT CHROMIUM > 20 mg/kg (SEE EXHIBIT B–2)
- PROPERTY BOUNDARY
- SCB WALL
- PERIMETER POOL
- RESTRICTED AREA



KEY MAP
SCALE: 1" = 600'



SOURCE REFERENCE:

DRAWING TITLED: "ALTA/ASCM LAND TITLE SURVEY FOR BAYFRONT REDEVELOPMENT, LLC., BLOCK 21901 LOTS 5 THRU 10, PREPARED BY MASER CONSULTING, P.A. DATED 10/16/15 CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY

DATUM:
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD29

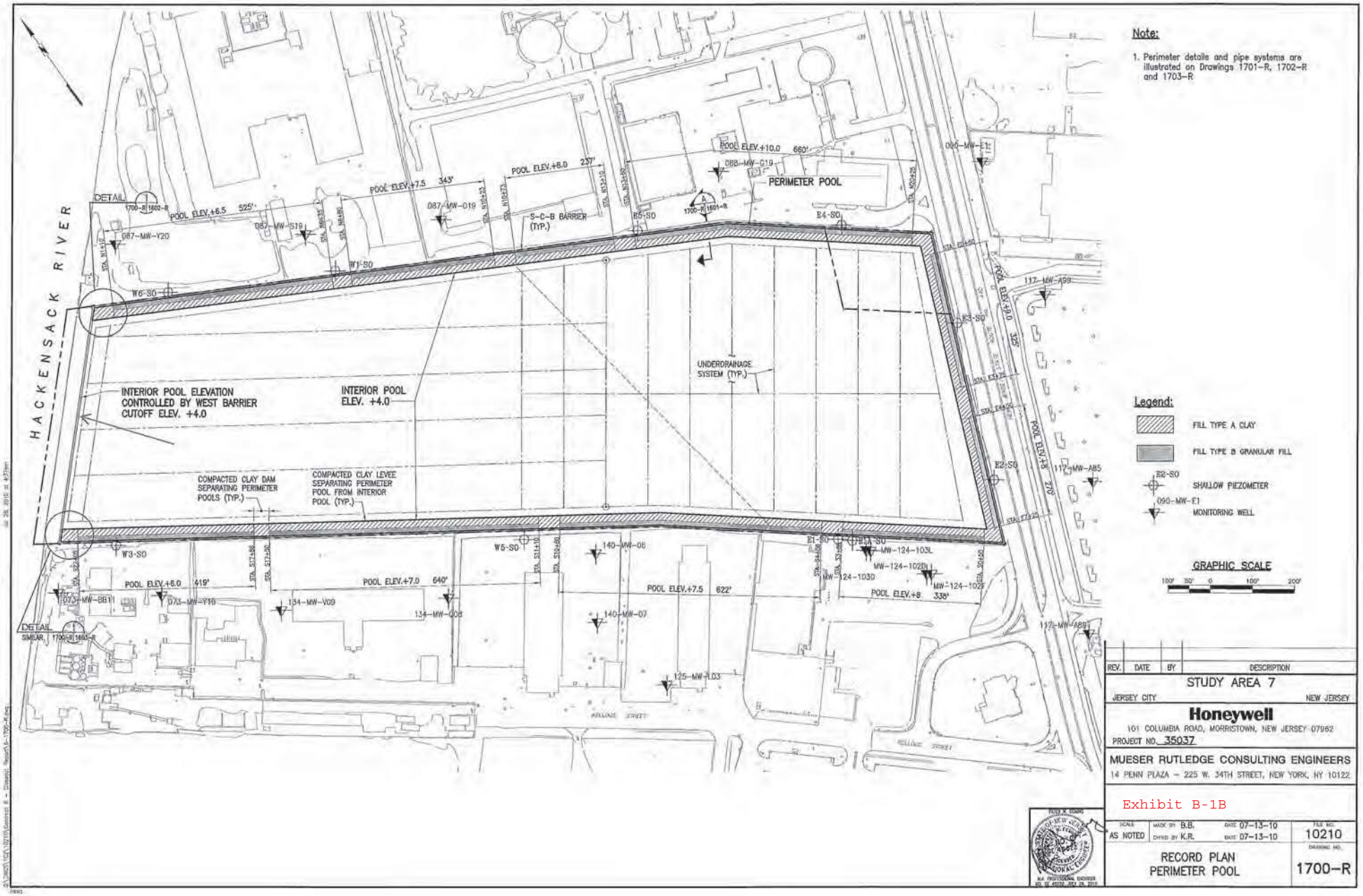
0 10 20 40
SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480150487 *DRAWING:* 3480150487–6100–B014–0000	
PREPARED/DATE: STR 12/15/16	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1A
RESTRICTED AREA MAP
BLOCK 21901, LOTS 6, 7 & 8
SA-7
JERSEY CITY, NEW JERSEY
DEED NOTICE #14



Note:

1. Perimeter details and pipe systems are illustrated on Drawings 1701–R, 1702–R and 1703–R

Legend:

- FILL TYPE A CLAY
- FILL TYPE B GRANULAR FILL
- E2-SO — SHALLOW PIEZOMETER
- 090-MW-E1 — MONITORING WELL

GRAPHIC SCALE

100' 50' 0 100' 200'

REV.	DATE	BY	DESCRIPTION

STUDY AREA 7

JERSEY CITY NEW JERSEY

Honeywell

101 COLUMBIA ROAD, MORRISTOWN, NEW JERSEY 07962

PROJECT NO. 35037

MUESER RUTLEDGE CONSULTING ENGINEERS

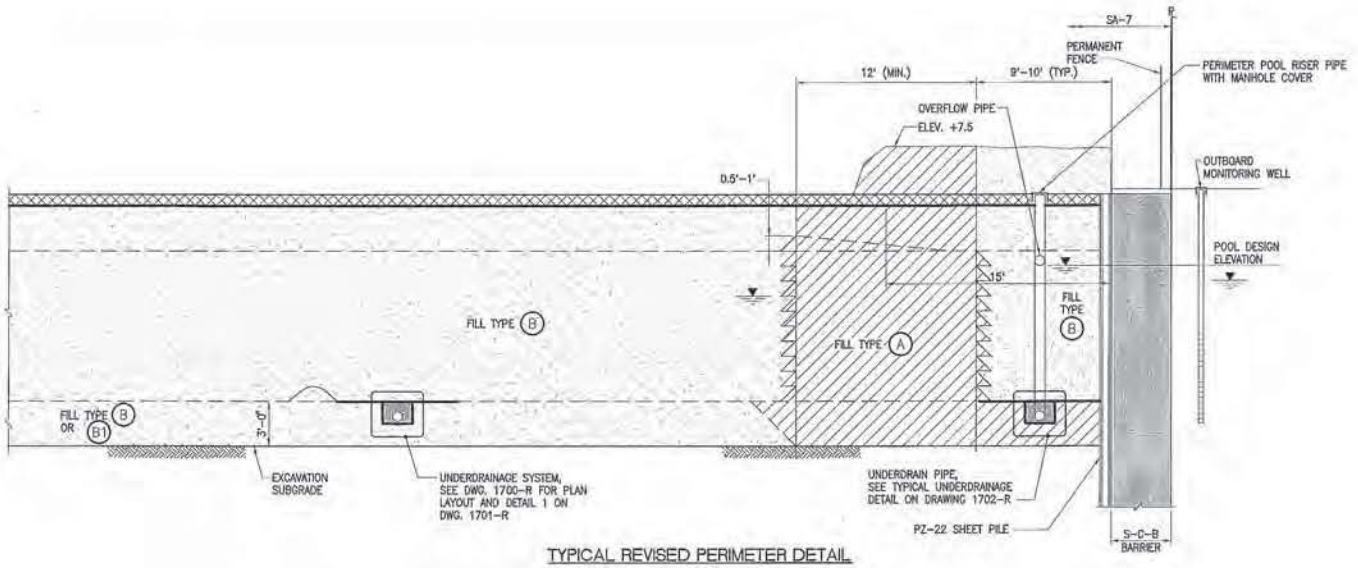
14 PENN PLAZA – 225 W. 34TH STREET, NEW YORK, NY 10122

Exhibit B-1B

SCALE	MADE BY	DATE	FILE NO.
AS NOTED	B.B.	07-13-10	10210
	CHKD BY K.R.	07-13-10	DRAWING NO.

RECORD PLAN
PERIMETER POOL

1700–R



TYPICAL REVISED PERIMETER DETAIL

SECTION A

SCALE: 1/4"=1'-0" 1700-R 1601-R

REV.	DATE	BY	DESCRIPTION

STUDY AREA 7

JERSEY CITY NEW JERSEY

Honeywell

101 COLUMBIA ROAD, MORRISTOWN, NEW JERSEY 07962

PROJECT NO. 35037

MUESER RUTLEDGE CONSULTING ENGINEERS

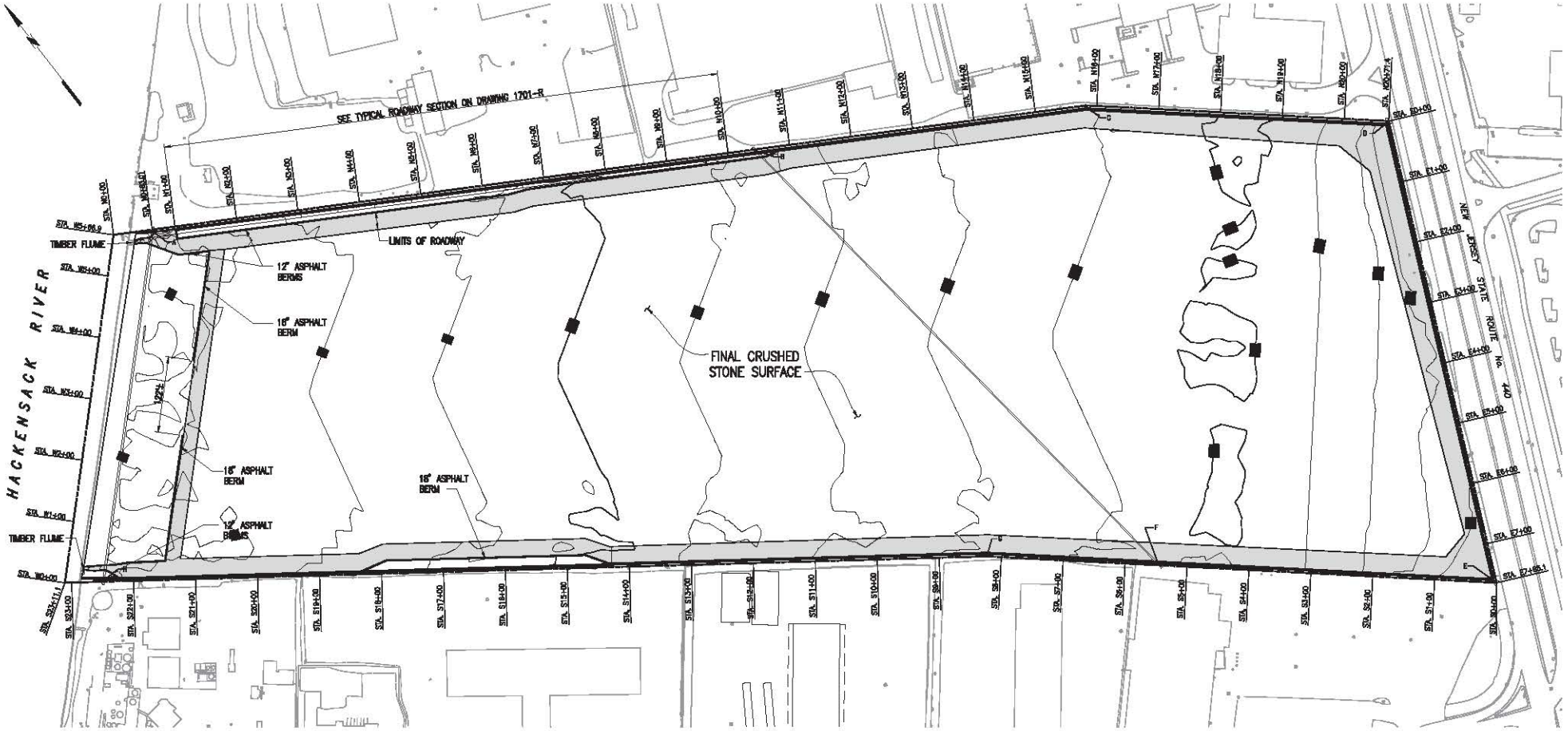
14 PENN PLAZA - 225 W. 34TH STREET, NEW YORK, NY 10122

Exhibit B-1C

SCALE	MADE BY B.B.	DATE 07-13-10	FILE NO.
GRAPHIC	CHKD BY D.W.C.	DATE 07-13-10	10210

MODIFIED PERIMETER DETAIL TYPICAL SECTION AND SEQUENCE NOTES

DRAWING NO. 1601-R



Legend:

- ASPHALT ROADWAY
- 18" ASPHALT BERM
- 12" ASPHALT BERM
- CONTOUR OF FINISHED GRADE

Notes:

1. For locations of perimeter pools and under drains see Drawing No. 1700-R.
2. For locations of underground utilities see Drawing No. 1701-R.
3. As-Built information was taken from final grades Drawing, SA7 and SA6 North/South, prepared by Entact, Dated 04/12/2010.

GRAPHIC SCALE

80' 40' 0 80' 160'

REV.	DATE	BY	DESCRIPTION

STUDY AREA 7

JERSEY CITY NEW JERSEY

Honeywell

101 COLUMBIA ROAD, MORRISTOWN, NEW JERSEY 07962

PROJECT NO. 35037

MUESER RUTLEDGE CONSULTING ENGINEERS

14 PENN PLAZA – 225 W. 34TH STREET, NEW YORK, NY 10122

Exhibit B-1D

SCALE	MADE BY	DATE	FILE NO.
GRAPHIC	B.B.	07-13-10	10210
	CH'KD BY D.W.C.	07-13-10	DRAWING NO.

FINAL SITE PLAN

1800-R

G:\DWGS\102\10210\Contract 6 - Closeout Report\B-1800-R.dwg

Jul 28, 2010 at 4:10pm

Inavo

Exhibit B-2: Table B-2
Eastern SCB Wall Sample Data Table (Hexavalent Chromium)

EXHIBIT B-2
Restricted Area Data Table
Deed Notice #14 SA-7 Eastern Perimeter Pool
Portions of Block 21901, Lots 6, 7, 8
Jersey City, New Jersey

Location ID	Sample Date	Sample Elevation (feet msl NAVD88)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Concentration (mg/kg)	Q
115-WC-E191A	08/10/2006	9.2	Hexavalent Chromium	18540-29-9	20	**47.4**	J

Notes:
Results reported in millgrams/kilogram (mg/kg).

Data Qualifiers:
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value

Abbreviations:
Feet bgs - Feet below ground surface
feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988
NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010
CASR# - Chemical Abstract Service Number

EXHIBIT C
Deed Notice #14 SA-7 Eastern Perimeter Pool

C-1 Institutional Controls
C-2 Engineering Controls
Portions of Block 21901 Lots 6, 7, 8
City of Jersey City, New Jersey

C-1 Institutional Controls

C-1 Deed Notice and Zoning as Institutional Controls: Exhibit C-1 for portions of Block 21901 Lots 6, 7, and 8, City of Jersey City known as the Eastern Perimeter Pool Area.

Exhibits C-1A and C-1B. Exhibit C-1A: Deed Notice as Institutional Control; Exhibit C-1B: Zoning as Institutional Control: Exhibits C-1A and C-1B include a narrative description of the restrictions and obligations of this Deed Notice and the other Institutional Controls that are in addition to those described above, as follows:

(A) General Description of the Institutional Control:

The Property encompasses the eastern portion of the SCB underground hydraulic barrier wall of SA-7 ("Eastern SCB Wall") and the associated eastern perimeter pool which, together, serve as a portion of the chromium remedy for SA-7 in order to protect SA-7 from re-contamination in accordance with the Amended Order Modifying Injunction (ECF No. 1116)**.**

(1) Description and estimated size of the Property as described above;

The Property constitutes portions of Block 21901 Lots 6, 7, and 8. The size of the Property for which this Deed Notice applies is identified on Exhibit B-1 and is estimated at approximately 26,000 square feet or approximately 0.6 acres. A small portion of the Property, represented by one sample along the western face of the Eastern SCB Wall, contains hexavalent chromium concentrations above 20 mg/kg that do not allow for unrestricted use of the Property. The Property, including the chromium-contaminated soils along the Eastern SCB Wall, is covered by approximately four feet clean fill and capped with asphalt.

(2) Description of the restrictions on the Property by operation of the Institutional Control;

The Property shall only be used for activities consistent with this Deed Notice and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering and hydraulic controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the terms of this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(3) The objective of the restrictions;

The restrictions will prohibit contact with Eastern SCB Wall containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg and will prohibit damage to the engineering and hydraulic controls, namely, the Eastern SCB Wall, the eastern perimeter pool, and the associated piezometers.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances in the Property resulted in the unacceptable exposure to the Eastern SCB Wall contamination or disturbance to the functioning of the engineering and hydraulic controls;

Visual inspections of the Property and other monitoring as set forth in the deed notice. Visual Inspections will be conducted at least quarterly in general and will be conducted at least weekly during any known disturbance of the Property. Monitoring of the eastern ***perimeter pool piezometers and adjacent piezometers to the east will occur quarterly to ensure the Eastern Barrier Wall and*** eastern ***perimeter pools are functioning as designed.***

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

Same as (B)(1).

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

Same as (B)(1).

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

Review of newly promulgated or modified requirements of applicable regulations or laws that potentially may apply to the site.

(5) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

Same as (B)(4).

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in this Deed Notice and the applicable zoning standards; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including evaluation of any available documents as a result of changes in land use or incidents.***
- ***A report that determines whether or not the land use at the Property has remained consistent with the restrictions in this Deed Notice*****, and** ***the applicable zoning standards.***
- ***A report that determines whether or not the Deed Notice continues to be protective of the public health and safety and the environment.***

C-2 Engineering Controls
Deed Notice #14 SA-7 Eastern Perimeter Pool

Portions of Block 21901 Lots 6, 7, 8
City of Jersey City, New Jersey

Exhibits C-2: Narrative description of the Engineering Controls including Clean Fill as follows:

(A) General Description of the engineering controls:

(1) Description of the engineering controls;

The Engineering Controls consist of the following: The engineering controls for the soils against the Eastern SCB Wall with hexavalent chromium concentrations above 20 mg/kg at the Property include a minimum 4 feet of clean soil cover (crushed stone) and an asphalt cap. The Engineering and Hydraulic Controls to prevent re-contamination of SA-7 by shallow groundwater along the eastern boundary of SA-7 include the Eastern SCB Wall, the eastern perimeter pool and the associated piezometers, all of which are included in this deed notice. Both the engineering and hydraulic controls are shown on Exhibit B-1.

(2) The objective of the engineering controls; and

The objective of the engineering controls consisting of 4 feet of clean soils and asphalt is to prevent contact with the soils against the SCB wall containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg. The objective of the Engineering and Hydraulic Controls consisting of the Eastern SCB Wall, the eastern perimeter pool, and the associated piezometers is to control groundwater levels at SA-7 in relation to neighboring SA-5 (Route 440),

(3) How the engineering controls are intended to function.

The engineering controls (soil cover and asphalt) are intended to function as a barrier to the soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg; and the Eastern SCB Wall, the eastern perimeter pool, and the associated piezometers are intended to function as a hydraulic barrier to prevent re-contamination of SA-7 by groundwater from the east by maintaining an outward hydraulic gradient.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring by visual inspection of the Property pursuant to this deed notice. Visual Inspections will be conducted at least quarterly in general and will be conducted at least weekly during any known disturbance of the Property. Monitoring of the eastern perimeter pool piezometers and adjacent piezometers to the east will occur quarterly to ensure the Eastern Barrier Wall and eastern perimeter pools are functioning as designed.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5).

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***
- ***A report to determine whether or not the engineering controls continue to operate as designed, including measured water levels in the eastern perimeter pools and the adjacent piezometers on the eastern side of the Eastern Barrier Wall.***
- ***A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.***

Deed Notice

Dated: _____, 2017

BAYFRONT REDEVELOPMENT LLC

Grantor(s).

Record and return to:

Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

ATTN: Perry Florio, Esq

APPENDIX A-5

CLASSIFICATION EXCEPTION AREA

State of New Jersey
Department of Environmental Protection
Site Remediation Program
Mailcode 401-06
P.O. Box 420
Trenton, NJ 08625-0420

CHRIS CHRISTIE
Governor
KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

Maria Kaouris, Remediation Manager
Honeywell International, Inc.
101 Columbia Road
Morristown, New Jersey 07962

Date: February 16, 2012

Approval

Re: Classification Exception Area
Study Areas 5, 6 and 7
Hudson County Chromate Sites 73, 87, 88, 90, 115, 117, 120, 124, 125, 134, 140, 153, 157, and 184
Jersey City, Hudson County
NJDEP PI # G000008789

Dear Ms. Kaouris:

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the Groundwater Classification Exception Area (CEA) application dated 8 June 2009, prepared by HydroQual, Inc. The NJDEP has determined that the referenced document is in compliance with Section 7:26E-8.3 of the New Jersey Technical Requirements for Site Remediation, and the CEA Guidance Document (revised November 1998). NJDEP hereby approves the CEA request effective the date of this letter.

Honeywell is advised that the CEA does not specify monitoring requirements since it functions as a notification mechanism, not as a "stand alone" enforcement or regulatory document. The need and the extent of ground water monitoring required during the duration of the CEA will be determined as part of the Comprehensive Ground Water Monitoring Program. As specified in NJAC 7:26E-8.3(b)5, the Department will require Honeywell to notify external agencies/affected parties of the CEA designations according to the guidelines established in the CEA Guidance Document (11/98) which can be located at: http://www.nj.gov/dep/srp/guidance/cea/ceaguid2.pdf. Note that all property owners within the plume do not need to be notified as long as they are on public water. Honeywell must also comply with the Biennial Certification requirements at NJAC 7:26E-8.6.

The CEAs are for the ground water contamination in three distinct water bearing zones (Shallow, Deep Overburden, and Bedrock). Since the aerial extent of contamination is different for each of the three zones, three separate CEAs were prepared. Note that these

CEAs are only for total and hexavalent chromium. Any other ground water contamination areas within or nearby (e.g. organic compounds in Study Area 6 – North) will require a separate CEA.

If you have any questions, please contact Thomas J. Cozzi of the Site Remediation Program at (609) 984-2905.

Sincerely,

Thomas J. Cozzi, Assistant Director
NJDEP Site Remediation

C: Barbara A. Netchert, Hudson County Clerk
Hudson County Regional Health Commission (CEHA)
Robert Byrne, RMC, Jersey City Clerk
Robert Vogt, Jersey City Division of Health
Carol Ann Wilson, Hudson County Department of Health & Human Services
Stephen D. Marks PP, AICP, Hudson County Division of Planning
Bureau Chief, NJDEP Bureau of Safe Drinking Water
Bureau Chief, NJDEP Bureau of Water Systems and Well Permitting
David Doyle, NJDEP-SRP
David Van Eck, NJDEP-BGWPA

JUNE 2009 CEA APPLICATION

Ground Water Classification Exception Area Fact Sheet

A. SITE INFORMATION

1. Program's Site Identification Number: 64070

2. Program Interest Number (Preferred ID): G000002548

3. Program Interest Name: Roosevelt Drive In (Site 115)

4. Street address: 425, 445 & 465 Route 440

5. City: Jersey City

6. County: Hudson

7. Block and Lots of the site (duplicate if the site is located in more than one municipality):

   a. Name of the municipality in which the site is located: Jersey City

   b. Block and Lots: Block: 1290.A Lots: 11W, 9L, 11H, 11J, 11K, 11L, 11Y, 11M, 11N, 11O, 11P, 11Q, 11R, 12B, 12A, 10Z, 10E, 10H, 10Y, 11T, 11U, 2D, 2E, 15D

   c. Year of tax map: 1977

8. United States Geological Survey Quadrangle map, indicating the location of the site, presented as Exhibit A.

9. Site Contact:

   a. Name of contact person: John J. Morris, P.E.

   b. Company name: Honeywell International Inc.

   c. Mailing address: 101 Columbia Road Morristown, NJ 07962

   d. Phone number: (973) 455 - 4003

B. PROPOSED CLASSIFICATION EXCEPTION AREA INFORMATION

1. Narrative description of proposed classification exception area:

The proposed CEA boundary represents the maximum extent to which groundwater in the shallow water-bearing zone (fill material) contains total chromium in excess of the NJDEP Class II-A Ground Water Quality Standards (GWQS). With one exception, this delineation is based on prior subsurface investigations conducted in the vicinity of Hudson County Chromate Site 115 (Study Area 7). The basis for this delineation has been documented in Section 4 of the Final Groundwater Investigation Report (FGIR) prepared by HydroQual on behalf of Honeywell (HydroQual, February 2, 2007). The proposed CEA boundary therefore has been developed based on the extent of total chromium in the shallow zone as depicted on Figure 4.2-3 of the FGIR. The exception is that there is no longer groundwater present above the meadow mat within the boundary of Site 115, and thus this portion of the Study Area has been carved out of the CEA. The majority of this area has been excavated and replaced with clean fill. The remaining portion of Site 115 is currently being excavated and has been dewatered through pumping from headers installed within the COPR. Based on multiple lines of evidence (as further discussed in the FGIR), it is concluded that this plume has reached steady-state conditions and thus no further lateral expansion of the plume is expected.

2. Location of proposed classification exception area (duplicate if the site is located in more than one municipality):

a. Name of the municipality in which the site is located: Jersey City

b. Block and Lots: Block: 1290.A Lots: 9H, 11W, 9L, 11H, 11J, 11K, 11L, 11Y, 11M, 11N, 11O, 11P, 11Q, 11R, 12B, 12A, 10Z, 10E, 10H, 10Y, 11T, 11U, 2D, 2E, 15D; Block: 1290.B Lots: 9E, 10F, 10G; Block: 1288.2 Lot: C1; Block: 1275 Lot: 4; Block: 1285.5 Lot: 1; Block 1286 Lot: 5; Block: 1286.5 Lot: 1; Blocks: 1291 – 1292 Lot: 76

c. Year of tax map: 1977

3. Affected aquifer(s):

Aquifer Name	Vertical Depth	Ground Water Classification
Fill	0 - 20 ft	Class II-A

4. Contaminant concentrations:

Contaminant	Concentration[1]	GWQS[2]	SWQS[3]
Chromium (Total)	229,000 ug/L	70 ug/L	750 ug/L
Chromium (Hexavalent)	115,000 ug/L	-------	50 ug/L

5. Proposed classification exception area boundaries:

Horizontal: Scaled map indicating projected areal extent of proposed classification exception area, as well as location of site, presented as Exhibit B.

Vertical: As stated in B.3., above.
Locational coordinates of boundary of proposed classification exception area as New Jersey State Plane Coordinates. A minimum of four coordinates shall be submitted, in a format compatible with Department's geographic information system:

Northing	Easting	(New Jersey State Plane Coordinates)
683438	603172	
683814	603807	
684547	604214	
685701	604234	
685353	603400	
686111	602154	
685441	601413	
684256	602709	

Latitude	Longitude
40.7090	-74.0994
40.7100	-74.0971
40.7120	-74.0956
40.7152	-74.0956
40.7143	-74.0986
40.7164	-74.1031
40.7145	-74.1057
40.7113	-74.1011

6. Estimated size of the proposed ground water classification exception area:

45.35 Acres

7. Projected duration and expiration date of the proposed classification exception area:

a. Duration (in years and or days): Indeterminate

Data from prior investigations indicates that the presence of elevated chromium in the shallow groundwater is limited to the extent of COPR and COPR-impacted soils. This indicates that the plume will not expand beyond its current extent, and that concentrations will remain above the NJ GWQS as long as the COPR remains in place. Thus, with the following exceptions, the duration of the proposed CEA is indeterminate.

The exceptions include ongoing and planned remedial actions which will reduce the concentrations and/or footprint of the shallow groundwater plume. For example, hot spot soil excavation with off-site disposal, soil containment, capping, and the installation of subsurface barrier walls are planned for SA-5, SA-6 north and SA-6 south. Remedial action work plans that provide a description of these activities have been approved by NJDEP. Upon completion of these remedial activities, proposals will be made to modify the CEA accordingly.

b. Expiration date (as calendar date): N/A

Footnotes

1 Maximum concentration detected at the time Classification Exception Area information submitted to the Department. For a complete list of sampling points in which chromium was detected above applicable standards, refer to the Final Groundwater Investigation Report-Honeywell Study Area 7 Site (HydroQual, February 2007).

2 New Jersey Ground Water Quality Standards, N.J.A.C. 7:9-6.

3 New Jersey Surface Water Quality Standards, N.J.A.C. 7:9B.

EVALUATION OF CURRENT AND FUTURE GROUNDWATER USE (RESULTS OF THE 25-YEAR WATER USE PLANNING REVIEW)

EVALUATION OF CURRENT AND FUTURE GROUNDWATER USE
(RESULTS OF THE 25-YEAR WATER USE PLANNING REVIEW)
(per 7:26E-8.3(b)4(ii) of the NJ Technical Requirements)

No.	Required Contact	Results of Inquiry	Influence On CEA
1	New Jersey Water Supply Master Plan	Contacted Ian Snook, DEP Division of Water Supply – no need for reviewing the NJ Water Supply Master Plan (e-mail dated 02/06/2008).	None
2	DEP Bureau of Water Allocation	Completed well search indicated 5 water supply wells within 1-mile radius – for details see Table 1.	None
3	Municipal Master Plans – Hudson County	Contacted Barbara A. Netchert, County Clerk's Office – was transferred to Neil Carroll, County Counsel's office and to Willie J. Flood, Register's office – no plans that would affect the groundwater	None
	Municipal Master Plans – Jersey City	Contacted Robert Byrne, City Clerk's Office and Bob Cotter, Director of Planning – Master Plan does not affect the groundwater.	None
4	Zoning Plans – Hudson County	Contacted Neil Carroll, County Counsel's office – no plans that would affect the groundwater	None
	Zoning Plans – Jersey City	Contacted Robert Byrne, City Clerk's Office and Bob Cotter, Director of Planning – no Zoning Plans that would affect the groundwater.	None
5	Local Water Purveyor	Contacted Richard Henning, United Water NJ and Keh Liu, Jersey City Municipal Utilities Authority – no plans pertaining to installation of water lines that would affect the groundwater.	None
6	Planning Officials – Hudson County	Contacted Stephen Marks, County Director of Planning and Mariano Vega, County Dept. of Parks, Engineering and Planning – was transferred to Bob Jasek, County Engineer – no plans that would affect the groundwater	None
	Planning Officials – Jersey City	Contacted Bob Cotter, City Director of Planning and Brian O'Reilly, City Business Administrator – no plans that would affect the groundwater.	None

EVALUATION OF CURRENT AND FUTURE GROUNDWATER USE
(RESULTS OF THE 25-YEAR WATER USE PLANNING REVIEW)
(per 7:26E-8.3(b)4(ii) of the NJ Technical Requirements)

No.	Required Contact	Results of Inquiry	Influence On CEA
7	Board of Health – Hudson County	Contacted Carol Ann Wilson, County Dept. of Health & Human Services – was transferred to Michael Walker, County Regional Health Comission – no plans that would affect the groundwater.	None
	Board of Health – Jersey City	Contacted Harry Melendez, City Dept. of Health & Human Services – was transferred to Joseph Castagna, County Health Officer – nothing that would affect the groundwater.	None
8	Ordinances Restricting Installation of Potable Wells – Hudson County	Contacted Barbara A. Netchert, County Clerk, Neil Carroll, County Counsel's office, Stephen Marks, County Director of Planning, Mariano Vega, County Dept. of Parks, Engineering and Planning, Bob Jasek, County Engineer, and Michael Walker, County Regional Health Comission – no ordinances restricting installation of potable wells (no potable wells in Jersey City area).	None
	Ordinances Restricting Installation of Potable Wells – Jersey City	Contacted Robert Byrne, City Clerk, Bob Cotter, City Director of Planning, Brian O'Reilly, City Business Administrator, and Joseph Castagna, County Health Officer – no ordinances restricting installation of potable wells (no potable wells in Jersey City area).	None

Table 1
Water Supply Wells
Well Search Summary

The results of the well search found five (5) water supply wells within a 1-mile radius of the site. Three (3) of these wells are listed as industrial water supply wells and the other two as domestic and non-public. Although their current operational status is unknown, all five wells are completed in the bedrock rather than the Shallow zone. None of the wells are located within the proposed CEA boundary, and potable water is provided to all locations within a 1-mile radius of the site.

Permit No.	Owner Name	Well Depth	Capacity	Well Use	Permit Date
		feet	gpm		MM-YY-DD
2600004975	CELANESE CHEMICAL CO	200	20	Domestic	FEB-81-25
2600001731	SPEEDWAY AUTO LAUNDR	150	40	Industrial	OCT-57-11
2600040387	FOWLER EQUIPT. CO. I	300	40	Industrial	APR-95-18
2600043694	PARK, HEE	150	35	Industrial	FEB-96-26
2600002429	GAS INC	150	10	Non Public	JUN-61-20

NAME AND ADDRESS COPY LIST

NAME AND ADDRESS COPY LIST

Barbara A. Netchert
Hudson County Clerk's Office
Brennan Court House
583 Newark Ave.
Jersey City, NJ 07306
Tel (201) 795-6112

Robert Byrne, RMC
Jersey City Clerk's Office
280 Grove Street
Jersey City, NJ 07302
Tel (201) 547-5150

Carol Ann Wilson
Hudson County Department of Health & Human Services
Meadowview Campus
595 County Road
Secaucus, NJ 07094
Tel (201) 271-4310

Harry Melendez
Jersey City Department of Health & Human Services
201 Cornelison Avenue
Jersey City, NJ 07304
Tel 201-547-6800

County Environmental Health Act
Hudson County Regional Health Commission
Meadowview Campus, Building 1
595 County Avenue
Secaucus, NJ 07094
(201) 223-1133 - Environmental Coordinator

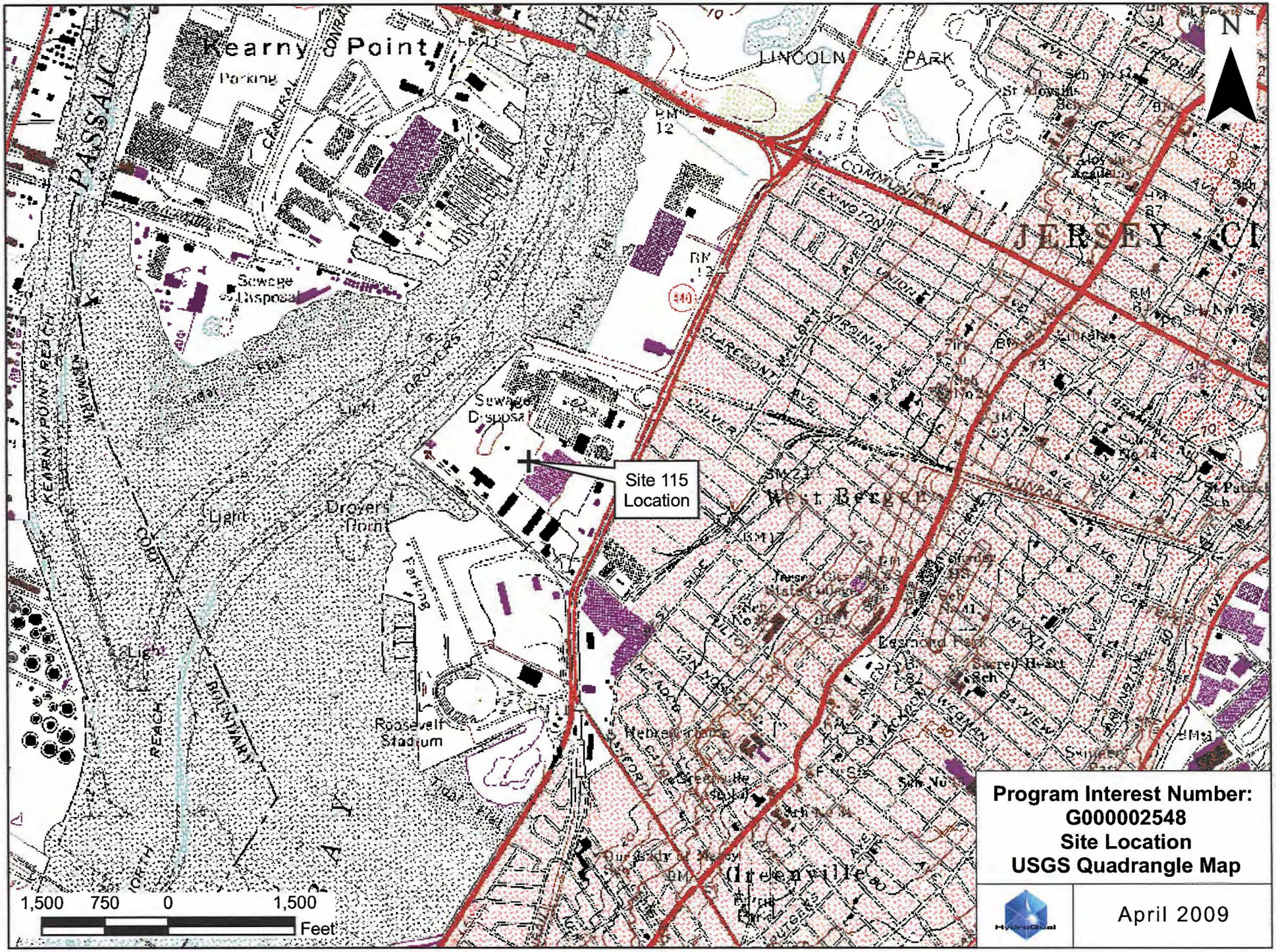
Stephen D. Marks PP, AICP
Hudson County Division of Planning
Brennan Court House
583 Newark Avenue
Jersey City, NJ 07306
Tel (201) 217-5137

Bureau Chief
Department of Environmental Protection
Bureau of Safe Drinking Water
401 E. State Street
P.O. Box 426
Trenton, NJ 08625-0426
(609) 292-5550

Diane Zalaskus
Department of Environmental Protection
Bureau of Water Allocation
401 E. State Street
P.O. Box 426
Trenton, NJ 08625-0426
(609) 292-2957

EXHIBIT A:

USGS QUADRANGLE MAP



Program Interest Number: G000002548
Site Location
USGS Quadrangle Map

April 2009

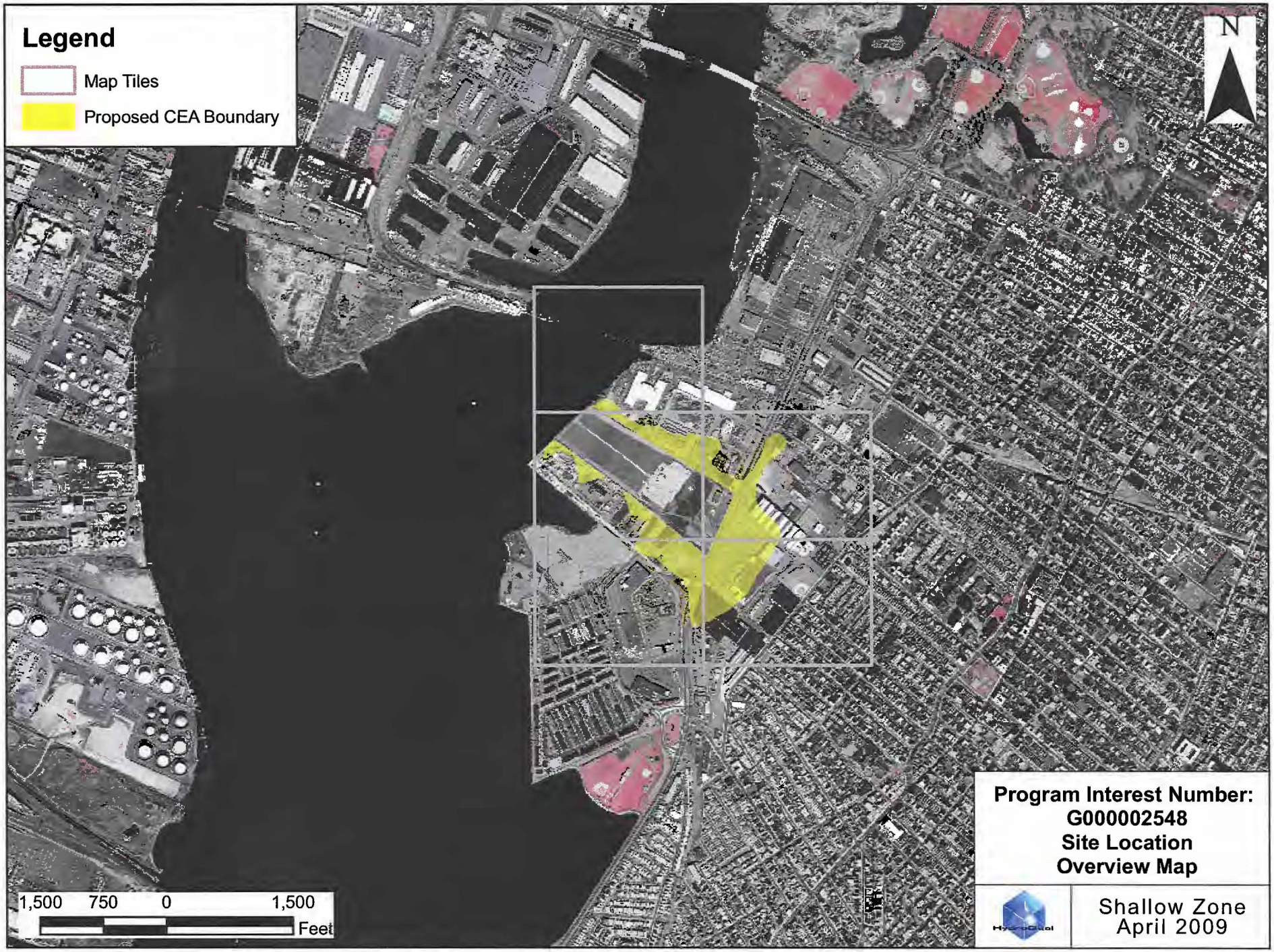
Data Source: USGS Digital Raster Graphic, Jersey City

EXHIBIT B:

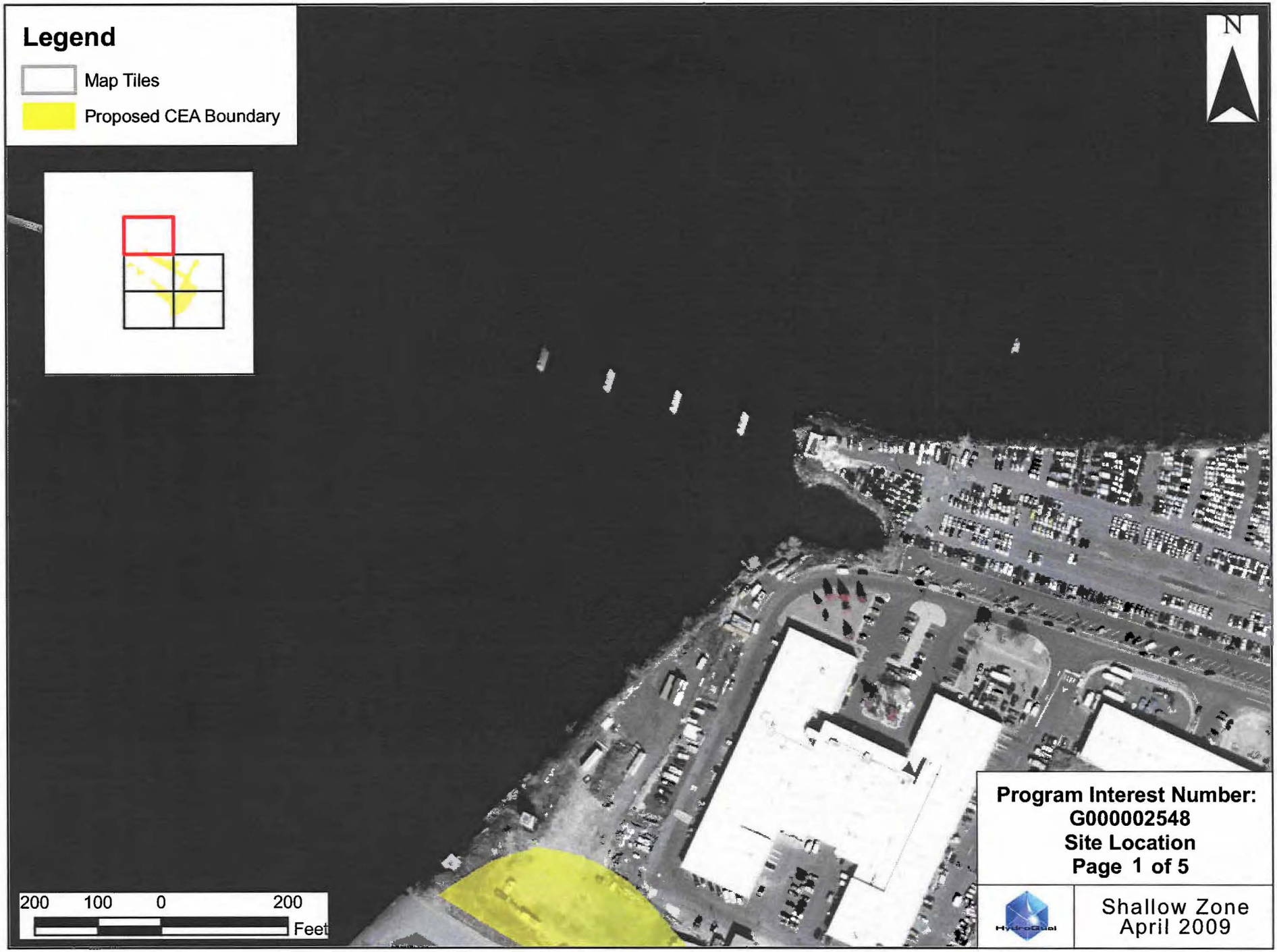
AERIAL EXTENT OF PROPOSED CEA AND SITE LOCATION MAPS

CEA BOUNDARY

EXTENT OF TOTAL CHROMIUM ABOVE THE NJDEP GROUNDWATER QUALITY STANDARDS (70 ppb)



Aerial Source: State of New Jersey Office of Information Technology, Office of Geographic Information Systems, 2002



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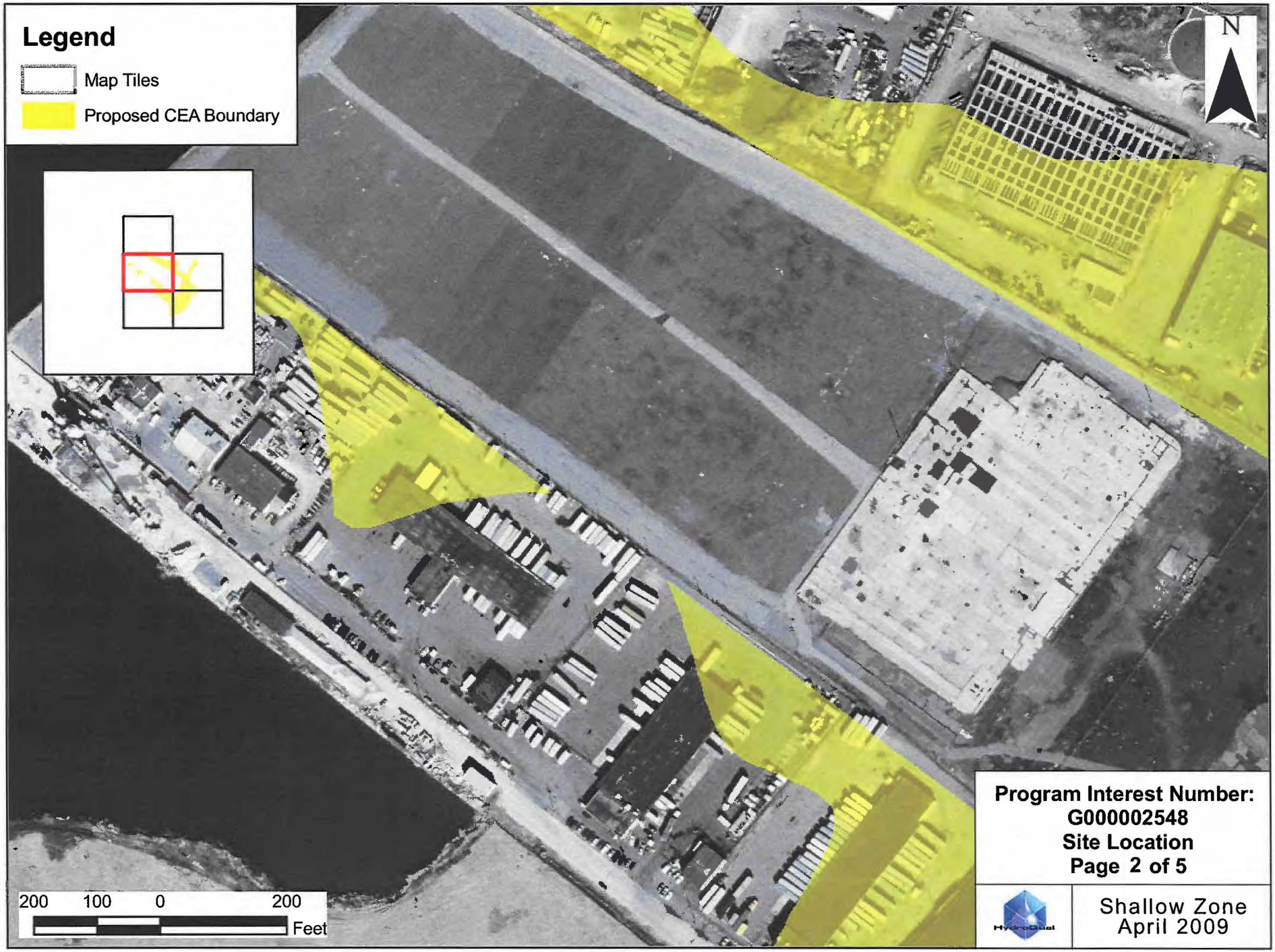

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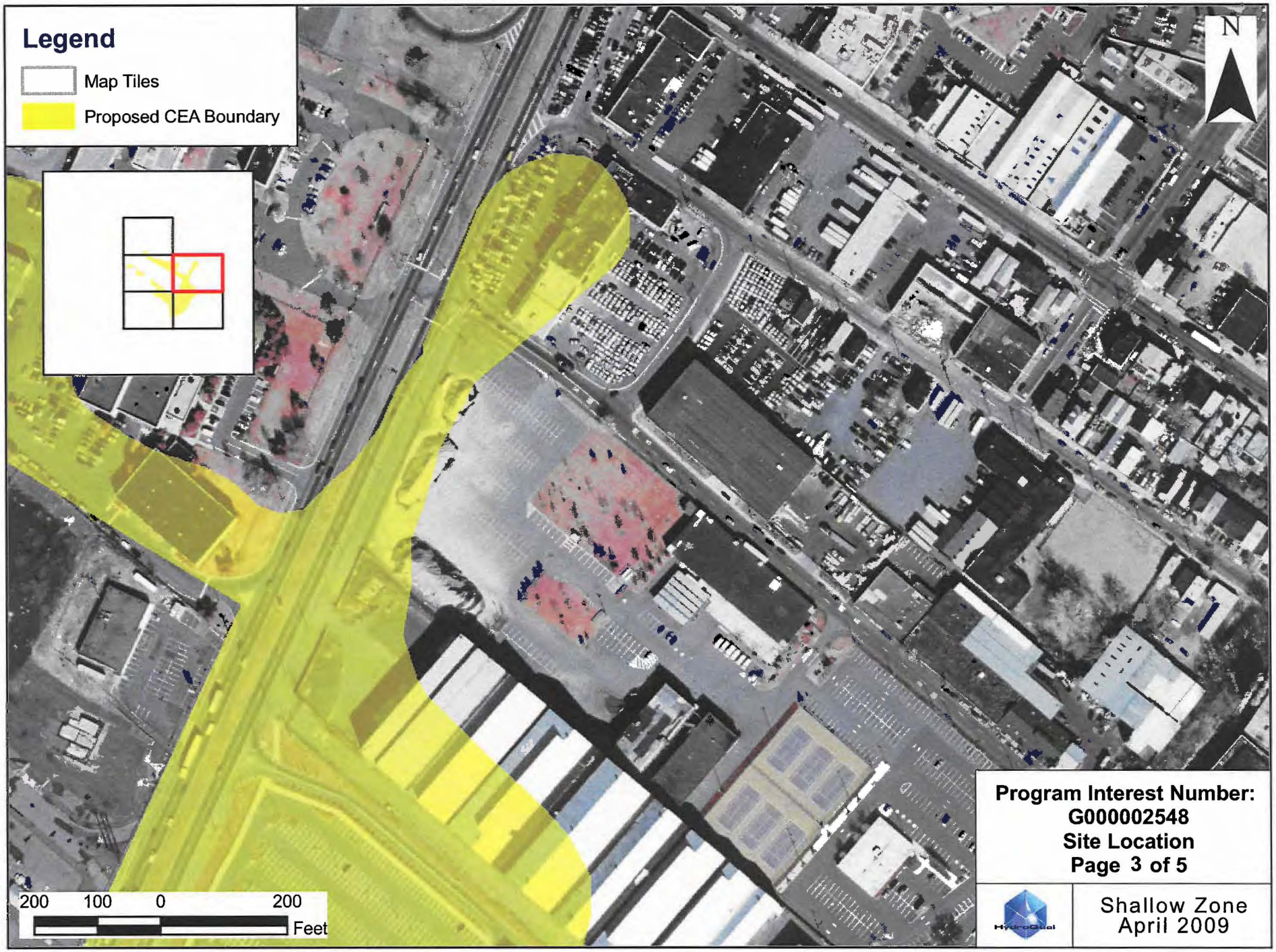
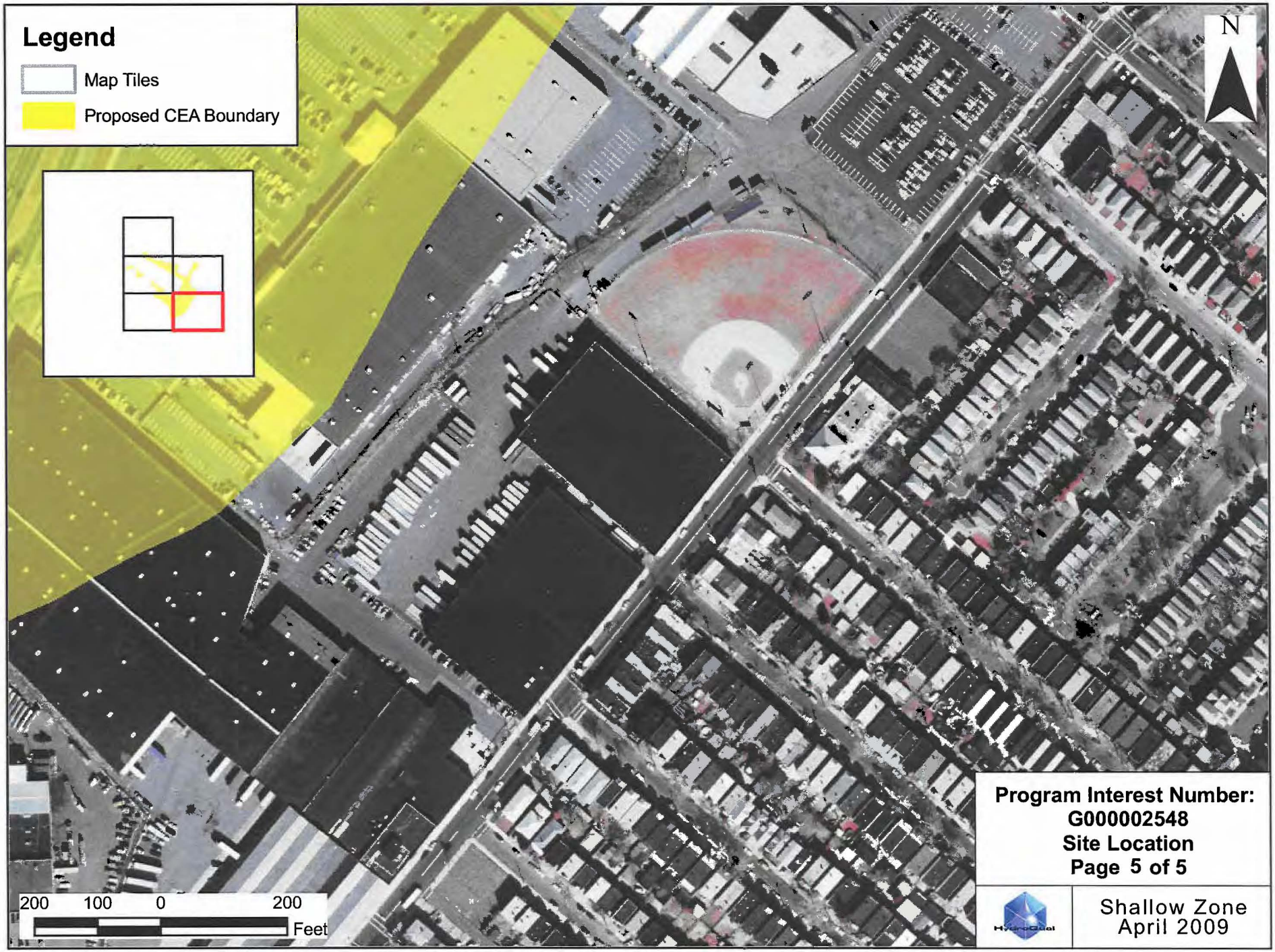


Aerial Source: State of New Jersey Office of Information Technology, Office of Geographic Information Systems, 2002



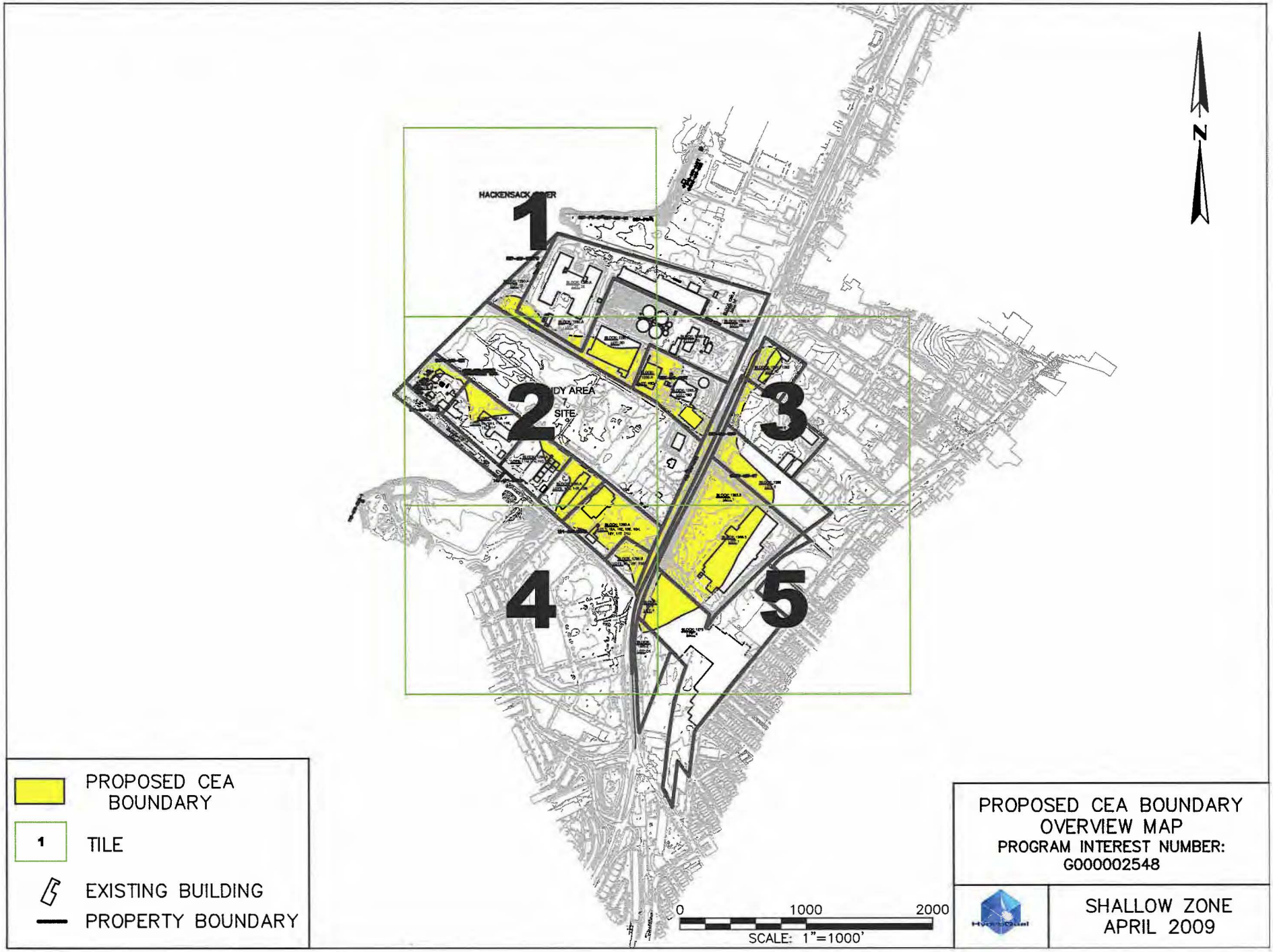
Aerial Source: State of New Jersey Office of Information Technology, Office of Geographic Information Systems, 2002

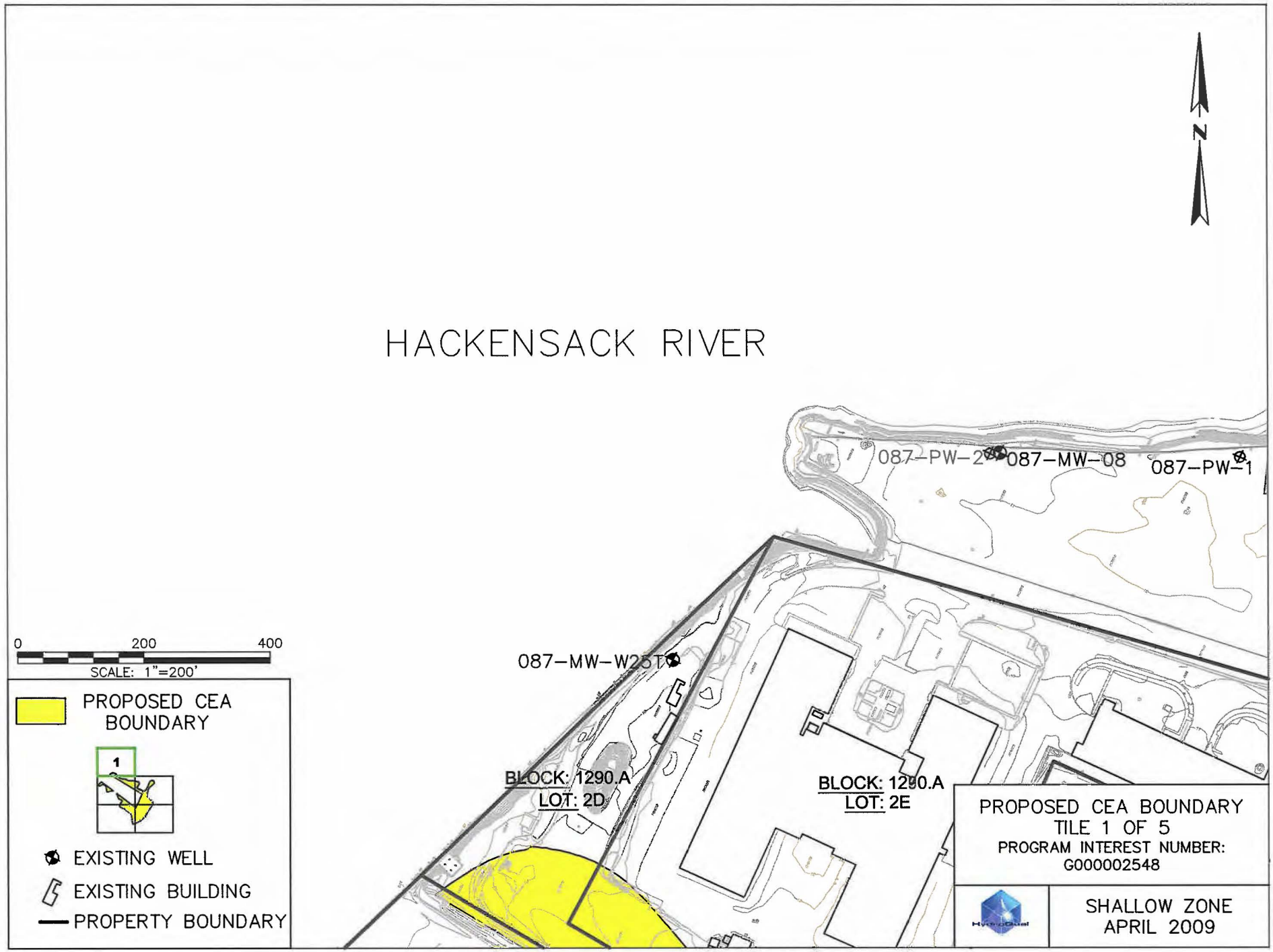


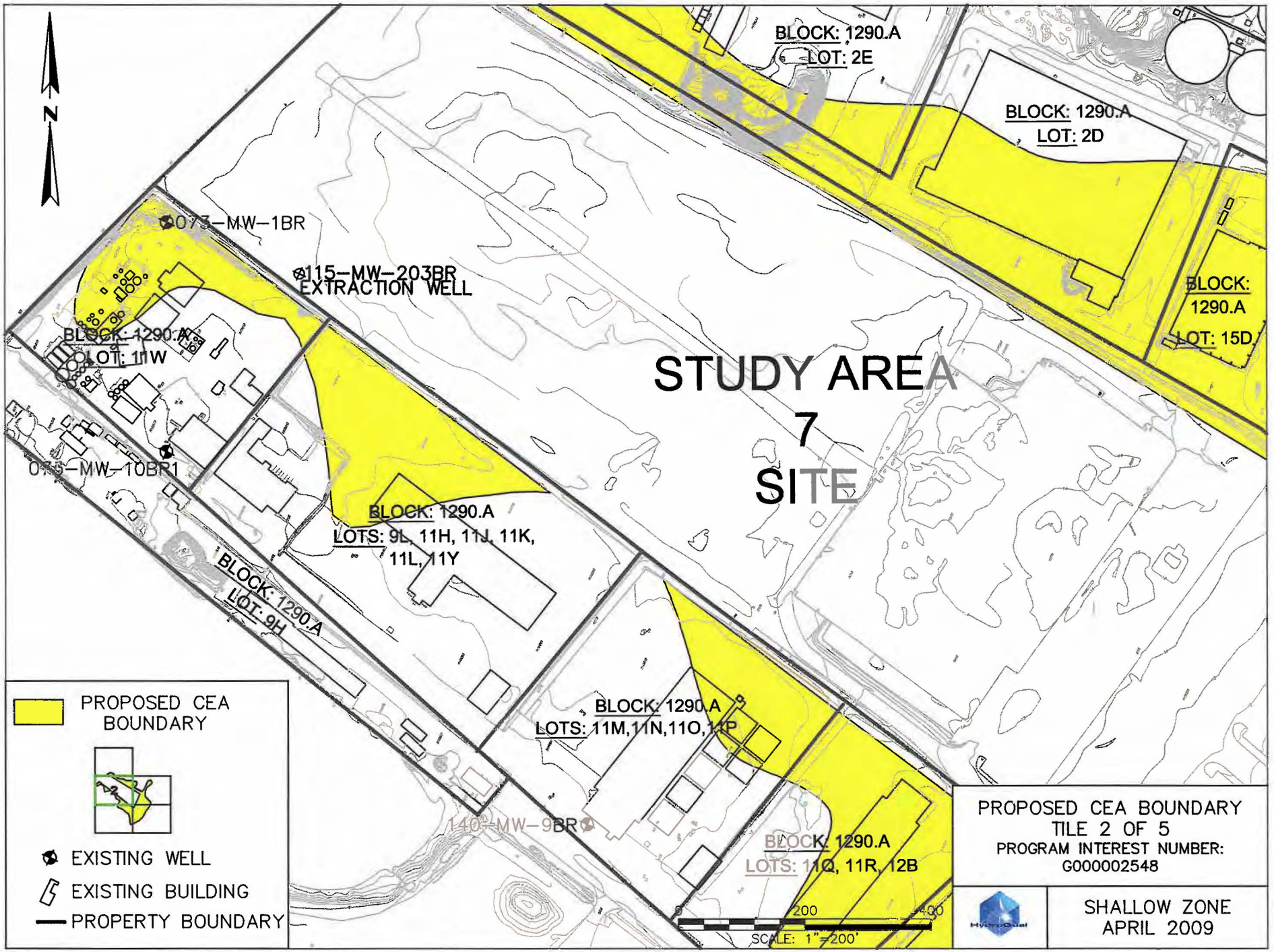
Aerial Source: State of New Jersey Office of Information Technology, Office of Geographic Information Systems, 2002

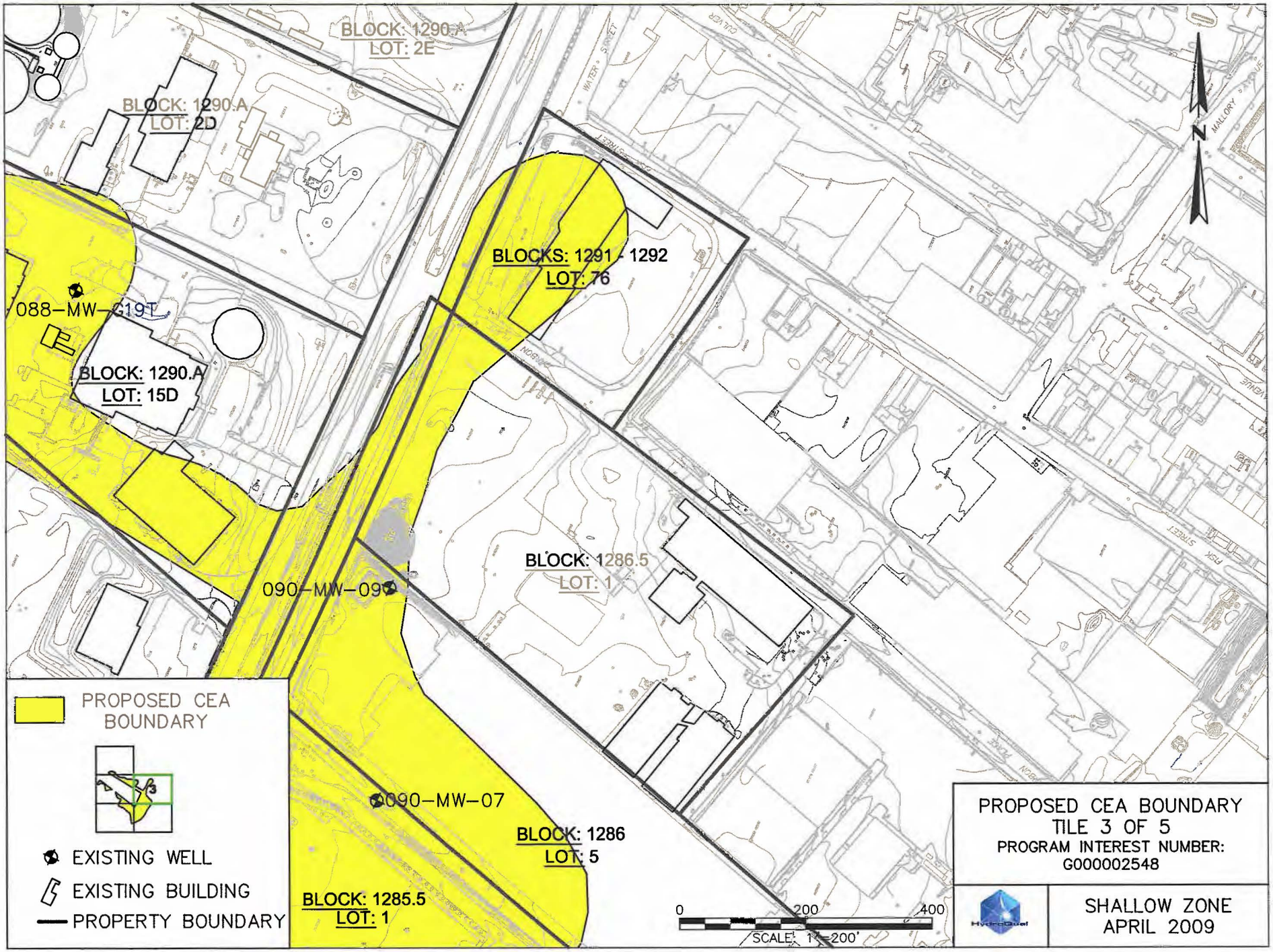
CEA BOUNDARY

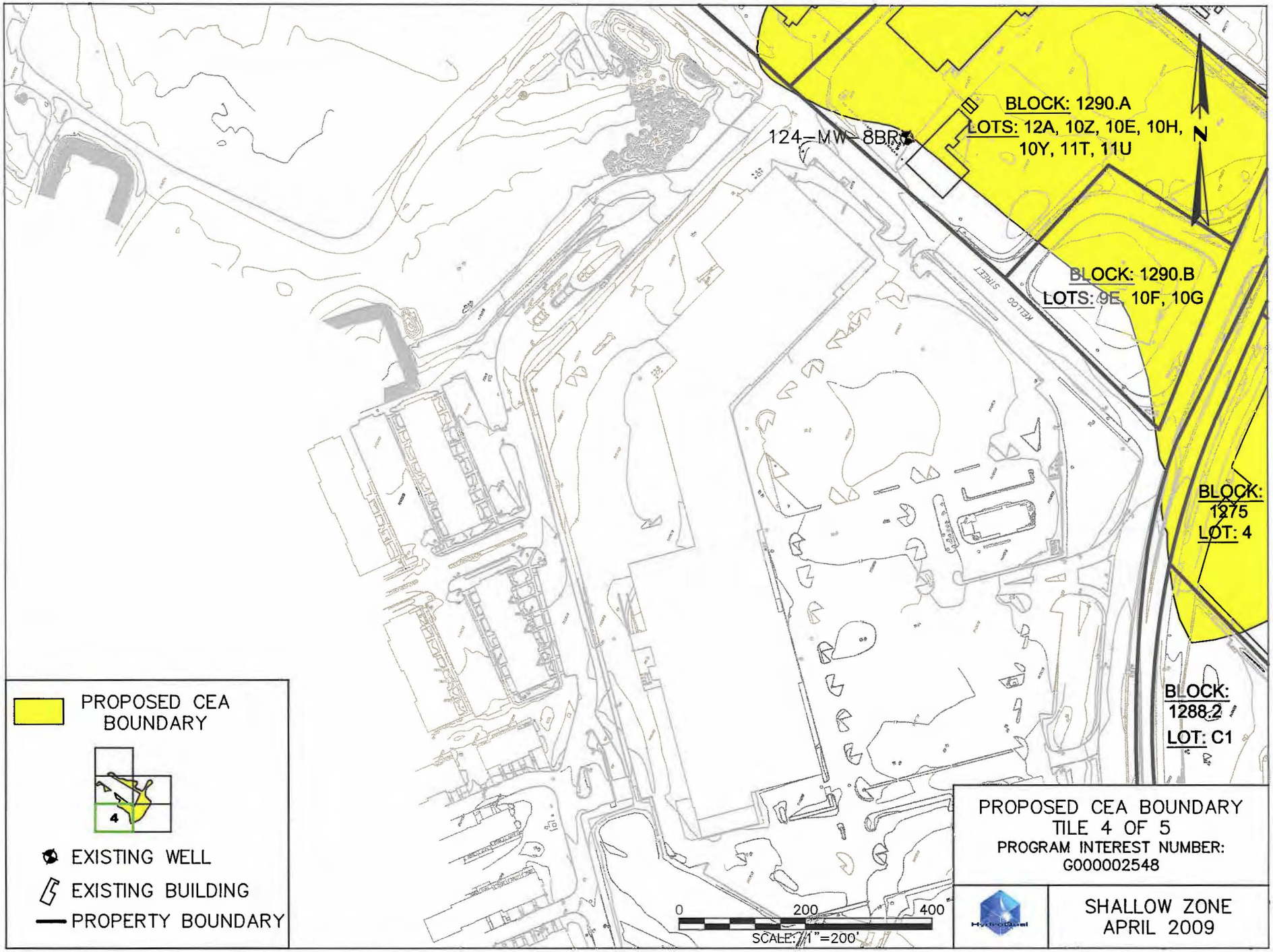
EXISTING CONDITIONS AND BLOCK & LOT INFORMATION MAPS

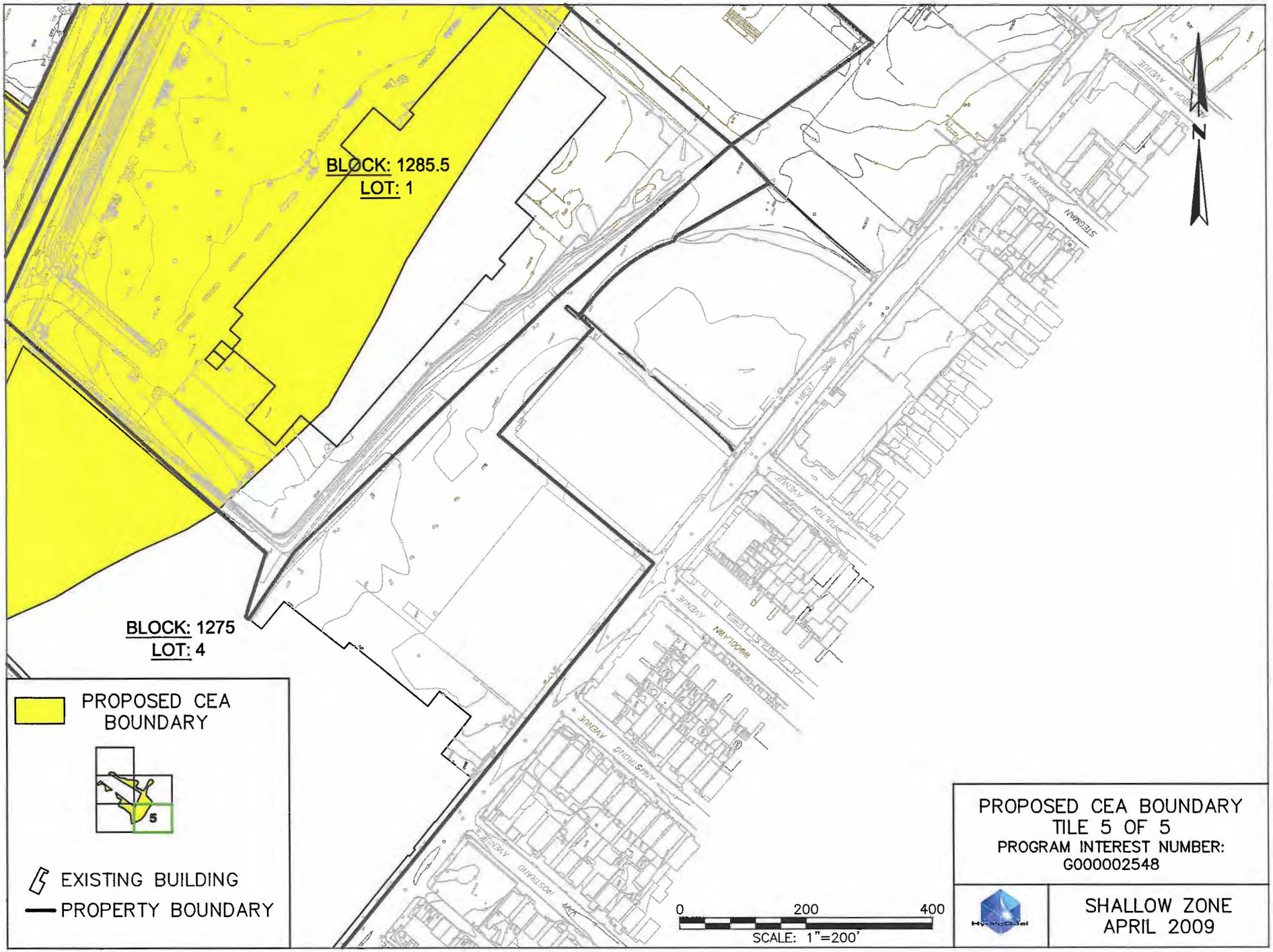

HACKENSACK RIVER
1
2
3
4
5
DY AREA
SITE
N
PROPOSED CEA BOUNDARY
1
TILE
EXISTING BUILDING
PROPERTY BOUNDARY
0
1000
2000
SCALE: 1"=1000'
PROPOSED CEA BOUNDARY
OVERVIEW MAP
PROGRAM INTEREST NUMBER:
G000002548
SHALLOW ZONE
APRIL 2009


HACKENSACK RIVER
N
087-PW-2
087-MW-08
087-PW-1
087-MW-W28T
BLOCK: 1290.A
LOT: 2D
BLOCK: 1290.A
LOT: 2E
0
200
400
SCALE: 1"=200'
PROPOSED CEA BOUNDARY
1
EXISTING WELL
EXISTING BUILDING
PROPERTY BOUNDARY
PROPOSED CEA BOUNDARY
TILE 1 OF 5
PROGRAM INTEREST NUMBER:
G000002548
SHALLOW ZONE
APRIL 2009


N
BLOCK: 1290.A
LOT: 2E
BLOCK: 1290.A
LOT: 2D
BLOCK: 1290.A
LOT: 15D
075-MW-1BR
115-MW-203BR
EXTRACTION WELL
BLOCK: 1290.A
LOT: 11W
STUDY AREA
7
SITE
075-MW-10BR1
BLOCK: 1290.A
LOTS: 9L, 11H, 11J, 11K,
11L, 11Y
BLOCK: 1290.A
LOT: 9H
BLOCK: 1290.A
LOTS: 11M,11N,11O,11P
140-MW-9BR
BLOCK: 1290.A
LOTS: 11Q, 11R, 12B
PROPOSED CEA
BOUNDARY
EXISTING WELL
EXISTING BUILDING
PROPERTY BOUNDARY
200
400
SCALE: 1"=200'
PROPOSED CEA BOUNDARY
TILE 2 OF 5
PROGRAM INTEREST NUMBER:
G000002548
SHALLOW ZONE
APRIL 2009


BLOCK: 1290.A
LOT: 2E
BLOCK: 1290.A
LOT: 2D
088-MW-C19T
BLOCK: 1290.A
LOT: 15D
BLOCKS: 1291 - 1292
LOT: 76
BLOCK: 1286.5
LOT: 1
090-MW-09
090-MW-07
BLOCK: 1286
LOT: 5
BLOCK: 1285.5
LOT: 1
PROPOSED CEA BOUNDARY
EXISTING WELL
EXISTING BUILDING
PROPERTY BOUNDARY
0
200
400
SCALE: 1"=200'
PROPOSED CEA BOUNDARY
TILE 3 OF 5
PROGRAM INTEREST NUMBER:
G000002548
SHALLOW ZONE
APRIL 2009


BLOCK: 1290.A
LOTS: 12A, 10Z, 10E, 10H, 10Y, 11T, 11U
124-MW-8BR
N
BLOCK: 1290.B
LOTS: 9E, 10F, 10G
KELLOG STREET
BLOCK: 1275
LOT: 4
BLOCK: 1288.2
LOT: C1
PROPOSED CEA BOUNDARY
4
EXISTING WELL
EXISTING BUILDING
PROPERTY BOUNDARY
0
200
400
SCALE: 1"=200'
PROPOSED CEA BOUNDARY
TILE 4 OF 5
PROGRAM INTEREST NUMBER:
G000002548
SHALLOW ZONE
APRIL 2009


BLOCK: 1285.5
LOT: 1
BLOCK: 1275
LOT: 4
N
PROPOSED CEA BOUNDARY
5
EXISTING BUILDING
PROPERTY BOUNDARY
0
200
400
SCALE: 1"=200'
PROPOSED CEA BOUNDARY
TILE 5 OF 5
PROGRAM INTEREST NUMBER:
G000002548
SHALLOW ZONE
APRIL 2009

STREET MAP



© 2008 MAPQUEST, INC.
MAP DATA © 2008NAVTEQ OR TELEATLAS

HydroQual

HYDROQUAL, INC.
1200 MACARTHUR BOULEVARD
MAHWAH, NEW JERSEY 07430
(201) 529-5151 F: 529-5728

STREET MAP
VICINITY OF SITE 115 CEA

PROGRAM INTEREST NUMBER: G000002548

HONEYWELL STUDY AREA 7
JERSEY CITY, NJ

DIGITAL MAP SUBMISSIONS
SITE INFO FILE
AND METADATA FILE

Site Info File:
Site Name – Roosevelt Drive In (Site 115)
CSL ID# - G000002548
Lead Program ID# -
Lead Program – BCM
Street Address – 425, 445 & 465 Route 440
Municipality – Jersey City
County – Hudson
Start Date – 6/1/09
Duration – Indeterminate
Contaminants –Chromium (Total), Chromium (Hexavalent)
CEA Depth – 20 feet

Metadata Information for Groundwater CEA (Shallow Fill)
Program Interest Number: G000002548
Jersey City, New Jersey

1. IDENTIFICATION INFORMATION

1.1. DESCRIPTION

The maps represent the area on and adjacent to the Roosevelt Drive In (Site 115) in Jersey City, New Jersey for which a groundwater Classification Exception Area (CEA) has been proposed for the shallow fill aquifer. The site location and CEA boundary for shallow groundwater is illustrated on the identified maps.

CSL#: G000008742 (from KCSNJ)
Site Name (from KCSNJ): Roosevelt Drive In (Site 115); 425, 445 & 465 Route 440, Jersey City, New Jersey.

1.1.1. ABSTRACT

The "CEA_shallow.xxx" are a set of four (4) ESRI Shapefiles that illustrate the boundaries of the Classification Exception Area (CEA) at Site 115 in Jersey City, New Jersey. The files contain the polygon shapefile and associated files showing the extent of the CEA boundary for groundwater in the shallow water-bearing zone (fill material) that contains total chromium in excess of the NJDEP Class II-A Ground Water Quality Standards (GWQS).

1.1.2. PURPOSE/BRIEF DESCRIPTION

The four (4) ESRI Shapefiles, "CEA_shallow.xxx", illustrate the boundaries of the Classification Exception Area (CEA) for the shallow fill at Site 115 in Jersey City, New Jersey.

1.1.3. SUPPLEMENTAL INFORMATION

The following files are provided on the diskette:

CEA_shallow.shp – ArcView shapefile
CEA_shallow.dbf – ArcView attribute table
CEA_shallow.prj – ArcView projection file
CEA_shallow.shx – ArcView index file

cea_metafile_shallow_final.doc – metadata information for GIS maps.

cea_site_info_file_shallow.doc – support information for CEA

1.1.4. CURRENTNESS REFERENCE

The maps are representative of current conditions as of June 2008.

---

2. DATA QUALITY INFORMATION

2.1. ATTRIBUTE ACCURACY

The shapefile CEA_shallow.shp was digitized using the 2002 orthophotography available from the State of New Jersey Office of Information Technology. The orthophotos and resulting CEA boundary are georeferenced to NJ State Plane, NAD 1983, Feet.

2.2. QUANTITATIVE ATTRIBUTE ACCURACY ASSESSMENT

The CEA boundary has been plotted on the georeferenced USGS topographic map to assess the positional accuracy of the files.

2.3. COMPLETENESS REPORT

There were no known omissions in the construction of the data sets.

2.4. LINEAGE

ESRI ArcGIS was used to view the orthophotos and digitize the CEA boundary based on measured values at sampling wells.

2.5. SOURCE SCALE DENOMINATOR

2400

2.6. TYPE OF SOURCE MEDIA

Online

SOURCE CURRENTNESS REFERENCE

2002

2.7. PROCESS DATE

April 2009

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3. SPATIAL DATA ORGANIZATION INFORMATION

3.1. DIRECT SPATIAL REFERENCE METHOD

Vector data, with polygons.

---

4. SPATIAL REFERENCE INFORMATION

4.1. GRID COORDINATE SYSTEM

NJ State Plane

4.2. HORIZONTAL DATUM NAME

NAD 83

---

5. ATTRIBUTE INFORMATION

5.1. ATTRIBUTE LABEL: CEA_shallow.shp

---

6. METADATA REFERENCE INFORMATION

6.1. METADATA DATE: 4/20/09

6.2. METADATA CONTACT: William G. Soukup P.G.

---

7. CITATION INFORMATION

7.1. ORIGINATOR

HydroQual Inc. – William G. Soukup P.G.

7.2. TITLE

CEA Boundary for Shallow Fill, Site 115, Jersey City, New Jersey

7.3. AUTHOR'S NOTES

8. CONTACT INFORMATION

8.1. CONTACT PERSON (PRIMARY)

John J. Morris, P.E.

8.2. CONTACT ORGANIZATION

Honeywell International Inc.

8.3. CONTACT ADDRESS

101 Columbia Road
Morristown, NJ 07962

8.4. CONTACT VOICE TELEPHONE

(973) 455-4003
john.morris@honeywell.com

8.5. CONTACT PERSON (SECONDARY)

Brian George
HydroQual, Inc.
1200 MacArthur Boulevard
Mahwah, NJ 07430
(201) 529-5151 x 7203

State of New Jersey
Department of Environmental Protection
Site Remediation Program
Mailcode 401-06
P.O. Box 420
Trenton, NJ 08625-0420

CHRIS CHRISTIE
Governor
KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

Maria Kaouris, Remediation Manager
Honeywell International, Inc.
101 Columbia Road
Morristown, New Jersey 07962

Date: February 16, 2012

Approval

Re: Classification Exception Area
Study Areas 5, 6 and 7
Hudson County Chromate Sites 73, 87, 88, 90, 115, 117, 120, 124, 125, 134, 140, 153, 157, and 184
Jersey City, Hudson County
NJDEP PI # G000008789

Dear Ms. Kaouris:

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the Groundwater Classification Exception Area (CEA) application dated 8 June 2009, prepared by HydroQual, Inc. The NJDEP has determined that the referenced document is in compliance with Section 7:26E-8.3 of the New Jersey Technical Requirements for Site Remediation, and the CEA Guidance Document (revised November 1998). NJDEP hereby approves the CEA request effective the date of this letter.

Honeywell is advised that the CEA does not specify monitoring requirements since it functions as a notification mechanism, not as a "stand alone" enforcement or regulatory document. The need and the extent of ground water monitoring required during the duration of the CEA will be determined as part of the Comprehensive Ground Water Monitoring Program. As specified in NJAC 7:26E-8.3(b)5, the Department will require Honeywell to notify external agencies/affected parties of the CEA designations according to the guidelines established in the CEA Guidance Document (11/98) which can be located at: http://www.nj.gov/dep/srp/guidance/cea/ceaguid2.pdf. Note that all property owners within the plume do not need to be notified as long as they are on public water. Honeywell must also comply with the Biennial Certification requirements at NJAC 7:26E-8.6.

The CEAs are for the ground water contamination in three distinct water bearing zones (Shallow, Deep Overburden, and Bedrock). Since the aerial extent of contamination is different for each of the three zones, three separate CEAs were prepared. Note that these

CEAs are only for total and hexavalent chromium. Any other ground water contamination areas within or nearby (e.g. organic compounds in Study Area 6 – North) will require a separate CEA.

If you have any questions, please contact Thomas J. Cozzi of the Site Remediation Program at (609) 984-2905.

Sincerely,

Thomas J. Cozzi, Assistant Director
NJDEP Site Remediation

C: Barbara A. Netchert, Hudson County Clerk
Hudson County Regional Health Commission (CEHA)
Robert Byrne, RMC, Jersey City Clerk
Robert Vogt, Jersey City Division of Health
Carol Ann Wilson, Hudson County Department of Health & Human Services
Stephen D. Marks PP, AICP, Hudson County Division of Planning
Bureau Chief, NJDEP Bureau of Safe Drinking Water
Bureau Chief, NJDEP Bureau of Water Systems and Well Permitting
David Doyle, NJDEP-SRP
David Van Eck, NJDEP-BGWPA

APPENDIX A-6

REMEDIAL ACTION PERMITS

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 South Open Space AOC

List All AKAs: Kellogg St Properties; See Section 1.2 of RAR for additional AKAs

Street Address: Kellogg Street

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000000927, G000008741, G000008742, 033312, 003846

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Portions of Block 24601 Lots 1 through 8; Portions of Block 21901 Lot 8

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Global Director, Remediation Desi

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: Figures 17 and 19

2. Deed Notice filing date: 11/30/2017

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9258 Page Numbers: First: 700 to Last: 833

5. Total Number of Pages filed: 133

6. Instrument/Control/File Number(s): 20171130010138840

7. Block(s) and Lot(s): Portions of Block 24601, Lots 1 through 8 and Portions of Block 21901 Lot 8

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 31 % Open Space AOC Only

9. Is this Deed Notice for Historic Fill material at the site? ☒ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☒ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? Completed with Non-Cr RAR ☒ Yes ☐ No ☐ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: NA

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 03/15/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Open Space AOC	Impermeable Cover	1	Inches
	Other *		
	Soil	3 on average	Feet

*Other, describe:

See CAP/Liner detail for Open Space AOC in Figures and As-builts in RAR

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	20.3-15,300	0-22*	20 mg/kg**	20 mg/kg**
Total Xylenes	33,900	1-1.5*	12,000 mg/kg	170,000 mg/kg
Historic Fill (see tables in Deed				
Notice)				
*Depth prior to cap installation				
**Per 2007 Chromium Memo				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary?
   Check all that apply.

   ☐ Residences
   ☐ Potable wells
   ☐ Public and private schools (K-12)
   ☐ Child care facilities
   ☐ Public parks and playgrounds
   ☒ Surface water
   ☐ Tier 1 Well-head protection areas
   ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

   If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

   If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

   ☐ Subsurface Depressurization System
   ☐ Subsurface Ventilation System
   ☐ Soil Vapor Extraction System
   ☐ HVAC Positive Pressure
   ☐ Other (specify): _____

   Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Soil and Groundwater Remedial Action Permits for non-chromium
Groundwater Remedial Action Permit for chromium

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 South Deed Notice #2 Route 440 Deferred Area

List All AKAs: Kellogg St Properties; See Section 1.2 of RAR for additional AKAs

Street Address: Kellogg Street

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000008741

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Portion of Block 24601, Lot 8

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Global Director, Remediation Desi

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☐ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: Figures 17 and 19

2. Deed Notice filing date: 11/30/17

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9258 Page Numbers: First: 844 to Last: 967

5. Total Number of Pages filed: 123

6. Instrument/Control/File Number(s): 20171130010138870

7. Block(s) and Lot(s): Portions of Block 24601, Lot 8

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 0.12 %

9. Is this Deed Notice for Historic Fill material at the site? ☐ Yes ☒ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☐ Yes ☒ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? ☐ Yes ☐ No ☒ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: NA

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 03/15/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Route 440 Deferred Area	Asphalt Cap	4-6	Inches

*Other, describe:

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	81.7-8,250	0-6	20 mg/kg*	20 mg/kg*
*Per 2007 Chromium Memo				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary? Check all that apply.

☐ Residences
☐ Potable wells
☐ Public and private schools (K-12)
☐ Child care facilities
☐ Public parks and playgrounds
☐ Surface water
☐ Tier 1 Well-head protection areas
☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

☐ Subsurface Depressurization System
☐ Subsurface Ventilation System
☐ Soil Vapor Extraction System
☐ HVAC Positive Pressure
☐ Other (specify): _____

Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Soil Remedial Action Permit for non-chromium

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 South Deed Notice #3 Portion of Site 163

List All AKAs: Kellogg St Properties; See Section 1.2 of RAR for additional AKAs

Street Address: Kellogg Street

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): 010374

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Portion of Block 24601, Lot 11

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Global Director, Remediation Desi

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☐ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: Figures 17 and 19

2. Deed Notice filing date: 11/30/2017

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9259 Page Numbers: First: 1 to Last: 128

5. Total Number of Pages filed: 128

6. Instrument/Control/File Number(s): 20171130010138890

7. Block(s) and Lot(s): Portions of Block 24601 Lot 11

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 7 %

9. Is this Deed Notice for Historic Fill material at the site? ☒ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☒ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? Completed with Non-Cr RAR ☒ Yes ☐ No ☐ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: NA

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 03/15/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Site 163	Permeable Cover	6	Inches
	Soil	4-6	Feet

*Other, describe:

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	0.5-92.5	1-18*	20 mg/kg**	20 mg/kg**
Historic Fill (see Tables)				
*Depth prior to cap installation				
**Per 2007 Chromium Memo				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary? Check all that apply.

- ☒ Residences
- ☐ Potable wells
- ☐ Public and private schools (K-12)
- ☐ Child care facilities
- ☐ Public parks and playgrounds
- ☒ Surface water
- ☐ Tier 1 Well-head protection areas
- ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

- ☐ Subsurface Depressurization System
- ☐ Subsurface Ventilation System
- ☐ Soil Vapor Extraction System
- ☐ HVAC Positive Pressure
- ☐ Other (specify): _____

Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Groundwater RAPs

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 South Deed Notice #4 Tract 2 Site 073 Deferred Area and Tract 1 SA-7 TI Area

List All AKAs: Kellogg St Properties; See Section 1.2 of RAR for additional AKAs

Street Address: Kellogg Street

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000000927, G000002548

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Portions of Block 24601, Lot 1 & Portions of Block 21901, Lot 8 and 10

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Global Director, Remediation Desi

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☐ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: Figures 17 and 19

2. Deed Notice filing date: 11/30/2017

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9258 Page Numbers: First: 566 to Last: 693

5. Total Number of Pages filed: 127

6. Instrument/Control/File Number(s): 20171130010138820

7. Block(s) and Lot(s): Portions of Block 24601 Lots 1 & Portions of 21901 Lots 8 and 10

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 3 % Tract 2 only is 1%

9. Is this Deed Notice for Historic Fill material at the site? ☐ Yes ☒ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☐ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? ☐ Yes ☐ No ☒ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: NA

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 03/15/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Tract 1 SA-7 TI Area	Soil	7-14	Feet
Tract 2 Site 073 Deferred Area	Asphalt Cap	4-6	Inches
	Soil	1	Feet

*Other, describe:

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	20.1-4,710	1-19	20 mg/kg*	20 mg/kg*
*Per 2007 Chromium Memo				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary?
   Check all that apply.

   ☐ Residences
   ☐ Potable wells
   ☐ Public and private schools (K-12)
   ☐ Child care facilities
   ☐ Public parks and playgrounds
   ☒ Surface water
   ☐ Tier 1 Well-head protection areas
   ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

   If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

   If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

   ☐ Subsurface Depressurization System
   ☐ Subsurface Ventilation System
   ☐ Soil Vapor Extraction System
   ☐ HVAC Positive Pressure
   ☐ Other (specify): _____

   Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Soil Remedial Action Permit for non-chromium

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

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ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

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ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 North Open Space Area

List All AKAs: See Section 1.2 of RAR for additional AKAs

Street Address: 501 and 575 Route 440

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000008710, G000008711

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Block 21901, Lots 5 through 10

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Director - Remediation Design and Construction

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: 16, see also Section 10.0

2. Deed Notice filing date: 12/14/2017

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9264 Page Numbers: First: 678 to Last: 808

5. Total Number of Pages filed: 130

6. Instrument/Control/File Number(s): 20171214010145690

7. Block(s) and Lot(s): Block 21901, Lots 5 through 10

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 24 % North Open Space Area

9. Is this Deed Notice for Historic Fill material at the site? ☒ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☒ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? Completed with Non-Cr RAR ☒ Yes ☐ No ☐ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: Not Applicable

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 10/01/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Open Space Area	Impermeable Cover	1	Inches
	Other *		
	Soil	3 on average	Feet
TA-10 Area	Asphalt Cap	4	Inches
	Soil	12 - 14	Feet

*Other, describe:

See CAP/Liner detail for Open Space AOC in Figures and As-builts in RAR

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	20.3 - 14,600	0 - 20*	20 mg/kg**	20 mg/kg**
Benzene	2.26 - 129	6 - 16*	2 mg/kg	5 mg/kg
Historic Fill (see tables in Deed				
Notice)				
Methyl tert butyl either	129	7-7.5*	110 mg/kg	320 mg/kg
*Depth prior to cap installation				
**Per 2007 Chromium Memo				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary?
   Check all that apply.

   ☐ Residences
   ☐ Potable wells
   ☐ Public and private schools (K-12)
   ☐ Child care facilities
   ☐ Public parks and playgrounds
   ☒ Surface water
   ☐ Tier 1 Well-head protection areas
   ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

   If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

   If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

   ☐ Subsurface Depressurization System
   ☐ Subsurface Ventilation System
   ☐ Soil Vapor Extraction System
   ☐ HVAC Positive Pressure
   ☐ Other (specify): _____

   Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Soil Remedial Action Permit for non-chromium

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

8B1A205974DB4DD...

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

8B1A205974DB4DD...

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 North Deferred Area Adjacent to Route 440 ROW

List All AKAs: See Section 1.2 of RAR for additional AKAs

Street Address: 501 Route 440

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000008711

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Block 21901, Lot 5

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Director - Remediation Design and Construction

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: 16, see also Section 8.0

2. Deed Notice filing date: 12/14/17

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9264 Page Numbers: First: 905 to Last: 1020

5. Total Number of Pages filed: 115

6. Instrument/Control/File Number(s): 20171214010145750

7. Block(s) and Lot(s): Block 21901, Lot 5

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 0.22 %

9. Is this Deed Notice for Historic Fill material at the site? ☒ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☒ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? Completed with Non-Cr RAR ☒ Yes ☐ No ☐ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: Not Applicable

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 10/01/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Route 440 Deferred Area	Other *	6	Inches
	Asphalt Cap		

*Other, describe:

6-inches gravel/stone over geotextile fabric

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	26.6 - 4,690	0 - 12*	20 mg/kg**	20 mg/kg**
*Depth prior to cap installation				
**Per 2007 Chromium Memo				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary? Check all that apply.

☐ Residences
☐ Potable wells
☐ Public and private schools (K-12)
☐ Child care facilities
☐ Public parks and playgrounds
☐ Surface water
☐ Tier 1 Well-head protection areas
☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

☐ Subsurface Depressurization System
☐ Subsurface Ventilation System
☐ Soil Vapor Extraction System
☐ HVAC Positive Pressure
☐ Other (specify): _____

Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Soil Remedial Action Permit for non-chromium

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

William J. Hague

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

William J. Hague

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 North Portion of TA-10

List All AKAs: See Section 1.2 of RAR for additional AKAs

Street Address: 575 Route 440

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000008710

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Block 21901, Lot 9

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Director - Remediation Design and Construction

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Bayfront Redevelopment LLC.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: 11B, see also Section 11.2

2. Deed Notice filing date: 12/14/17

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9265 Page Numbers: First: 32 to Last: 148

5. Total Number of Pages filed: 116

6. Instrument/Control/File Number(s): 20171214010145830

7. Block(s) and Lot(s): Block 21901, Lot 9

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 0.45 % North TA-10 Area

9. Is this Deed Notice for Historic Fill material at the site? ☒ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☒ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? Completed with Non-Cr RAR ☒ Yes ☐ No ☐ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: Not Applicable

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 10/01/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
TA-10-1	Soil	12	Feet
	Asphalt Cap	4	Inches

*Other, describe:

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	25.1 - 39	12 - 14	20 mg/kg*	20 mg/kg*
*Per 2007 Chromium Policy				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary?
   Check all that apply.

   ☐ Residences
   ☐ Potable wells
   ☐ Public and private schools (K-12)
   ☐ Child care facilities
   ☐ Public parks and playgrounds
   ☒ Surface water
   ☐ Tier 1 Well-head protection areas
   ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

   If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

   If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

   ☐ Subsurface Depressurization System
   ☐ Subsurface Ventilation System
   ☐ Soil Vapor Extraction System
   ☐ HVAC Positive Pressure
   ☐ Other (specify): _____

   Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Soil Remedial Action Permits for historic fill

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: DocuSigned by: William J. Hague 824A20F975DB4DD... Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague, Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Bayfront Redevelopment LLC.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: DocuSigned by: William J. Hague 824A20F975DB4DD... Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague, Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ..... ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
6. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 North Deferred Area

List All AKAs: See Section 1.2 of RAR for additional AKAs

Street Address: 555 & 575 Route 440

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000008710

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Block 21901, Lot 4

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Director - Remediation Design and Construction

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: 16, see also Section 8.0

2. Deed Notice filing date: 12/14/17

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9265 Page Numbers: First: 148 to Last: 265

5. Total Number of Pages filed: 117

6. Instrument/Control/File Number(s): 201712140145840

7. Block(s) and Lot(s): Block 21901, Lot 4

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 0.12 %

9. Is this Deed Notice for Historic Fill material at the site? ☒ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☒ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? Completed with Non-Cr RAR ☒ Yes ☐ No ☐ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: Not Applicable

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 10/01/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Northern Parcel	Soil	12	Inches
Southern Parcel	Asphalt Cap	6	Inches
	Soil	12	Inches

*Other, describe:

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	24.3 - 4,670	1 - 7	20 mg/kg*	20 mg/kg*
*Per 2007 Chromium Memo				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary?
   Check all that apply.

   ☐ Residences
   ☐ Potable wells
   ☐ Public and private schools (K-12)
   ☐ Child care facilities
   ☐ Public parks and playgrounds
   ☐ Surface water
   ☐ Tier 1 Well-head protection areas
   ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

   If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

   If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

   ☐ Subsurface Depressurization System
   ☐ Subsurface Ventilation System
   ☐ Soil Vapor Extraction System
   ☐ HVAC Positive Pressure
   ☐ Other (specify): _____

   Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☐ Yes ☒ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 North, TA-7 Area

List All AKAs: See Section 1.2 of RAR for additional AKAs

Street Address: 555 Route 440

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000008710

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Block 21901, Lot 10

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Director - Remediation Design and Construction

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Jersey City Municipal Utilities Authority

First Name of Contact: Jeremy Last Name of Contact: Farrell

Title: Acting Executive Director

Phone Number: (201) 432-1150 Ext: Fax:

Mailing Address: 555 NJ Route 440

City/Town: Jersey City State: NJ Zip Code: 07304

Email Address: J.Farrell@jcmua.com

☐ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☒ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: 11B, see also Section 11.2

2. Deed Notice filing date: 01/11/2018

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9272 Page Numbers: First: 481 to Last: 596

5. Total Number of Pages filed: 115

6. Instrument/Control/File Number(s): 20180111010003720

7. Block(s) and Lot(s): Block 21901, Lot 10

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 0.03 % North TA-7 Area

9. Is this Deed Notice for Historic Fill material at the site? ☒ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☒ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? Completed with Non-Cr RAR ☒ Yes ☐ No ☐ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☒ Yes ☐ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent:

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☒ No

   If "Yes," have all of the following criteria been met? ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank

   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M

   Mailing Address: Trade Service Operations, 1980 Saturn Street, V02-906

   City/Town: Monterey Park State: CA Zip Code: 91755

   Email Address: Not Applicable

   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 10/01/2016

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
TA-7	Asphalt Cap	6	Inches
	Soil	2	Feet

*Other, describe:

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	26.3 - 43.6	2 - 3	20 mg/kg*	20 mg/kg*
*Per 2007 Chromium Policy				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary? Check all that apply.

- ☐ Residences
- ☐ Potable wells
- ☐ Public and private schools (K-12)
- ☐ Child care facilities
- ☐ Public parks and playgrounds
- ☐ Surface water
- ☐ Tier 1 Well-head protection areas
- ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

- ☐ Subsurface Depressurization System
- ☐ Subsurface Ventilation System
- ☐ Soil Vapor Extraction System
- ☐ HVAC Positive Pressure
- ☐ Other (specify): _____

Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Soil Remedial Action Permits for non-chromium

DocuSign Envelope ID: FF60125F-890B-4FD5-A832-26C49A9213F7

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: William J. Hague Date: January 10, 2018

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Jersey City Municipal Utilites Authority

Representative First Name: Jeremy Representative Last Name: Farrell

Title: Acting Executive Director

Phone Number: Ext: Fax:

Mailing Address: 555 NJ Route 440

City/Town: Jersey City State: NJ Zip Code: 07304

Email Address: J.Farrell@jcmua.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Date: 1/5/18

Name/Title: Jeremy Farrell, Acting Executive Director

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No

   If "No," proceed to next section.

2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:

   ☐ Government entity
   ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   ☐ A person that conducted remediation at their primary or secondary residence
   ☐ Owner or operator of a child care center
   ☐ Public school or private school
   ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business

3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ..... ☐ Yes ☐ No

   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No

   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS..... $ _____

6. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*

   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT APPLICATION – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT only)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-7 Perimeter Pool Area

List All AKAs: Hudson County Chromate Sites: 115, 120 and 157

Street Address: 441 Route 440

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305-4806

Program Interest (PI) Number(s): G000002548

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the entire site: Block 21901 Lots 6, 7, 8

Is this site a Federal case?..... ☐ Yes ☒ No

If "Yes," indicate the Federal Case Type:

☐ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION B. PERMIT APPLICATION, MODIFICATION, AND TERMINATION FEES

If this Application is for a Modification or Termination please confirm:

☒ All outstanding Remedial Action Permit annual fees are paid in full.

Note: The application will not be processed until all outstanding fees have been paid.

Select One:	**Effective on or Before June 30, 2017**	**Effective July 1, 2017**
☒ Remedial Action Permit Application	$1,175.00	$1,470.00
☐ Remedial Action Permit Modification	$780.00	$975.00
☐ Remedial Action Permit Termination	$1,175.00	$1470.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell International Inc. Phone: (973) 455-2175

Contact: William Hague Title: Director - Remediation Design and Construction

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: Honeywell International Inc.

First Name of Contact: William Last Name of Contact: Hague

Title: Director - Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Rd

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

☒ Primary Responsibility for Permit Compliance

SECTION F. DEED NOTICE INFORMATION

1. Attach the following:

   ☒ Copy of the Filed Deed Notice or Deed Notice Termination document with Book & Page Numbers (both in paper and electronically in Adobe PDF format)

   ☐ Remedial Action Report (RAR) (electronically only - in Adobe PDF format)
   Provide the location in the RAR (*page # / figure #)*
   of the map(s) showing soil contaminant delineation: _____

2. Deed Notice filing date: 12/14/17

3. Name of County Office the Deed Notice was filed in: Hudson

4. Book Number the Deed Notice is filed in: 9265 Page Numbers: First: 471 to Last: 509

5. Total Number of Pages filed: 38

6. Instrument/Control/File Number(s): 20171214010145910

7. Block(s) and Lot(s): 21901 Lots 6, 7, 8

8. Is the entire site restricted? ☐ Yes ☒ No

   If "No," what percent of the site is restricted? 0.018 % Perimeter Pool Area

9. Is this Deed Notice for Historic Fill material at the site? ☐ Yes ☒ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☐ Yes ☐ No

10. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? ☐ Yes ☐ No ☒ N/A

    If "No," attach a completed CEA/WRA Fact Sheet Form to this application.

11. Has the Deed Notice restricted area been accurately mapped on NJ-GeoWeb? ☐ Yes ☒ No

    If "No", then submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent: _____

SECTION G. FINANCIAL ASSURANCE

1. Does the Remedial Action/Deed Notice include an engineering control? ☒ Yes ☐ No

   If "No," proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☒ No

   If "Yes," check the exemption(s) that applies:

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☒ No

   If "Yes," and the association is identified in Section E of this Permit Application, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ 7,900,000.00

5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☒ Yes ☐ No

   If "Yes," have all of the following criteria been met? ☒ Yes ☐ No

   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____

6. Identify the full amount established as a Financial Assurance: $ 46,915,000.00
   Attach a completed Remediation Cost Review and RFS/FA Form.

7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☒ Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: MFUG Union Bank
   First Name of Contact: Customer Service Last Name of Contact: RE: S315125M
   Mailing Address: 1980 Saturn Street, VO2-906
   City/Town: Monterey Park State: CA Zip Code: 91755
   Email Address: Not Applicable
   Phone Number: (800) 858-9120 Ext: _____ Fax: (323) 720-2773

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

SECTION H. ENGINEERING CONTROL

1. Current Land Use for the Engineering Controlled Area *(check all that apply)*

☐ Industrial	☐ Park or Recreational Use	☐ Child Care Center
☐ Residential	☐ Agricultural	☐ Hospital
☐ Commercial	☐ Road/Right of Way	☒ Vacant
☐ Government Facility	☐ School	☐ Other: _____

2. If school, childcare, or residential was checked above, was a presumptive remedy implemented pursuant to N.J.A.C. 7:26E-5.3? ..... ☐ Yes ☐ No ☒ N/A

   If "No," when was the remedy approved by the NJDEP? _____

3. Date Engineering Control(s) was installed: 07/13/2010

4. Identify below the materials used for the engineering control(s).

Area	Engineering Control Description	Thickness	Units
Perimeter Pool	Soil	4	Feet
	Asphalt Cap	6	Inches

*Other, describe:

5. In the following table, please list all contaminants that require the use of a Deed Notice/engineering control(s) (attach additional pages if needed). *Please do not attach tables from reports.*

Contaminant	Concentration (mg/kg)	Depth (feet)	Residential Direct Contact Soil Remediation Standard	Non-Residential Direct Contact Soil Remediation Standard
Hexavalent Chromium	47.4	4	20 mg/kg*	20 mg/kg*
*Per 2007 Chromium Policy				

SECTION I. RECEPTOR EVALUATION SUMMARY

1. Have any of the following been identified within 200 feet of the site boundary?
   Check all that apply.

   ☐ Residences
   ☐ Potable wells
   ☐ Public and private schools (K-12)
   ☐ Child care facilities
   ☐ Public parks and playgrounds
   ☒ Surface water
   ☐ Tier 1 Well-head protection areas
   ☐ Ecological receptor (e.g., wetlands, pinelands) Specify: _____

2. Have any of these receptors been impacted?..... ☐ Yes ☒ No

   If "Yes," date of Receptor Control: _____ Date of IEC Contaminant Source Control: _____

3. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☒ No

   If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

   ☐ Subsurface Depressurization System
   ☐ Subsurface Ventilation System
   ☐ Soil Vapor Extraction System
   ☐ HVAC Positive Pressure
   ☐ Other (specify): _____

   Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. OTHER REMEDIAL ACTION PERMITS

Are other Remedial Action Permits also being applied for or already obtained?..... ☒ Yes ☐ No

If "Yes," please list the Permit Type, Permit Number, and Effective Date for each Remedial Action Permit obtained or the type of Remedial Action Permit(s) being applied for.

Groundwater RAP for Chromium

SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Con

SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: Honeywell International Inc.

Representative First Name: William Representative Last Name: Hague

Title: Global Director, Remediation Design and Construction

Phone Number: (973) 455-2175 Ext: Fax:

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: NJ Zip Code: 07950

Email Address: William.Hague@Honeywell.com

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:

Signature: William J. Hague Date: 12/5/2017 | 11:20:31 AM EST

Name/Title: William Hague/Global Director, Remediation Design and Co

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

City/Town: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM A
Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ..... ☐ Yes ☐ No
   If "No," proceed to the next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No
   If "Yes," check the exemption(s) that applies:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: ..... $ _____
4. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ..... ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ..... ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS ..... $ _____
5. Identify the full amount established as a Financial Assurance: ..... $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
6. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit
7. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____
8. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM A

ADDENDUM TO SECTION K. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

DocuSign Envelope ID: CAA7599C-F344-4A79-B89F-E448A595522A

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Phone Number: _____ Ext: _____ Fax: _____

Title: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

☐ Primary Responsibility for Permit Compliance

1. Does the Remedial Action/Deed Notice include an engineering control? ☐ Yes ☐ No
   If "No," proceed to next section.
2. Are you exempt from establishing financial assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No
   If "Yes," check the exemption that applies, and then proceed to the next section:
   - ☐ Government entity
   - ☐ A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
   - ☐ A person that conducted remediation at their primary or secondary residence
   - ☐ Owner or operator of a child care center
   - ☐ Public school or private school
   - ☐ Owner or operator of a small business responsible for conducting remediation at the location of the business
3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No
   If "Yes," attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.
4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: $ _____
5. Are you using an existing Remediation Funding Source (RFS) mechanism for the site as the Financial Assurance? ☐ Yes ☐ No
   If "Yes," have <u>all</u> of the following criteria been met? ☐ Yes ☐ No
   a. There are no remaining areas of concern at the site that need additional remediation (i.e., the LSRP will be issuing a full site Remedial Action Outcome as a result of this permit issuance);
   b. The amount of funds in the RFS equals the amount of funds required to be posted for Financial Assurance; and
   c. The RFS is not in the form of a self-guarantee.

   Identify the full amount of the current RFS $ _____
6. Identify the full amount established as a Financial Assurance: $ _____
   Attach a completed Remediation Cost Review and RFS/FA Form.
7. What is the Financial Assurance Mechanism? *(check all that apply)*
   ☐ Remediation Trust Fund ☐ Line of Credit ☐ Loan or Grant
   ☐ Environmental Insurance Policy ☐ Letter of Credit

ADDENDUM B

8. Contact information at the financial institution for the Financial Assurance:

   Financial Institution: _____

   First Name of Contact: _____ Last Name of Contact: _____

   Mailing Address: _____

   City/Town: _____ State: _____ Zip Code: _____

   Email Address: _____

   Phone Number: _____ Ext: _____ Fax: _____

9. Attach the original Financial Assurance mechanism or a copy of the RFS mechanism if using an existing RFS mechanism as the Financial Assurance.

ADDENDUM TO SECTION L. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

APPENDIX B

EXAMPLE FORMS

B-1: Annual/Quarterly Inspection Form and Deed Notice Checklist
B-2: Subsurface Work Authorization Form/Dig Permit
B-3: Methane Monitoring Form
B-4: Groundwater Elevation Monitoring Form

APPENDIX B-1

ANNUAL/QUARTERLY INSPECTION FORM
AND
SA-6 SITE DEED NOTICE INSPECTION LIST

Site Inspection Form

I. Site Information	
Site Name	
Date of Inspection:	
NJDEP Site Number:	
Deed Notice/Site Area of Inspection:	
Block/Lot Numbers:	
Type of Inspection:	**Quarterly Inspection:** ☐ **Annual Inspection:** ☐
Inspected By:	

II. General Information	
Site Redevelopment Status:	
Number of Persons Working at Site:	
Owner and Address:	a.
Tenants Name(s) and Address:	a.
Current Site Use: **(Plant, Warehouse, Vacant, etc.):**	
Summary of Previous Inspections:	

III. On-Site Documents & Records

Description	Readily available	Up to date	N/A	Remarks
O&M Documents:				
O&M Manual-GWTP				
As-built drawings				
Long Term Monitoring Plan (LTMP) Documents				
Maintenance logs				
Site Health & Safety Plan:				
Contingency Plan/Emergency response plan				
O&M and OSHA Training Records:				
O&M and OSHA Training Records				
Permits and Service Agreements:				
Description	**Readily available**	**Up to date**	**N/A**	**Remarks**
TWA Permit				
PVSC Discharge Permit				
Dig Permits Completed/Submitted during Quarter (List and Attach if Not Previously Provided):				
Intrusive Excavation Plans Completed/Submitted during Quarter (List and Attach if Not Previously Provided):				
Deed Notice Disturbance Reports Completed/Submitted during Quarter (List):				
Post Work Documentation Reports Completed/Submitted during Quarter (List, include date submitted to Special Master/Parties):				

Description	Readily available	Up to date	N/A	Remarks
Other:				

IV. Institutional Controls				
Status of Deed Notice:				
Description	**Yes**	**No**	**N/A**	**Remarks**
Site Use meets permitted use:				
Site conditions imply Institutional Controls not properly implemented				
Site conditions imply Institutional Controls not being fully enforced				
Biennial Certification Reports up-to-date				
Violations have been reported				
Previous suggested correction made				
Other problems or suggestions:				

V. Site Conditions

	Description	Sub-Area	Inspection Performed	Attention Required	Recommendations, Comments, Field Observations and Measurements, Reference Photo #
Vegetative cap area/Cover Area/Asphalt Cover					
a.	Surface Grade Visual Inspections (Visually-observed depressions, ponding water, loss of positive drainage)	Overall Observations			
b.	Differential Settlement Visual Inspection (subsidence of surface features)	Overall Observations			
c.	Disturbance Visual Inspection (root barrier, warning layer, or hardscape engineering control exposed)	Overall Observations			
d.	Burrowing Animals Visual Inspection	Overall Observations			
e.	Vegetative Cover Visual Inspection (Damage or Impairment of vegetative cover, integrity, and health)	Overall Observations			
f.	Vegetative Cover Visual Inspection (Extent of degradation or disturbance including dimensions and depth of erosion)	Overall Observations			

Description		Sub-Area	Inspection Performed	Attention Required	Recommendations, Comments, Field Observations and Measurements, Reference Photo #

VI. Overall Observations on Remedy Implementation & Site Conditions

SA-6 Site-Deed Notice Inspection List

I. SA-6 South Inspections			
Deed Notice #/Name	**Date Inspected**	**Inspector**	**Evidence of Disturbance (Yes/No)[1]**
1 – Open Space AOC			
2 – Route 440 Deferred Area			
3 – Site 163			
4 – Tract 2 Site 073 Deferred Area and Tract 1 SA-7			
II. SA-6 North Inspections			
Deed Notice #/Name	**Date Inspected**	**Inspector**	**Evidence of Disturbance (Yes/No)[1]**
5 – Open Space Area			
6 – Route 440 Deferred Area			
7 – TA-10 Deferred Area			
9 – Route 440 Deferred Area			
10 – TA-7 Deferred Area			

[1] If yes, fill out the full inspection form for the area.

APPENDIX B-2

SUBSURFACE WORK AUTHORIZATION FORM DIG PERMIT

SUBSURFACE WORK AUTHORIZATION FORM / DIGGING AND EXCAVATION PERMIT

SA-6 Site

Prior to Performing Work (Completed by Contractor)					
Project Name:					
Request Date:		**Est. Start Date:**		**Est. Duration:**	
General Work Description:					
Depth of Digging/Excavation:					
Intrusive Excavation Plan Required? (Attach)	Yes ☐ No ☐ PE Signature Required:				
Contractor Performing Work:					
Contractor Contact:			**Phone No.:**		
Honeywell Project Contact:			**Phone No.:**		
Location of Work:					

Prior to Performing Work (Completed by Honeywell)

Open Space Area Work[1] Yes ☐ No ☐

- ☐ Contact Honeywell to review proposed work activity.
- ☐ Provide drawings showing proposed subsurface work or design drawings (if applicable).
- ☐ Schedule project meeting to review proposed work and coordination with Honeywell.

Yes ☐ **No** ☐ Does proposed work involve disturbance to engineering controls? If yes, review deed notice requirements for disturbances, restoration, notification, reporting.

Yes ☐ **No** ☐ Does proposed work comply with Open Space Design Standard (OSDS)?

Yes ☐ **No** ☐ NJDEP notified per Deed Notice. Date of notification: _____

Yes ☐ **No** ☐ Plaintiffs and Owner/Tenants notified if applicable per Consent Decree requirements. Date of notification: _____

Field Work Phase (Prior to Digging) (Completed by Honeywell)

1. Honeywell field oversight or contractor coordination required?
   - **Yes** ☐ - coordinate with Honeywell representative.
   - **No** ☐ - proceed with work/no further input from Honeywell.
2. Will the project involve excavation and offsite disposal of chromium soils?
   - **Yes** ☐ - coordinate with Honeywell representative.
   - **No** ☐ - proceed with work/no further input from Honeywell.

HONEYWELL AND OWNER APPROVAL REQUIRED TO PROCEED WITH WORK.

Comments (Completed by Contractor, Owner and Honeywell)

Contractor Signature:		**Date:**	
Owner Signature:		**Date:**	
Honeywell Signature:		**Date:**	

COMPLETE PAGES 1 AND 2 BEFORE FIELD WORK COMMENCES

SUBSURFACE WORK AUTHORIZATION FORM / DIGGING AND EXCAVATION PERMIT

SA-6 Site

COMPLETE THIS SECTION ONLY IF THERE ARE DESIGN OR FIELD CHANGES

Field Work Changes (Completed by Contractor, Owner and Honeywell)
IN THE EVENT OF ANY DESIGN OR FIELD CHANGES DURING WORK IMPLEMENTATION, PROVIDE A BRIEF DESCRIPTION OF DESIGN AND/OR FIELD CHANGE AND OBTAIN HONEYWELL AND OWNER APPROVAL TO PROCEED WITH WORK.
Describe Changed Conditions (Completed by Contractor, Owner and Honeywell)

Contractor Signature:		**Date:**	
Owner Signature:		**Date:**	
Honeywell Signature:		**Date:**	

COMPLETE THE SECTION BELOW AFTER WORK IS COMPLETE

Post-Work Phase/Closeout Requirements – Open Space Area (Completed by Contractor, Owner and Honeywell)			
Actual Start Date:		**Actual Finish Date:**	

- ☐ 1. Compile representative photographs showing work progress, restoration of engineering controls.
- ☐ 2. Prepare as-built figure or other appropriate drawing(s) showing work area, relevant site features.
- ☐ 3. Prepare and submit deed notice disturbance report.

Post-Work Phase/Closeout Requirements – Residential Area (Completed by Owner and Honeywell)

- ☐ Prepare follow-up report and/or figure if needed to document work activities.

HONEYWELL AND OWNER SIGN-OFF REQUIRED AT COMPLETION OF WORK.

Comments (Completed by Contractor, Owner and Honeywell)

Contractor Signature:		**Date:**	
Owner Signature:		**Date:**	
Honeywell Signature:		**Date:**	

Notes:

(1) Open Space Area Work:

- Field verification of the exact location of permanent remedy components including the warning layer and liner is required in all intrusive activities within the commercial area.
- Mechanical digging is restricted within the Open Space Area. Excavation greater than 12 inches below existing grade or within 12 inches of cap materials (i.e., at or below warning layer) must be performed using soft dig techniques or other method approved by Honeywell.
- Driving of fence posts or use of drilling/Geoprobe is also restricted within the area and shall not be initiated unless the approach is approved by Honeywell.

APPENDIX B-3

METHANE MONITORING RECORDING FORM

SA-6 LTMP Methane Monitoring Form

I. Site Information	
Site Name:	
Date of Inspection:	
Weather (include Temp ºF):	
Inspected By:	

Vent Number	Time	Methane Reading %	Methane % LEL	Velocity ft/min	Barometric Pressure (in Hg)

Notes:
ºF – degrees Fahrenheit
% of LEL – percentage of lower explosion limit
ft/min – feet per minute
in Hg – inches of mercury

APPENDIX B-4

GROUNDWATER ELEVATION MONITORING FORM

SA-6 Groundwater Elevation Monitoring Form

VI. Groundwater Monitoring Well Records
Groundwater Elevation Measurement: Date:_____ Measured By: _____

Well ID	Time	Depth from TOC to Water (feet)	Comments: (Condition, secured, etc)

Notes:
TOC = top of interior casing/riser pipe

APPENDIX C

NJDEP REMEDIAL ACTION PROTECTIVENESS/BIENNIAL CERTIFICATION FORM

New Jersey Department of Environmental Protection
Site Remediation Program

REMEDIAL ACTION PROTECTIVENESS / BIENNIAL CERTIFICATION FORM – SOIL

☐ LSRP ☐ Subsurface Evaluator (UHOT)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: _____

List all AKAs: _____

Street Address: _____

Municipality: _____ (Township, Borough or City)

County: _____ Zip Code: _____

Program Interest (PI) Number(s): _____

Case Tracking Number(s) _____

Municipal Block and Lot Numbers of the entire Site:

_____

SECTION B. FEES

☐ Soil Remedial Action Protectiveness/Biennial Certification for a Remedial Action Permit (No fee)

☐ Soil Remedial Action Protectiveness/Biennial Certification Non-Remedial Action Permit $375.00

SECTION C. FEE BILLING CONTACT PERSON

☐ Changed Since Last Submission Effective Date of Change: _____

Business Name: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION D. CURRENT OWNER OF THE SITE

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section K), check box and proceed to the next section.

Full Legal Name of the Owner: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION E. CURRENT OPERATOR OF THE SITE

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section K), check box and proceed to the next section.

Full Legal Name of the Operator: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION F. CURRENT LESSEE OF THE SITE

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section K), check box and proceed to the next section.

Full Legal Name of the Lessee: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION G. DEED NOTICE/DECLARATION OF ENVRONMENTAL RESTRICTION (DER) INFORMATION

1. Provide the filing date of each Deed Notice/DER: _____

2. For each Deed Notice/DER provide the Book and Page numbers in which the Deed Notice/DER was filed in the county recording office:

   Book and Page Numbers: _____

3. Since the Deed Notice/DER was filed or the last submittal of the Soil Remedial Action Protectiveness/Biennial Certification Form, whichever is most recent, did the Municipal Block and Lot number(s) of the Deed Notice/DER change? ☐ Yes ☐ No

   If "Yes," attach a current Tax Map of the property and list the former and new Municipal Block and Lot numbers of the Deed Notice/DER below:

   Former Municipal Block and Lot Number(s): _____

   New Municipal Block and Lot Number(s): _____

4. Is this form being submitted pursuant to a Soil Remedial Action Permit? ☐ Yes ☐ No
   If "No", submit a completed Soil Remedial Action Permit Application with this form.

5. Did you provide hard copies of this form to the municipal and county clerks for each municipality and county in which the site is located; the local, county and regional health department for each municipality and county in which the site is located; each current owner of the site; each current operator of the site; the Pinelands Commission as applicable; and the Highlands Commission as applicable? ☐ Yes ☐ No

6. Did you provide to NJDEP copies of this form in paper and electronically in Adobe PDF format? ☐ Yes ☐ No

7. Is this Deed Notice/DER for Historic Fill material at the site? ☐ Yes ☐ No

   If "Yes," is the Historic Fill material impacting the ground water at the site? ☐ Yes ☐ No

8. If Historic Fill material is impacting the ground water, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP? ..... ☐ Yes ☐ No ☐ N/A
If "No," attach a completed CEA/WRA Fact Sheet Form to this form.

9. Have you evaluated all relevant Soil Remediation Standards and guidance related to soil that have been modified subsequent to the filing of the Deed Notice/DER or the last submittal of the Soil Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent? ..... ☐ Yes ☐ No

10. Has the Deed Notice/DER restricted area been accurately mapped on NJ-GeoWeb? ..... ☐ Yes ☐ No
If "No", then submit a GIS compatible map of the Deed Notice/DER restricted area by email to srpgis_dn@dep.state.nj.us.

SECTION H. LAND USE, CHANGES, AND DISTURBANCES

1. Site Use(s) at the time the Deed Notice/DER was Filed *(check all that apply)*

☐ Industrial	☐ Child Care Facility	☐ Park or Recreational Use	☐ Other: _____
☐ Residential	☐ Hospital	☐ Vacant	
☐ Commercial	☐ Landfill	☐ Government Facility	
☐ School	☐ Agricultural	☐ Road/Right of Way	

2. Current Site Use(s) *(check all that apply)*

☐ Industrial	☐ Child Care Facility	☐ Park or Recreational Use	☐ Other: _____
☐ Residential	☐ Hospital	☐ Vacant	
☐ Commercial	☐ Landfill	☐ Government Facility	
☐ School	☐ Agricultural	☐ Road/Right of Way	

3. Intended Future Site Use(s), If Known *(check all that apply)*

☐ Industrial	☐ Child Care Facility	☐ Park or Recreational Use	☐ Future site use unknown
☐ Residential	☐ Hospital	☐ Vacant	☐ Other: _____
☐ Commercial	☐ Landfill	☐ Government Facility	
☐ School	☐ Agricultural	☐ Road/Right of Way	

4. Describe the current site operations and the status of any planned future land use(s) for the site, particularly if the proposed use is residential, school, or licensed child care facility:

5. Since the Deed Notice/DER was filed or the last submittal of the Soil Remedial Action Protectiveness/Biennial Certification Form, whichever is most recent, has the site use changed to residential, school, or licensed child care facility? ..... ☐ Yes ☐ No

If "Yes," indicate the type of remedy used:

☐ Presumptive Remedy pursuant to the NJDEP's Presumptive Remedies for Soil Contamination at Schools, Child Care Centers, and Residences. [N.J.A.C. 7:26E- 5.3]

Briefly describe the presumptive remedy:

☐ Alternate Remedy pre-approved by the NJDEP. Attach a copy of the NJDEP's pre-approval letter.

☐ Unrestricted Use Remedy

6. Has there been a zoning change or is a zoning change pending? ..... ☐ Yes ☐ No

If "Yes," briefly describe the zoning change or the pending zoning change:

7. Have you conducted periodic inspections pursuant to N.J.A.C. 7:26C-7.8(b)2 to determine if disturbances of the Remedial Action/engineering control(s) have taken place since the Deed Notice/DER was filed or the last submittal of the Soil Remedial Action Protectiveness/ Biennial Certification Form, whichever is more recent? ☐ Yes ☐ No

   If "Yes," attach all inspection reports/logs that have been completed since the last submittal of the Soil Remedial Action Protectiveness/Biennial Certification Form.

8. Have disturbances of the Remedial Action/engineering control(s) taken place since the Deed Notice/DER was filed or the last submittal of the Soil Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent? ☐ Yes ☐ No

   If "Yes," :

   a) Provide the following information:

   Date of Disturbance: _____ Duration of Disturbance: Months _____ Days _____

   Date NJDEP Hotline contacted: _____ Hotline Incident Number assigned: _____

   Describe the disturbance:

   b) Was the Remedial Action/engineering control(s) restored to the conditions stated in the Deed Notice/DER? ☐ Yes ☐ No

   If "No," briefly describe the reasons why:

9. Check the appropriate box(es) to indicate if any of the following have rendered the Remedial Action/engineering control(s) **not** protective of public health, safety and of the environment (check all that apply):

   ☐ An evaluation all relevant Soil Remediation Standards and guidance related to soil that have been modified subsequent to the filing of the Deed Notice/DER or the last submittal of the Soil Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent;

   ☐ A change in property use since the Deed Notice/DER was filed;

   ☐ A zoning change or the pending zoning change;

   ☐ Land disturbance(s) of the engineering control(s).

   If any of the boxes above are checked the Person Responsible for Monitoring the Protectiveness of the Remedial Action (the permittee/co-permittee) shall modify the Remedial Action, revise the Deed Notice (i.e., submit a Deed Notice Termination Document for the existing Deed Notice/DER and a new Deed Notice for the NJDEP's approval/signature with supporting documentation (i.e., a Remedial Action Report)), and apply for a modification of the Soil Remedial Action Permit as necessary pursuant to N.J.A.C. 7:26C-7.8(d)2.

SECTION I. VAPOR INTRUSION

1. Are volatile organic compounds included in the Deed Notice/DER? ☐ Yes ☐ No
   If "Yes," complete this section, otherwise proceed to the next section
2. Were there any changes in property use that increased the risk of vapor intrusion? ☐ Yes ☐ No
3. Did you investigate the vapor intrusion pathway? ☐ Yes ☐ No

   If "Yes,":

   a) Attach a scaled site map indicating the location of all structures investigated for vapor intrusion.

   b) Did the investigation indicate that an Immediate Environmental Concern (IEC) condition exists? ☐ Yes ☐ No

   If "Yes," provide the date of IEC Contaminant Source Control Report: _____

c) Did the investigation indicate that a Vapor Concern (VC) condition exists? ☐ Yes ☐ No

If "Yes," provide the date of VC Mitigation Response Action Report: _____

d) Was public notification conducted to notify all applicable parties of the increased vapor intrusion risk? ☐ Yes ☐ No ☐ N/A

4. Provide a written explanation of either how the vapor intrusion pathway was investigated *or* the reasons for not evaluating the vapor intrusion pathway.

5. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination? ☐ Yes ☐ No

If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

- ☐ Subsurface Depressurization System
- ☐ Subsurface Ventilation System
- ☐ Soil Vapor Extraction System
- ☐ HVAC Positive Pressure
- ☐ Other (specify): _____

Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION J. FINANCIAL ASSURANCE

1. Does the Remedial Action/ Deed Notice/DER include an engineering control? ☐ Yes ☐ No

If "No," proceed to the next section.

2. Are **both** the "Person Responsible for Conducting the Remediation" and the current property owner exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ☐ Yes ☐ No

If "Yes," check the exemptions that apply, and then proceed to the next section.

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

If "No," - *If either entity is not exempt, then establishment of the full amount of the Financial Assurance is required by the non-exempt permittee(s)- attach a completed Remediation Cost Review and RFS/FA Form.*

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? ☐ Yes ☐ No

If "Yes," and the association is identified in Section D of this form, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

SECTION K. PERSON RESPONSIBLE FOR MONITORING THE PROTECTIVENESS OF THE REMEDIAL ACTION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for monitoring the protectiveness of the Remedial Action: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

Relationship to the Site (check all that apply)

- ☐ I am the current Owner
- ☐ I am the current Operator
- ☐ I am the current Lessee
- ☐ I am the Person who conducted the remediation
- ☐ I am the Permittee
- ☐ I am the Co-Permittee

This certification shall be signed by the person responsible for submitting the Soil Remedial Action Protectiveness/Biennial Certification Form in accordance with the Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

I also understand that engineering and institutional controls must be evaluated and maintained to ensure they remain protective of public health and safety and the environment.

Based upon the information provided herein, I hereby certify that the remedial action(s) implemented at the site that includes engineering and/or institutional controls remains protective of public health and safety and the environment.

Signature: _____ Date: _____

Name/Title: _____

SECTION L. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with SRRA Section 16 d. and Section 30 b.2.

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

No Changes To Contact Information Since Last Submission ☐

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION L. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

Municipality: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address: _____

Signature: _____ Date: _____

No Changes To Contact Information Since Last Submission ☐

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

APPENDIX C

REMEDIAL ACTION PROTECTIVENESS BIENNIAL CERTIFICATION FORM – GROUNDWATER

New Jersey Department of Environmental Protection
Site Remediation Program

REMEDIAL ACTION PROTECTIVENESS / BIENNIAL CERTIFICATION FORM – GROUND WATER

☐ LSRP ☐ Subsurface Evaluator (UHOT)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: _____

List all AKAs: _____

Street Address: _____

Municipality: _____ (Township, Borough or City)

County: _____ Zip Code: _____

Program Interest (PI) Number(s): _____

Case Tracking Number(s): _____

Municipal Block and Lot Numbers of the entire Site:

_____

SECTION B. FEES

☐ Ground Water Remedial Action Protectiveness/Biennial Certification for a Remedial Action Permit (No fee)
☐ Ground Water Remedial Action Protectiveness/Biennial Certification - Non-Remedial Action Permit $375.00

SECTION C. FEE BILLING CONTACT PERSON

☐ Changed Since Last Submission Effective Date of Change: _____

Business Name: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION D. CURRENT OWNER OF THE SITE

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section L), check box and proceed to next section.

Full Legal Name of the Owner: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION E. CURRENT OPERATOR OF THE SITE

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section L), check box and proceed to the next section.

Full Legal Name of the Operator: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION F. CURRENT LESSEE OF THE SITE

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section L), check box and proceed to the next section.

Full Legal Name of the Lessee: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

SECTION G. REMEDIAL ACTION AND CEA/WRA INFORMATION

1. Type of Ground Water Remediation

a. ☐ **Monitored Natural Attenuation**

1) Has ground water sampling been conducted at the site since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/ Biennial Certification Form, whichever is more recent? ☐ Yes ☐ No

If "Yes," attach a summary of the ground water sampling results to this form, including all historical ground water sampling data for the site.

2) Do the results of the ground water sampling demonstrate that contaminant concentrations have decreased to or below the applicable Ground Water Quality Standards for two consecutive sampling events accounting for seasonal fluctuation? ☐ Yes ☐ No ☐ N/A

If "Yes", then submit a Ground Water Remedial Action Permit Application for a termination or a request for a CEA/WRA lift for sites that do not currently have a Ground Water Remedial Action Permit and skip the rest of this section.

3) Do the results of the ground water sampling indicate that there is a decreasing trend of contaminant concentrations in the ground water? ☐ Yes ☐ No

If "No," is the ground water plume considered stable? ☐ Yes ☐ No

If "No," then the permittee/co-permittee shall modify the Remedial Action and apply for a modification of the Ground Water Remedial Action Permit as necessary pursuant to N.J.A.C. 7:26C-7.9(d)2.

4) Is the ground water plume reaching the sentinel wells? ☐ Yes ☐ No

If "Yes," then the permittee/co-permittee shall complete additional delineation of the ground water contamination and modify the Remedial Action and apply for a modification of the Ground Water Remedial Action Permit as necessary pursuant to N.J.A.C. 7:26C-7.9(d)2.

5) Has all soil contamination in the unsaturated zone been remediated to the applicable numeric Soil Remediation Standard for all area(s) of concern associated with this CEA? ☐ Yes ☐ No ☐ N/A

6) Has all free and/or residual product in the unsaturated and saturated zones, as determined pursuant to N.J.A.C. 7:26E-5.1(e), been treated or removed for all area(s) of concern associated with this CEA? ☐ Yes ☐ No ☐ N/A

b. ☐ **Active Remediation**

Provide the type of remediation: _____

1) Has ground water sampling been conducted at the site since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/ Biennial Certification Form, whichever is more recent? ☐ Yes ☐ No

If "Yes", Attach a summary of the ground water sampling results to this form, including all historical ground water sampling data for the site.

2) Do the results of the ground water sampling demonstrate that contaminant concentrations have decreased to or below the applicable Ground Water Quality Standards for two consecutive sampling events accounting for seasonal fluctuation? ☐ Yes ☐ No ☐ N/A

If "Yes", then submit a Ground Water Remedial Action Permit Application for a termination or a request for a CEA/WRA lift for sites that do not currently have a Ground Water Remedial Action Permit and skip the rest of this section.

3) Do the results of the ground water sampling indicate that there is a decreasing trend of contaminant concentrations in the ground water? ☐ Yes ☐ No

If "No", is the ground water plume considered stable? ☐ Yes ☐ No

If "No," then the permittee/co-permittee shall modify the Remedial Action and apply for a modification of the Ground Water Remedial Action Permit as necessary pursuant to N.J.A.C. 7:26C-7.9(d)2.

4) Is the ground water plume reaching the sentinel wells? ☐ Yes ☐ No

If "Yes," then the permittee/co-permittee shall complete additional delineation of the ground water contamination and modify the Remedial Action and apply for a modification of the Ground Water Remedial Action Permit as necessary pursuant to N.J.A.C. 7:26C-7.9(d)2.

5) Is the ground water plume migrating horizontally or vertically into an uncontaminated aquifer zone below and adjacent to the contaminant plume? ☐ Yes ☐ No

6) Is the ground water remedial action performing as designed? ☐ Yes ☐ No

If "No", provide an explanation:

7) Has the active ground water treatment system been shutdown for longer than 24-hours since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent? ☐ Yes ☐ No ☐ N/A

If "Yes", provide an explanation for the shutdown, including the duration of the shutdown and whether or not the shutdown rendered the Remedial Action not protective of public health, safety and of the environment:

8) What is the expected duration of the active remediation? _____ (whole years)

2. Has a Technical Impracticability (TI) Determination been submitted? ☐ Yes ☐ No

   If "Yes," please provide the date of the TI Determination: _____
   And attach a summary of the TI Determination and a 5-year evaluation if applicable.

3. Check the Ground Water **Monitoring Schedule** that is currently being applied for the site:

   ☐ Monthly ☐ Annual
   ☐ Quarterly ☐ Biennial
   ☐ Semi Annual ☐ Other: _____

4. CEA/WRA Specific Information:

   Date CEA/WRA was Established: _____ Expected Expiration Date of the CEA/WRA: _____

   Name of the Impacted Aquifer: _____

   Ground Water Classification: _____ Ground Water Flow Direction: _____

   Horizontal Extent of CEA/WRA: _____ (acres) Vertical Depth of the CEA/WRA: _____ (feet below ground surface)

   Attach a scaled site map with the extent of the CEA/WRA on it.

5. Since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent, did the Municipal Block and Lot number(s) of the CEA/WRA change? ☐ Yes ☐ No

   If "Yes," attach a current Tax Map of the property and list the former and new Municipal Block and Lot numbers of the CEA/WRA below:

   Former Municipal Block and Lot Number(s): _____

   New Municipal Block and Lot Number(s): _____

6. Is this form being submitted pursuant to a Ground Water Remedial Action Permit? ☐ Yes ☐ No
   If 'No', submit a completed Ground Water Remedial Action Permit Application with this form.

7. Did you provide hard copies of this form to the municipal and county clerks for each municipality and county in which the site is located; the local, county and regional health department for each municipality and county in which the site is located; each current owner of the site; each current operator of the site; each current property owner within the footprint of the CEA/WRA and the Pinelands Commission, as applicable, and the Highlands Commission as applicable? ☐ Yes ☐ No

8. Did you provide to NJDEP copies of this form in paper and electronically on a CD (in Adobe PDF format)? ☐ Yes ☐ No

9. Have monitoring wells associated with the CEA/WRA been damaged, vandalized, repaired, replaced, or decommissioned? ☐ Yes ☐ No

   If "Yes," attach a description of what occurred and, if applicable, a copy of the Well Abandonment Report for each well that has been damaged, vandalized, repaired, replaced, or decommissioned, and the construction specifications for each new/replacement well.

   Attach the maintenance and evaluation logs for all the monitoring wells associated with the CEA/WRA.

10. Have additional monitoring wells been installed since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent? ☐ Yes ☐ No

    If "Yes", attach the construction specifications for each new well.

11. Has the CEA/WRA been revised for any reason that did not require conducting additional remediation? ☐ Yes ☐ No

    If "Yes," attach a new CEA/WRA Fact Sheet form with all Exhibits and indicate which major CEA component(s) have been revised:

    ☐ Contaminant List ☐ Boundaries ☐ Projected Term of CEA/WRA

12. Have you evaluated the Ground Water Quality Standards and other regulations and guidance relevant to the CEA/WRA and any resulting vapor intrusion risk, that have been modified subsequent to the establishment of the CEA/WRA or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form and report, whichever is more recent? ..... ☐ Yes ☐ No

13. Has the CEA/WRA been accurately mapped on NJ-GeoWeb? ..... ☐ Yes ☐ No

If 'No', then submit a GIS compatible map of the CEA/WRA to srpgis_cea@dep.state.nj.us.

SECTION H. LAND USE, CHANGES, AND DISTURBANCES

1. Site Use(s) at the time the CEA/WRA was established *(check all that apply)*

☐ Industrial	☐ Child Care Facility	☐ Park or Recreational Use	☐ Other: _____
☐ Residential	☐ Hospital	☐ Vacant	
☐ Commercial	☐ Landfill	☐ Government Facility	
☐ School	☐ Agricultural	☐ Road/Right of Way	

2. Current Site Use(s) *(check all that apply)*

☐ Industrial	☐ Child Care Facility	☐ Park or Recreational Use	☐ Other: _____
☐ Residential	☐ Hospital	☐ Vacant	
☐ Commercial	☐ Landfill	☐ Government Facility	
☐ School	☐ Agricultural	☐ Road/Right of Way	

3. Intended Future Site Use(s), If Known *(check all that apply)*

☐ Industrial	☐ Child Care Facility	☐ Park or Recreational Use	☐ Future site use unknown
☐ Residential	☐ Hospital	☐ Vacant	☐ Other: _____
☐ Commercial	☐ Landfill	☐ Government Facility	
☐ School	☐ Agricultural	☐ Road/Right of Way	

4. Describe the current site operations and the status of any planned future land use(s) for the site, particularly if the proposed use is residential, school, or licensed child care facility:

5. Since time the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent, has the site use changed to residential, school, or licensed child care facility? ..... ☐ Yes ☐ No

If "Yes,": indicate the type of remedy used:

☐ Presumptive Remedy pursuant to the NJDEP's Presumptive Remedies for Soil Contamination at Schools, Child Care Centers, and Residences. [N.J.A.C. 7:26E- 5.3]

Briefly describe presumptive remedy:

☐ Alternate Remedy pre-approved by the NJDEP. Attach a copy of the NJDEP's pre-approval letter.

☐ Unrestricted Use Remedy

6. Have disturbances of the land, such as installation of a detention basin, taken place? ..... ☐ Yes ☐ No

If "Yes,":

a) Indicate the type of and the approximate date of the disturbance(s): _____

b) Did these disturbances result in a contaminated discharge to surface water that rendered the Remedial Action not protective of public health, safety and of the environment? ..... ☐ Yes ☐ No

c) Did these disturbances intercept the water table within the CEA/WRA area in such a way that ground water sampling was needed to determine if the ground water contaminant plume could discharge to surface water? ☐ Yes ☐ No

If "Yes," does the ground water meet the more stringent of either the New Jersey Surface Water Quality Criteria, N.J.A.C. 7:9B or the Federal Surface Water Quality Criteria, CFR Part 131? ☐ Yes ☐ No

SECTION I. CURRENT OR PLANNED WATER USE WITHIN THE WELL SEARCH AREA

1. Water use within the CEA/WRA when CEA/WRA was established *(check all that apply)*

- ☐ Potable
- ☐ Well Head Protection Area
  - ☐ Tier 1 ☐ Tier 2 ☐ Tier 3
- ☐ Irrigation
- ☐ Industrial
- ☐ Geothermal

2. Current water use within the CEA/WRA Boundaries *(check all that apply)*

- ☐ Potable
- ☐ Well Head Protection Area
  - ☐ Tier 1 ☐ Tier 2 ☐ Tier 3
- ☐ Irrigation
- ☐ Industrial
- ☐ Geothermal

3. Attach the results of the required updated well search to this form, including a scaled map.

4. Since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent, has the water use changed within the well search area? ☐ Yes ☐ No

   If "Yes," briefly describe:

5. Have any changes in water use altered the areal extent and or the duration of the CEA/WRA? ☐ Yes ☐ No

6. Since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent, have any of the following wells been installed within one mile up-gradient, side-gradient, and down-gradient of the CEA/WRA? ☐ Yes ☐ No

   If "Yes," check all that apply:

   ☐ Potable ☐ Industrial ☐ Community Supply Well ☐ Irrigation
   ☐ Geothermal ☐ Production ☐ Non-Community Supply Well

   If you checked one of the above, was it necessary to sample the well pursuant to N.J.A.C. 7:26 E-1.14? ☐ Yes ☐ No

7. Since the CEA/WRA was established or the last submittal of the Ground Water Remedial Action Protectiveness/Biennial Certification Form, whichever is more recent, are there any planned changes in water use for the aquifers in which the CEA/WRA is located? ☐ Yes ☐ No

   Check all the sources that were evaluated to determine planned changes in water use:

   - ☐ Municipal Master Plans
   - ☐ Zoning Plans
   - ☐ Local water purveyor plans and planning data pertaining to the existence of water lines and proposed future installation of water lines, wells or well fields
   - ☐ Local and County ordinances restricting installation of potable wells
   - ☐ Local and County boards of health
   - ☐ Local planning officials

8. Did or will the actual or planned changes reported in items 1-7 above render the Remedial Action that includes the CEA/WRA not protective of public health, safety and of the environment? ☐ Yes ☐ No

   If "Yes," then the permittee/co-permittee shall modify the Remedial Action and apply for a modification of the Ground Water Remedial Action Permit as necessary pursuant to N.J.A.C. 7:26C-7.8(d)2.

SECTION J. VAPOR INTRUSION

1. Are volatile organic compounds included in the CEA/WRA? ☐ Yes ☐ No
   If "Yes," complete this section, otherwise proceed to the next section
2. Based on the most recent data available, do any of the contaminants in the CEA/WRA exceed the current ground water screening levels in the NJDEP's Vapor Intrusion Technical Guidance Document? ☐ Yes ☐ No
3. Was it necessary to re-evaluate the fate and transport of the ground water contaminant plume or the contaminants in the CEA/WRA with regard to vapor intrusion? ☐ Yes ☐ No
4. Were there any changes in property use that increased the risk of vapor intrusion? ☐ Yes ☐ No
5. Did you investigate the vapor intrusion pathway? ☐ Yes ☐ No

   If "Yes,":

   a) Attach a scaled site map indicating the location of all structures investigated for vapor intrusion.

   b) Did the investigation indicate that an Immediate Environmental Concern (IEC) condition exists? ☐ Yes ☐ No

      If "Yes," provide the date of IEC Contaminant Source Control Report: _____

   c) Did the investigation indicate that a Vapor Concern (VC) condition exists? ☐ Yes ☐ No

      If "Yes," provide the date of VC Mitigation Response Action Report: _____

   d) Was public notification conducted to notify all applicable parties of the increased vapor intrusion risk? ☐ Yes ☐ No ☐ N/A

6. Provide a written explanation of either how the vapor intrusion pathway was investigated *or* the reasons for not evaluating the vapor intrusion pathway.

7. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this ground water contamination? ☐ Yes ☐ No

   If "Yes," indicate the type of engineering control that was implemented: *(check all that apply)*

   ☐ Subsurface Depressurization System
   ☐ Subsurface Ventilation System
   ☐ Soil Vapor Extraction System
   ☐ HVAC Positive Pressure
   ☐ Other (specify): _____

   Attach the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) both in paper and electronically (in "MS Word" file format). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION K. FINANCIAL ASSURANCE

1. Does the Remedial Action include an engineering control? ..... ☐ Yes ☐ No

   If "No," proceed to the next section.

2. Are **both** the "Person Responsible for Conducting the Remediation" and the current property owner exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? ..... ☐ Yes ☐ No

   If "Yes," check the exemptions that apply, and then proceed to the next section.

Person Responsible for Conducting the Remediation – Co-Permittee	Current Owner of the Site – Co-Permittee	
☐	☐	Government entity
☐	☐	A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
☐	☐	A person that conducted remediation at their primary or secondary residence
☐	☐	Owner or operator of a child care center
☐	☐	Public school or private school
☐	☐	Owner or operator of a small business responsible for conducting remediation at the location of the business

   If "No," - *If either entity is not exempt, then establishment of the full amount of the Financial Assurance is required by the non-exempt permittee(s) - attach a completed Remediation Cost Review and RFS/FA Form.*

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.?..... ☐ Yes ☐ No

   If "Yes," and the association is identified in Section D of this form, attach a copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site.

SECTION L. PERSON RESPONSIBLE FOR MONITORING THE PROTECTIVENESS OF THE REMEDIAL ACTION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for monitoring the Protectiveness of the Remediation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

Relationship to the Site *(check all that apply)*

- ☐ I am the current Owner
- ☐ I am the current Operator
- ☐ I am the current Lessee
- ☐ I am the Person who conducted the remediation
- ☐ I am the Permittee
- ☐ I am the Co-Permittee

This certification shall be signed by the person responsible for submitting the Ground Water Remedial Action Protectiveness/Biennial Certification Form in accordance with the Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

I also understand that engineering and institutional controls must be evaluated and maintained to ensure they remain protective of public health and safety and the environment.

Based upon the information provided herein, I hereby certify that the remedial action(s) implemented at the site that includes engineering and/or institutional controls remains protective of public health and safety and the environment.

Signature: _____ Date: _____

Name/Title: _____

SECTION M. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION M. SUBSURFACE EVALUATOR INFORMATION AND STATEMENT

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____

Firm: _____ Firm's UST Cert. Number: _____

Firm Address: _____

Municipality: _____ State: _____ Zip Code: _____

Phone Number: _____ Ext: _____ Fax: _____

Email Address: _____

Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

APPENDIX D

RELEVANT PREVIOUS REPORTS

D-1: Open Space Design Standards
D-2: Integrated Groundwater Sampling and Analysis Plan
D-3: L-Well Groundwater Monitoring Plan
D-4: In-Situ Treatment Monitoring Workplan

APPENDIX D-1

OPEN SPACE DESIGN STANDARDS

APPENDIX L
OPEN SPACE DESIGN STANDARDS FOR THE BAYFRONT REDEVELOPMENT

JERSEY CITY, NJ

Prepared for

Honeywell

101 Columbia Road
Morristown, New Jersey 07962

Prepared by

AMEC Environment & Infrastructure, Inc.
200 American Metro Boulevard, Suite 113
Hamilton, New Jersey 08619

JUNE 2013
ISSUED FOR CONSTRUCTION

APPENDIX L
OPEN SPACE DESIGN STANDARDS FOR THE BAYFRONT REDEVELOPMENT

JERSEY CITY, NJ

Prepared for

Honeywell

101 Columbia Road
Morristown, New Jersey 07962

Prepared by

amec

AMEC Environment & Infrastructure, Inc.
200 American Metro Boulevard, Suite 113
Hamilton, New Jersey 08619

JUNE 2013
REVISION 0

Samuel G. Shallard, P.E. New Jersey
Associate Project Manager

Joseph T. Clifford, P.E. New Jersey
Principal Engineer – Civil

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ATTACHMENT

Attachment A OSDS Comparison of Applicable Consent Decree Paragraphs

EXHIBITS

Exhibit 1 Bayfront Redevelopment Proposed Final Grading
Exhibit 2 Technical Specifications – Section 02315, 02372, 02374

Exhibit 3 Interim Grading Plans
Exhibit 4 Surcharge Pile Height Plans
Exhibit 5 Utility Corridors
Exhibit 6 Excerpts from American Standards for Nursery Stock

1.0 INTRODUCTION

1.1 APPLICABILITY

A. Federal Court Orders. These Open Space Design Standards (OSDS) have been adopted pursuant to two federal court orders. These orders are formally titled the *First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 North ("Study Area 6 North Consent Decree")* ECF No. 435 (August 2, 2012) and the *First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South ("Study Area 6 South Consent Decree")* ECF No. 434 (August 2, 2012). Both orders have been entered by the United States District Court for the District of New Jersey in consolidated litigation referred to as *Jersey City Municipal Utilities Authority et al. v. Honeywell International Inc.,* Civ. No. 05-5955 (also consolidated with *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097). The court orders provide for the remediation of chromium contamination, through the installation of an engineered cap, and for the development of open space parks over the cap. The court orders also require the establishment of Open Space Design Standards that protect the integrity of the Chromium Remedy.

B. Central Park and Promenade. The OSDS apply to the open spaces known as "Central Park" and "Promenade" in the Bayfront Redevelopment Plan and collectively referred to as the Open Spaces Areas. Concept architectural renderings for the Open Spaces (or Open Space Areas) are provided in the Bayfront Redevelopment Plan (dated February 13, 2008). The Bayfront Redevelopment Plan was adopted by the City of Jersey City Planning Board on March 12, 2008. The approximately 100 acre Bayfront Redevelopment Plan envisions a mixed-use, new urbanism development readily accessible to mass transportation and consisting of residential, commercial, retail, professional office, institutional and integrated recreational land use. Recreational open space use totals approximately 25 acres of park space including Central Park (~11 acres) and the Promenade (~8 acre) (see Figure 1). These Open Space Design Standards do not apply to any other open or green space in the Bayfront Redevelopment Plan.

C. Compliance Required. Compliance with the OSDS is required by the federal court orders, and is mandatory for all planning, development, and maintenance of the Open Space Areas regardless of when undertaken.

Under the Study Area 6 North and Study Area 6 South Consent Decrees, the OSDS may be developed in phases. The standards contained herein may be supplemented in the future with additional standards.

Compliance with the OSDS does not replace the obligation to comply with all applicable Jersey City standards, requirements, and ordinances. Compliance with the OSDS is required in addition to compliance with all applicable Jersey City standards, requirements, and ordinances.

D. Protection of Chromium Remedy. The OSDS set forth requirements intended to protect the Chromium Remedy as it was engineered and installed as described in the 100% Design. All Permissible Development Elements must satisfy these standards, the Consent Decrees, and the conservation restrictions for the Open Space Areas (ECF Nos. 249 and 363 in Civ, No. 05-5955). However, the standards are not intended to restrict the selection and variety of Permissible Development Elements. For example, these standards do not require selection of a particular style of lighting fixture. A variety of lighting fixtures may be selected as long as the fixtures satisfy the requirements of these standards, such as those regarding bearing pressure.

E. Organization. Section 1 identifies the pertinent legal and regulatory documents governing the OSDS and provides some background information on relevant aspects of the Chromium Remedy. Section 2 establishes specific criteria for the Permissible Development described in the Consent Decrees. Section 3 provides criteria governing the documentation of development undertaken in the Open Space Areas.

F. References to Consent Decrees. Notwithstanding differences in details of the Study Area 6 North and Study Area 6 South Open Space Area remedies, the requirements related to the OSDS are identical between the two Consent Decrees. The paragraph numbering for specific sections differs between the two documents. For example "Prohibited Development" is described in Paragraph 60(j) for Study Area 6 North and 74(j) for Study Area 6 South. For the purposes of this document the requirements will be referenced to the numbering used in the Study Area 6 North Consent Decree. Unless specifically noted, that requirement is deemed to apply to the corresponding paragraph in the Study Area 6 South Consent Decree.

Attachment A provides a cross reference of the relevant paragraph numbering from the two Consent Decrees.

1.2 DEFINITIONS

Terms used in the OSDS have the meanings set forth in the Study Area 6 North and Study Area 6 South Consent Decrees, and the definitions set forth therein are incorporated into the OSDS by reference. In addition, the following definitions apply to these OSDS:

1. **100% Design** shall mean the design documents approved and entered as an order of the Court pursuant to Paragraph 72(f) of the Study Area 6 North Consent Decree or Paragraph 86(g) of the Study Area 6 South Consent Decree, including the drawings and Technical Specifications, and any Court-approved amendments thereto. References herein to Technical Specifications are to those that are part of the 100% Design.
2. **Bayfront Redevelopment Plan** shall mean the development plan adopted by Jersey City on March 12, 2008.
3. **Bedding Material** shall mean the granular soil (sand or crushed stone) placed beneath the utility or structure.
4. **Canopy** shall mean the total area comprised of the drip-line diameter of the trees.
5. **Cap** shall mean the base protective layer, an impervious geomembrane liner; a geocomposite drainage layer, a filter fabric and a distinctive colored warning layer with markings in English and Spanish as described in the 100% Design. The geocomposite drainage layer also serves as the warning layer.
6. **City Engineer** shall mean the Office of the City Engineer for the City of Jersey City.
7. **Consent Decree(s)** shall mean the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 North (Study Area 6 North Consent Decree)(ECF No. 435) and/or the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South (Study Area 6 South Consent Decree)(ECF No. 434), which were both entered by the United States District Court for the District of New Jersey on

August 2, 2012 in *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* Civ. No. 05-05955 (consolidated with Civ. Nos. 05-05993 and 0622).

8. **Court or Federal Court** shall mean the United States District Court for the District of New Jersey.
9. **Development Plan** shall mean the plan required by the Study Area 6 North Consent Decree Paragraph 60(j)(vi) and the Study Area 6 South Consent Decree Paragraph 74(j)(vi).
10. **Excavation** shall mean any digging activity including plant installation and plant maintenance activities. See also the definition of Intrusive Excavation.
11. **Fill** shall mean the soils or other fill material above the Warning Layer/Liner. The term Fill shall also mean soil and vice versa.
12. **Final Development Grade** shall mean the site surface grades shown in the As-Built drawings created as of the conclusion of the Initial Development Period as set forth in Sections 2.1.3 and 3.1.
13. **Fill Depth** shall mean the Fill or soil depths above the Warning Layer/Liner as set forth in Figures 4 B through D, and G through I, but no greater than the maximum Fill or soil depths set forth in Section 2.1.3.A.
14. **Furnishings** shall mean pedestrian benches, trash receptacles, bollards, kiosks, bus stop sheds, bicycle racks, decorative fencing, signs or other permanent fixtures or amenities.
15. **Geocomposite Drainage Layer Cover Soil** shall mean the nominal 12 inch protective soil cover immediately above the Geocomposite Drainage Layer.
16. **Hardscape Areas** shall mean those areas of the Open Space Areas that are not Roadways or Landscaped Acreage.
17. **Honeywell Groundwater Treatment Plant** shall mean the groundwater treatment plant maintained and operated by Honeywell pursuant to the Deep Overburden and Bedrock Groundwater Remedies Consent Order, which was entered by the United States District Court for the District of New Jersey in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No.

95-2097 (consolidated with Civ. Nos. 05-5955, 05-5993, and 06-22) ECF No. 898 (September 3, 2008).

18. **Initial Development** shall mean the development undertaken pursuant to paragraph 60(j) (ii) of the Study Area 6 North Consent Decree and paragraph 74(j) (ii) of the Study Area 6 South Consent Decree.
19. **Initial Development Period** shall mean the period defined in paragraph 60(j) (ii) of the Study Area 6 North Consent Decree and paragraph 74(j) (ii) of the Study Area 6 South Consent Decree.
20. **Intrusive Excavation** shall mean any excavation one foot or greater in depth from the ground surface or any excavation within one foot of the Warning Layer/Liner, except for hand-digging unless hand-digging comes within one foot of the Warning Layer/Liner.
21. **Landscape Element** shall mean an individual landscape item, such as a tree or shrub.
22. **Landscaped Acreage** shall mean the total acreage of the Open Space Area devoted to landscaping.
23. **Landscaped Area** shall mean any area included in the Landscaped Acreage.
24. **Liner** shall mean the geomembrane liner component of the Cap. For purposes of the OSDS, the Warning Layer is deemed to have the same elevation as the Liner.
25. **Maintenance Equipment** shall mean vehicles that are permitted in the Landscape and Hardscape Areas based on compliance with the ground pressure requirements set forth in Section 2.1.4.D.
26. **Master Intrusive Excavation Plan** shall mean the plan required by Section 2.1.1.F.
27. **Open Space Area(s)** shall mean the Area of Concern (AOC) 1 Open Space Area as defined in the Study Area 6 North Consent Decree and referred to as "Central Park" in the Bayfront Redevelopment Plan and the Open Space AOC as defined in the Study Area 6 South Consent Decree and referred to as the "Promenade" in the Bayfront Redevelopment Plan.
28. **Pedestrian Thoroughfare/Way** shall mean the paved walkway that runs from Kellogg Street in the south to the Transit Plaza in the north as shown on page 64 of the Bayfront Redevelopment Plan.

29. **Perimeter Hydraulic Barrier** shall mean the walls that form the borders of the Open Space Areas which consist of the Soil/Cement/Bentonite Walls on the south side of the Study Area 6 North Open Space Area and the north side of the Study Area 6 South Open Space Area and the Steel Sheetpile walls on the remaining sides of the Open Space Areas.
30. **Permissible Development** shall mean those items that are permitted under Paragraph 60(k) of the Study Area 6 North Consent Decree and 74(k) of the Study Area 6 South Consent Decree.
31. **Permissible Development Element** shall mean an individual Permissible Development item other than a Landscape Element, such as a single recreational facility or a single street light.
32. **Prohibited Development** shall mean that development which is prohibited by Paragraph 60(j) of the Study Area 6 North Consent Decree or Paragraph 74(j) of the Study Area 6 South Consent Decree.
33. **Root Barrier** shall mean a woven polypropylene geotextile similar or equal to Belton Industries 1104.
34. **Root Barrier Horizon C Soils** shall mean the first 6 inches of Horizon C soils directly above the Root Barrier that are compacted as required by Section 2.1.2.D.3. These soils are included as part of the layer of Horizon C Soils set forth in Technical Specification 2315 and Drawings CN301 and C301 of the 100% Design but are not identified or labeled in those materials as Root Barrier Horizon C Soils.
35. **Roadway** shall mean the road and its associated curbing. Permanent Roadway shall mean the roads depicted on page 39 of the Bayfront Redevelopment Plan.
36. **Warning Layer** shall mean the clearly visible, distinctive colored layer with both English and Spanish warning labels as required by Paragraph 56(a) of the Study Area 6 North Consent Decree or Paragraph 65(a) of the Study Area 6 South Consent Decree. For purposes of the OSDS the Warning Layer is deemed to have the same elevation as the Liner.

1.3 GOVERNING DOCUMENTS

The following documents shall also be consulted and considered in the planning, development, construction, and maintenance of the Open Space Areas:

A. **The Study Area 6 North and Study Area 6 South Consent Decrees.** Both decrees were entered by the United States District Court for the District of New Jersey in *Jersey City Municipal Utilities Authority v. Honeywell International Inc.,* Civ. No. 05-05955 (consolidated with Civ. Nos. 05-05993 and 06-22). The Consent Decrees are entitled: *First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 North* (ECF No. 435, August 2, 2012) and *First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South* (ECF No. 434, August 2, 2012). The Consent Decrees are available from Honeywell and the Federal Court.

B. **The Chromium Remedy as set forth in the 100% Design and the As-Built Documentation**. The 100% Design includes the design documents approved and entered as an order of the Court pursuant to Paragraph 72(e)(i) of the Study Area 6 North Consent Decree or Paragraph 86(e)(i) of the Study Area 6 South Consent Decree. The Chromium Remedy designs for both Study Area 6 North and Study Area 6 South are also addressed in the final Remedial Action Report and supporting "as-built" documentation required by Paragraph 72(c) (vii) of the Study Area 6 North Consent Decree and Paragraph 86(c)(xvii) of the Study Area 6 South Consent Decree. The 100% Design and As-Built Documentation for the Chromium Remedy are available from Honeywell, the Federal Court, and the City Engineer.

C. **The Bayfront Redevelopment Plan** approved March 12, 2008, and specifically Section 4 Mobility and Section 6 Landscape Plan. This plan is available from Honeywell, the City Engineer and the Jersey City Redevelopment Authority.

D. **The Open Space Design Standards**. Additional Open Space Design Standards may be developed in conjunction with the preparation of the Development Plans for the Initial Development of each Open Space Area. Such additional standards will be incorporated into these standards and re-published as an amendment to the 100% Design. The OSDS as modified are available from Honeywell, the Federal Court and the City Engineer.

E. **The Conservation Restrictions**. Pursuant to Consent Decrees, a conservation restriction was recorded for each of the Open Space Areas. The

conservation restrictions were also entered as orders of the Court, ECF Nos. 249 and 363.

1.4 GENERAL DESCRIPTION OF THE CHROMIUM REMEDIES

The Chromium Remedies for the Open Space Areas consist of the following general components described in this section. For more specific design details, consult the 100% Design documents and "As-built" Documentation for each respective Chromium Remedy. A schematic of the Chromium Remedy is shown in Figure 2.

In general, the Chromium Remedies consist of two components.

- Soil Remedy
  - Resource Conservation and Recovery Act (RCRA) Cap
- Shallow Groundwater Remedy
  - Perimeter Hydraulic Barrier
  - Pump and Treat contingent system, which consists of:
    - Groundwater recovery wells
    - Paired piezometers to measure conformance with the negative gradient requirement stipulated in the Consent Decree
    - Utilities in the form of electrical and instrumentation wiring and discharge piping

A schematic of the cap system detail is shown in Figure 3.

Figure 2: Chromium Remedy Schematic

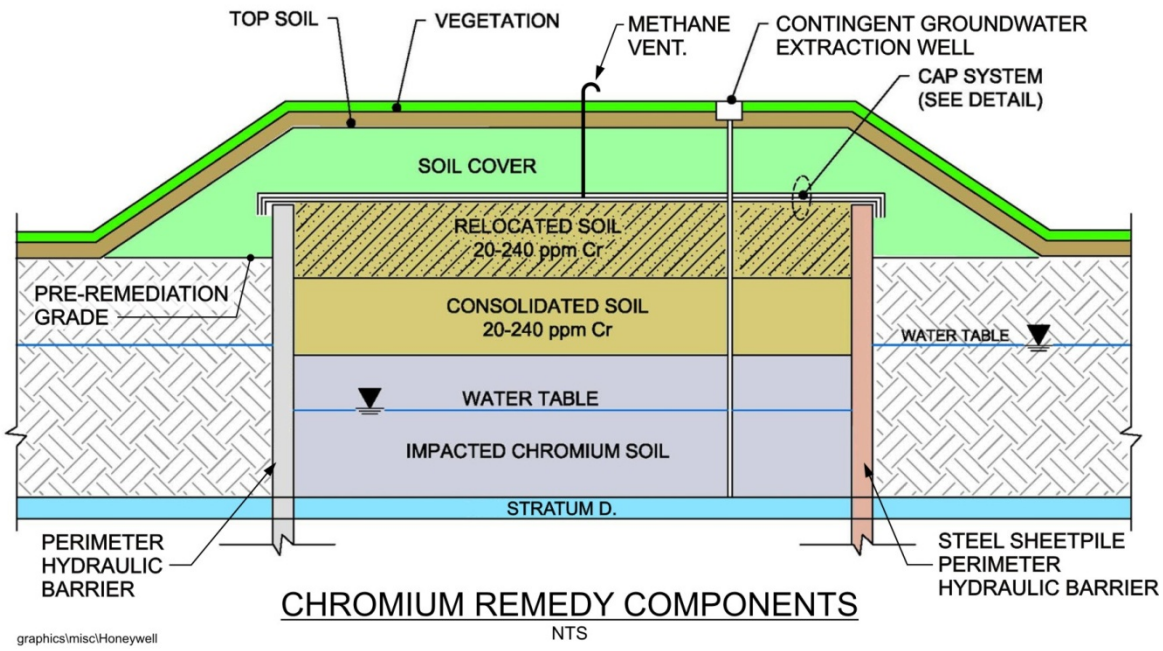
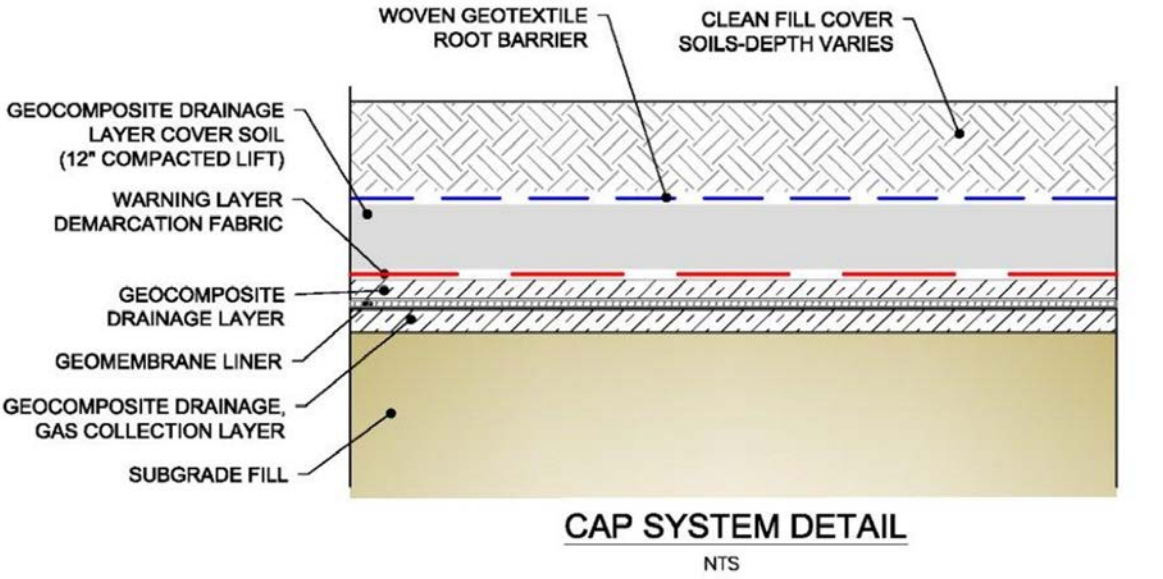


Figure 3: Cap System Detail



1.5 PERMISSIBLE DEVELOPMENT AND OPEN SPACE AREA USES

The Bayfront Redevelopment Plan incorporates two major parks to be developed over the Chromium Remedies in the Open Space Areas. Pursuant to the Study

Area 6 North Consent Decree and the Study Area 6 South Consent Decree, the Open Space Areas may include any or all of the following types of development features or facilities, **provided that such features satisfy the conditions set forth in the design criteria contained in Section 2:**

(i) roads and pedestrian thoroughfares-- both crossing and running along the Open Space areas, but no more extensive than provided for in Page 39 of the Bayfront Redevelopment Plan;

(ii) curbing and fences;

(iii) sidewalks, paths, walkways, and nature trails;

(iv) utilities and utility corridors, lighting and restrooms;

(v) irrigation or sprinkler components or systems;

(vi) water features;

(vii) above ground storm water cisterns;

(viii) signs, including signs informing visitors of the history of chromium production, contamination, and remediation;

(ix) benches, trash receptacles, and bicycle racks;

(x) recreational facilities, such as playground equipment, bocce ball courts, tennis courts, basketball courts, and athletic fields, and

(xi) landscaping, including natural grasses, small trees, shrubbery, and potted plants, provided that such landscaping, and the anticipated root structure of each landscaping component do not and will not jeopardize the integrity of the Chromium Remedy.

Other uses of the Open Space Areas are expressly prohibited. All Permissible Development must comply with the Open Space Design Standards set forth in Section 2.

2.0 STANDARDS

The Consent Decrees include specific requirements for protection of the Cap that are expressly incorporated into the Open Space Design Standards as follows:

- Paragraph 60 of the Study Area 6 North Consent Decree sets out the framework for requirements intended to protect the chromium remedy.
- Paragraph 56 of the Study Area 6 North Consent Decree defines the minimum standards for cap components and thickness of cover soils.
- The Consent Decrees recognize that certain types of development are not compatible with the RCRA-type cap. Paragraph 60(j) of the Study Area 6 North Consent Decree addresses Prohibited Development and establishes specific criteria for the Permissible Development and defines acceptable types of development features or facilities.
- Seventy five percent (75%) of the Open Space Area exclusive of the acreage used for roads and the pedestrian thoroughfare shall be comprised of landscaping as defined in Paragraph 60(k) (xi) of the Study Area 6 North Consent Decree.

These Consent Decree requirements, and the corresponding requirements in the Study Area 6 South Consent Decree, are expressly incorporated into the OSDS and must be complied with in the development of the Open Space Areas. This section provides additional requirements which must be met in future development of the Open Space Areas.

2.1 STANDARDS APPLICABLE TO ALL PERMISSIBLE DEVELOPMENT

2.1.1 Excavations and Protection of the Cap from Penetrations

A. Protection of the Cap. Except as provided in this section, the Cap shall not be intentionally penetrated or breached. If breached, all repairs of the Cap shall be conducted in accordance with the 100% Design Technical Specifications Section 02372, Cap Geomembrane Liner, Paragraph 3.07, and sub-paragraphs G – H.

B. Protection of the Perimeter Hydraulic Barrier. No Permitted Development Element shall penetrate, breach, or impair the Perimeter Hydraulic

Barrier, unless measures designed to maintain the integrity of the Perimeter Hydraulic Barrier have been certified by a licensed New Jersey Professional Engineer and incorporated into a Development Plan which has been reviewed and approved by the Special Master or the Federal Court. No penetration or breach shall be certified or approved unless it is demonstrated that the designed measures shall maintain the integrity of the Perimeter Hydraulic Barrier and shall not jeopardize the integrity of the Chromium Remedy.

C. General Prohibition on Excavation Except in Compliance with OSDS. Excavation is prohibited in the Open Space Areas, except to the extent necessary to construct, install, repair, inspect, or otherwise maintain Permissible Development and the Chromium Remedies. Excavation in the Open Space Areas is permitted only if in compliance with these Standards.

D. Criteria for Excavation. To the extent that Excavation is required, the following criteria apply:

1. Machine excavation is prohibited within one foot of the Warning Layer/Liner. Soft digging methods shall be used within one foot of the Warning Layer/Liner. Soft digging methods include hand excavation and use of equipment such as air knives.
2. Use of augers for excavation, including for planting, is prohibited.
3. In any excavation in Roadways, the Roadway and its underlying Fill shall be re-established to pre-excavation conditions.
4. In any excavation in Landscaped Areas, compliance with Section 2.2.9 is also required.
5. In any excavation in Landscaped and Hardscape Areas, reasonable effort shall be made to minimize the mixing of the various soil types and follow the last out/first in principle where the last soils excavated are the first soils returned to the excavation so that the Fill is replaced in the same layering as depicted in the 100% Design and the Final Development Grade. In all instances where applicable, the Root Barrier Horizon C Soils shall be repaired as required by Section 2.1.1.D.9.
6. The Root Barrier Horizon C Soils shall not be intentionally penetrated when installing any Landscape Element. In the event of penetration, the Root

Barrier and Root Barrier Horizon C Soils shall be repaired as required by Section 2.1.1.D.9 before installation of the Landscape Element.

7. The Root Barrier and Warning Layer may be penetrated if necessary to conduct inspections or repairs to the Cap. Upon completion of the inspection or repair, the breach or penetration of the Warning Layer/Liner shall be repaired to meet the requirements of the 100% Design and the breach or penetration of the Root Barrier Horizon C Soils, Root Barrier, and Geocomposite Drainage Layer Cover Soils shall be repaired as required by Section 2.1.1.D.9.
8. In the event of an unplanned breach or penetration of the Root Barrier, Warning Layer or Liner, notice shall be given of such breach to Honeywell and Jersey City within 24 hours. The breach or penetration of the Warning Layer/Liner shall be repaired to meet the requirements of the 100% Design and the breach or penetration of the Root Barrier Horizon C Soils, Root Barrier, and Geocomposite Drainage Layer Cover Soils shall be repaired as required by Section 2.1.1.D.9.
9. All repairs to the Root Barrier Horizon C Soils, the Root Barrier and the Geocomposite Drainage Layer Cover Soils shall comply with the Master Intrusive Excavation Plan requirements developed pursuant to Section 2.1.1.F.2.
10. A licensed New Jersey Professional Engineer shall certify to Honeywell and Jersey City all repairs to the Warning Layer and/or Cap.

E. Criteria for Intrusive Excavation. To the extent that Intrusive Excavation is required, the following criteria apply:

1. The criteria set forth in Section 2.1.1.D.
2. The criteria set forth in the Master Intrusive Excavation Plan to the extent applicable to the particular excavation.
3. Before any Intrusive Excavation, except in cases of emergencies, an entity that intends to excavate in the Open Space Areas shall prepare a Specific Intrusive Excavation Plan to supplement the Master Intrusive Excavation Plan. The Specific Intrusive Excavation Plan shall be approved by a licensed New Jersey Professional Engineer and submitted to Honeywell and

Jersey City. The Specific Intrusive Excavation Plan shall contain a Hazard Analysis check list of items considered critical to the Chromium Remedy including, but not limited to:

a. Type of utility to be repaired or other work to be completed.

b. Contact New Jersey One Call.

c. Review of Record Drawings and the OSDS.

d. Depth to the invert of the utility.

e. Depth to the Warning Layer/Liner at the proposed repair location.

f. Guidance to workers regarding the requirement for soft digging methods such as hand excavation or use of equipment such as air knives within 12 inches of the Warning Layer/Liner.

4. A licensed New Jersey Professional Engineer shall be onsite to observe any Intrusive Excavation within one foot of the Warning Layer/Liner.

5. Notice of each Intrusive Excavation, and a copy of the Specific Intrusive Excavation Plan, shall be provided to Honeywell and/or Jersey City for approval at least 5 business days in advance of any planned excavation and as soon as practicable with respect to any emergency excavation.

6. The Hazard Analysis shall be reviewed with all workers associated with the task prior to excavation.

F. Master Intrusive Excavation Plan. Before any Intrusive Excavation takes place in the Open Space Areas or prior to the submission of the first Development Plan, whichever occurs first, Honeywell shall prepare a Master Intrusive Excavation Plan. The Master Intrusive Excavation Plan shall meet the requirements of this paragraph.

1. The Master Intrusive Excavation Plan shall include the following general requirements:

a. General methods for conducting Intrusive Excavation;

b. Types of precautions that may need to be taken to protect the Warning Layer/Liner;

c. The requirements for the repair of the Root Barrier Horizon C Soils, Root Barrier, Geocomposite Drainage Layer Cover Soils and Warning Layer/Liner;

d. Procedures to be implemented in the event of an unplanned breach or damage to the Root Barrier Horizon C Soils, Root Barrier, Warning Layer/Liner;

e. Procedures to be implemented in the event of an emergency excavation.

2. The Master Intrusive Excavation Plan shall require the following for all repairs and restoration of the Root Barrier Horizon C Soils, Root Barrier, and Geocomposite Drainage Layer Cover Soils:

   a. The Root Barrier shall be repaired in a manner designed to restore its barrier qualities using accepted engineering practices;

   b. The Root Barrier Horizon C Soils and the Geocomposite Drainage Layer Cover Soils shall be re-established to the depth required by the 100% Design and compacted as follows depending on the size of the excavated area:

      i. When the size of the excavated area is 1000 square feet or less, the Root Barrier Horizon C Soils and the Geocomposite Drainage Layer Cover Soils shall be repaired using accepted engineering practices to attempt to achieve a compaction equivalent to 90% maximum dry density as determined in accordance with ASTM D 698 (Standard Proctor); and

      ii. When the size of the excavated area is greater than 1000 square feet, the Root Barrier Horizon C Soils and the Geocomposite Drainage Layer Cover Soils shall be repaired to 90% maximum dry density as determined in accordance with ASTM D 698 (Standard Proctor). A field density test shall be conducted at least once per 2,500 square feet or any part thereof and such repair shall be certified by a licensed New Jersey Professional Engineer;

3. The Master Intrusive Excavation Plan shall include an appendix for each utility in the Open Space Areas. Honeywell shall have each utility prepare an appendix to the Master Intrusive Excavation Plan which shall set forth

the general methods for conducting excavation in the vicinity of the particular utility and the types of precautions that may need to be taken to protect the utility. The appendix shall be approved by a licensed New Jersey Professional Engineer. In conjunction with the preparation of the As-Built Documentation required by Section 3.1, the appendix shall be updated to include utility locations.

4. The Master Intrusive Excavation Plan and its appendices shall be reviewed at least every 5 years and updated as needed.

5. The Master Intrusive Excavation Plan, including all of the appendices required by Section 2.1.1.F.3 above, shall be provided to those utilities and other entities that may need to excavate in the Open Space Areas and shall be made available from the City Engineer and the Honeywell Groundwater Treatment Plant. Anytime the Master Intrusive Excavation Plan and/or its appendices are updated, the updated version shall be provided to those utilities and other entities that may need to excavate in the Open Space Areas and shall be made available from the City Engineer and the Honeywell Groundwater Treatment Plant.

2.1.2 Restrictions on the Use and Placement of Fill

A. Fill Composition. Imported Fill shall be clean natural soil that is free of contamination, meets New Jersey Department of Environmental Protection (NJDEP) Technical Requirements pursuant to 7:26E 5.2(d), and has a hexavalent chromium concentration of 1 milligram per kilogram or less. Treated soils or other recycled materials imported from off-site sources are prohibited.

B. Fill Placement. All Fill shall be placed in conformance with Technical Specifications 2315 and 2374 of the 100% Design.

C. Stockpiling. Small stockpiles of less than 10 feet in height and less than 2 weeks in duration shall be allowed without prior approval or certification. Any stockpiling in excess of 10 feet in height or longer than 2 weeks in duration shall be subject to the approval of Honeywell and Jersey City based upon the certification of a licensed New Jersey Professional Engineer that the size and duration of any proposed stockpiling will not jeopardize the integrity of the Chromium Remedy or potentially affected infrastructure including but not limited to the Jersey City Municipal Utilities Authority 72 inch force main. The certification and approval

must be included with a Development Plan during the Initial Development Period. Subsequent to the Initial Development Period, the certification and approval is required but need not be submitted with a Development Plan.

D. Specific Requirements for Fill Soils in Landscape Areas. Fill soils in the Landscape Areas shall be placed in separate lifts as set forth below:

1. Soil Horizon A – Topsoil shall have a minimum depth of 6 inches. Topsoil shall be placed over the Horizon B and/or C soils to Final Development Grade. Topsoil shall be natural, friable, fertile loam, fine sandy loam or sandy loam with an organic matter content of 3.5% - 6% by weight and a pH range of 5.0 – 6.5.
2. Soil Horizon B – Horizon B soils shall only be used in areas where the total depth of Horizon A and C soils exceeds 24 inches above the Root Barrier. Horizon B soils of specified depths are required for the planting of all Landscape Elements as set forth in Section 2.2.9. Horizon B soils shall be a uniform sandy loam having the following properties: Sandy loam classification having 80% sand, ≤ 10% silt, 10% clay (by weight), a pH range of 5.5 – 7.0, and organic matter (by weight) of 1.5-3.5%.
3. Soil Horizon C – A maximum of 18 inches of Horizon C soils shall be placed immediately above the Root Barrier. The first 6 inches of Horizon C soils above the Root Barrier shall be compacted to a minimum 90% maximum dry density as determined in accordance with ASTM D 698 (Standard Proctor) Horizon C soil shall consist of uniform sandy loam having the following properties: Sandy loam classification with 70-80% sand, ≤ 10% silt, 15-20% clay (by weight), a pH range of 5.0 – 7.5, and organic matter (by weight) of 1% max.
4. Horizon A, B, & C soils shall be handled dry of optimum moisture to reduce the risk of over compaction. Compaction testing will be conducted on these soils prior to placement to determine placement criteria specific to the soil source.
5. Horizon A, B, & C soils shall be placed with low ground pressure equipment as set forth in Technical Specifications 2315 and 2374 of the 100% Design.
6. Soil Horizons B and C shall be blended by scarification (tilling) to a depth of 3 inches prior to the placement of the next layer, if the compaction of the prior

horizon has created a layer at the surface of the horizon that would not be conducive to healthy root growths.

E. Fill in Roadways. The portion of the road subgrade above the Geocomposite Drainage Layer Cover Soils shall meet the requirements in Section 2.2.1.A.2.B. These standards address the material and preparation requirements for the portion of the road subgrade above the Geocomposite Drainage Layer Cover Soils. The requirements for the materials and preparation of the portion of the road subgrade below the Cap, including the Geocomposite Drainage Layer Cover Soils, are in the 100% Design.

F. Fill Soils in Hardscape Areas. Fill in Hardscape Areas shall have a minimum depth of at least 24 inches from the surface to the Warning Layer/Liner, including the Geocomposite Drainage Layer Cover Soils.

2.1.3 Final Development Grading

A. Final Development Grade. The Open Space Areas Final Development Grading shall provide for the minimum soil depths shown in Figures 4 B-D and G-I, but no greater soil depths than two (2) feet above the soil depths shown in Figures 4 B-D and G-I unless a licensed New Jersey Professional Engineer has certified that the soil depths will not jeopardize the integrity of the Chromium Remedy or potentially affected infrastructure. After the Initial Development Period, such certification shall accompany any notice submitted under paragraph 60(j) (x) of the Study Area 6 North Consent Decree or paragraph 74(j) (x) of the Study Area 6 South Consent Decree to the extent that such notice relates to a proposed change in soil depths.

B. Regrading Plan. Any regrading of soils shall be conducted pursuant to a soil regrading plan that:

1. Is designed to maximize the reuse of soils from the prior grade and provides for the segregation and re-establishment of required soil horizons; and
2. Sets out the sequence of work for reaching the Final Development Grade.

C. Positive Surface Drainage. In all cases, the Open Space Areas must be graded to maintain positive surface drainage.

2.1.4 Bearing Pressure, Vehicle Load Limits and Bearing Areas

A. Incremental Bearing Pressure Limits. Except with regard to water features, each Permissible Development Element shall be designed to limit the incremental bearing pressure from its foundation load on the Liner to 1000 pounds per square foot as compared to the surrounding area, unless a greater incremental bearing pressure has been expressly certified as protective of the Cap by a licensed New Jersey Professional Engineer and subsequently approved by the Special Master or the Federal Court. No greater incremental bearing pressure shall be certified or approved unless it is demonstrated that the load imposed by the Permissible Development Element will not jeopardize the integrity of the Chromium Remedy. This limit on incremental bearing pressure on the Liner does not apply to loading due to vehicles. All vehicles, including Maintenance Equipment shall comply with the load limits set forth in Section 2.1.4.C for vehicles and Section 2.1.4.D for Maintenance Equipment.

B. Water Feature Load Limits. Water feature size and weight shall be structurally controlled so as to not cause loads greater than the equivalent soil mass imposed in the Final Development Grade. If higher loads are proposed, a licensed New Jersey Professional Engineer shall certify that the loads will not jeopardize the integrity of the Chromium Remedy, and such certification must be included in a Development Plan reviewed and approved by the Special Master or the Federal Court.

C. Vehicle Load Limits. There is no load limit on automobile and truck traffic on permanent Roadways, provided that permanent Roadways are constructed pursuant to Section 2.2.1.A and through trucks are prohibited pursuant to Jersey City ordinance as set forth in Section 2.2.1.A.8. Automobile and truck traffic is limited to Roadways except that trucks are permitted on temporary roads provided that they comply with the load limits specified in Subsection D.

D. Maintenance Equipment on Landscape Areas, Vehicles on Temporary Roadways. Maintence Equipment is permitted on the Landscape Acreage and the Hardscape Areas in compliance with the following limits. Maintenance Equipment shall comply with the load limits specified in Table 1.

Table 1: Allowable Ground Pressure versus Fill Depth

Maximum Ground Pressure	Fill Depth Over Warning Layer/Liner
Maximum Ground Pressure for Maintenance Equipment	
< 5 psi	12 inches
5-10 psi	18 inches
>10-40 psi	24 inches
Additional Maximum Ground Pressure for Temporary Roads	
Fully Loaded Highway Truck (>40-80 psi)	36 inches
Permanent Roadways	
No maximum ground pressure limit	36 inches

The load limits on temporary roads and on Landscape and Hardscape Areas allow for heavier loads where a rigid pavement or temporary load spreading system such as matts is used to spread the load and reduce the bearing pressures to below the limits specified in Table 1, and where a licensed New Jersey Professional Engineer has certified to Honeywell and Jersey City that the rigid pavement or temporary load spreading system will reduce the bearing pressures to below the limits specified in Table 1.

E. Bearing Area – Foundations, Footers and Separation from Cap

1. Each point load from a Permissible Development Element shall have a minimum bearing area of 2 square feet except that traffic light poles and street light poles shall have a minimum bearing area of 3.5 square feet.
2. Each Permissible Development Element requiring a footer shall have a shallow footer.
3. Anchoring systems for Permissible Development Elements such as site furnishings shall be designed for surface mounting on spread footings. Hardscape areas shall accommodate surface mounted anchoring on spread footings.

4. Restroom facilities shall be constructed on insulated matt foundations or spread footings or other equivalent foundations to reduce bearing pressures and counter frost penetration.
5. Use of driven posts for fencing or other purposes is prohibited unless it has been expressly certified by a licensed New Jersey Professional Engineer that the driven posts will not penetrate the Root Barrier Horizon C Soils and will not jeopardize the integrity of the Chromium Remedy and it has been subsequently approved by the Special Master or the Federal Court.
6. The use of stakes for activities such as erosion control fabrics or temporary snow fence will be subject to certification and approval of the City Engineer. Prior to granting approval the City Engineer must certify that the use of stakes will not jeopardize the integrity of the Chromium Remedy. In no case will the length of stake be greater than the depth from the ground surface to the Root Barrier less 6 inches in order to prevent penetration of the Root Barrier Horizon C Soils.
7. There shall be two feet of soil or more between the Warning Layer/Liner and the lowest elevation of the bedding for any footings and/or foundations.

2.2 SPECIFIC STANDARDS FOR PARTICULAR TYPES OF PERMISSIBLE DEVELOPMENT

2.2.1 Roads and Hardscape Areas

A. Permanent Vehicular Roadways. The following requirements apply to all Permanent Roadways:

1. For all Roadways, these standards address the material and preparation requirements for the portion of the road subgrade above the Geocomposite Drainage Layer Cover Soils. The requirements for the materials and preparation of the portion of the road subgrade below the Cap, including the Geocomposite Drainage Layer Cover Soils, are in the 100% Design.
2. The surface of all Roadways shall be a minimum of 3 feet above the Warning Layer/Liner. The three-foot minimum shall be comprised of the following layers:
    a. The Geocomposite Drainage Layer Cover Soils installed pursuant to the 100% Design which has a nominal depth of 12 inches;

b. A layer of Structural Fill for Use Under Roadways which satisfies Technical Specification 2315 of the 100% Design. This layer shall have a minimum depth of 6 inches and shall be placed immediately above the Geocomposite Drainage Layer Cover Soils. This layer shall be compacted to 95% maximum dry density as determined in accordance with ASTM D 698 (Standard Proctor) ; and

c. A three-layer flexible pavement system which shall include an aggregate base course, a dense graded asphalt course and an asphalt wearing course. The three-layer flexible pavement system shall be placed immediately above the Structural Fill for Use Under Roadways in the order of the courses listed. The three-layer flexible pavement system shall have a total minimum depth of 18 inches. The materials used in the three-layer flexible pavement system shall satisfy the requirements of the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction. Each course of the three-layer flexible pavement system shall be prepared and installed to satisfy the requirements of the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction and the City of Jersey City Design Standards for Roadways.

3. Alternative pavement designs may be acceptable provided that (a) the alternative design meets the requirements of Section 1.1.C, (b) obtains all requisite Jersey City approvals, and (c) a licensed New Jersey Professional Engineer certifies that the alternative design will not jeopardize the integrity of the Chromium Remedy and provides equal or better subgrade and utility protection as the three-layer flexible pavement system defined in this subparagraph. Such alternative design and certification shall be included in a Development Plan that is reviewed and approved by the Special Master or Federal Court during the Initial Development Period. After the Initial Development Period, such certification shall accompany any notice submitted under paragraph 60(j)(x) of the Study Area 6 North Consent Decree or paragraph 74(j)(x) of the Study Area 6 South Consent Decree. In the event that an approved alternate pavement system is less than 18 inches in depth, the depth of the Structural Fill for Use Under Roadways must be increased so that the minimum depth between the surface of the Roadway and the Warning Layer/Liner is 3 feet or more.

4. Any improvement, new construction, expansion, and/or modification of the roadway to the east of the Open Space Areas, currently known as Route 440, that would result in any part of that roadway (as opposed to the Frontage Street currently shown on the Bayfront Redevelopment Plan at page 39) coming within the boundaries of one or more of the Open Space Areas shall:

    a. Comply with the requirements of Paragraphs 60 of the Study Area 6 North Consent Decree and Paragraph 74 of the Study Area 6 South Consent Decree;

    b. Meet or exceed the requirements of this Section 2.2.1.A;

    c. Meet the requirements of Section 1.1.C, and obtain all requisite Jersey City approvals;

    d. Have a design certified by a licensed New Jersey Professional Engineer who shall certify that the design will not jeopardize the integrity of the Chromium Remedy and provides equal or better subgrade and utility protection as the three-layer flexible pavement system defined in Section 2.2.1.A.2. Such design and certification shall be included in a Development Plan that is reviewed and approved by the Special Master or Federal Court during the Initial Development Period. After the Initial Development Period, such certification shall accompany any notice submitted under paragraph 60(j) (x) of the Study Area 6 North Consent Decree or paragraph 74(j) (x) of the Study Area 6 South Consent Decree.

5. All Roadways shall be designed to meet the City of Jersey City Design Standards (Figure 6). By way of illustration only, typical cross sections illustrating allowable pavement and landscape concepts for Third Avenue and Stegman Boulevard are shown in Figure 7.

6. Roadways shall be limited to the locations designated for Roadways in the 100% Design on Drawings CN-515 and C-516.

7. All curbing shall meet the City of Jersey City Design Standards. Curb types may vary as long as the total depth of curb and footing remains within the pavement box. The curb detail may extend beyond the pavement box provided it meets the required limits of separation from the Warning Layer/Liner. A licensed New Jersey Professional Engineer shall certify that the road and curb design will not jeopardize the integrity of the Chromium

Remedy and such certification will be included in a Development Plan reviewed and approved by the Special Master or the Federal Court. No curb and pavement box design shall be certified or approved unless it is demonstrated that it will not jeopardize the integrity of the Chromium Remedy.

8. Through trucks are prohibited on Roadways. Roadways shall be posted to prohibit through trucks. Jersey City shall prohibit through trucks and require the posting of such prohibition in an ordinance prior to the installation of the Roadways. The standard becomes effective upon the effective date of a Jersey City ordinance prohibiting through trucks on Roadways.

9. Every five years from the initial surfacing, a licensed New Jersey Professional Engineer shall inspect all Roadways in the Open Space Areas to evaluate whether the condition of any Roadway or segment thereof has compromised or is likely to compromise the structural integrity of the underlying subgrade or utilities. Within 30 days of the completion of the inspection, the licensed New Jersey Professional Engineer shall submit a certified report to Honeywell and Jersey City that describes the inspection undertaken and the repairs needed, if any, in order to address any condition that has compromised or is likely to compromise the structural integrity of the underlying subgrade or utilities. Within 18 months of the submission of the report, the repairs described in the report shall be completed. In the event that in the report the licensed New Jersey Professional Engineer deems a condition to constitute an emergency requiring immediate repair, such repair shall be made as soon as possible, and, if necessary, interim measures shall be employed to protect the cap, subgrade and utilities. Within 60 days of completion of the repairs, emergency or otherwise, a licensed New Jersey Professional Engineer shall inspect the repairs and certify that the repairs have been satisfactorily completed.

B. Temporary Construction Roads. The following requirements apply to all temporary construction roads:

1. In the event temporary construction roads are installed, these roads shall be limited to the locations designated for Roadways in the 100% Design on Drawings CN-515 and C-516. Temporary roads shall be installed using a load bearing geotextile fabric to isolate the wearing surface from the

subgrade. A wearing surface shall be installed that is sufficient to handle the intended temporary traffic loadings. Temporary roads shall be designed consistent with the projected loads and frequency. Temporary roads shall be designed to be protective of the Chromium Remedy. A licensed New Jersey Professional Engineer shall certify that the temporary road design is protective of the Chromium Remedy and such certification shall be included in a Development Plan reviewed and approved by the Special Master or the Federal Court. No temporary road design shall be certified or approved unless it is demonstrated that it will not jeopardize the integrity of the Chromium Remedy.

2. The load limitations specificed in Section 2.1.4.D of the OSDS and Section 02374 Part 3.3 G 7 of the Technical Specifications shall apply to all loads on the temporary roadways.

2.2.2 Hardscape Areas including Pedestrian Thoroughfare

Hardscape Areas shall have a minimum separation of 12 inches between the Warning Layer/Liner and the underside of the hard surfacing. The surface and subgrade materials shall be of sufficient strength to accommodate Maintenance Equipment.

2.2.3 Utilities

All utilities including those supporting the pump and treat system for groundwater remediation, with the exception of any extraction wells or collection trenches, shall be placed above the Cap as required in Paragraph 56(b) of the Study Area 6 North Consent Decree.

2.2.4 Utility Corridors

A. Public Utilities. All public utilities shall be located in a designated utility corridor and shall be installed in accordance with Paragraphs 60(j)(v)(6) and (7) of the Study Area 6 North Consent Decree. The location of the utility corridors is shown on Drawing CN-515 of the Study Area 6 North 100% Design and C-516 of the Study Area 6 South 100% Design. During the Initial Development Period, the modification of designated utility corridors or the designation of additional utility corridors, if necessary shall be subject to the review and approval of Honeywell, Jersey City, and the Special Master.

B. Placement within Utility Corridors. Placement of utilities within the utility corridor is flexible as long as the installation does not jeopardize the integrity of the Chromium Remedies and complies with the required separation from the Warning Layer/Liner set forth in the Consent Decrees.

C. Duct Banks. Duct banks shall be concrete encased.

2.2.5 Utility Corridors Beneath Roadways and Hardscape Areas

Except as provided in Section 2.2.6, the following utilities shall be located only within utility corridors beneath Roadways and Hardscape Areas in the Open Space Areas:

- Sanitary Sewers,
- Storm Drains,
- Water Mains,
- Electric Service,
- Telecommunications Service, and
- Gas Mains.

2.2.6 Utility Corridors-Irrigation and Local Electric and Water Service

A. Utilities Outside Corridors. The following utilities may be located outside of the utility corridors depicted on Drawings CN-515 and C-516, and may be placed in the interior park space of the Open Space Areas:

1. Water laterals for seasonal water service to amenities;
2. Irrigation mains and laterals; and
3. Local electric service supply for amenities.

B. Designation of Corridors. During the Initial Development Period, the design and location of additional utility corridors, if appropriate, shall be subject to the review and approval of Honeywell, Jersey City, and the Special Master. Upon completion of the design of these utilities the noted drawings shall be amended and recorded accordingly.

C. Minimum Fill Requirements. For any such utilities that may be installed outside a designated utility corridor, there shall be a minimum of two feet of fill between the Warning Layer/Liner and the lowest elevation of the bedding for any such utility.

D. Water Laterals. For seasonal water service to amenities, such as supply lines to drinking fountains. Portions of service lines may be located above the frost line and must be equipped with drain-back valves and hardware for winterization, in accordance with state and local plumbing codes.

E. Irrigation Mains and Laterals. Irrigation systems shall be designed by a licensed New Jersey Landscape Architect.

F. Electric Service. Electric service conductors for local power supply to park amenities such as light fixtures, controllers, (water feature) pumps, timers and other electrical devices shall be contained in buried conduits in accordance with all governing electrical codes. The grounding system for lighting and electrical services shall be installed at least one (1) foot above the Warning Layer/Liner in areas where the Fill Material is two feet. In other instances, the grounding system shall be installed at least two feet above the Warning Layer/Liner. The use of vertical grounding rods that require penetration through the Liner are prohibited.

2.2.7 Restrooms

If installed, restroom structures shall be located in close proximity to recreational use areas. Utilities associated with the restrooms shall meet the requirements of Sections 2.2.3 through 2.2.6. Restroom foundations shall meet the requirements of Section 2.1.4.E.

2.2.8 Water Features and Above Ground Water Cisterns

A waterproof liner system with leak detection shall be installed at all water features and cisterns.

2.2.9 Landscaping

A. Landscaping Acreage Requirement. The Consent Decrees require that 75% of each of the Open Space Areas, exclusive of the acreage used for roads and the pedestrian thoroughfare, be comprised of landscaping. Landscaping includes some

or all of the following: natural grasses, trees, shrubbery, flowers, and potted plants, provided that such landscaping and the anticipated root structure of each landscaping component shall not jeopardize the Chromium Remedies. Any portion of an athletic court or playground that is covered in natural grass shall be considered landscaping.

B. Supervision of Design and Installation. Landscaped Acreage shall be designed and installed under the supervision and direction of a licensed New Jersey Landscape Architect, licensed New Jersey Arborist, and a licensed New Jersey Professional Engineer with expertise in RCRA-style engineered caps. The selection of all plant material shall be performed under the direct supervision of a licensed New Jersey Landscape Architect and a licensed New Jersey Arborist.

C. Landscape Design Preparation. The licensed New Jersey Landscape Architect and licensed New Jersey Arborist shall use:

- Figures 4 C-E, H-J,
- Previously approved Development Plans,
- Utility corridor limits set forth in drawings CN-515 of the Study Area 6 North 100% Design and C-516 of the Study Area 6 South 100% Design, and
- The Bayfront Development Plan Section 6 Landscape Plan

when preparing the design for the Landscaped Acreage.

D. Landscaping Requirements. Landscaping shall meet the following requirements which are consistent with the protection of the integrity of the Chromium Remedy while supporting a viable and attractive landscape:

1. All landscaping shall be of the same type and characteristics of the landscaping classes set forth in Tables 2 through 4. Tables 2 through 4 include those plant species suitable for the Open Space Areas for specific depths of soils. Species included in Tables 2 through 4 are known to exhibit root systems with characteristically high root plate formation typical of species occurring in riparian plant communities as well as adaptability to urban environments.

2. In the event that a landscape design includes a plant species not listed on Tables 2 through 4, such species shall be specifically identified as a new proposed species in a Development Plan subject to the review and approval of the Special Master or Federal Court. Such Development Plan shall not be approved unless it is demonstrated that the new proposed species has the same root growth characteristics as the same corresponding class of species in Tables 2 through 4, can thrive in the minimum soil depths set forth in the corresponding class applicable table, and is adaptable to urban environments.
3. While Landscape Elements may be located in or in close proximity to utility corridors, no Landscape Element (except natural grasses) shall be located in an area which would prevent access by Maintenance Equipment to any utility, including recovery wells. Landscape Elements within the Open Space Areas shall be located to facilitate access to recovery wells and monitoring wells for operation and maintenance. Trees shall not be located where the Canopy could extend over a pumping well or could inhibit access to pumps for maintenance.
4. Landscape Elements shall be planted in compliance with the soil depths requirements set forth in Tables 2 through 4 and Section 2.1.2.D or as follows for approved landscaping with comparable characteristics:
    a. Table 2 class trees shall only be planted in areas where the Horizon B Soil is 18 inches or greater in depth;
    b. Table 3 class trees shall only be planted in areas where the Horizon B Soil is 12 inches or greater in depth; and
    c. Table 4 Column D class Large Shrubs & Ornamental Trees shall only be planted in areas where the Horizon B Soil is 12 inches or greater in depth.

E. Replacement of Landscaping. Landscaping has been grouped in Tables 2 through 4 into the following classes for the purpose of open space design: (i) turf grass, (ii) herbaceous perennials, (iii) small and medium shrubs, (iv) large shrubs and ornamental trees, (v) major deciduous trees, and (vi) major evergreen trees. Replacement of Landscape Elements with new landscaping of (a) the same class, (b) the same approximate density; and (c) in the same general vicinity within the Open Space shall be considered replacement-in-kind that is not subject to Court or Special Master approval. Replacement of Landscape Elements with (a) a

different class of landscaping; (b) a substantially different density of landscaping; or (c) substantially different locations shall be considered a new landscape development which is subject to the Court or Special Master approval. However, in no case shall a different class of landscaping be approved unless it is demonstrated that the new class has the same root growth characteristics as the same corresponding class in Tables 2 through4, can thrive in the minimum soil depths set forth in the corresponding class applicable table, and is adaptable to urban environments.

F. Landscaping Maintenance. All trees shall be installed and maintained as follows:

1. Direct drip irrigation systems may be provided.
2. No humps of soil or other landscaping material shall be mounded around the trunk.

G. Thorns, Toxic Fruit Prohibited. Shrubs with dangerous thorns and toxic fruit are prohibited.

H. Lawn Areas. All lawn areas shall be established and maintained with an environmentally-friendly, drought tolerant, wear and pest resistant turf grass mixture, with low fertilizer needs, as recommended by the Rutgers' University turf grass breeding program. Seed mixture shall be suitable for New Jersey urban conditions.

I. Drainage. Landscaped Areas shall be designed to provide adequate drainage. Supplemental drainage systems including use of underdrains such as shown in the concept details Figures 5-7 or other functionally equivalent designs may be added by the Landscape Designer and incorporated into the drainage system for the Cap.

J. Raised planters. Raised planters are allowed provided they are consistent with the details in Figure 5. Other types of raised planters may be approved, but design specifications for such raised planters must be set forth in a Development Plan subject to review and approval by the Special Master or Federal Court. However, in no case shall other types of raised planters be approved unless it is demonstrated that they will not jeopardize the integrity of the Chromium Remedy.

K. Criteria for Selection of Landscape Elements. Landscape Elements shall be selected for installation in accordance with the following criteria:

1. **Referenced Standard** – All trees shall be commercially grown in accordance with ANLA publication, "American Standards for Nursery Stock" ANSI Z60.1 2004. (Attached as Exhibit 6).
2. **Source** – All trees and shrubs shall be nursery-grown stock raised in commercial nurseries specializing in the growth and supply of superior quality stock in accordance with ANSI Z60.1 2004 and certified to be free of any and all pathogens by inspection and certification at the time of harvesting. Nurseries shall be in a comparable bioregion to the Open Space Areas. "Plantation grown" trees referenced in ANSI Z60.1 2004 are not permitted.
3. **Lateral Root Growth** – The supply nursery shall have soil characteristics which support a shallow, horizontal high plate formation root systems. All trees and shrubs shall have been root pruned at initial planting (lining out) and transplanted a minimum of three times (trans.3x) in accordance with the ANSI Z60.1 2004 to eliminate downward (striker) roots. Additionally, supply nurseries shall demonstrate that progeny have been generated from mother stock of superior seed provenance with characteristic surface, horizontal, high plate formation root systems. Plant material selected for Open Space Areas shall be provided in numbers such that at time of harvesting (transplanting for shipment to the site), 5% of all individuals selected from the nursery stocks shall be excavated and the root systems exposed to demonstrate the absence of striker roots.
4. **Size** – Except as provided in Section 2.2.9.K.4.f, at the time of installation, Landscape Elements shall meet the size requirements set forth in Tables 2 through 4 or as follows below for approved landscaping with comparable characteristics:
    a. Table 2 class deciduous trees shall have the following size:
        i. a height no less than 10 feet and no greater than 16 feet;
        ii. a caliper no less than 2 inches and no greater than 3.5 inches; and
        iii. a root ball depth no greater than 34 inches.

b. Table 2 class evergreen trees shall have the following size:

   i. a height no less than 7 feet and no greater than 8 feet;

   ii. a spread between 4.5 and 5 feet if the height is 8 feet and between 3.5 and 4 feet if the height is 7 feet; and

   iii. a root ball depth no greater than 34 inches.

c. Table 3 class trees shall have the following size at the time of installation:

   i. a height no less than 8 feet and no greater than 14 feet;

   ii. a caliper no less than 1 inch and no greater than 2.5 inches; and

   iii. a root ball depth no greater than 28 inches.

d. Table 4, Column D class trees and shrubs shall have a root ball depth no greater than 28 inches.

e. Table 4, Column C class shrubs shall have a root ball depth no greater than 16 inches.

f. Landscape Elements with larger calipers, spreads and/or heights may be installed provided that the applicable root ball depth is not exceeded.

g. For purposes of these requirements, the root ball depth, the caliper and the spread shall be measured according to ANZI Z60.1 2004.

h. The size of each Landscape Element shall also allow for compliance with the planting requirements set forth in Section 2.2.9.L.

L. Planting Requirements. Verification and certification of the planting requirements set forth in this section shall be made as specified herein by the licensed professionals required under Section 2.2.9.B.

1. The depth of each planting hole shall in no case be deeper than 6 inches above the Root Barrier Horizon C Soils if machine excavation is employed or 2 inches above the Root Barrier Horizon C Soils if soft-digging methods are employed. The maximum allowed depth for each planting hole shall be set forth in a planting plan prepared as part of the landscape design for each

Open Space Area and such maximum depths shall be certified on the plan by the licensed New Jersey Professional Engineer.

2. Balled and burlapped or containerized trees and shrubs shall be set during planting such that the top of the root ball (root flare) is approximately 2 inches above the final surface soil line. After balled and burlapped trees and shrubs have been set, burlap shall be removed from the top one third of the root ball and a visual inspection of the root structure shall be made by the licensed New Jersey Arborist or licensed New Jersey Landscape Architect to verify setting height. No backfilling of the planting hole shall be performed until the setting height has been verified by the licensed New Jersey Arborist or licensed New Jersey Landscape Architect. Staking of trees is prohibited.
3. Large containerized shrubs shall be set with containers intact such that the top of the root ball is 2 inches above the final soil line. After verification of the setting height by the licensed New Jersey Arborist or licensed New Jersey Landscape Architect, the container shall be cut and removed leaving the bottom of the container in place. No backfilling of the planting hole shall be performed until the setting height has been verified by the licensed New Jersey Arborist or licensed New Jersey Landscape Architect. Large containerized shrubs are Table 4, column D class shrubs.

Table 2: Bayfront Development – Major Trees

Major Deciduous Trees	Mature Height	Canopy Width	Minimum Overall Fill Depth Above Root Barrier (feet)	Minimum Depth of Horizon B Soils (inches)	Application	Installed Size Range Caliper in Inches Height in Feet	Maximum Root Ball Depth (inches)	Native Species
ACER x freemanii 'Autumn Blaze' Autumn Blaze Red Maple	50'	40'	3.5’	18	Street, Shade Tree	2”-3½"cal. 10’-16' Ht.	34	Y
ACER rubrum 'varieties' Red Maple 'varieties'	50'	40'	3.5’	18	Street, Shade Tree	2”-3½"cal. 10’-16' Ht.	34	Y
ACER saccharum 'varieties' Sugar maple	50'	35'	3.5’	18	Shade Tree	2”-3½"cal. 10’-16' Ht.	34	Y
QUESCUS palustris Pin oak	60'	40'	3.5’	18	Shade, Plaza Tree	2”-3½"cal. 10’-16' Ht.	34	Y
FRAXINUS pennsylvanica 'varieties' Green Ash varieties & cultivars	50'	40'	3.5’	18	Street, Shade Tree	2”-3½"cal. 10’-16' Ht.	34	Y
ZELKOVA serrata 'varieties' Japanese Zelkova	50'	50'	3.5’	18	Street, Shade, Plaza	2”-3½"cal. 10’-16' Ht.	34	N
GINKGO biloba (male only) Ginkgo	50'	35'	3.5’	18	Street, Shade, Plaza	2”-3½"cal. 10’-16' Ht.	34	N
FRAXINUS americana White ash	60'	50'	3.5’	18	Shade Tree	2”-3½"cal. 10’-16' Ht.	34	Y
TILIA americana American Linden	60'	50'	3.5’	18	Park, Plaza Tree	2”-3½"cal. 10’-16' Ht.	34	Y

Major Deciduous Trees	Mature Height	Canopy Width	Minimum Overall Fill Depth Above Root Barrier (feet)	Minimum Depth of Horizon B Soils (inches)	Application	Installed Size Range Caliper in Inches Height in Feet	Maximum Root Ball Depth (inches)	Native Species
BETULA nigra River Birch	40'	30'	3.5’	18	Park	2”-3½"cal. 10’-16' Ht.	34	Y
ILEX opaca American holly	40'	20'	3.5’	18	Park	8' Ht. / 4½-5' Spd.	34	Y
THUJA occidentalis 'nigra' or 'techny' American or 'Techny' Arborvitae	30'	15'	3.5’	18	Park	7' Ht. / 3½-4' Spd.	34	Y
PICEA pungens Colorado Spruce	50'	30'	3.5’	18	Park	8' Ht. / 4½-5' Spd.	34	Y
CHAMECYPARIS thyoides Atlantic White Cedar	35'	15'	3.5’	18	Park	7' Ht. / 3½-4' Spd.	34	Y
CUPRESSOCYPARIS leylandii Leyland Cypress	35'	20'	3.5’	18	Park	7' Ht. / 3½-4' Spd.	34	N

Table 3: Minor Flowering / Ornamental Trees

MM Minor Flowering / Ornamental Trees	Mature Height (feet)	Canopy Width (feet)	Minimum Overall Fill Depth Above Root Barrier (feet)	Minimum Depth of Horizon B Fill Soils (inches)	Application	Installed Size Range Caliper in Inches Height in Feet	Maximum Root Ball Depth (inches)	Native Species
ACER compestre Hedge Maple	30'	25'	3’	12	Park	1”-2½"cal. 8’-14' Ht.	28	N
CERCIDIPHYLUM japonicum Katsura tree	40'	20'	3’	12	Park	1”-2½"cal. 8’-14' Ht.	28	N
CARPINUS betulus European hornbeam	30'	20'	3’	12	Park	1”-2½"cal. 8’-14' Ht.	28	N
MALUS spp. Crabapple	20'	20'	3’	12	Park	1”-2½"cal. 8’-14' Ht.	28	Y
CERCIS canadensis Eastern redbud	25'	25'	3’	12	Park	1”-2½"cal. 8’-14' Ht.	28	Y
CORNUS florida Flowering dogwood	25'	25'	2.5’	12	Park	1”-2½"cal. 8’-14' Ht.	28	Y
AMELANCHIER arborea Serviceberry	25'	20'	2.5’	12	Park	1”-2½"cal. 8’-14' Ht.	28	Y
CRATAEGUS viridis Hawthorn	20'	15'	2.5’	12	Park	1”-2½"cal. 8’-14' Ht.	28	Y

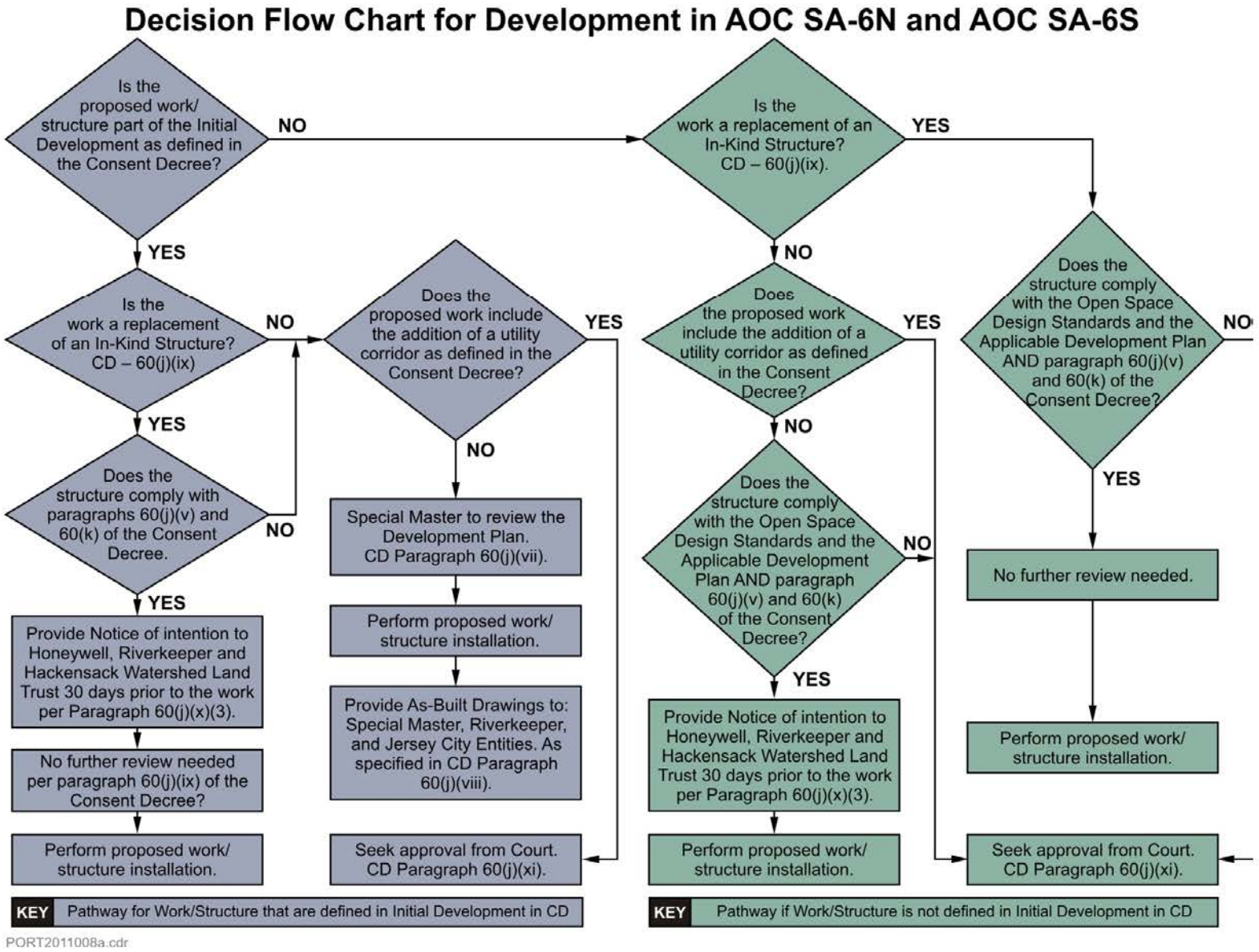
Table 4: Ground Covers, Grasses, Shrubs and Small Trees Suitable for Planting over the Liner at the Bayfront Development Site

A.	B.	C.	D.
Turfgrass **1.0' Minimum Fill Depth above the Root Barrier**	**Herbaceous Perennials,** **and Ground Covers** **1.5' Minimum Fill Depth above the Root Barrier**	**Small & Med. Shrubs and Native or Ornamental Grasses - 2'- 8' Ht.** **2.0 Minimum Fill Depth above the Root Barrier** **Maximum Root Ball Depth – 16 inches**	**Minor Flowering /Large Shrubs & Ornamental Trees** **3.0' Minimum Fill Depth above the Root Barrier** **Fill thickness by Soil Horizon** **Horizon A - 6 inches minimum** **Horizon B – 12 inches minimum** **Horizon C – 18 inches** **Maximum Root Ball Depth – 28 inches**
Fine Fescue Lawn Mix	Aegopodium (Bishop Weed) Ajuga Arctostaphylos (Bearberry) Chrysogonum Convallaria (Lily of the Valley) Coreopsis (Tickseed) Echinacea (Coneflower) Ferns Heuchera (Coral Bells) Liriope (Lilly Turf) Pathenocissus (Virginia Creeper)	Aronia arbutifolia Berberris thunbergii (Dwarf) Clethra alnifolia (Summersweet) Cotoneaster horizontalis Euonymous (shrub form) Juniperus (spreaders to 4' ht.) Spiraea (dwarf varieties) Rhododendron (compact) Lonicera (low shrub form) Juniperus (chinensis low spreading) Spiraea (dwarf varieties) Cornus stolenifera Vaccinium angustifolia Miscanthus (Ornamental Grass) Pennisetum (Ornamental Grass) Andropogen (Bluestem)	Acer palmatum Amelanchier canadensis Cornus mas Ilex latifolia (Asiatic Holly) Juniperus chinensis Magnolia (virginiana & stellata) Picea (dwarf varieties) Pinus (dwarf varieties) Prunus - (low varieties) Styrax japonica Thuja (compact varieties) Chamaecyparis (dwarf varieties) Enkianthus campanulatus Forsythia suspense Hamamelis virginiana Ilex glabra

A.	B.	C.	D.
	Phlox (Creeping Phlox) Rudbeckia (Black eyed Susan) Sedum spp. Verbena (creeping) Vinca minor Various Perennials (low) Fine Fescue (grasses) • Design mix for mowing • Design mix for no-mow All species from Table 6A	Sorghastrum (Indian Grass) Tripsacum (Dwarf Gamma Grass) Helictotrichon (Blue Oat Grass) Panicum virgatum (switchgrass) Rosa (low ornamental/shrub forms) All species from Table 6B	Ilex meservae Ilex verticillata Juniperus chinensis pfitzeriana Myrica pennsylvanica Rhododendron (hybrid varieties) Spiraea (shrub forms) Syringa (compact varieties) Taxus (cuspidata – low varieties) Viburnum spp. All species from Table 6 A & B

3.0 ADMINISTRATION

The Consent Decrees define the approval process for Permissible Development in the Open Space Areas. In general, Permissible Development requires preparation of a Development Plan and approval of such plan by the Special Master or permits replacement-in-kind of previously approved Permissible Development. The following flow chart provides a general description of the process, but the Consent Decrees should be consulted for the specific requirements.


Decision Flow Chart for Development in AOC SA-6N and AOC SA-6S
Is the proposed work/ structure part of the Initial Development as defined in the Consent Decree?
NO
YES
Is the work a replacement of an In-Kind Structure? CD – 60(j)(ix).
YES
NO
Is the work a replacement of an In-Kind Structure? CD – 60(j)(ix)
NO
YES
Does the proposed work include the addition of a utility corridor as defined in the Consent Decree?
YES
NO
Does the proposed work include the addition of a utility corridor as defined in the Consent Decree?
YES
NO
Does the structure comply with the Open Space Design Standards and the Applicable Development Plan AND paragraph 60(j)(v) and 60(k) of the Consent Decree?
NO
YES
Does the structure comply with paragraphs 60(j)(v) and 60(k) of the Consent Decree.
NO
YES
Special Master to review the Development Plan. CD Paragraph 60(j)(vii).
Does the structure comply with the Open Space Design Standards and the Applicable Development Plan AND paragraph 60(j)(v) and 60(k) of the Consent Decree?
NO
YES
No further review needed.
Provide Notice of intention to Honeywell, Riverkeeper and Hackensack Watershed Land Trust 30 days prior to the work per Paragraph 60(j)(x)(3).
Perform proposed work/ structure installation.
Provide Notice of intention to Honeywell, Riverkeeper and Hackensack Watershed Land Trust 30 days prior to the work per Paragraph 60(j)(x)(3).
Perform proposed work/ structure installation.
No further review needed per paragraph 60(j)(ix) of the Consent Decree?
Provide As-Built Drawings to: Special Master, Riverkeeper, and Jersey City Entities. As specified in CD Paragraph 60(j)(viii).
Perform proposed work/ structure installation.
Seek approval from Court. CD Paragraph 60(j)(xi).
Seek approval from Court. CD Paragraph 60(j)(xi).
KEY
Pathway for Work/Structure that are defined in Initial Development in CD
KEY
Pathway if Work/Structure is not defined in Initial Development in CD
PORT2011008a.cdr

3.1 AS-BUILT DOCUMENTATION

As-Built drawing records shall be required for all Permissible Development to provide a reference for later work conducted pursuant to the OSDS. The requirement for as-built records during Initial Development is stipulated in Paragraph 60(j)(viii) of the Study Area 6 North Consent Decree. If any development or modifications are made following Initial Development, the Developer shall provide the same level of as-built documentation as required during the Initial Development period.

The as-built drawings Permissible Development shall include coordinates for each of the following as specified:

- Utilities: At the beginning and end points of a run and at any structure, turning points or changes of horizontal or vertical alignment.
- Utility Corridors: At all turn points such that the limits of the corridor can be easily identified.
- Final Development Grade
- Landscaped Areas: Types, locations, and limits
- Details on constructed Permissible Development Elements

4.0 LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
NJDEP	New Jersey Department of Environmental Protection
OSDS	Open Space Design Standards
RCRA	Resource Conservation and Recovery Act
SA	Study Area
Study Area 6 North Consent Decree	Consent Decree Regarding Remediation and Redevelopment of Study Area 6 North
Study Area 6 South Consent Decree	Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South

FIGURES



LEGEND:

- OPEN SPACE (BAYFRONT)
- OPEN SPACE (SA-6 NORTH AND SA-6 SOUTH)
- CONSERVATION EASEMENT)
- PROPERTY LINE
- SA7 SCB HYDRAULIC BARRIER
- HYDRAULIC BARRIER SA-6 NORTH
- HYDRAULIC BARRIER SA-6 SOUTH

0 75 150 300
SCALE IN FEET

Prepared/Date: RJR 06/06/13
Checked/Date: SGS 06/06/13

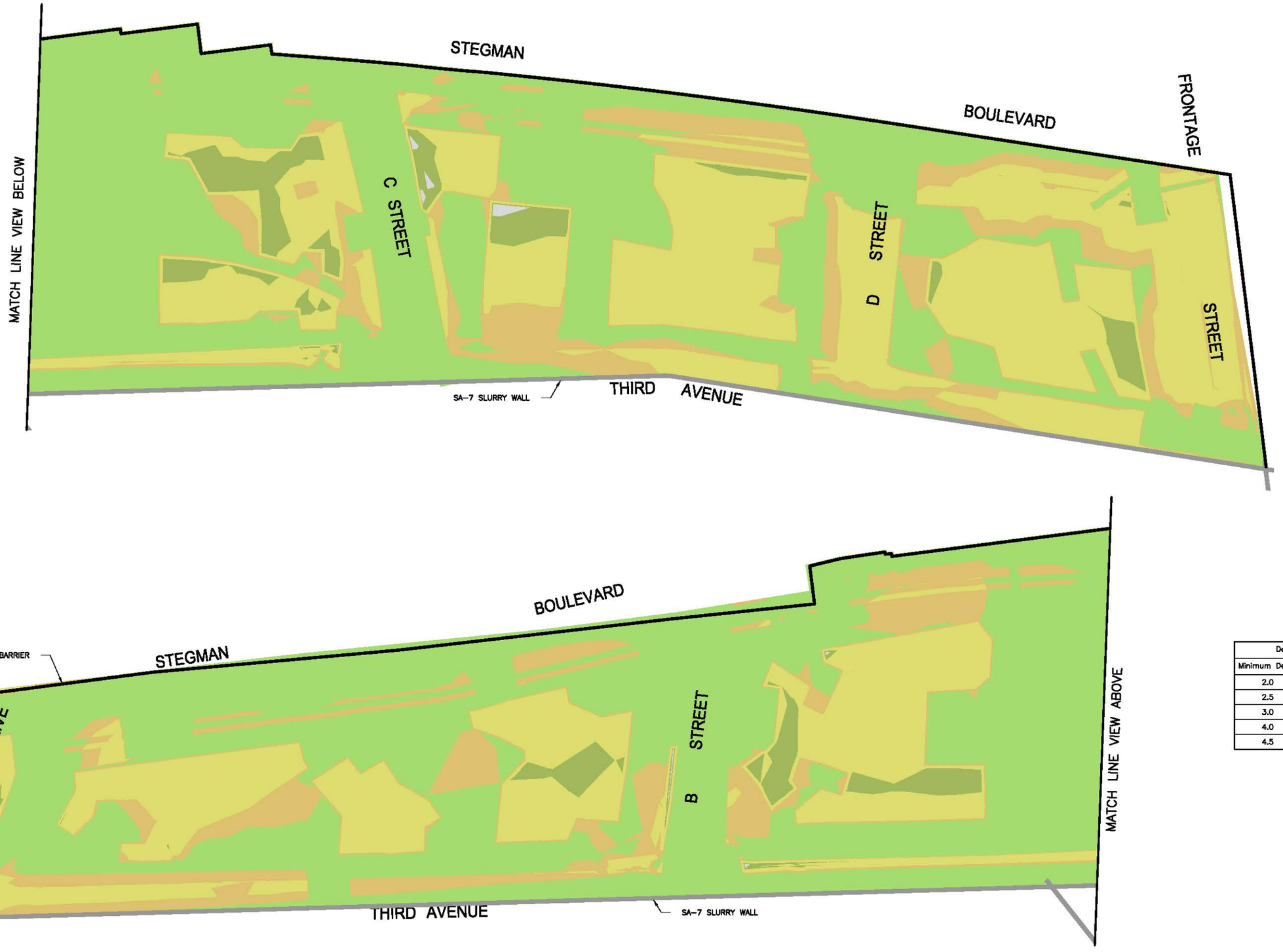
Honeywell 101 COLUMBIA RD., P.O. BOX 2105 MORRISTOWN, NJ 07962	OPEN SPACE DESIGN STANDARDS CHROMIUM REMEDY STUDY AREAS 6 NORTH AND SOUTH JERSEY CITY, NEW JERSEY	amec	OPEN SPACE AREAS FIGURE 1



0 20 40 80
SCALE IN FEET

Prepared/Date: RJR 04/08/13
Checked/Date: SGS 04/08/13

Honeywell 101 COLUMBIA RD., BOX 2105 MORRISTOWN, NJ 07962	OPEN SPACE DESIGN STANDARDS CHROMIUM REMEDY, STUDY AREA 6 NORTH JERSEY CITY, NEW JERSEY HONEYWELL SITE ID - 37472	amec	CENTRAL PARK LANDSCAPING AND HARDSCAPE CONCEPTS FIGURE 4A



Depth to Liner Table		
Minimum Depth	Maximum Depth	Color
2.0	2.5	
2.5	3.0	
3.0	4.0	
4.0	4.5	
4.5	13.6	

Prepared/Date: RJR 04/08/13
Checked/Date: SGS 04/08/13

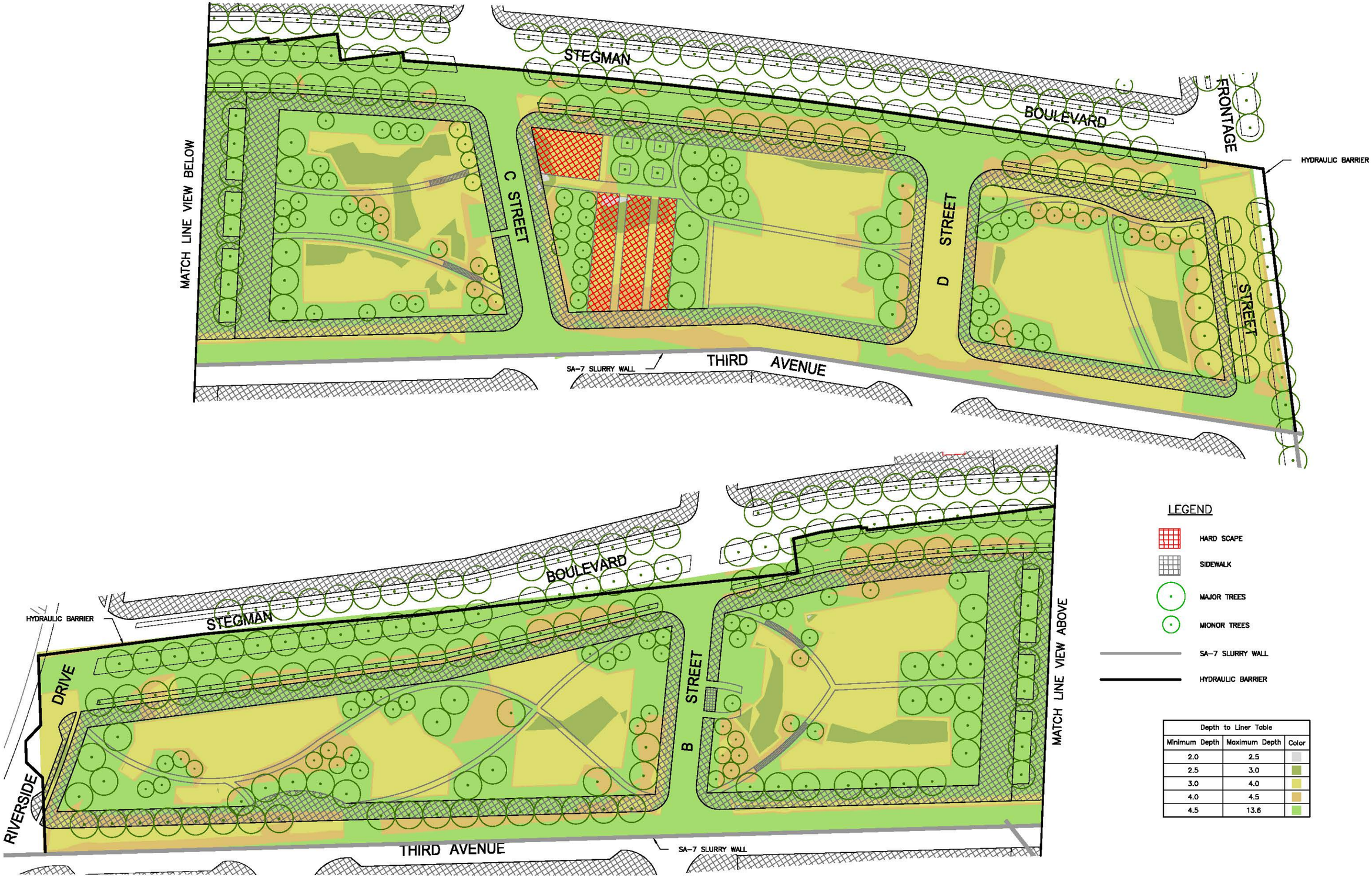
0 20 40 80
SCALE IN FEET

Honeywell
101 COLUMBIA RD. BOX 2105
MORRISTOWN, NJ 07962

OPEN SPACE DESIGN STANDARDS
CHROMIUM REMEDY, STUDY AREA 6 NORTH
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

amec

CENTRAL PARK
SOIL DEPTH RANGES
ABOVE WARNING LAYER/LINER
FIGURE 4B



Depth to Liner Table		
Minimum Depth	Maximum Depth	Color
2.0	2.5	
2.5	3.0	
3.0	4.0	
4.0	4.5	
4.5	13.6	

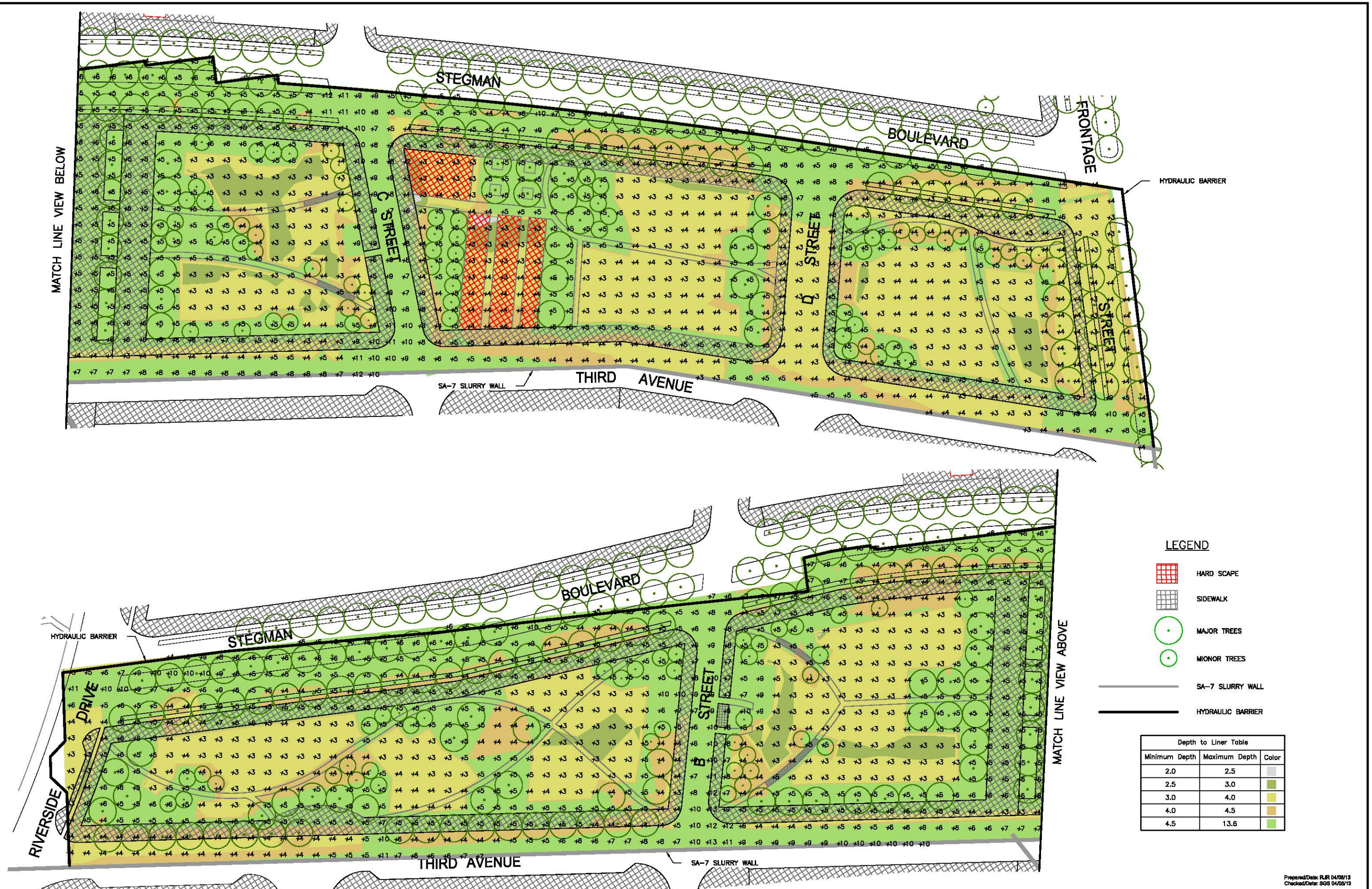
Prepared/Date: RJR 04/08/13
Checked/Date: SGS 04/08/13

Honeywell
101 COLUMBIA RD. BOX 2105
MORRISTOWN, NJ 07962

OPEN SPACE DESIGN STANDARDS
CHROMIUM REMEDY, STUDY AREA 6 NORTH
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

amec

CENTRAL PARK
LANDSCAPING AND SOIL DEPTH RANGES
ABOVE WARNING LAYER/LINER
FIGURE 4C



Depth to Liner Table		
Minimum Depth	Maximum Depth	Color
2.0	2.5	
2.5	3.0	
3.0	4.0	
4.0	4.5	
4.5	13.6	

Prepared/Date: RJR 04/08/13
Checked/Date: SGS 04/08/13

Honeywell
101 COLUMBIA RD. BOX 2106
MORRISTOWN, NJ 07962

OPEN SPACE DESIGN STANDARDS
CHROMIUM REMEDY, STUDY AREA 6 NORTH
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

amec

CENTRAL PARK
LANDSCAPING AND SOIL SPOT DEPTHS
TO WARNING LAYER/LINER
FIGURE 4D

STEGMAN BOULEVARD

FRONTAGE ROAD

NEW JERSEY STATE HIGHWAY ROUTE 440

HYDRAULIC BARRIER

MATCH LINE VIEW BELOW

C STREET

D STREET

STREET

THIRD AVENUE

SA-7 SLURRY WALL

HACKENSACK RIVER

HYDRAULIC BARRIER

STEGMAN BOULEVARD

RIVERSIDE DRIVE

B STREET

THIRD AVENUE

SA-7 SLURRY WALL

MATCH LINE VIEW ABOVE

LEGEND

MAJOR TREES

MIONOR TREES

SA-7 SLURRY WALL

HYDRAULIC BARRIER

0 20 40 80

SCALE IN FEET

Prepared/Date: RJR 04/08/13
Checked/Date: SGS 04/08/13

Honeywell

101 COLUMBIA RD., BOX 2105
MORRISTOWN, NJ 07962

OPEN SPACE DESIGN STANDARDS
CHROMIUM REMEDY, STUDY AREA 6 NORTH
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

amec

CENTRAL PARK
SOIL SPOT DEPTH TO ROOT BARRIER

Figure 4E

Z:\Projects\HONEYWELL\JERSEY CITY\Dsg Design-SAR-2\3D\3dPLSAN\100 Percent\Response to Comments\Figure 4 - Fit Remedy to Root Barrier Landscaping Thickness.dwg Mon, 08 Apr 2013 - 1:48pm roper.ritzler

GRAND BLVD.

C STREET

D STREET

SA-7 SLURRY WALL

FRONTAGE

STREET

MATCH LINE VIEW BELOW

HYDRAULIC BARRIER

GRAND BLVD.

SA-7 SLURRY WALL

GRAND BLVD.

RIVERSIDE DRIVE

A STREET

B STREET

MATCH LINE VIEW ABOVE

HYDRAULIC BARRIER

GRAND BLVD.

LEGEND

- HARD SCAPE
- SIDEWALK
- MAJOR TREES
- MIONOR TREES
- SA-7 SLURRY WALL
- HYDRAULIC BARRIER

Prepared/Date: RJR 06/09/13
Checked/Date: SGS 06/09/13

0 20 40 80
SCALE IN FEET

Honeywell
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MORRISTOWN, NJ 07962

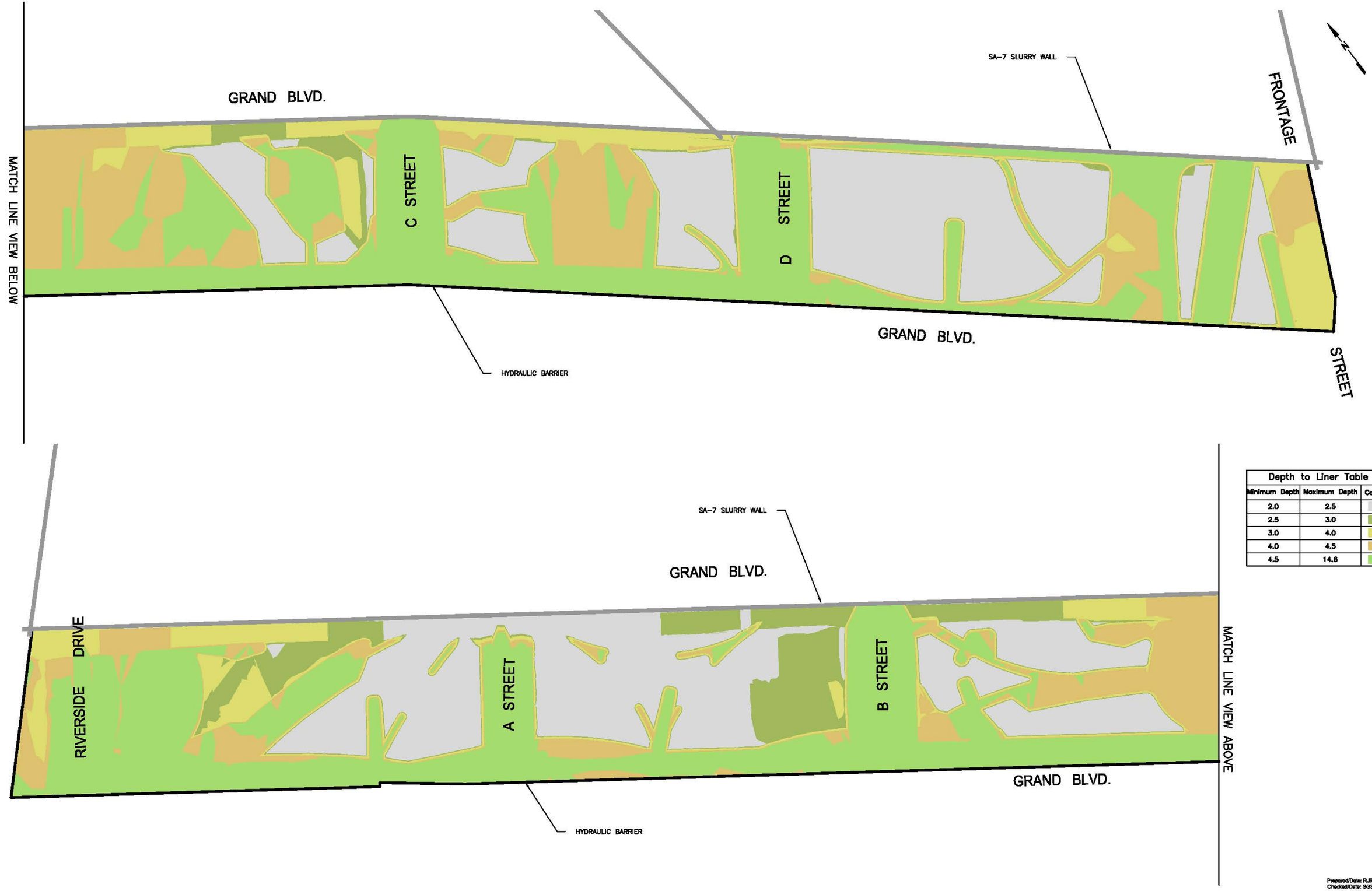
OPEN SPACE DESIGN STANDARDS
CHROMIUM REMEDY
STUDY AREA 6 SOUTH
JERSEY CITY, NEW JERSEY

amec

PROMENADE
LANDSCAPING AND HARDSCAPE CONCEPTS

Figure 4F

Z:\Projects\HONEYWELL\JERSEY CITY\Data Design-Data-CDR\CAD\SA6S\Figure 4F Landscaping Redlining Thu, 06 Jun 2013 - 3:03pm roger.fiedler



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Prepared/Date: RJR 04/08/13
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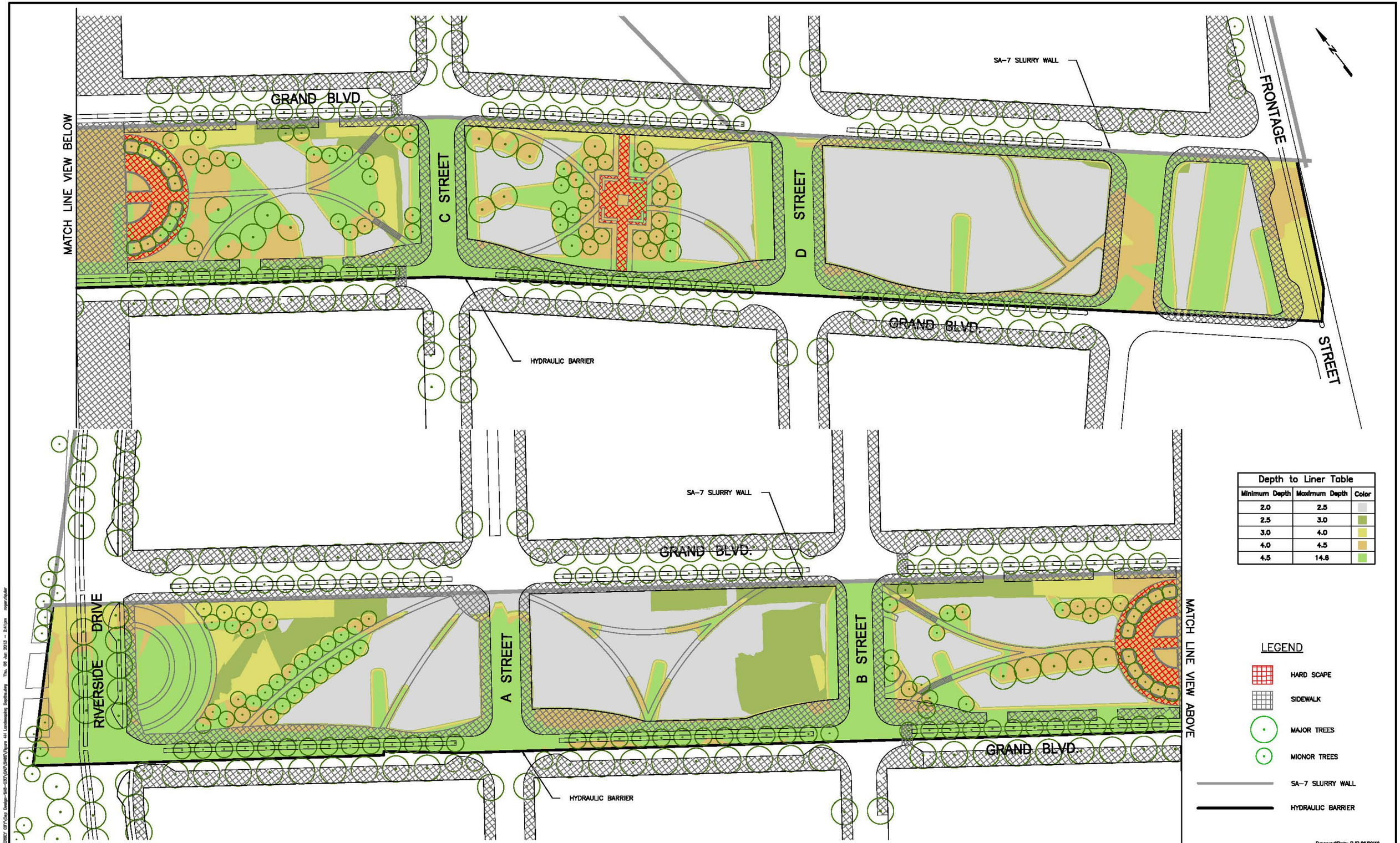
PROMENADE
SOIL DEPTH RANGES ABOVE
WARNING LAYER/LINER
Figure 4G



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4.0	4.5	
4.5	14.6	

Prepared/Date: RJR 06/09/13
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OPEN SPACE DESIGN STANDARDS
CHROMIUM REMEDY
STUDY AREA 6 SOUTH
JERSEY CITY, NEW JERSEY

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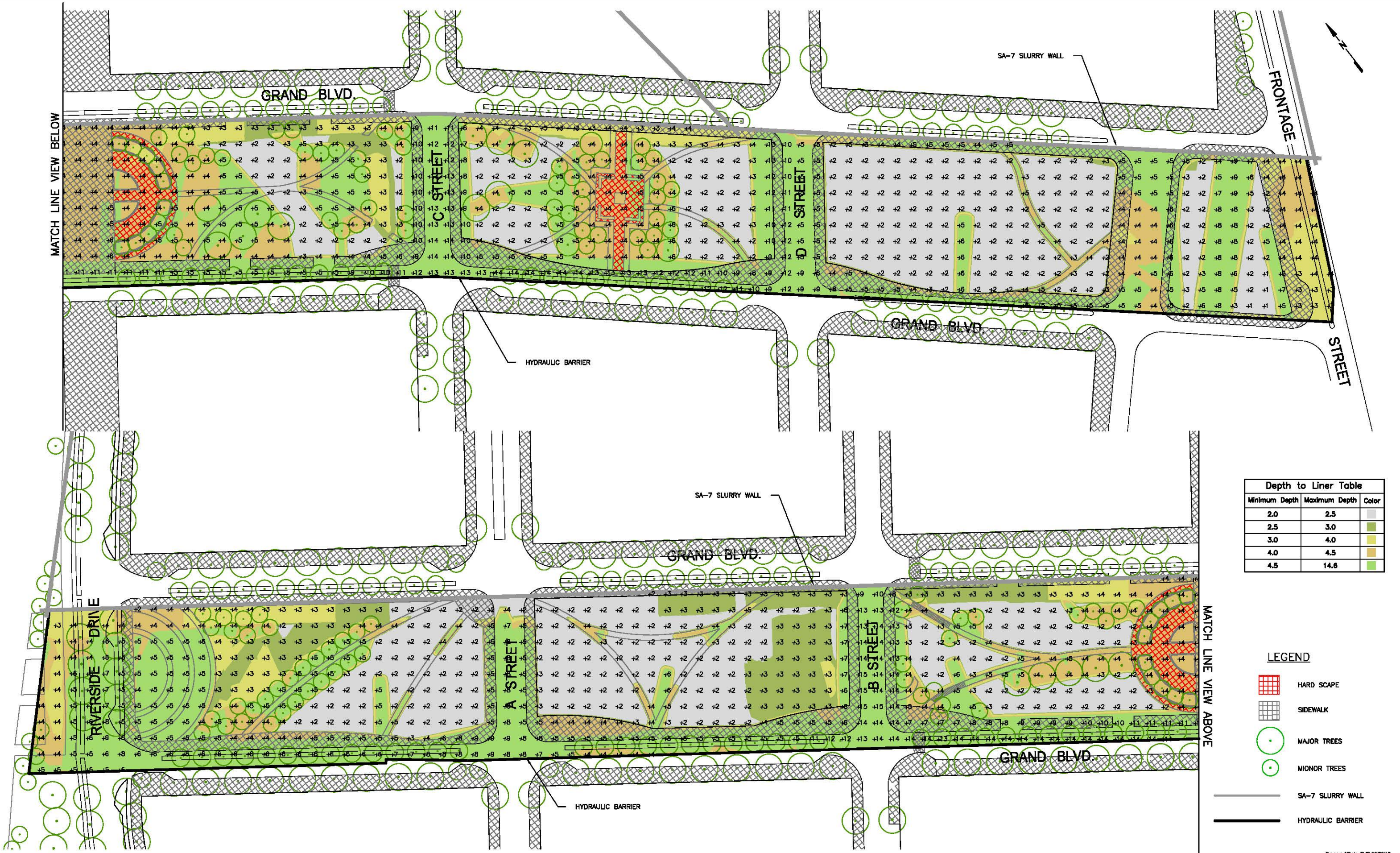
PROMENADE
LANDSCAPING AND SOIL DEPTH RANGES
ABOVE WARNING LAYER/LINER
Figure 4H



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4.5	14.6	

Prepared/Date: RJR 06/09/13
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STUDY AREA 6 SOUTH
JERSEY CITY, NEW JERSEY

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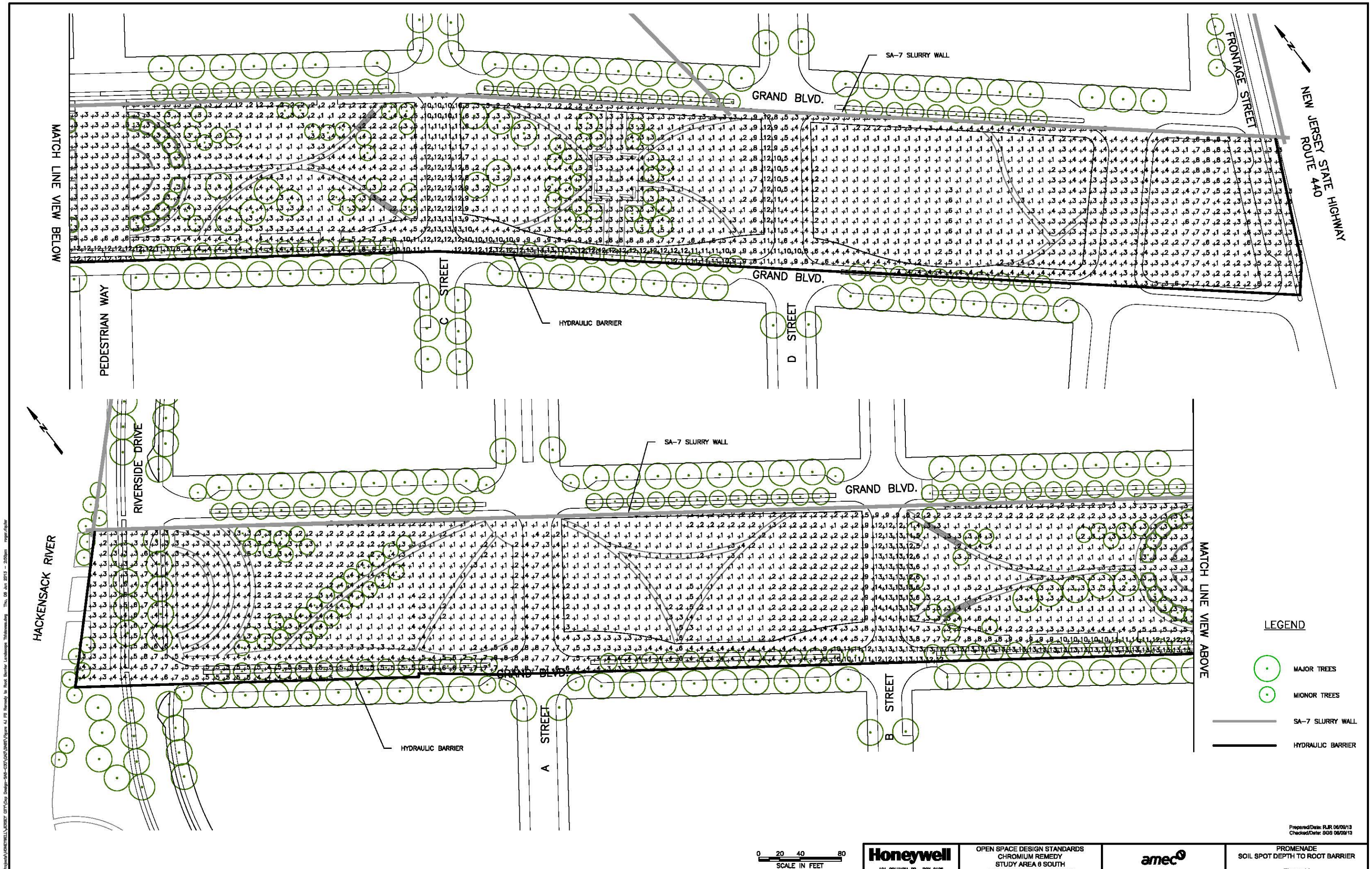
PROMENADE
LANDSCAPING AND SOIL SPOT
DEPTHS TO WARNING LAYER/LINER
Figure 4I



Prepared/Date: RJR 06/09/13
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OPEN SPACE DESIGN STANDARDS
CHROMIUM REMEDY
STUDY AREA 6 SOUTH
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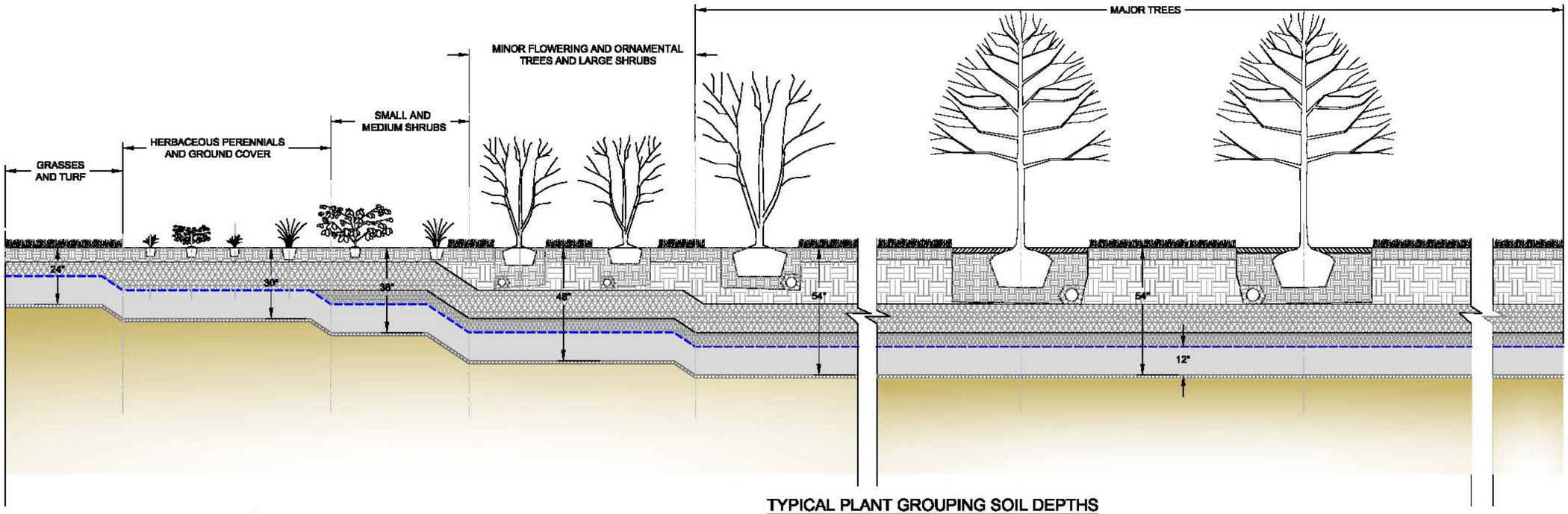
PROMENADE
SOIL SPOT DEPTH TO ROOT BARRIER

Figure 4J

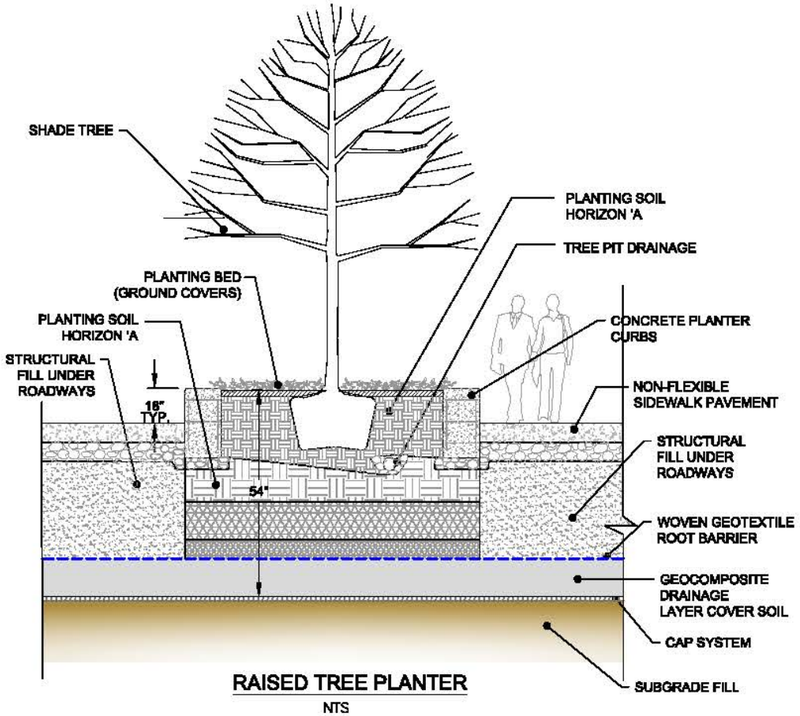


TYPICAL PLANT GROUPING SOIL DEPTHS

NTS

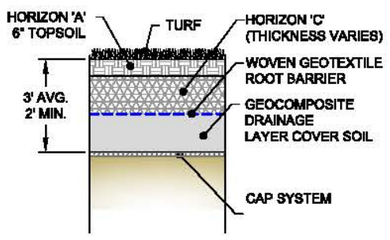
NOTES:

1. SOIL DEPTHS ILLUSTRATE THE NOMINAL DEPTH FOR EACH PLANT GROUPING TABULATED IN TABLE 2 OF THE OSDS. PLANTS FROM SHALLOW GROUPINGS MAY BE PLACED IN AREAS WHERE DEPTHS EXCEED THAT SHOWN.
2. GEOCOMPOSITE DRAINAGE LAYER COVER SOIL WILL BE PLACED IN A SINGLE LIFT AS SPECIFIED. THE LAYER WILL HAVE A MINIMUM COMPACTED THICKNESS OF 12 INCHES.
3. THE ROOT BARRIER WILL BE PLACED OVER THE GEOCOMPOSITE DRAINAGE LAYER COVER SOIL.
4. HORIZON C SOIL WILL BE PLACED OVER THE ROOT BARRIER. THE FIRST 6 INCHES OF HORIZON C SOIL WILL BE COMPACTED TO 90% STANDARD PROCTOR IN THE TREE PLANTING AREAS.
5. THE ROOT BARRIER WILL EXTEND UNDER ALL NON-ROADWAY AREAS WITHIN THE OPEN SPACE. HONEYWELL RESERVES THE RIGHT TO NOT INSTALL THE ROOT BARRIER UNDER ROADWAYS.



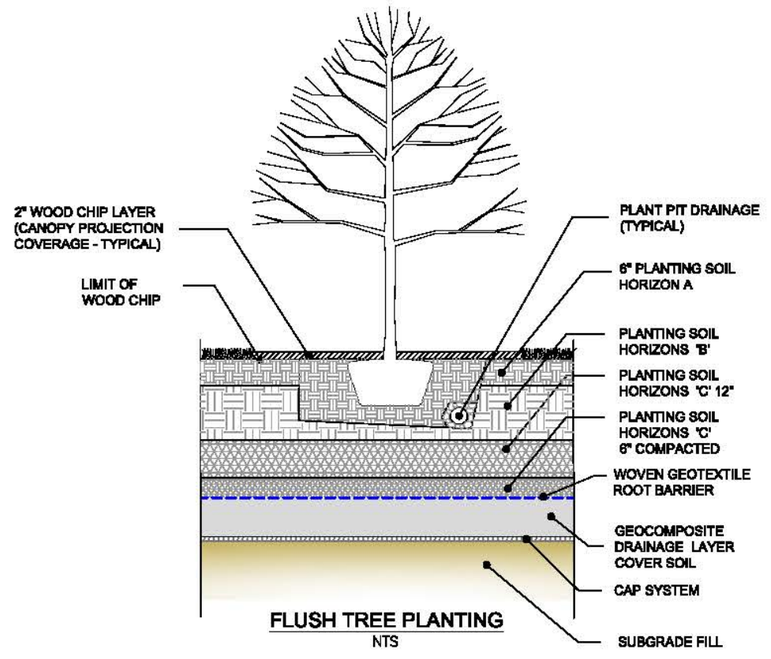
RAISED TREE PLANTER

NTS



SOIL DEPTH LAWNS

NTS



FLUSH TREE PLANTING

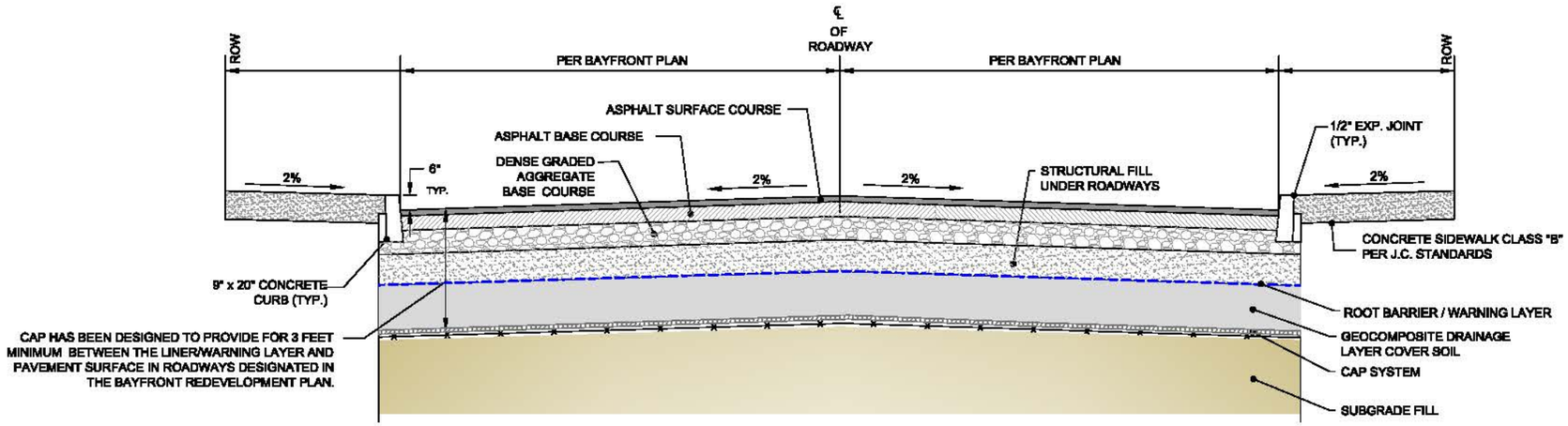
NTS

NOTES:

A. RAISED PLANTER DETAIL IS INCLUDED TO ILLUSTRATE ARCHITECTURAL CONCEPTS BAYFRONT REDEVELOPMENT MASTER PLAN REPORT AS PER EXHIBIT NO.123, PAGE 164.
B. DRAINAGE SYSTEM DETAILS WILL BE DEVELOPED AS PART OF THE FINAL LANDSCAPE DESIGN BASED ON PLANTING LAYOUT AND SPECIES SELECTION.

Prepared/Date: RJR 05/20/13
Checked/Date: BGB 05/20/13

Honeywell 101 COLUMBIA RD, MORRISTOWN, NJ 07962	OPEN SPACE DESIGN STANDARDS CHROMIUM REMEDY, STUDY AREA 6 NORTH JERSEY CITY, NEW JERSEY HONEYWELL SITE ID - 37472	amec	TYPICAL PLANTING GROUPING SOIL DEPTHS FIGURE 5

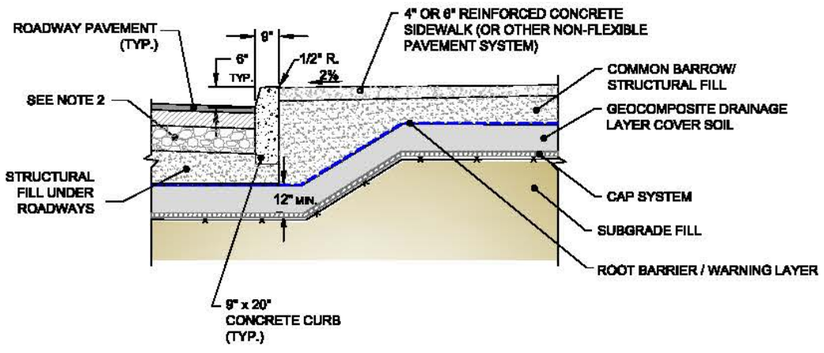


TYPICAL ROADWAY SECTION

NTS

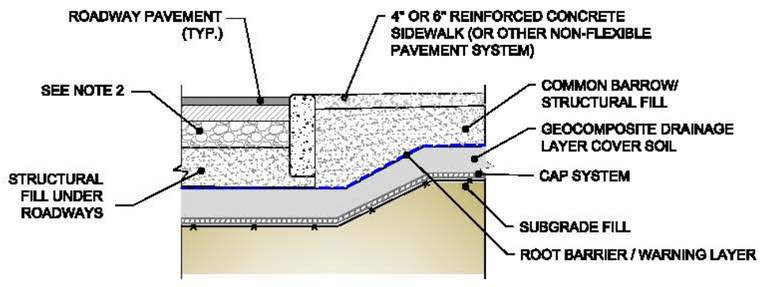
NOTE:

1. THESE SECTIONS ILLUSTRATE DESIGN CONCEPTS THAT ARE PROTECTIVE OF THE CAP SYSTEM. THE ROAD DESIGNER WILL INCORPORATE THE FOLLOWING COMPONENTS OF THE REMEDIAL DESIGN INTO THE ROAD DESIGN.
   - 12" COMPACTED SINGLE LIFT OF GEOCOMPOSITE DRAINAGE LAYER COVER SOIL .
   - STRUCTURAL FILL UNDER ROADWAYS. DEPTH WILL VARY SUBJECT TO THE PAVEMENT DESIGN.
2. DEPTH OF PAVEMENT BOX AS SHOWN IS BASED ON JERSEY CITY DEPARTMENT OF ENGINEERING STANDARDS. PAVEMENT DESIGNS WILL BE PREPARED IN ACCORDANCE WITH APPENDIX L: OPEN SPACE DESIGN STANDARDS, SECTION 2.2.1.A ROADS AND HARDSCAPE AREAS.
3. THE ROOT BARRIER WILL EXTEND UNDER ALL NON-ROADWAYS AREAS WITHIN THE OPEN SPACE. HONEYWELL RESERVES THE RIGHT TO NOT INSTALL THE ROOT BARRIER UNDER ROADWAYS.



TYPICAL SIDEWALK & CURB SECTION

NTS

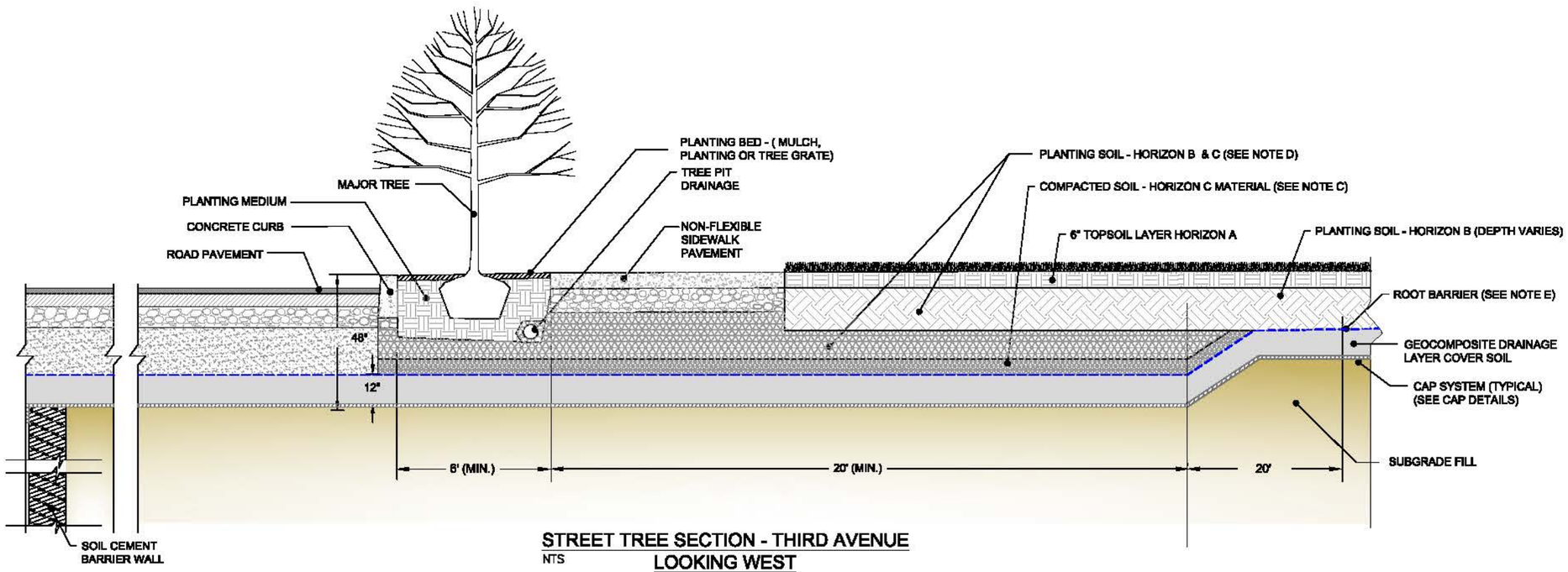


TYPICAL RECESSED CURB SECTION

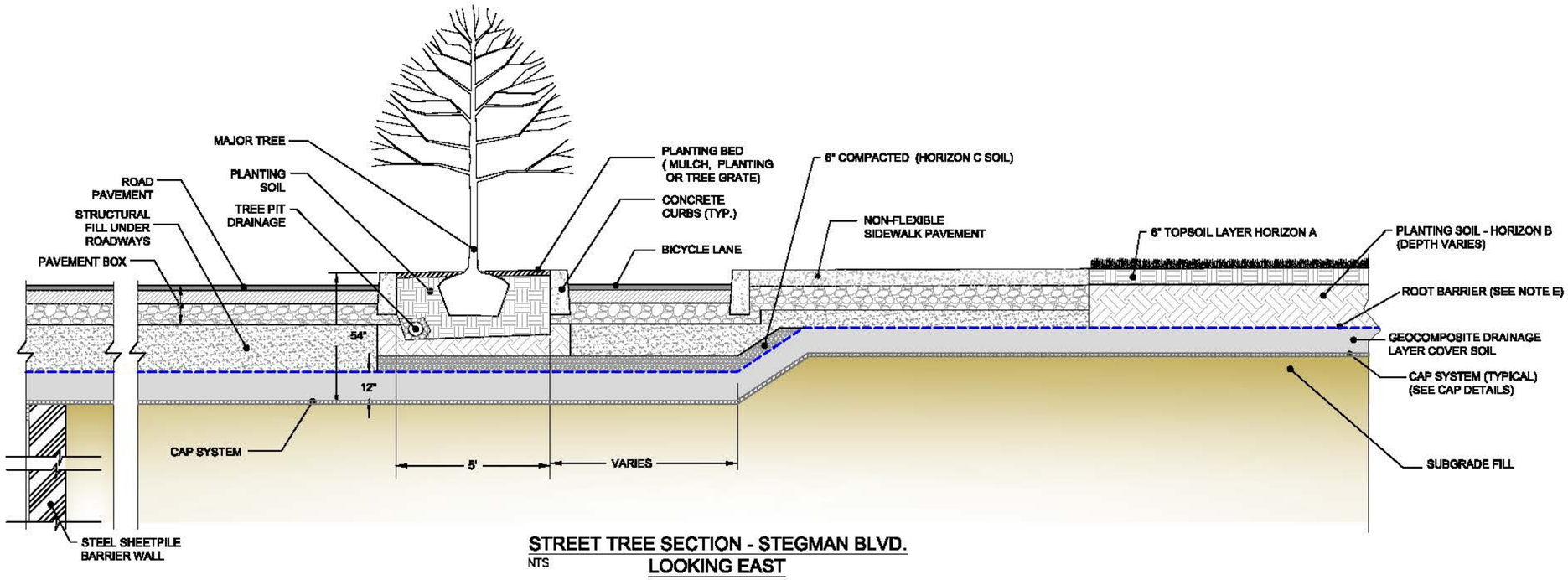
NTS

Prepared/Date: RJR 05/20/13
Checked/Date: SCS 05/20/13

Honeywell 101 COLUMBIA RD, BOX 2105 MORRISTOWN, NJ 07962	OPEN SPACE DESIGN STANDARDS CHROMIUM REMEDY, STUDY AREA 6 NORTH JERSEY CITY, NEW JERSEY HONEYWELL SITE ID - 37472	amec	ROAD SECTION CONCEPTS HONEYWELL BAYFRONT REDEVELOPMENT FIGURE 6



STREET TREE SECTION - THIRD AVENUE
NTS
LOOKING WEST



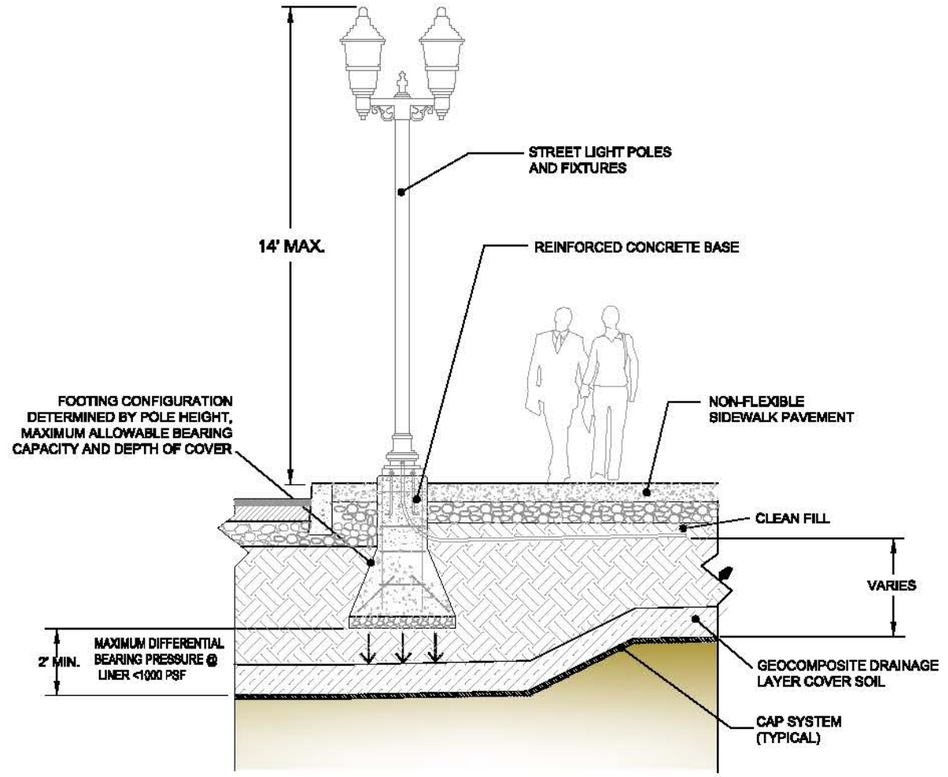
STREET TREE SECTION - STEGMAN BLVD.
NTS
LOOKING EAST

NOTES:

A. SIDEWALK WIDTH AND DEPTH ARE INCLUDED TO ILLUSTRATE POTENTIAL DEVELOPMENT CONCEPTS. FINAL DESIGN DETAILS WILL BE DEVELOPED TO MEET JERSEY CITY DESIGN REQUIREMENTS STIPULATED IN THE CONSENT DECREE AND OSDS.
B. ACTUAL DEPTH TO LINER MAY BE DEEPER THAN SHOWN WHERE UTILITIES OCCUR.
C. HORIZON C MATERIAL SHALL BE PLACED TO A MAXIMUM OF 18" THICKNESS ABOVE THE LINER, WITH BOTTOM 6" WILL BE COMPACTED TO 90% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST. HORIZON B MATERIAL SHALL BE PLACED OVER HORIZON C AND EXTEND TO HORIZON A. IF THE DEPTH TO LINER IS LESS THAN 36 INCHES HORIZON C MATERIAL WILL EXTEND TO HORIZON A.
D. IN LAWN OR PAVEMENT AREAS HORIZON C MATERIAL SHALL EXTEND TO HORIZON A.
E. THE ROOT BARRIER WILL EXTEND UNDER ALL NON-ROADWAYS AREAS WITHIN THE OPEN SPACE. HONEYWELL RESERVES THE RIGHT TO NOT INSTALL THE ROOT BARRIER UNDER ROADWAYS.

Prepared/Date: RJR 05/20/13
Checked/Date: SGS 05/20/13

Honeywell 101 COLUMBIA RD, BOX 2105 MORRISTOWN, NJ 07962	OPEN SPACE DESIGN STANDARDS CHROMIUM REMEDY, STUDY AREA 6 NORTH JERSEY CITY, NEW JERSEY HONEYWELL SITE ID - 37472	amec	STREET TREE PLANTING CONCEPTS HONEYWELL BAYFRONT REDEVELOPMENT FIGURE 7



STREET LIGHT INSTALLATION CONCEPT

NTS

PSF - LBS PER SQUARE FOOT

Prepared/Date: RJR 03/15/13
Checked/Date: BGS 03/15/13

Honeywell 101 COLUMBIA RD, MORRISTOWN, NJ 07962	OPEN SPACE DESIGN STANDARDS CHROMIUM REMEDY, STUDY AREA 6 NORTH JERSEY CITY, NEW JERSEY HONEYWELL SITE ID - 37472	amec	STREET LIGHT CONCEPTS HONEYWELL BAYFRONT REDEVELOPMENT Project 3480-10-0005 FIGURE 8

ATTACHMENT A

OSDS COMPARISON OF APPLICABLE CONSENT DECREE PARAGRAPHS					
ARTICLE	**SECTION**	**Description**	**PARAGRAPH**		**COMMENTS**
			Study Area 6 South	Study Area 6 North	
	A	Chromium Remediation	65	56	
ARTICLE III		Cap 40 mil	65(a)	56(a)	Identical
		Utilities above cap	65(b)	56(b)	56(b) outfall etc. adds provisions related to JCMUA
		Average Soil Depths	65(c)	56(c)	Identical
		Soil Consolidation	65(d)	56(d)	65(d) allows for soils up to 1000 PPM to e consolidated under cap. 56(c) allows solid up to 240
		Shallow Groundwater Remedy	69	58	
		Incorporation of Study Area 7 SCB wall	a	a	Identical
		Hydraulic Barrier wall depth	b	b	Identical
		Groundwater Extraction system	c	c	Identical
		Shallow groundwater capture	d	d	Study Area 6 North includes a caveat related to the deep groundwater remedy
		Plan for control of water levels	e	e	Identical
		Demolition of structures below the meadow mat	f	f	Identical
		NJDEP groundwater classification exception submittal	g	g	Identical
	B	Long Term Monitoring, Maintenance and Protection of Engineering and Institutional Controls		H	
		Prohibited Development	74(j)	60(j)	
		Establishment of OSDS by Honeywell	i	i	Identical
		Initial Development	ii	ii	Identical

OSDS COMPARISON OF APPLICABLE CONSENT DECREE PARAGRAPHS					
ARTICLE	**SECTION**	**Description**	**PARAGRAPH**		**COMMENTS**
		Special Master review of Initial Development	iii	iii	Identical
		Honeywell responsibility for compliance with the requirements of the CD	iv	iv	Identical
		Requirements for Development	v	v	Identical
		NJDEP submission of OSDS not reqd.	PL	plastic limit	Identical
		During Initial period Development Plans require Special Master approval	vii	vii	Identical
		As-Built documentation distribution	viii	viii	Identical
		Initial Development "in kind" and modification approvals	ix	ix	Identical
		Benchmarks for Development after Initial Period	x (1-3)	x (1-3)	Identical
		Approval for expansion of Utility corridors after Initial Period	xi	xi	Identical
		Reporting of alteration and additions after the Initial Period	xii	xii	Identical
		Demolition of Development to maintain or repair the Chromium Remedy	xiii	xiii	Identical
		Permissible Development	74(k)	60(k)	Identical
		Roads and Pedestrian thoroughfare	i	i	Identical
		Curbing and Fences	ii	ii	Identical
		Sidewalks, paths, walkways and trails	iii	iii	Identical
		Utilities and Utility corridors	iv	iv	Identical
		Irrigation and sprinkler components	v	v	Identical
		Water features	vi	vi	Identical
		Above ground stormwater cisterns	vii	vii	Identical
		Signs	viii	viii	Identical
		Benches, trash receptacle and bicycle racks	ix	ix	Identical

OSDS COMPARISON OF APPLICABLE CONSENT DECREE PARAGRAPHS					
ARTICLE	**SECTION**	**Description**	**PARAGRAPH**		**COMMENTS**
		Recreational facilities	x	x	Identical
		Landscaping	xi	xi	Identical
		Honeywell's Ongoing Responsibility	75	61	Identical
		Long Term Monitoring Plan	76	62	Identical
		Long Term Monitoring Plan Objectives	77	PL	Identical
					Identical
		Quarterly Visual		64(a)(i)	Identical
		Quarterly Erosion		a (ii)	Identical
		Quarterly differential settlement		a iii	Identical
		Topographic survey frequency		a iv	Identical
		Quarterly Remedy disturbance		a v	Identical
		Quarterly Burrowing animals		a vi	Identical
		Quarterly vegetation cover		a vii	Identical
		Quarterly groundwater levels		a viii	Identical
		Other monitoring to be defined		a ix	Identical
		Procedures for Changes to Long term monitoring		b	Identical
		Contingency Plan		c	Identical
		Routine Maintenance		d	Identical
		Record keeping		e	Identical
		Monitoring Reporting	79	65	Identical
		Notice to Stakeholders	80	66	Identical
		Annual Letter	81	67	Identical
		Future Notice to Stakeholders	82	68	Identical
		Stakeholder Enforcement	83	69	Identical

Notes:

CD = Consent Decree

JCMUA = Jersey City Municipal Utilities Authority

NJDEP = New Jersey Department of Environmental Protection

PL = Plastic Limit

PPM = Parts Per Million

SCB = Soil Cement Bentonite

EXHIBIT 1

BAYFRONT REDEVELOPMENT PROPOSED FINAL GRADING

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Scale in feet: 0, 150, 300

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(973) 538-2120

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Hamilton, New Jersey 08619
(609) 936-0700

OVERALL GRADING PLAN

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BAYFRONT REDEVELOPMENT PLAN
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

CONCEPT DESIGN

NO.	DATE	REVISION	BY	APVD
1	3-12-13	REVISE GRAND BLVD/FRONTAGE RD LAYOUT PER ROUTE 440 DESIGN MODIFICATION	JRH	APS

DSGN	DR	CHK	APVD
APS	JRH	APS	APS

VERIFY SCALE
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0 1"

DATE 03/12/2010
PROJ 3480-05-0155
DWG C-300
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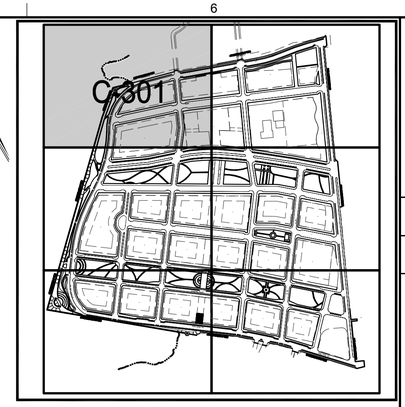

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Scale in feet

NO.	DATE	REVISION	BY	APVD
1		DR NDT CHK MAB	NJS	APVD APS

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HONEYWELL SITE ID - 37472

CONCEPT DESIGN

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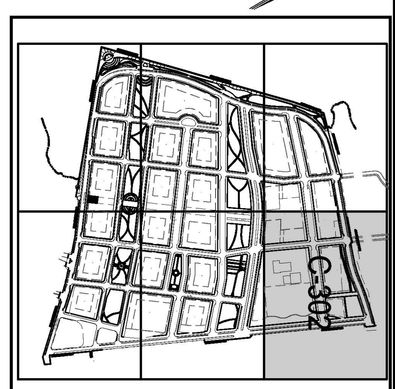

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DATE	03/12/2010
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DWG	C-302
SHEET	26 OF 64

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GRADING PLAN

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JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

CONCEPT DESIGN

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1				

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NDT	MAB	NJS	APS

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MATCH LINE SEE DRAWING C-301

APPROXIMATE LIMITS OF WORK

8

9

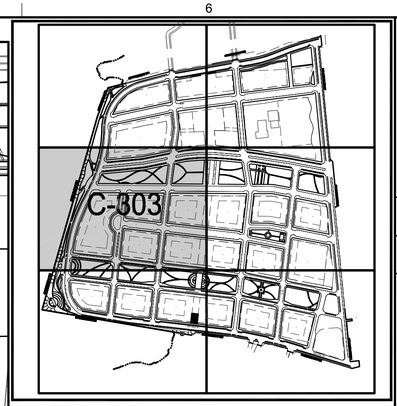
7

13

14

MATCH LINE SEE DRAWING C-304

MATCH LINE SEE DRAWING C-305



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Scale in feet

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NO.	DATE	REVISION	BY
1		DSGN NDT DR MAB CHK NJS APVD APS	APVD

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BAYFRONT REDEVELOPMENT PLAN
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

CONCEPT DESIGN

GRADING PLAN

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DWG	C-303
SHEET	27 OF 64

FILE NAME: K:\19552\CADD\ACAD_Sheet_Files\Comprehensive Plans\19552_C-306-Grading Plans-Rev-03-12-2013.dwg PLOT DATE: Mon, 08 Apr 2013 PLOT TIME: 1:09 PM

MATCH LINE SEE DRAWING C-302

MATCH LINE SEE DRAWING C-303

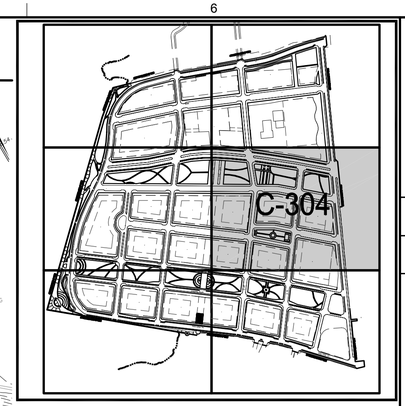
MATCH LINE SEE DRAWING C-306

APPROXIMATE LIMITS OF WORK

60" U.G. STORMWATER DETENTION PIPE (2)

D ST.

10 11 12 15 16 17



SHEET KEY

0 50 100
Scale in feet

NO.	DATE	REVISION	BY	APVD
1		DR MAB CHK NJS APVD APS DSGN NDT		

Honeywell
101 COLUMBIA RD.
MORRISTOWN, NJ 07962

BAYFRONT REDEVELOPMENT PLAN
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

CONCEPT DESIGN

GRADING PLAN

CHA
6 Campus Drive
Parsippany, NJ 07054-4406
(973) 538-2120

MACTEC
200 American Metro BLVD.
Hamilton, New Jersey 08619
(609) 936-0700

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/12/2010
PROJ	3480-05-0155
DWG	C-304
SHEET	28 OF 64

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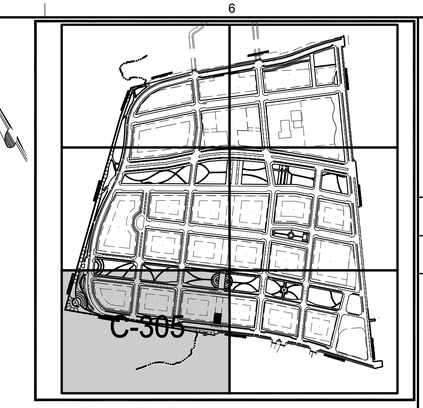

SHEET KEY

MATCH LINE SEE DRAWING C-303

APPROXIMATE LIMITS OF WORK

RIVERSIDE DR.

GRAND. BLVD.

KELLOGG ST.

APPROXIMATE LIMITS OF WORK

MATCH LINE SEE DRAWING C-306

18

19

20

0 50 100
Scale in feet

NO.	DATE	REVISION	BY	APVD
		DR NDT	CHK MAB	NJS APVD APS

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CONCEPT DESIGN

GRADING PLAN

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MACTEC
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Hamilton, New Jersey 08619
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VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/12/2010
PROJ	3480-05-0155
DWG	C-305
SHEET	29 OF 64

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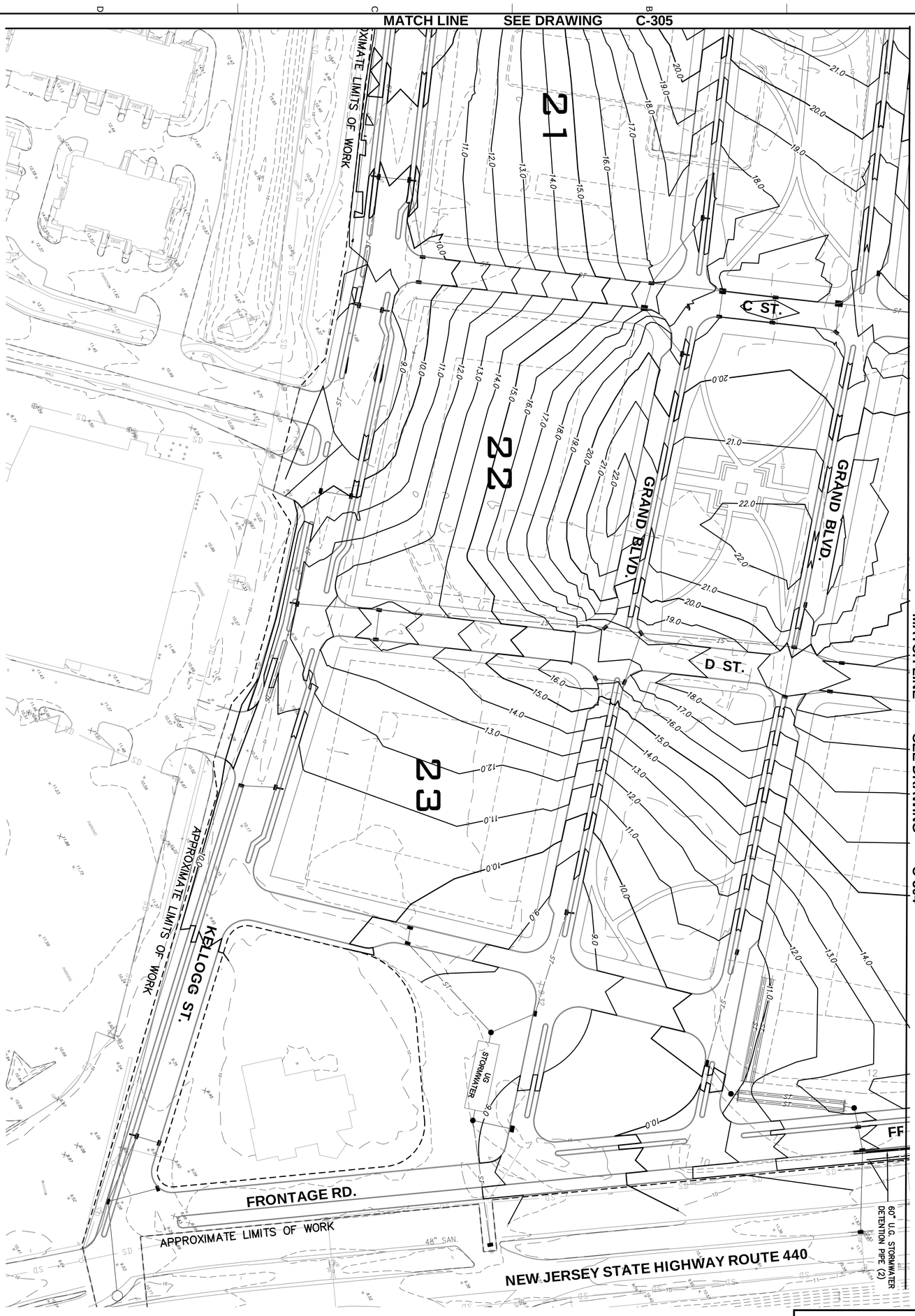

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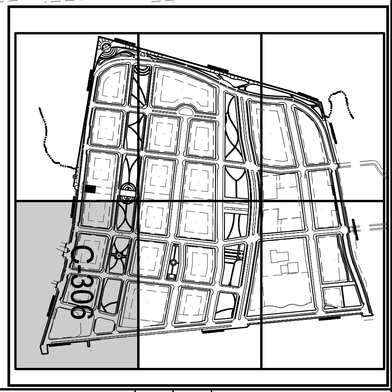

Scale in feet: 0, 50, 100

CHA
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GRADING PLAN

BAYFRONT REDEVELOPMENT PLAN
JERSEY CITY, NEW JERSEY
HONEYWELL SITE ID - 37472

CONCEPT DESIGN

NO.	DATE	REVISION	BY	APVD
1	3-12-13	REVISE GRAND BLVD/FRONTAGE RD LAYOUT	JRH	APS
		PER ROUTE 440 DESIGN MODIFICATION		

DSGN	DR	CHK	APVD
APS	JRH	APS	APS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE 03/12/2010
PROJ 3480-05-0155
DWG C-306
SHEET 30 OF 64

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EXHIBIT 2

TECHNICAL SPECIFICATIONS – SECTION 02315, 02372, 02374

SECTION 02315

EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION

A. The Contractor shall furnish all labor, equipment, and materials necessary for excavation, filling/backfilling, compaction, testing, and grading. The Work shall be as shown on the Drawings and as specified herein. Work includes, but is not limited to, the following:
   1. Borrow source testing of imported fill materials;
   2. Installation of decontamination facilities;
   3. Excavation of soils/materials;
   4. Placement and compaction of non-chromium impacted excavated soils/materials to remain on-site;
   5. Placement and compaction of chromium impacted excavated soils/materials to remain on-site;
   6. Placement and compaction of imported fill materials;
   7. Field quality control testing of fill materials;
   8. Restoration of all disturbed areas; and
   9. Other miscellaneous earthwork activities, as necessary.

B. Control of surface water run-on and run-off during construction shall be in accordance with Section 02370, ñErosion and Sedimentation Controlò.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01010: Summary of Work (RFP Section III).
B. Section 01100: Remediation Construction Requirements (RFP Section III).
C. Section 01330: Submittal Procedures.
D. Section 01560: Dust Control.
E. Section 01600: Soil Handling and Management.
F. Section 02140: Dewatering.
G. Section 02150: Temporary Excavation Support.
H. Section 02170: Hydraulic Barrier.
I. Section 02230: Clearing and Grubbing.
J. Section 02370: Erosion and Sedimentation Control.

1.03 REFERENCES

A. The publications listed below form a part of this Specification to the extent referenced. The current version/edition of the publication is referenced, unless otherwise noted. The publications are referred to in the text by basic designation only.

B. ASTM International, Inc. (ASTM):
   1. ASTM C 88 Standard Test for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
   2. ASTM C 136 Sieve Analysis of Fine and Coarse Aggregates;
   3. ASTM D 422 Standard Test Method for Particle-Size Analysis of Soils;

4. ASTM D 535 Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine;
5. ASTM D 698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3)
6. ASTM D 854 Test Method for Specific Gravity of Soils;
7. ASTM D 1140 Amount of Material in Soils Finer than the No. 200 (75-micrometer) Sieve;
8. ASTM D 1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3)
9. ASTM D 2216 Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soils and Rock by Mass;
10. ASTM D 2487 Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System);
11. ASTM D 3740 Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction;
12. ASTM D 4318 Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils;
13. ASTM D 5101 Standard Test Method for Measuring the Soil-Geotextile System Clogging Potential by the Gradient Ratio;
14. ASTM D 5519 Standard Test Method for Particle Size Analysis of Natural and Man-Made Riprap Materials;
15. ASTM D 6938 Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

C. New Jersey Soil Erosion and Sediment Control Standards, July 1999.
D. N.J.A.C. 7:26E Technical Requirements for Site Remediation ("Tech Rule")
E. USEPA 7199 Determination of Hexavalent Chromium in Drinking Water, Groundwater and Industrial Wastewater Effluents by Ion Chromatography, 1996
F. Alternative and Clean Fill Guidance for SRP Sites, 2011

1.04 DEFINITIONS

A. Satisfactory Soils:
1. Satisfactory soils shall meet the requirements specified in Part 2 of this Section and shall be used in areas as shown on the Drawings and as approved by the Engineer. In addition, satisfactory soils shall satisfy the following conditions:
a. Satisfactory soils shall be free of material greater than 6 inches any direction, unless otherwise specified or approved by the Engineer. Furthermore, the maximum particle size shall not exceed ½ of the lift thickness, unless otherwise specified.
b. Satisfactory soils shall be certified clean from the off-site borrow source of origin, based on analytical testing data, as approved by the Engineer.
c. Satisfactory soils shall be free of all unsatisfactory soils/materials listed below.

B. Unsatisfactory Soils/Materials:
1. Unsatisfactory soils/materials include but are not limited to highly plastic/fat silt and clay, organic soils, and/or peat (classified as MH, CH, OL, OH, or PT via ASTM D 2487), stumps/brush, trash, refuse, debris, frozen soils, soils containing materials greater than the allowable size (see above),

saturated soils, fine-grained soils above their liquid limit at the time of compaction, and soils that are either too wet or too dry to compact.

C. Cohesionless and Cohesive Soils:
   1. Cohesionless soils include gravels, sand-gravel mixtures, sands, and gravelly-sands, classified as GW, GP, SW, or SP by the Unified Soil Classification System (ASTM D 2487).
   2. Cohesive soils include clayey gravels, sand-clay mixtures, clayey sands, clays, and silts, classified as GC, SC, CL, CH, ML, or MH by the Unified Soil Classification System (ASTM D 2487).
   3. Soils classified as GM and SM will be identified as cohesionless only when the "fines" are determined to be non-plastic.
   4. Testing required for the classification of soil shall be in accordance with ASTM D 4318, ASTM C 136, ASTM D 422, and/or ASTM D 1140.

D. Structural and Non-structural Fills
   1. Structural fills include soils to be placed under or in the vicinity of proposed structures or under pavement.
   2. Non-structural fills include soils not placed under the vicinity of proposed structures or pavement.

E. Percent Compaction:
   1. Degree of compaction (percent compaction) required is expressed as a percentage of the maximum dry density, at the optimum moisture content.
   2. Maximum dry density and optimum moisture content for structural fills shall be obtained by the test procedures presented in ASTM D 698, unless otherwise specified.
   3. Maximum dry density and optimum moisture content for non-structural fills shall be obtained by the test procedures presented in ASTM D 698, unless otherwise specified.

1.05 QUALITY ASSURANCE

A. Codes and Standards:
   1. Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

1.06 SUBMITTALS

A. Submit to the Engineer for approval (unless otherwise specified) the following in accordance with Section 01330, "Submittal Procedures":
   1. Surveyor:
      a. The name, qualifications, and proposed survey means/methods of an independent third-party Land Surveyor to complete site topographic surveys as required for measurement and payment shall be submitted within 7 days following notice to proceed.
      b. The Land Surveyor shall be registered in the State of New Jersey.

2. Borrow Source(s):
    a. The Contractor shall provide the proposed source(s) of borrow materials prior to initiation of work. Any available/previous geotechnical laboratory testing data shall be provided.
3. Contractor's Quality Control Testing Laboratory (QCTL):
    a. The name and qualifications of an independent third-party geotechnical testing laboratory to be used for borrow source testing and field quality control testing shall be submitted within 7 days following notice to proceed.
    b. The Contractor's QCTL shall meet the requirements of ASTM D 3740, at a minimum.
4. Test Reports:
    a. The Contractor's QCTL shall submit 2 copies of the following test reports directly to the Engineer, with at least 1 copy to the Contractor:
        (1) All test reports for borrow source materials; and
        (2) Field quality control test reports (for review).

1.07 SITE CONDITIONS

A. Subsurface Information:
    1. Site Subsurface soils identified within the limits of excavation contain hexavalent chromium in excess of NJDEP's most stringent Non-Residential Soil Cleanup Criteria of 20 mg/kg, based on available analytical testing data.

B. Existing Utilities and Underground Structures:
    1. Known existing utilities and underground structures are shown on the Drawings. The location of existing utilities and underground structures should be considered approximate.
        a. The approximate footprints of former/historic structures are shown on the Drawings. The presence and/or condition of below-grade foundations, slabs, walls, etc. is not known.
    2. Prior to the commencement of site activities, the Contractor shall locate and identify all existing utilities in the areas of Work. If utilities are to remain in place, provide adequate means of protection.
    3. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the Utility Owner and Engineer immediately for directions. Cooperate with the Owner, Honeywell, and utility companies in keeping respective services and facilities in operation. The Contractor shall repair damaged utilities to satisfaction of the Utility Owner and Honeywell.
    4. Do not interrupt existing utilities serving facilities occupied and used by the Owner or others, except when permitted in writing by the Engineer and then only after acceptable temporary utility services have been provided.

C. Use of Explosives:
    1. Use of explosives is prohibited.

D. Protection of Persons and Property:
    1. Barricade and mark open excavations occurring as part of this Work in accordance with applicable standards.
    2. Protect wooded areas, facilities, structures, utilities, pavements, sidewalks, fences, and other facilities designated to remain from damage caused by

settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations and heavy truck/equipment traffic.

a. Unless otherwise noted, existing monitoring wells and piezometers are to remain. The Contractor shall take necessary precautions to protect existing wells and piezometers during all phases of the work.

b. Unless otherwise noted, existing storm water inlets and sanitary sewer manholes are to remain. The Contractor shall take necessary precautions to protect existing storm water inlets and sanitary sewer manholes during the work.

c. Any damage to facilities, structures, utilities, etc. designated to remain shall be repaired and/or replaced by the Contractor at no additional expense to Honeywell.

PART 2 - PRODUCTS

2.01 IMPORTED FILL

A. Location/Use:

1. Imported Fill shall consist of Common Borrow, Structural Fill, Geocomposite Drainage Layer Cover Soil, Cushion Fill and Planting Soils.

B. Imported Fill shall be certified clean from the origin, based on analytical testing data, as approved by the Engineer.

1. NJDEP Technical Requirements 7:26E 1.8, Imported Fill shall meet requirements of “Clean Fill”.
2. NJDEP Alternative and Clean Fill Guidance for Soil Remediation Project Sites December 29, 2011 Version 2.
3. USEPA 7199, Imported Fill shall have a hexavalent chromium concentration of 1 milligram per kilogram or less.
4. Treated soils or other recycled materials imported from off-site sources are prohibited.

2.02 NON-CHROMIUM IMPACTED SOILS/MATERIALS

A. Location/Use:

1. Non-Chromium Impacted Soils/Materials removed and stockpiled to access the chromium impacted soils shall be used initially as backfill to achieve the subgrade elevations indicated on the Drawings. Upon completion of excavation activities, the stockpiled soils from that excavation are to be returned to the excavation first.

2.03 CHROMIUM IMPACTED SOILS/MATERIALS

A. Location/Use:

1. Chromium Impacted Soils/Materials that are removed from beyond the limits of the cap in accordance with the Drawings, or as directed by the Engineer, are to be used as backfill to achieve the subgrade elevations within the footprint of the cap(s) in compliance with the limits defined in the Consent Decree and specified in Part 1.01 C of Specification 01600.

2.04 COMMON BORROW

A. Location/Use:
   1. Common Borrow shall be used to supplement the non-chromium impacted soils in order to reinstate the subgrade in areas of excavation, in fill areas as necessary to achieve subgrade, and as indicated on the Drawings.
   2. The Contractor is to use all available on-site suitable fill materials prior to importing Common Borrow.

B. Common Borrow shall consist of granular soil reasonably well graded suitable for embankment construction. It shall be free from frozen materials, perishable rubbish, peat, and other unsatisfactory soils/materials. It shall be of such a nature and character that it can be compacted to the specified density (Sub-Part 3.12 of this Section).
   1. Common Borrow shall have a maximum nominal particle size of 4 inches or less when placed in lifts of 12 inches (prior to compaction) or less and compacted by heavy compaction equipment (i.e. vibratory roller), unless otherwise specified. The maximum nominal particle size shall be no more than ½ of the lift thickness when placed in lifts less than 12 inches thick (prior to compaction).
   2. Common Borrow shall be certified clean from the borrow source or origin, based on analytical testing data, as approved by the Engineer.
      a. Soils shall be tested and certified "clean" relative to the NJDEP Technical Requirements pursuant to 7:26E 5.2(d) 2 .
   3. Common Borrow shall contain a minimum of 5% to a maximum of 25% (by weight) passing the No. 200 sieve.

C. The moisture content shall be sufficient to provide the required compaction and a stable embankment and/or subgrade. In no case shall the moisture content exceed 3% above optimum, which shall be determined in accordance with ASTM D 698 for structural fills and non-structural fills, or approved equal testing method.

2.05 STRUCTURAL FILL UNDER ROADWAYS

A. Location/Use:
   1. Structural Fill Under Roadways shall be placed above the Geocomposite Drainage Layer Cover Soil and below the Horizon A planting soils, as indicated on the Drawings.

B. Structural Fill Under Roadways shall conform to the NJDOT requirements for Subgrade Fill Section 901.11. Materials shall meet the gradation requirements for one of the following DOT classifications: I-5 or I-8.

Gradation Designations, percentage by weight passing square mesh sieves											
	4"	2"	1"	¾"	½"	No. 4	No. 8	No. 16	No. 50	No. 100	No. 200
I-5		100		70-100		30-80			10-35		5-12
I-8					100	95-100		45-70	5-25		0-5

C. The moisture content shall be sufficient to provide the required compaction and a stable subgrade. In no case shall the moisture content exceed 3% above optimum,

which shall be determined in accordance with ASTM D 698 or an Engineer-approved equivalent testing method.

2.06 GEOCOMPOSITE DRAINAGE LAYER COVER SOIL

A. Geocomposite drainage layer cover soil shall be placed above the geocomposite drainage layer. The cover soil will be placed in a single lift with a minimum compacted thickness of 12-inches. If temporary haul roads are utilized over the cap for truck delivery of cover soil the roads will be constructed to a minimum depth of 36 inches. The soil placed over the geocomposite shall be spread using low ground pressure equipment (or equivalent low load method) while maintaining a 1 foot minimum of cover between the equipment and the geocomposite. Small equipment such as ATV's or golf carts will be permitted to operate directly on the surface of the geocomposite subject to the approval of the engineer. Such equipment will be subject to inspection to verify that the tires are of a type and condition that will not damage the geocomposite drainage layer and that there are no fuel of hydraulic leaks. The cover soil must be spread consistent with Specification 02374.

B. The geocomposite drainage layer cover soil shall be free of trash, ice, snow, tree stumps, and other unsuitable and deleterious materials. The maximum particle size shall be 3/8" inch or less. It shall be of such a nature and character that it can be compacted to the specified dry density of 90% (measured as a percentage of the max. dry density as determined by ASTM D 698) with a reasonable compaction effort. The geocomposite drainage layer cover soil will have a compacted (90% of the maximum dry density as determined by ASTM D 698) in-place hydraulic conductivity not less than $1x10^{-4}$ cm/sec.

Geocomposite drainage layer cover soil will meet one of the two requirements shown below:

1. The materials may be analyzed directly for hydraulic performance with the geosynthetic used in the drainage composite by the gradient ratio test (ASTM D 5101). Materials will be subject to engineer's approval after results from the gradient ratio test are reviewed.

2. The following gradation, retention, and clogging requirements for contact with the drainage geocomposite:

   Gradation/Stability: For soil to be classified as both well graded and stable, it must meet the following criteria:

   Well Graded: $D_{60}/D_{10} > 4$ and
   Stable: $D_{30}^2 / (D_{10} \times D_{60}) < 3$
   Where:
   D_{10} = the diameter at which 10 percent of the soil is finer
   D_{30} = the diameter at which 30 percent of the soil is finer
   D_{60} = the diameter at which 60 percent of the soil is finer

   Retention: The ability of the geocomposite drainage geotextile to retain the cover soil can be verified using the following criterion:

$O95 / D85 < B$

Where: B is a function of coefficient of uniformity (D_{60}/D_{10})

$B = 1$ $D_{60}/D_{10} < 2$ or > 8

$B = 0.5 \times D_{60}/D_{10}$ $2 < D_{60}/D_{10} < 4$

$B = 8/ (D_{60}/D_{10})$ $4 < D_{60}/D_{10} < 8$

$B = 1.8$ for silts and clays

O95 = the 95 % opening size of the geotextile (in mm)

D85 = the diameter at which 85 percent of the soil is finer

Clogging: To minimize particulate clogging:

$O95 > 3D_{15}$

Where:

O95 = the 95 % opening size of the geotextile (in mm)

D_{15} = the diameter at which 15 percent of the soil is finer

2.07 CUSHION FILL

A. Cushion Fill material will be placed directly beneath the cover system geomembrane. The cushion fill shall be a material capable of being compacted to 90% of maximum dry density as determined by ASTM D 698 with a reasonable compaction effort. The material selected will be a clean fill with a maximum particle size of ½-inch meeting the requirements of a Unified Soil Classification System SP material.

B. A non-woven geotextile fabric may be substituted for Cushion Fill soil material. Refer to the Drawings for required material.

C. A Geocomposite Drainage layer conforming to the requirements of Section 02374 may be substituted for Cushion Fill or Non Woven geotextile.

2.08 BEDDING SAND

A. Bedding sand for piping trench shall be as follows or similar locally available aggregate acceptable to the Engineer.

Sieve Designation	Percent by Weight Passing
3/8-inch	100
No. 4	95-100
No. 8	85-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	2-10

2.09 CRUSHED STONE

A. Crushed stone shall be used around drainage control structures, pipes, and other locations as shown on the Drawings. Crushed Stone shall consist of clean, inert, hard durable grains of rock free from vegetable matter, shale, and lumps or balls of clay, meet the requirements of NJDOT 901.01, 901.02, 901.03 and 901.04 and conform to the following gradation requirements provided below.

Sieve Size	Gradation (percent passing, by dry weight)	
	1-1/2 – inch stone (NJDOT No. 4 size)	3/8 –inch stone (NJDOT No. 8 size)
1 ¾ - inch	100	
1 - ½ inch	90-100	
1 – inch	20-55	
¾ - inch	0-15	
½ - inch		100
3/8 – inch	0-5	85-100
No. 4 sieve		10-30
No. 8 sieve		0-10
No. 16 sieve		0-5
No. 200 sieve	0-2	0-2

2.10 DENSE GRADED AGGREGATE

A. Location/Use:
   1. Dense Graded Aggregate shall be used as indicated in the Construction Documents.
   2. Dense Graded Aggregate shall conform to Section 901 of the NJDOT Standard Specifications.

2.11 HISTORIC FILL

A. Location/Use:
   1. Historic Fill materials shall be used initially for surcharge material as indicated on the Construction Drawings.
   2. Historic Fill shall be screened to a 4-inch minus prior to use as surcharge material or Common Borrow. Unsuitable materials and waste shall be removed from Historic Fill prior to its reuse on site.
   3. Historic Fill meeting the requirements of Common Borrow specified herein shall be used in order to reinstate the subgrade in areas of excavation as indicated on the Drawings or as fill after surcharge of the Site has been completed.

2.12 PLANTING SOILS

Planting Soils have been designated as Horizon A, B and C. Soil Horizon A – Topsoil will be a nominal thickness of 6 inches and shall conform to the requirement noted below.

A. Topsoil - Topsoil shall be placed over the Horizon B and C planting soils to final development grades shown in the design drawings. Topsoil will have a nominal depth of 6 inches. Topsoil shall be in accordance with Section 02900, “Topsoil and Seeding”. Topsoil shall be certified clean from the borrow source or origin, based on analytical testing data, as approved by the Engineer. Topsoil shall be natural, friable, fertile loam, fine sandy loam or sandy loam with an organic matter content of 3.5% - 6% and a pH range of 5.0 – 6.5.

B. Soil Horizon B - soils will only be used in areas where the total depth of cover soils exceeds 36 inches. During the Interim Phase no Horizon B soil will be

placed. Horizon B soils will be a uniform sandy loam having the following properties:

Sandy loam classification having 80% sand, ≤ 10% silt, 10% clay.
Ph range 5.5 – 7.0.
Organic Matter (by weight) 1.5-3.5%.

C. Soil Horizon C – During Interim Grading Horizon C Soil will be placed between the root barrier and the Horizon A soil. The first 6 inches of Horizon C soils to be placed directly above the root barrier will be compacted to a minimum 90% of Standard Proctor. To meet Final Grading and planting requirements Horizon A soils will be stripped as necessary and Horizon C soils shall be re-graded to provide an appropriate depth of 18 inches. Horizon C soil shall consist of uniform sandy loam having the following properties:

1. Sandy loam classification with 70-80% sand, ≤ 10% silt, 15-20% clay.
2. pH range 5.0 – 7.5.
3. Organic Matter (by weight) 1 % max.

2.13 BORROW SOURCE TESTING

A. Borrow source testing, including geotechnical characterization requirements, shall be conducted on all soil materials proposed for construction. Minimum third-party geotechnical laboratory testing requirements and frequency for materials are listed as follows:

1. Common Borrow, Geocomposite Drainage Layer Cover Soil, Cushion Fill, Dense Graded Aggregate, Planting Soils (Horizons B and C):

Test	Methodology[1]	Frequency[2]
Particle-Size Analysis	ASTM D 422	1 test/source/material (to #200 Sieve)
Standard Proctor	ASTM D 698	3 test/source/material

2. Topsoil (Horizon A):
   Refer to Section 02900, "Topsoil and Seeding".
3. Crushed Stone:

Test	Methodology[1]	Frequency[2]
Particle-Size Analysis	ASTM D 422	1 test/source/material (to #200 Sieve)

B. Borrow Source Testing Notes:

1. Other testing methods may be considered acceptable, based on prior approval of the Engineer.
2. Testing frequency shall be as listed, at any change in borrow source, or at any discernable change in material delivered to the site (as determined by the Engineer).
   a. Common Borrow shall be certified clean from the borrow source or origin, based on analytical testing data, as approved by the Engineer.
      1. Soils shall be tested and certified "clean" relative to the NJDEP Technical Requirements pursuant to 7:26E 5.2(d)
      2.

PART 3 - EXECUTION

3.01 NOTIFICATION

A. The Contractor shall also comply with the New Jersey's Underground Facility Protection Act and notify the New Jersey's One Call System before performing Work on the Project. The One Call System can be reached by calling 1-800-272-1000.

3.02 INSPECTION

A. Examine the areas and conditions under which excavating, filling, and grading are to be performed and notify the Engineer, in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected in an acceptable manner.

3.03 TOPOGRAPHIC SURVEYS

A. General:
   1. Pre-Construction, Post-Excavation, and Final/Post-Construction Topographic Surveys, at a minimum, shall be completed for the purposes of quantifying excavation volumes, backfill (i.e., Non-Chromium Impacted Fill and Common Borrow) volumes, restored surface areas (i.e. Topsoil and Seed).
   2. Topographic surveys completed for the purposes of quantifying work completed shall be performed by an independent/third-party surveyor licensed in the State of New Jersey.
   3. Topographic surveys shall correspond to the state plane coordinate system.
   4. Topographic surveys for the purposes of measurement and payment shall be surveyed on a grid with points spaced no greater than 25 feet by 25 feet with suitable detail to provide one-foot elevation contours, unless otherwise approved by the Engineer.
   5. Topographic surveys shall be submitted to the Engineer in both printed and electronic form (AutoCAD 2008 format/compatible).

B. Pre-Construction Survey:
   1. The pre-construction topographic survey shall be completed within the Limits of Disturbance, as shown on the drawings, plus 50 feet beyond the perimeter.
   2. Survey data shall provide the basis for measurements of excavation volume.

C. Post-Excavation Survey:
   1. Upon completion of excavation, the Contractor shall provide for a topographic survey of the limits and subgrade elevations of the final excavation footprint(s), as approved by Honeywell and the Engineer.
   2. The post-excavation survey shall be completed within the limits of excavation, plus 25 feet.
   3. Survey data shall provide the basis for measurements of excavation volume.

D. Final/Post-Construction Survey:

1. The Contractor shall provide for a topographic survey of the final restored surface to provide final grades.
2. The final/post-construction survey shall be completed for the final disturbed (and restored) footprint, plus 25 feet.
3. Survey data shall provide the basis for measurements of the volume of Non-Chromium Impacted Fill and Common Borrow.

3.04 EXCAVATION DEWATERING AND DISCHARGE

A. General:
   1. Perform dewatering as necessary for the control, collection, and discharge of groundwater and surface water entering excavations.
   2. Perform dewatering as necessary for provide a safe working environment.
   3. Perform dewatering in accordance with Section 02140, “Dewatering”.

3.05 STABILITY OF EXCAVATIONS

A. General:
   1. Slope sides of excavations to comply with applicable codes and ordinances.
      a. Shore and brace excavations where sloping is not possible because of space restrictions or stability of material excavated.
   2. Maintain excavations in a safe condition until completion of backfilling, or longer, if specified or directed by the Engineer.

B. Shoring, Sheeting, and Bracing:
   1. Utilize where necessary to meet safety requirements and/or as shown on the Drawings.
      a. Establish requirements for trench shoring, sheeting, and bracing to comply with codes and ordinances of authorities having jurisdiction.
   2. Provide materials for shoring, sheeting, and bracing, such as sheet piling, uprights, stringers and cross-braces, in good serviceable condition.
   3. Shoring, sheeting, and/or bracing shall be in accordance with Section 02150, “Temporary Excavation Support”.

3.06 COLD WEATHER PROTECTION

A. Protect exposed subgrade surfaces against freezing when atmospheric temperature is less than 35°F.
   1. Fill materials shall not be placed atop frozen subgrade surfaces.

3.07 EXCAVATION

A. General:
   1. Excavation consists of removal of material encountered when establishing required subgrade elevations/depths as shown on the Drawings.
   2. During construction, excavation and fill shall be performed in a manner and sequence that will provide proper drainage at all times.
   3. Excavated materials shall be segregated as shown on the Drawings.
      a. Refer to Section 01600, “Material Handling and Management”, for additional information.

B. General Site Excavation/Grading:

1. Before removal of bituminous materials, a neat saw cut shall be performed to provide for the complete removal of the asphalt material without damage to the remaining adjacent material.
2. The work includes a total excavation depth of approximately 20 feet bgs of soils/materials which shall be completed as shown on the Contract Drawings. Phasing of the work shall allow for excavation and staging of both chromium impacted and non-chromium impacted soils/materials for future reuse on-site as backfill or for disposal.
3. Excavated material containing excess water shall be mixed with dryer soils and or absorbents prior to loading. Prior to off-site transportation and disposal, the Contractor shall inspect the truck to ensure that soil shipped off-site for disposal does not contain standing water.

3.08 POST-EXCAVATION VERIFICATION/CONFIRMATION SAMPLING

A. Preapproval of the limits excavation for chromium-impacted soils has been provided by NJDEP based on soil sampling results. As a result, a limited number of excavations will require post-excavation verification/confirmation sampling following completion of specified excavation activities. Post-excavation verification/confirmation sampling will be completed by others. The Contractor shall support sampling activities as necessary and shall not begin backfilling excavations prior to review and acceptance by the Engineer.

Conditions that would trigger the need for additional post excavation sampling may include:

1. If field observations indicate that an area previously characterized as clean is not, sampling may be conducted to help identify the source and assess the impact;
2. Observations that were not consistent with soil conditions characterized by the samples that were collected during the RI and PDI;
3. Observations of chromium blooms on the surface of soils previously thought to be clean; and
4. Any other field conditions which suggest chromium impacts may extend outside the defined limits.

3.09 TRANSPORTATION AND DISPOSAL OF EXCAVATED MATERIALS

A. Honeywell shall arrange for the off-site transportation and disposal of chromium impacted solid waste materials (exclusive of cleared materials, asphalt and concrete debris, and general rubbish/trash), under separate contract.
B. The Contractor shall be responsible for coordination and day to day scheduling of Honeywell's designated transporters for chromium impacted solid waste materials.
C. The Contractor shall provide all equipment, labor, and personnel necessary to load the transporter's trucks and/or containers in a timely manner.

3.10 SUBGRADE PREPARATION

A. General:
   1. Remove vegetation, debris, unsatisfactory soils/materials, obstructions, and deleterious materials from subgrade surfaces prior to placement of fills.
   2. Bench, plow, strip, scarify, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.

B. Subgrade Compaction:
   1. After to placing of any required Common Borrow, subgrade surfaces shall be compacted to a firm and unyielding condition, as approved by the Engineer. Compaction shall be performed using a static steel drum roller loaded to provide a 1 TSF (2,000 PSF) loading to the subgrade. The roller shall be tracked over the subgrade materials until no further significant rutting or deformation of the subgrade occurs. Subgrade compaction shall be subject to engineer's approval.
      a. The Engineer's subgrade evaluation shall include visual observations, hand-rod probing, and/or compaction testing.
   2. Subgrade surfaces shall be relatively smooth/even, free of loose soil, ponded water, and debris. Any loose, soft, wet, frozen, or otherwise unsuitable/unsatisfactory soils or materials observed should either be re-compacted or undercut to a suitable subgrade, as approved by the Engineer.
   3. Any undercut/excavated material should be replaced/backfilled with Common Borrow, as approved by the Engineer.
      a. Fill materials shall be placed and compacted as specified herein.

3.11 PLACEMENT OF FILL MATERIALS

A. General:
   1. Place specified fill materials in lifts as specified herein as required to achieve specified subgrade elevations.
   2. Do not place fill material on surfaces that are muddy, frozen, or contain frost or ice.
   3. Backfill excavations as promptly as work permits, but not until completion of the following:
      a. Acceptance by Engineer of any construction below finish grade.
      b. Removal of trash and debris.

B. Fill Placement:
   1. Place fill materials in layers not more than 12 inches (prior to compaction) for material to be compacted by heavy compaction equipment (i.e. vibratory roller, sheepsfoot roller, etc.), unless otherwise specified.
   2. Place fill materials in layers not more than 8 inches (prior to compaction) for material to be compacted by hand-operated walk-behind equipment, unless otherwise specified.
   3. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content. Compact each layer to required percentage of maximum dry density (Sub-Part 3.13).
   4. Three feet of fill thickness above the GDL will be maintained in areas where loaded trucks will be operating. Thickness of less than 3 feet will be acceptable if LGP equipment is used to spread cover.

3.12 COMPACTION

A. General:
   1. Provide soil compaction during construction as necessary to achieve minimum percent/degree of compaction, as specified herein.

B. Percent Compaction Requirements:
   1. All structural fill shall be compacted to at least 95% maximum dry density as determined by ASTM D 698, unless otherwise approved by the Engineer.
   2. All structural fill under roadways shall be compacted to at least 95% maximum dry density as determined by ASTM D 698, unless otherwise approved by the Engineer.
   3. All non-structural fill shall be compacted to at least 90% maximum dry density as determined in accordance with ASTM D 698, unless otherwise approved by the Engineer.
   4. Crushed stone is to be compacted in 8”-9” loose lifts, and compacted using 2-3 passes of a hand operated vibratory plate compactor weighing approximately 200 lbs, unless otherwise approved by the Engineer.
   5. Re-used on-site historic fill material will be compacted by 2 to 3 passes of a suitable vibratory roller.

C. Moisture Control:
   1. Where the subgrade or a layer of fill/backfill must be moisture-conditioned before compaction, uniformly apply water to the surface, in proper quantities to prevent free water appearing on surface during or subsequent to compaction operations.
   2. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
   3. Soil material that has been removed because it is too wet to permit compaction may be stockpiled as specified herein or spread and allowed to dry. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory level.

3.13 FIELD QUALITY CONTROL TESTING

A. Quality Control Testing During Construction:
   1. Allow testing service to examine and test subgrade surfaces and fill/backfill layers. Before further construction work is performed, test results meeting the requirements of this Section shall be obtained.
   2. Perform field density tests on imported materials in accordance with ASTM D 6938 (nuclear method), or other Engineer approved methods, as applicable.
      a. For each layer of fill placed, conduct at least 1 compaction test for every 2,500 square feet, but in no case less than 3 tests per lift.
      b. Re-used on-site historic fill material will not be tested for compaction.
      c. The 6 inches of Horizon C soil immediately above the root barrier will be conducted at the start of the project to develop a correlation of compaction results between Procedure A and Procedure B as defined in ASTM D 6938. A minimum of 15 results will be used to develop the correlation. Procedure B (backscatter) will be used in conjunction with the correction factor developed through the correlation testing to test for conformance with the specified

compaction. The pin shall be fitted with a collar or other device to limit the maximum depth to prevent puncture of the root barrier geotextile.

3. The frequency of testing, for each layer of fill placed, may be reduced to 5 tests per acre provided it can be demonstrated by statistical analysis of a data set of at least 40 samples that there is a 95% confidence level that the required compaction is being achieved.
4. If in opinion of Engineer, based on testing service reports and inspection, subgrade soils or fill/backfill materials which have been placed are below specified density, the Contractor shall provide additional compaction and testing at no additional expense to Honeywell.

3.14 ASPHALT RESTORATION

A. Asphalt areas shall be restored as indicated in the Construction Documents.
B. Refer to Section 02741, “Road Construction”.

3.15 TOPSOILING

A. Refer to Section 02900, “Topsoil and Seeding”.

3.16 FINAL GRADING

A. General:
   1. The Contractor shall uniformly grade areas within the Limits of Work/Disturbance, as shown on the Drawings. Smooth finished surface within specified tolerances, with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

3.17 MAINTENANCE

A. Protection of Graded Areas:
   1. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
B. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.
C. Reconditioning Compacted Areas:
   1. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.

--END OF SECTION--

SECTION 02372

CAP GEOMEMBRANE LINER

PART 1 - GENERAL

1.01 DESCRIPTION

Work provided in this Section includes furnishing labor, materials, equipment and incidentals required to install a 60-mil textured (both sides) Linear Low Density Polyethylene (LLDPE) geomembrane as part of the multi-layer cap construction as shown on the Drawings and as specified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01330: Submittal Procedures
B. Section 02315: Earthwork
C. Section 02374: Geocomposite Drainage Layer

1.03 REFERENCES

The publications listed below, latest edition unless otherwise noted, form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 698	Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbs/ft^3 (600 kN-m/m^3)
ASTM D 792	Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
ASTM D 1004	Standard Test Method for Tear Resistance (Graves Tear) of Plastic Film and Sheeting
ASTM D 1238	Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer
ASTM D 1505	Standard Test Method for Density of Plastics by the Density-Gradient Technique
ASTM D 1603	Standard Test Method for Carbon Black in Olefin Plastics
ASTM D 3895	Standard Test Method for Oxidative-Induction Time of Polyolefins By Differential Scanning Calorimetry
ASTM D 4218	Standard Test Method for Determination of Carbon Black Content in Polyethylene Compounds by the Muffle-Furnace Technique

ASTM D 4437	Standard Practice for Non-destructive Testing (NDT) Determining the Integrity of Field Seams Used in Joining Flexible Polymeric Sheet Geomembranes
ASTM D 4833	Standard Test Method for Index Puncture Resistance of Geotextile, Geomembranes and Related Products
ASTM D 5321	Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method
ASTM D 5323	Standard Practice for Determination of 2% Secant Modulus for Polyethylene Geomembranes
ASTM D 5596	Standard Test Method for Microscopic Evaluation of the Dispersion of Carbon Black in Polyolefin Geosynthetics
ASTM D 5617	Standard Test Method for Multi-Axial Tension Test for Geosynthetics
ASTM D 5721	Standard Practice for Air-Oven Aging of Polyolefin Geomembranes
ASTM D 5885	Standard Test method for Oxidative Induction Time of Polyolefin Geosynthetics By High-Pressure Differential Scanning Calorimetry
ASTM D 5994	Standard Test Method for Measuring the Core Thickness of Textured Geomembrane
ASTM D 6392	Standard Test Method for Determining the Integrity of Nonreinforced Geomembrane Seams Produced Using Thermo-Fusion Methods
ASTM D6693	Standard Test Method for Determining Tensile Properties of Nonreinforced Polyethylene and Nonreinforced Flexible Polypropylene Geomembranes

GEOSYNTHETIC RESEARCH INSTITUTE (GRI) STANDARDS

GRI GM11	Accelerated Weathering of Geomembranes using a Fluorescent UVA-Condensation Exposure Device
GRI GM12	Measurement of the Asperity Height of Textured Geomembranes Using a Depth Gage
GRI GM17	Test Properties, Testing Frequency and Recommended Warranty for Linear Low Density Polyethylene (LLDPE) Smooth and Textured Geomembranes

1.04 SUBMITTALS

Submit the following in accordance with Section 01330, “Submittal Procedures”.

A. Submittals relating to liner Manufacturer and liner material:
   1. Manufacturing:
      a. List of material properties of the liner proposed for the project meeting the requirements herein with attached certified test results.
      b. Manufacturer's quality control program and manual including description of in-house laboratory facilities.
      c. A list of ten completed facilities totaling a minimum of ten million square feet, for which the Manufacturer has manufactured LLDPE geomembrane. The following information shall be provided for each facility.
         1. Name and purpose of facility, its location and date of installation.
         2. Name of Owner, Project Manager, Design Engineer and Installer.
         3. Geomembrane thickness and surface area.
      d. Qualifications statement in accordance with Section 1.06 “Qualifications”.
      e. Manufacturer’s recommendations for geomembrane installation procedures.
   2. The origin of the resin to be used in the manufacturing of geomembrane used on-site including the suppliers name and production plant, as well as brand name and tracking number.
   3. Copy of quality control certificates in conformance with Section 2.01. Certifications that the LLDPE geomembrane and extrudate produced for this project have compatible properties. Quality control reports for the time period materials were produced for this project.
   4. A "Sample Warranty" in accordance with Section 1.08.
   5. Prior to shipment of liner material to the site, provide 5 samples (roll width by 3 feet) from 5 random rolls to be provided. Only ship to site, material that is approved by the Contractor.
      Submittals relating to the Installer:
   6. Installation Capabilities:
      a. Information on equipment and personnel.
      b. Anticipated average daily production.
      c. Number of crews employed and number available for this work.
      d. Qualifications in accordance with Section 1.06 “Qualifications”.
   7. A list of five completed facilities totaling 2 million square feet for which the Installer has installed LLDPE geomembrane. The following information shall be provided for each facility:
      a. Name and purpose of facility, its location and date of installation.
      b. Name of Owner, Design Engineer, Manufacturer and name and telephone number of Manufacturer’s Representative at the facility who can discuss the project.
      c. Surface area of the installed LLDPE geomembrane.

d. Type of seaming, patching and tacking equipment.
e. A copy of the Manufacturer's certification or approval letter.

8. As-built drawings reflecting the actual installation of geomembrane liner, including the location of seams, the location of destructive samples, and the location of repair work.

B. Within 10 days prior to liner installation submit the following:

1. Shop Drawings:
   a. Proposed panel layout showing the installation layout identifying field seams as well as any variance or additional details which deviate from the Drawings.
   b. Details of seaming the geomembrane, anchoring, connections, penetrations and other construction details, which deviate from these specifications.
2. Installation Quality Control:
   a. A quality control manual that specifically defines the quality control program during installation for this project. The manual shall include daily procedures, welding techniques, field testing procedures, lab testing procedures, specific steps that are to be taken in the event of a failure or defect, personnel requirements, levels of authority and other information necessary to ensure a high quality geomembrane installation consistent with Manufacturer recommendations and these specifications.
   b. Resume of the Installation Supervisor to be assigned to and on-site during the project.
   c. Resume of the Master Seamer to be assigned to and on-site during the project.
   d. A list of personnel performing field seaming operations along with pertinent experience information.

1.05 QUALITY CONTROL

A. In addition to Manufacturer and Installer requirements for qualifications and certification specified in Paragraph 1.06, Quality Control consists of conformance testing of the material prior to delivery to the site and field quality control during installation.

B. Manufacturer conformance testing requirements are specified in Paragraph 2.02. The purpose of conformance testing is to verify that the supplied material conforms to the Specifications and to the Manufacturer's quality control certificates.

C. Field quality control testing requirements are specified in Paragraph 3.06 and 3.07. The purpose of field quality control procedures is to verify that the geomembrane has been installed in accordance with the specifications and Manufacturer's recommendations.

D. Field Quality Control Forms:
The forms in attached Appendix A shall be used for field installation documentation. Alternative forms may be used for documentation as submitted and approved by the Contractor and Engineer.

E. Geomembrane Quality Control Documentation:

1. Project Files:

b. Two duplicate project files shall be maintained. One shall be maintained by the Contractor's Field Representative and the other shall be maintained by the Installer. The Installer shall provide the Contractor's Field Representative with complete daily documentation by the end of the following work day. At the end of each work week, the Contractor and Installer will update and check the files to assure that copies of pertinent project information are included in each file.

c. Blank copies of the project forms shall be available onsite throughout the duration of the project and are included in attached Appendix A.

1.06 QUALIFICATIONS

A. Manufacturer:
The Manufacturer of the lining material described hereunder shall have previously demonstrated its ability to produce this geomembrane by having at least 5 years continuous experience in the manufacturing of LLDPE geomembrane and successfully manufactured a minimum of 10 million square feet of similar material for hydraulic liner installations.

B. Installer:
The Installer shall be the Manufacturer or a Manufacturer approved Installer trained to install the Manufacturer's geomembrane. Installation shall be performed under the constant direction of a single Installation Supervisor who shall remain on site and be in responsible charge, through the subgrade approval, geomembrane installation, for geomembrane layout, seaming, patching, testing, repairs and other site activities required by the Installer. The Installer shall also provide a Master Seamer (who may also be the Installation Supervisor). The Installation Supervisor/Master Seamer shall have installed or supervised the installation and seaming of a minimum of two million square feet of LLDPE geomembrane liner.

1.07 DELIVERY, STORAGE AND HANDLING

A. The geomembrane rolls shall be packaged and shipped by appropriate means to prevent damage of the geomembrane rolls. Off-loading, handling, and storage of the geomembrane is the responsibility of the Installer. The Installer shall be responsible for replacing any damaged or unacceptable material at no additional cost to the Contractor.

B. Roll Identification:
The Manufacturer shall provide geomembrane rolls marked or tagged with the following information:
1. Manufacturer's name;
2. Product identification;
3. Thickness;
4. Roll dimensions;
5. Manufacturer's roll and lot number; and
6. Date of manufacture.

C Damage during off-loading shall be documented by the Contractor's Field Representative. Damaged rolls must be separated from the undamaged rolls and removed by the Manufacturer.

D. The geomembrane rolls shall be stored so as to be protected from puncture, dirt, grease, water, mud, mechanical abrasions and excessive heat or cold that may damage the geomembrane material. The rolls shall be stored on a prepared surface (not wooden pallets or hard abrasive surfaces) and shall not be stacked more than two rolls high.

1.08 MATERIAL WARRANTY

The LLDPE geomembrane Manufacturer shall warrant the geomembrane against manufacturing defects and material degradation under outdoor exposure for a period of 5 years on a prorated basis from the date of final payment and acceptance. The Manufacturer shall repair or replace, including material and labor, at no expense to Honeywell, any material which fails from the above causes within the warranty period. The Manufacturer shall furnish a written warranty covering the requirements of this Paragraph.

1.09 GUARANTEE

The Installer shall guarantee the LLDPE geomembrane against defects in installation and workmanship for the period of 1 year commencing with the date of final payment and acceptance by the Contractor. The guarantee shall include the services of qualified personnel, all materials required for the repairs and testing at no expense to the Contractor.

1.10 DEFINITIONS AND RESPONSIBILITIES

A. Contractor:
The Contractor is the firm or corporation with whom Honeywell has entered into agreement to construct the project. The Contractor is responsible for review of submittals by the Manufacturer and the Installer as required by the Specifications. The Contractor is also responsible for scheduling and coordination of the required work with the Manufacturer and the Installer to complete the project.

B. Contractor's Field Representative:
The Contractor's field representative shall oversee the installation of the geomembrane by the Installer. The Contractor's field representative will be responsible for inspections and reviewing testing results for conformance with the specified requirements. The Contractor's field representative will compile QC test results daily and document all QC activities in weekly reports.

C. Engineer:
The Engineer shall be the individual or firm responsible for the design and preparation of the project's Contract Drawings and Specifications and shall provide technical guidance and review when required.

D. Manufacturer:
The Manufacturer is the firm or corporation contracted by the Contractor for production of the geomembrane material to be used in the project. The Manufacturer shall produce a consistent product meeting or exceeding the project specifications and shall provide quality control documentation for the product specified herein.

E. Installer:
The Installer is the firm or corporation contracted by the Contractor for installation of the geomembrane. The Installer shall be the Manufacturer or a Manufacturer approved Installer trained and certified to install the Manufacturer's

geomembrane. The Installer shall be responsible for field handling, storing, placing, seaming, sampling, testing, protecting and other aspects of the geomembrane installation.

F. Quality Control Laboratory:
An independent Quality Control Laboratory (QCL) hired by the Contractor to perform conformance testing of the liner material with demonstrated qualifications for conducting required testing.

G. Quality Assurance (QA). QA inspections will be conducted by an Independent Third Party specializing in Geoemembrane QC/QA. The QA inspector will collect samples and conduct independent QA testing.

PART 2 - PRODUCTS

2.01 MATERIALS

A. General:
1. The resin from which the geomembrane is made shall generally be in the density range of 0.926 g/cc or lower, and have a melt index value per ASTM D 1238 of less than 1.0 g/10 min. Formulated sheet density shall be 0.939 g/cc or lower.
2. The blended resin shall contain two to three percent carbon black, anti-oxidants and heat stabilizer, but no fillers or extenders. The resin shall be virgin material, with no more than ten (10) percent rework. If rework is used, it must be of the same formulation as the parent material. No post-consumer resin of any type shall be added to the formulation.
3. The geomembrane material shall be so produced as to be free of holes, blisters, thin areas, inconsistent texturing, undispersed raw materials, or any sign of contamination by foreign matter.
4. The sheets shall be manufactured in a minimum 15-ft seamless width.

B. Properties:
1. The geomembrane rolls shall be textured LLDPE and shall meet the specified physical, mechanical, and chemical property requirements listed in attached Table 02372-1. Manufacturing Quality Control testing shall be conducted at the frequencies recommended in GRI GM 17 unless otherwise noted.

C. Other Materials:
1. Extrudate welding rods (for fusion welds) shall be compatible and similar to the geomembrane and supplied by the Manufacturer and shall be delivered in the original sealed containers. Each container shall have a label bearing the brand name, Manufacturer's lot number and complete directions as to proper storage.
2. Boots and shrouds for pipe penetration shall fit snugly around the pipe. Prefabricated material shall be designed to fit site specific conditions for the intended slope and size of pipe and be made of compatible and identical materials as the geomembrane.

2.02 CONFORMANCE TESTING

A. Tests:
Conformance testing shall be performed by the independent Quality Control Laboratory (QCL) provided and paid for by the Contractor. The Manufacturer shall obtain the samples from the roll, mark the machine direction and identification number and ship the samples to the QCL. The following conformance tests shall be conducted at the laboratory prior to shipment to the site:

1. Thickness
2. Density
3. Tensile properties
4. Tear resistance
5. Puncture resistance
6. Carbon black content
7. Carbon black dispersion
8. Asperity height
9. Interface Strength

B. Frequency:
These conformance tests shall be performed in accordance with Table 02372-1 and paragraph 2.1.B.2 for interface strength, at a frequency of one sample per 100,000 square feet unless otherwise noted or approved by the Contractor.

C. Acceptance or Rejection:
Conformance test results shall be reviewed by the Contractor and accepted or rejected, prior to shipment of the geomembrane. Test results shall meet, or exceed, the property values listed in Table 02372-1. The course of action implemented for retesting failing tests shall be approved by the Contractor. In case of failing test results, the Manufacturer may request that another sample be retested by the independent laboratory with Manufacturer's technical representative present during the testing procedures. This retesting shall be paid for by the Manufacturer. The Manufacturer may also have the sample retested at two different laboratories approved by the Contractor, paid for by the Manufacturer. If both laboratories report passing results, the material shall be accepted. If both laboratories do not report passing results, geomembrane material from the lot or bracketed square footage representing the failing sample will be considered out of specification and rejected.

PART 3 - EXECUTION

3.01 SUBGRADE PREPARATION

A. Preparation of the subgrade using cushion fill for the cover system geomembrane (60-mil geomembrane) shall be as specified in Section 02315, “Earthwork”.

B. The surface of the subgrade shall be smooth, uniform, relatively free from abrupt changes in grade, rocks and stones greater than 1/2-inch for 60-mil geomembrane, sharp objects, debris and deleterious materials. During actual placing and seaming of the geomembrane, the subgrade surface shall be kept free of standing water. If the subgrade below the geomembrane becomes wet and unstable, it shall be recompacted in accordance with Section 02315, “Earthwork”. Before the

geomembrane installation begins, the Contractor and Installer shall verify and sign off that the surface area to be lined has been properly prepared.

3.02 ANCHOR TRENCH

A. The anchor trench shall be constructed as shown on the Drawings and/or as specified herein.

B. The anchor trench shall be adequately drained to prevent water ponding and softening of adjacent soils. The anchor trench shall be backfilled and compacted.

C. Geosynthetic material in the anchor trench shall be temporarily anchored with sandbags or other suitable materials until final approvals are obtained.

D. Backfilling of the anchor trench shall be conducted when the geomembrane is in its most contracted (taut) state.

E. Care shall be taken when backfilling and compacting the trenches to prevent any damage to the lining materials.

3.03 GEOMEMBRANE PLACEMENT

A. Weather Conditions:
Geomembrane placement shall not proceed at an ambient temperature below 32 degrees F or above 104 degrees F unless otherwise authorized, in writing, by the Contractor. Geomembrane placement shall not be performed during precipitation, excessive moisture, in an area of ponded water, or excessive winds that adversely affect the geomembrane placement.

B. Method of Placement:

1. Each panel of the geomembrane shall be rolled out and installed in accordance with the approved shop drawings prepared by the Installer. The layout shall be designed to keep field seams of the LLDPE geomembrane liner to a minimum and consistent with proper methods of LLDPE geomembrane installation. Panel layout and deployment shall be such that seams run down slope (i.e., perpendicular to top of slope). End seams across slopes greater than 4:1 (4 horizontal and 1 vertical) shall be avoided. See additional seam requirements in Section 3.04.
2. Geomembrane rolls shall be placed in a manner to prevent the material from being stretched during deployment.
3. The Contractor’s field representative shall inspect each panel, after placement and prior to seaming, for damage and/or defects. Also, inspect geomembrane prior to geocomposite drainage layer installation. Defective or damaged panels shall be replaced or repaired, in accordance with Section 3.07.G of the specifications.
4. The Installer shall avoid dragging the geomembrane sheets on rough soil subgrade.
5. Geomembrane shall be anchored as shown on the Drawings and/or consistent with Manufacturer's recommendations.
6. Personnel working on the geomembrane shall not smoke, wear damaging shoes or involve themselves in any activity that may damage the geomembrane.
7. Edges and large exposed areas of the geomembrane shall be properly weighted to avoid uplift due to wind and to prevent lateral movement of the geomembrane.

8. Vehicular traffic except for proper installation vehicles (ATVs) across the geomembrane shall not be allowed. Any vehicle used prior to or after liner placement shall be first approved by the Contractor's field representative.
9. Repaired areas and destructive sample locations shall be recorded and indicated on the as-built drawings.
10. When tying into previously installed geomembrane, excavation, if required, adjacent to installed liner shall be performed by hand to prevent damage.
11. The geomembrane shall be kept free of debris, unnecessary tools and materials. In general, the geomembrane area shall remain neat in appearance.
12. Equipment necessary to perform the installation (generators, compressors, etc) at a minimum shall have a scrap geomembrane sheet placed underneath to protect the installed geomembrane from possible damage.
13. No welder or testing equipment shall be allowed to remain on top of the installed geomembrane overnight. Equipment must be removed and stored off the installed geomembrane.
14. No fueling of equipment will be allowed on top of the installed geomembrane. No fuel containers shall be allowed on the geomembrane.

C. Liner Boots (Penetrations):
1. LLDPE boots or shrouds for liner penetrations shall be furnished and installed where indicated on the Drawings. Prefabricated material shall be designed to fit site specific conditions for the intended slope and size of pipe and be made of compatible and similar materials as the geomembrane.
2. The geomembrane end of the boots shall terminate in a skirt section suitable for welding to the geomembrane liner. The overlap between the boot and the geomembrane shall be approximately 18-in. The boot shall be welded to the geomembrane as specified herein.
3. Boots and shrouds shall fit snugly around the pipe, pole, wells or vaults.
4. A neoprene rubber gasket and/or silicone caulking shall be used between the boot or shroud and the penetration structure and secured with a 1-in wide stainless steel clamp. An LLDPE sacrificial sheet shall be used between the boot or shroud and the clamp for protection.
5. For pipes, poles, wells, vaults larger than 4-in diameter, a second clamp shall be used. The fastener of the second clamp shall be located on the opposite side from the first clamp, to compensate for uneven pressure and elongation.

3.04 FIELD SEAMS

A. Individual panels of geomembrane shall be laid out and overlapped by a minimum of 4-inches for fusion welding and 6 inches for extrusion welding prior to welding. The area to be welded shall be cleaned and prepared in accordance with the quality control welding procedures approved by the Contractor's field representative.
B. Double track hot wedge fusion welds shall be used for straight long seams to the maximum extent possible.
C. Extrusion welds shall be used in areas inaccessible for double track hot wedge fusion welding, including patches, repairs and penetration boots.

D. The welding equipment used shall be capable of continuously monitoring and controlling the temperatures in the zone of contact where the machine is actually fusing the geomembrane material so as to ensure that changes in environmental conditions will not affect the integrity of the weld.

E. No "fish mouths" or wrinkles will be allowed within the seam area. Where "fish mouths" or wrinkles occur, the material shall be cut, overlapped and an extrusion weld patch shall be applied. Welds upon completion of the work shall be tightly bonded. Any geomembrane area showing injury due to excessive scuffing, puncture, or distress from any cause shall be replaced or repaired with an additional piece of geomembrane. The number of patches per 100-ft length of seam length shall not exceed five. If more than five patches per 100-ft length are necessary, then the entire 100-ft length of seam shall be removed. Further welding will cease at this time and the Contractor's field representative shall be notified.

F. Seams shall have a seam number that corresponds with the panel layout numbers. The numbering system shall be used in the development of the as-built drawings. Seam numbers shall be derived from the combination of the two panel numbers that are to be welded together. Patches, boots and repairs shall be numbered using a system that includes the panel number where the patch, boot or repair is located.

G. Fusion welded "T" seams (i.e., the result of the geomembrane panels placed perpendicular to each other) shall be double welded where possible. The extrusion process shall be used for the second weld.

H. Extrudate shall be free of dirt, dry and protected from damage.

I. If an extrusion welder is stopped for longer than one minute, it shall be purged to remove heat degraded extrudate. Purged extrudate shall not be placed on the installed geomembrane.

J. Seams constructed on sloped surfaces shall be perpendicular to the top and toe of the slope (vertical seams).

K. Panels placed on sloped surfaces (steeper than 4:1) shall extend a minimum of 5-ft inward (on the flat) from the top of slope or edge of trench.

L. End seams shall be staggered a minimum of 5-ft in length between contiguous panels. No end seams are allowed on slopes 4:1 (4 horizontal and 1 vertical) or greater, unless otherwise approved by the Contractor.

M. To prevent moisture buildup during fusion welding, it may be necessary to place a movable protective layer of plastic (skid sheet) directly below each overlap of geomembrane that is to be seamed.

N. Seam welds shall extend the full extent into the anchor trench.

O. Factory seams, field seams and repair welds shall meet seam strength requirements specified in Table 02372-2.

P. Seams shall be "shingled" or "rain-lapped."

3.05 SEAMING WEATHER CONDITIONS

A. Normal Weather Conditions:

1. The normal required weather conditions for seaming are:
   a. Ambient temperature higher than 32 degrees F and lower than 104 degrees F.
   b. No precipitation or other excessive moisture, such as fog or dew.
   c. No excessive winds.
2. These weather conditions shall be fulfilled during seaming process.

B. Cold Weather Conditions:
   1. If the ambient air temperature is below 32 degrees F seaming activity is to be avoided. If necessary, Contractor shall provide separate plan for approval.

C. Warm Weather Conditions:
   1. If the ambient air temperature is above 104 degrees F, no seaming of geomembrane shall be permitted unless the Installer can demonstrate, to the satisfaction of the Contractor's field representative that geomembrane seam quality is not adversely impacted.
   2. Test seams shall be performed under similar ambient air temperature conditions as the actual seams.
   3. Additional destructive tests shall be taken at the discretion of the Contractor's field representative.

3.06 FIELD QUALITY CONTROL

A. Start-up Testing:
   1. A test weld 3-ft long from each welding machine shall be run upon the beginning of each shift and every five hours thereafter, under the same conditions as exist for the geomembrane welding. The test weld shall be marked with date, time of day, Seamer's initials, temperature and speed settings (for fusion welds) or temperature and preheat settings (for extrusion welds), and machine number. The Installer shall provide a calibrated tensiometer, on-site before and during geomembrane installation for the purpose of testing samples. Six 1-in wide specimens shall be cut from each test weld and tested on-site in the presence of the Contractor's field representative (three for peel and three for shear strength) in accordance with Table 02372-2. To account for minor variations in conditions, the Seamer may reduce the weld speed by a maximum of 15% without the need to perform additional test welds.
   2. Test seams shall be performed under the same conditions as the actual seams and shall be at least 3-ft long and 1-ft wide after seaming. Material for test seams shall be cut out of the approved geomembrane rolls.

B. Nondestructive Seam Testing:
   1. The Installer shall perform a nondestructive test on field seams over their full length. The purpose of this test is to assure continuity and integrity of the seams. Vacuum and air pressure tests shall be used for nondestructive testing. The vacuum test shall be used for extrusion welds. The air pressure test shall be used for double track fusion welds.
   2. Vacuum Testing:
      a. Equipment for testing extrusion seams shall be comprised of the following:
         1. A vacuum box assembly consisting of a rigid housing, a transparent viewing window, a soft rubber gasket attached to the bottom, port hole or valve assembly and a vacuum gauge.
         2. A vacuum tank and pump assembly equipped with a pressure controller and pipe connections.
         3. A rubber pressure/vacuum hose with fittings and connections.

4. A plastic bucket and wide paint brush or mop.
5. A soapy solution.

b. The following procedures shall be followed by the Installer:
1. Excess sheet overlap shall be trimmed away.
2. Clean the window, gasket surfaces and check for leaks.
3. Energize the vacuum pump and reduce the tank pressure to approximately 5 psi.
4. Wet a strip of geomembrane approximately 12-in by 48-in (length of box) with the soapy solution.
5. Place the box over the wetted area and compress.
6. Close the bleed valve and open the vacuum valve.
7. Ensure that a leak-tight seal is created.
8. For a minimum period of 10 seconds, examine the geomembrane through the viewing window for the presence of soap bubbles.
9. If no bubbles appear after 10 seconds, close the vacuum valve and open the bleed valve, move the box over the next adjoining area with a minimum of 3-in overlap and repeat the process.
10. Areas where soap bubbles appear shall be marked and repaired in accordance with Paragraph 3.07.G and then retested.

c. If the seam is not accessible to vacuum box equipment and cannot be tested prior to final installation, the seaming operations shall be observed by the Contractor's field representative for uniformity and completeness.

3. Air Pressure Testing (for double track fusion seams only):
a. The following procedures are applicable to those processes which produce a double seam with an enclosed space.
b. Equipment for testing double fusion seams shall be comprised of the following:
1. An air pump equipped with pressure gauge capable of generating and sustaining a pressure between 25 and 30 psi and mounted on a cushion to protect the geomembrane.
2. A manometer equipped with a sharp hollow needle, or other approved pressure feed device.

c. The following procedures shall be followed by the Installer:
1. Seal both ends of the seam to be tested. The length of seam shall not exceed 500-ft without approval by the Contractor's field representative.
2. Insert needle or other approved pressure feed device into the tunnel created by the double wedge fusion weld.
3. Energize the air pump to a pressure between 25 and 30 psi. After allowing two minutes for relaxation, the pressure shall be monitored over a test period not less than five minutes.
4. If the loss of pressure exceeds 4-psi or the pressure does not stabilize, the weld shall be considered faulty (unless the Installer can demonstrate that monitoring for an

additional five minutes does not cause an additional loss in pressure in excess of 1 psi, and that the pressure stabilizes within the second monitoring period). Locate the faulty area, repair in accordance with Paragraph 3.07.G and retest.

5. If the pressure loss is less than 4 psi after five minutes, cut the air channel on the opposite end the pressure device to confirm there is no blockage and verify the length of the seam tested. Remove needle or other approved pressure feed device and seal penetrations with extrusion weld.

3.07 DESTRUCTIVE SEAM TESTING

A. Purpose:

The purpose of the destructive testing is to evaluate seam strength properties. An initial minimum sampling interval of one test per 500-ft of performed seam length shall be used for a minimum start-up batch of 25 samples. With 0 to 1 failures out of 25 samples, the sampling interval may be increased to a maximum of one test per 1500-ft of seam length with the approval of the Contractor's field representative. With more than 2 failures out of 25 samples, the sampling interval may be decreased as determined by the Contractor's field representative. The location of samples shall be determined by the Contractor's field representative. Selection of such locations may be prompted by suspicion of overheating, contamination, or other potential cause that may adversely impact the welds. Location of samples shall not be revealed to Installer in advance. Sampling shall be performed by the Installer. Testing of field samples shall be performed by the Contractor's QCL.

B. Sampling Procedures:

1. Samples shall be cut by the Installer at locations chosen by the Contractor's field representative as the seaming progresses.
2. The seams shall not be covered by another material before they have been tested and accepted by Contractor's field representative.
3. Upon obtaining each sample, assign a number to the sample and mark it accordingly.
4. Record sample location on layout drawing.
5. Record purpose of the sample, statistical routine or suspicious weld area.
6. Holes in the geomembrane resulting from destructive seam testing shall be immediately repaired in accordance with Paragraph 3.07.G.

C. Size and Disposition of Samples:

1. Two samples, 12-inch wide by 6-inch shall be taken for field testing. Each of these samples shall be cut with a 1-in wide die, with the seam centered parallel to the width. The distance between these two samples shall be 36-in. If all samples pass the field test described in Paragraph 3.07.D, a sample for laboratory testing shall be taken from the 36-inch portion.
2. The laboratory sample shall be cut into three parts and distributed as follows:
   a. One portion to the Installer for optional laboratory testing, 12-in by 12-in.
   b. One portion for QCL testing, 12-in by 12-in.
   c. One portion to the Contractor for archive storage, 12-in by 12-in.

D. Field Testing:

1. The following shall be performed by the Installer in the presence of the Contractor's field representative:
    a. The Installer shall cut six 1-in wide replicate specimens from the field testing samples to be tested for shear and peel strength, in accordance with the criteria set in Table 02372-2.
    b. The Installer shall test three specimens for shear seam strength and three for peel strength. Replicate test specimens shall pass for the seam to be acceptable.
    c. Samples shall be tested with a tensiometer equipped with a drive/pull apparatus adjusted to a pull rate of 20 inches per minute for both peel and sheer testing in accordance with ASTM D 6392. Each sample shall be tested until film tearing bond (FTB) is achieved. At a minimum, the required pass criteria for peel shall be as specified in Appendix A.
    (Note: The machine shall be capable of pulling the geomembrane seams at either 2 or 20 inches per minute. At the start of the first production work day. If the results are similar, both numerically and visually, the specified test speed shall be 20 inches per minute for all field and laboratory destructive seam tests. If it appears that the faster speed may be affecting the testing results, then the specified speed shall be 2 inches per minute for all field and laboratory destructive seam testing.)
    d. Any specimen that fails through the weld or through the fusion at the weld sheet interface is a non-FTB break and shall be considered a failure even if it achieves the acceptable strengths.
    e. A specimen that does not break at the full extent of the test apparatus will be considered a passing test.
    f. Alternate testing to evaluate both sides of dual wedge welds.

E. Quality Control Laboratory Testing:

1. The Installer shall package and ship destructive test samples to the Contractor's independent Quality Control Laboratory (QCL) as directed by the Contractor's field representative by overnight delivery service. Shipping costs and destructive tests are to be paid by the Contractor.
2. Laboratory testing shall include shear and peel strength tests performed in accordance with ASTM D 6392. The minimum acceptable values obtained in these tests shall be in accordance with Table 02372-2.
3. At least five specimens shall be tested each for shear and peel strength. A passing test shall meet the minimum required values in the five specimens tested for each method.
4. The QCL shall provide verbal test results to the Contractor's field representative no more than 24 hours after they receive the samples. The Contractor's field representative shall review the laboratory results as soon as they become available.

F. Procedures for Destructive Test Failure:

1. The following procedures shall apply whenever a sample fails a destructive test, whether that test is conducted in the field or by the QCL. The Installer has two options:

a. The Installer can repair the seam between (1/2 distance or as directed by the Contractor's field representative) any two passing test locations in accordance with Paragraph 3.07.G.
b. The Installer can retrace the welding path to an intermediate location a minimum of 10-ft on each side of the failed sample. The sample shall be tested in the field. Subsequent failure of test samples shall cause the testing to move further down the seam until the extent of faulty seam has been determined.

2. Acceptable repaired seams shall be bound by two passing locations on each side of the original sample. In cases where repaired seam exceeds 150-ft, a sample taken from the zone in which the seam has been repaired must pass destructive testing. Repairs shall be made in accordance with Paragraph 3.07.G.
3. The Contractor's field representative shall document all actions taken in conjunction with destructive test failures.

G. Repair Procedures:
1. Any portion of the geomembrane exhibiting signs of any kind of defect, or failing a destructive or a nondestructive test, shall be repaired. Several procedures exist for the repair of these areas. The final decision as to the appropriate repair procedure shall be made by the Contractor's field representative.
2. The repair procedures available include:
a. Patching, used to repair large holes, tears, undispersed raw materials and contamination by foreign matter.
b. Spot welding or seaming, used to repair small tears, pinholes, or other minor, localized defects.
c. Capping, is used to repair large lengths of failed seams.
d. Removing bad seam and replacing with a strip of new material welded in place.
3. For any repair method, the following provisions shall be satisfied:
a. Surfaces of the geomembrane which are to be repaired using extrusion methods shall be abraded no more than one hour prior to the repair.
b. Surfaces shall be clean and dry at the time of the repair.
c. Seaming equipment used in repairing procedures shall be qualified.
d. Patches and caps shall extend at least 4-inches beyond the edge of the defect.
e. Patches shall have rounded corners.

H. Repair Verification:
Each repair shall be numbered and logged by the Installer. Each repair shall be nondestructively tested using the methods described in Paragraph 3.6 as appropriate. Repairs which pass the nondestructive test shall be taken as an indication of an adequate repair. Repairs more than 150-ft long may be of sufficient length to require destructive test sampling, at the discretion of the Contractor's field representative. A failed test of the repaired section indicates that the repair shall be redone and retested until passing test results are achieved. The Contractor's field representative shall observe nondestructive testing of repairs. The Installer shall record the number of each repair, date and test outcome.

I. Wrinkles:
Large wrinkles that remain in the sheet as result of temperature expansion or uneven surface preparation may need removal as determined by the Contractor's field representative in consideration of applied loads on the wrinkle. Should the wrinkle need removing, the lower down-slope edge of the wrinkle shall be cut, overlapped and repaired as described in 3.7.G. Both ends of the wrinkle repair shall be patched. Caution must be taken in removing any wrinkles.

J. Sufficient slack shall be placed in the geomembrane to compensate for the coldest temperatures envisioned so that no tensile stresses are generated in the geomembrane or in its seams either during installation or subsequently after the geomembrane is covered.

K. The geomembrane shall have adequate slack such that is does not lift up off the subgrade or substrate material at any location within the facility, i.e., no "trampolining" of the geomembrane shall be allowed to occur at any time.

L. The geomembrane shall not have excessive slack to the point where creases fold over upon themselves either during placement and seaming, or when the protective soil or drainage materials are placed on the geomembrane.

M. Permanent (fold-over type) creases in the covered geomembrane should not be permitted at any time.

The amount of slack to be added to the deployed and seamed geomembrane should be carefully considered and calculated, taking into account the type of geomembrane and the geomembrane's temperature during installation versus its final temperature in the completed installation.

3.08 DISPOSAL OF WASTE MATERIAL

Upon completion of installation, the Installer shall properly remove and dispose of all trash, waste material, tools, and equipment used in connection with the performed work and shall leave the premises in a neat and acceptable condition.

3.09 AS-BUILT DRAWINGS AND INSTALLATION DOCUMENTATION

The Installer shall prepare and submit to the Contractor an as-built drawing reflecting the actual installation of geomembrane liner, including the location of seams, the location of destructive samples, and the location of repair work. The as-built drawing shall be submitted to the Contractor within seven days of the completion of the geomembrane. In addition, a copy of the complete installation documentation package will accompany the as-built drawing.

3.10 AS-BUILT DRAWINGS AND INSTALLATION DOCUMENTATION

Following QC approvals geosynthetic drainage layer will be placed directly over the liner. The GDL will be placed in accordance with section 02374 of the specifications. Fill placement and allowable loading will be as stated in section 02374 3.3G.

TABLE 02372-1
MATERIAL PROPERTIES
LINEAR LOW DENSITY POLYETHYLENE (LLDPE) GEOMEMBRANE
TEXTURED (Both Sides) SHEET

Property	Unit	Test Method	Value	Frequency
Thickness – specified	Mils	ASTM D 5994	60	
Thickness – min average.	Mils	ASTM D 5994	57	
• lowest individual for 8 of 10 values	Mils	ASTM D 5994	54	Per Roll
• lowest individual for any 10 values	Mils	ASTM D 5994	51	
Asperity height (min. avg.)[1, 2]	Mils	GRI GM12	10	Every second roll
Tensile Properties (min. avg.)[3]		ASTM D 6693 (Type IV)		
1. Break Strength	lb/in		90	20,000 lbs
2. Break Elongation	%		250	
Tear Resistance (min. avg.)	lb	ASTM D 1004	33	45,000 lbs
Puncture Resistance (min. avg.)	lb	ASTM D 4833	66	45,000 lbs
Density (max.)	g/cc	ASTM D 1505/D 792	0.92	200,000 lbs
Carbon Black Content (range)	%	ASTM D 1603[4]	2.0 to 3.0	20,000 lbs
Carbon Black Dispersion	N/A	ASTM D 5596	Note 5	45,000 lbs
Oxidative Induction Time (OIT) (min. avg.)[6]				
- Standard OIT		ASTM D 3895	100	100,000 lbs
or				
- High Pressure OIT		ASTM D 5885	400	
Axi-Symmetric Break Resistance Strain (min.)	%	ASTM D 5617	30	
Oven Aging at 85º C -		ASTM D 5721		

Property	Unit	Test Method	Value	Frequency
retained after 90 days (min. ave.) [9]				
- Standard OIT	%	ASTM D 3895	35	
- High Pressure OIT	%	ASTM D 5885	60	
UV Resistance – High Pressure OIT – retained after 1600 hrs (min. ave.) [7][8]	%	ASTM D 5885	35	

Table 02372-1 Notes:

1. Of 10 readings, 8 of 10 must be ≥ 7 mils, and the lowest individual reading must be ≥ 5 mils.
2. Alternate the measurement side for double sided textured sheet.
3. Machine direction (MD) and cross machine direction (XMD) average values should be on the basis of 5 test specimens each direction. Break elongation is calculated using a gage length of 2.0 inches at 2.0 in./min.
4. Other methods such as ASTM D 4218 (muffle furnace) or microwave methods are acceptable if an appropriate correlation to ASTM D 1603 (tube furnace) can be established.
5. Carbon black dispersion (only near spherical agglomerates) for 10 different views: 9 in Categories 1 or 2 and 1 in Category 3.
6. The manufacturer has the option to select either one of the OIT methods listed to evaluate the antioxidant content in the geomembrane.
7. The condition of the test should be 20 hr. UV cycle at 75º C followed by 4 hr. condensation at 60º C.
8. UV resistance is based on percent retained value regardless of the original HP-OIT value.
9. It is also recommended to evaluate samples at 30 and 60 days to compare with the 90 day response.

The above tests shall be performed by the manufacturer of the LLDPE geomembrane for identification of the manufacturer's product. The above test results shall be submitted to the Contractor for approval of the product. The geomembrane to be supplied for the project shall meet these properties.

TABLE 02372-2

SEAM PROPERTIES
LINEAR LOW DENSITY POLYETHYLENE (LLDPE) GEOMEMBRANE
TEXTURED (Both Sides) SHEET

Property	Unit	Test Method		60-mil Value
Shear Strength (min. avg.)	lb/in	ASTM 6392	D	90
Peel Strength (extrusion) (min. avg.)	lb/in	ASTM 6392	D	66 & FTB
Peel Strength (hot wedge) (min. avg.)	lb/in	ASTM 6392	D	75 & FTB

-- END OF SECTION --

SECTION 02372 - APPENDIX A

PROJECT FORMS
FOR
INSTALLATION OF
LINEAR LOW DENSITY POLYETHYLENE (LLDPE) GEOMEMBRANE

Geosynthetics Inventory and Certification Log

Sheet # _____

Project Name		Material Desc.						
Project No.		Layer	Primary		Secondary			Tertiary
Owner/Contr.		Material Type	HDPE	GN	GT	GC	GCL	OTHER
QA Monitor		Texture:	Smooth		Thickness:			Width:

	Roll Number	Lot/Batch Number	Roll Length	Roll Area	Date Roll Received	Date Cert.'s Received	Date Roll Approved
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
	Total		-	-			
	Running Total			-			

Notes, Observations, Comments:

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 001

Defect Log

Sheet # _____

Project Name Project No. Owner/Contr. QA Monitor	Material Desc. Layer — Primary / Secondary / Tertiary Material Type — HDPE GN GT GC GCL OTHER CELL No.

Seam or Panel No.	Date	Reason for Repair	Detailed Location of Repair	Repair's Date	Repair's Tech	QC NDT Result's Date	QC NDT Result's Tech	QC NDT Result's P/F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F
								P F

Retest of Failed Repairs

		Defect No.					
Repair's	Date						
	Tech						
QC NDT Result's	Date						
	Tech						
	P/F	P F	P F	P F	P F	P F	P F

Sketch's:

Notes, Observations, Comments:

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 002

Seam Control and Non-Destructive Test Log

Sheet # _____

Project Name	Material Desc.	Machine/Operator
Project No.	Layer Primary Secondary Tertiary	Previous Cumulative
Owner/Contr.	Notes:	Last DS (LF)
QA Monitor	CELL No:	Next DS (LF)

Seam Control							Non-Destructive Testing									
Date Time	Seam No.	Seam Length Cumulative	Mach. Temp.	Mach. Speed	Amb. Temp.	Weather/ Winds	Test Date	Test Type	Tech. ID	Time Start	Time Finish	Pressure Start	Pressure Finish	Pressure Net	Test P/F	Defects/Destructive Samples & Comments
Date								AT VB							P F	
Start								AT VB							P F	
Finish								AT VB							P F	
Date								AT VB							P F	
Start								AT VB							P F	
Finish								AT VB							P F	
Date								AT VB							P F	
Start								AT VB							P F	
Finish								AT VB							P F	
Date								AT VB							P F	
Start								AT VB							P F	
Finish								AT VB							P F	
Date								AT VB							P F	
Start								AT VB							P F	
Finish								AT VB							P F	
Date								AT VB							P F	
Start								AT VB							P F	
Finish								AT VB							P F	
Date								AT VB							P F	
Start								AT VB							P F	
Finish								AT VB							P F	

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 003

Panel Placement Log

Sheet # _____

Project Name Project No. Owner/Contr. QA Monitor	Material Desc. Layer — Primary / Secondary / Tertiary Material Type — HDPE GN GT GC GCL OTHER CELL No:

	Date	Panel No.	Roll No.	Panel Length	Panel SF	Panel Visual Condition, Inspection and Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
	Total					
	Running Total					

Notes, Observations, Comments:	Sketch's:

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 004

Daily Panel As-Built

Sheet # _____

Project Name	Material Desc.						
Project No.	Layer	Primary		Secondary			Tertiary
Owner/Contr.	Material Type	HDPE	GN	GT	GC	GCL	OTHER
QA Monitor	CELL No:						

Scale: Vertical / Horizontal

Adjacent Sheet No. ____

Indicate North

Adjacent Sheet No. ____

Adjacent Sheet No. ____

Adjacent Sheet No. ____

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 005

Trial Weld Log

Sheet # _____

Project Name			Material Desc.	60 mil Texture					
Project No.			Layer	Primary		Secondary		Tertiary	
Owner/Contr.			Material Type	HDPE	GN	GT	GC	OTHER	
QA Monitor			CELL No:						

Date & Time	Weather/ Winds/ Temp.	Machine/ Operator	Machine Settings Fusion	Machine Settings Extrusion	Peel (ppi)	Shear (ppi)	Result (P/F)	FTB (Y/N)	Test Number	Comments/ Observations
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
							P F	Y N		
							P F	Y N		
			Fusion	Extrusion			P F	Y N		
Notes, Observations, Comments:										

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 006

Destructive Seam Field Test

Sheet # _____

Project Name		Material Desc.			
Project No.		Layer	Primary	Secondary	Tertiary
Owner/Contr.		Sheet Thickness	Top		Fusion
QA Monitor			Bottom		Extrusion

Seam Location		Temp. @ Test	Sample Size 1x4'

Sample ID	Date Welded		Seam No.
Cumulative Weld Total	Date Tested		Welder ID
Number of Destruct's	Test Location		QC Tester ID

Reason for Test	Destructive Sampling Requirements

Coupon No.	Peel				Shear	
	Inside Track		Outside Track			
	Load (ppi)	Failure Mode	Load (ppi)	Failure Mode	Load (ppi)	Failure Mode
P1						
P2						
P3						
P4						
P5						
Average						

Tensiometer Gauge No.	Pass	Fail
ST-033		

Material Strength Specifications		
Material Description	Peel (ppi)	Shear (ppi)
60 mil Smooth	78	120
60 mil Textured	78	120

Notes, Observations, Comments:

Tracking for Failed Samples



DS-_____ Original Sample DS-_____

_____ Compass Direction of Seam

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 007

Certificate of Soil Surface

Sheet # _____

Project Name	Material Desc.			
Project No.	General Desc.	Subgrade	Operations	LCRS
Owner/Contr.	CELL No.			
QA Monitor	Date			

Description of Soil Surface to be lined:

I hereby certify that the above surface area is suitable for the installation of geosynthetics, and I shall be responsible for its integrity and suitability in accordance with the specifications from this date to the completion of the installation.

CQA Monitor
Name:
Date:
Title:
Representing:
Signature:

Installer Representative
Name:
Date:
Title:
Representing:
Signature:

Owner Representative
Name:
Date:
Title:
Representing:
Signature:

Notes, Observations, Comments:

CQA Form 008

Certificate of Completion

Sheet # _____

Project Name	Material Desc.			
Project No.	Layer	Primary	Secondary	Tertiary
Owner/Contr.	Type	Partial	Substantial	Final
QA Monitor	Date			

Description and Area of Work Being Certified:

I hereby certify that the above identified work has been inspected and it has been properly installed. I further certify all required testing has been completed and the results are acceptable to the CQA Officer. The liner system is suitable for its intended use.

CQA Monitor

Name:
Date:
Title:
Representing:
Signature:

Installer Representative

Name:
Date:
Title:
Representing:
Signature:

Owner Representative

Name:
Date:
Title:
Representing:
Signature:

Notes, Observations, Comments:

CQA Form 009

Daily Inspection Report

Sheet # _____

General Project Information		Site Condition		
Project Name		Weather		
Project No.		Type Precip. / Amount		
Owner/Contr.		Wind Speed / Direction		
Engineer		Liner Temperature	Max.	Min.
Sub-Contractor		Site Conditions		
QA Monitor				
Project Schedule		**Meetings**		
Date		Purpose		
Original Comp. Date				
Revised Comp. Date				
Construction Day	Working Day's Remaining	Attendees		
Contracted Working Days	Revised No. of Working Days			

Construction Activities
Activities Started/Completed (by Contractor)
Extra Works, Potential Change Orders
Materials Delivered to Site
Permanent Materials Installed
Contractor and Crew Size
Site Visitor's
Additional Comments

DUDEK Personnel Activity					
	Hours Onsite	Arrive	Depart	Hours Offsite	Total Hours
	Hours Onsite	Arrive	Depart	Hours Offsite	Total Hours

List Daily QA Documents

	Sheet #'s	Comment		Sheet #'s	Comment
Inventory Log- CQA Form 001.			DS Tracking Summary- CQA Form 011.		
Defect Log- CQA Form 002.			Photo Log- CQA Form 012.		
Seam Control- CQA Form 003.			NC / Corrective Action- CQA Form 013.		
Panel Placement Log- CQA Form 004.			Laboratory Test Results		
Daily Panel As-Built- CQA Form 004.			*List Other:*		
Trial Welds- CQA Form 006.					
Destructive Field Sample- CQA Form 007.					
Subgrade Surface- CQA Form 008.					
Completion Certification- CQA Form 009.					

CQA Form 010

In-Use Construction Equipment (Include machine numbers and data) by Subcontractor	

Summary of Construction Activities

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 010

Destructive Sample Tracking Summary

Sheet # _____

Project Name Project No. Owner/Contr. QA Monitor	Material Desc. Layer Primary Secondary Tertiary	Notes, Observations, Comments:

DS No.	Seam No.	Machine/ Operator	Date Welded	Roll No.	Lot No.	QA Monitor	Average Test Results Lab (P/F) Peel	Lab (P/F) Shear	Field (P/F) Peel	Field (P/F) Shear	Overall (P/F)	Comments and Subsequent Tracking No.'s

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 011

Photograph Log

Sheet # _____

Project Name Project No. Owner/Contr. QA Monitor	Notes, Observations, Comments: CELL No:

Date/Time	Roll No.	Photo No.	Plant Area/Location *(Show Location of Photograph on Daily As-Built)*	Photo Description

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 012

Notice of Non-Compliance and Corrective Action

Sheet # _____

General Project Information	
Project Name	Date
Project No.	Contractor in NC
Owner/Contr.	Non-Compliance No.
QA Monitor	Notes:

Reference	
Item	Drawing No.
Specification Sec. No.	Other:

Description of Non-Compliance

Cross Reference (QA Inspection Form & Sheet No.):

Contractor's Response

Follow Up Action Required

Recommended by:

DUDEK Representative _____ Date _____

Approved by:

Owner Representative _____ Date _____

Follow Up Action Taken

Cross Reference (QA Inspection Form & Sheet No.):

MACTEC Representative _____ Date _____

Owner Representative _____ Date _____

CQA Form 013

SEAM TESTING
CHAIN OF CUSTODY FORM

SEND YOUR SEAMS TO

PROJECT NAME / PROJECT NUMBER: _____

PROJECT LOCATION: _____

No.	Seam ID (Include seam ID, panel ID, welder, etc.)	MATERIAL DESCRIPTION	FUSION	EXTRUSION	Solvent Weld
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

TEST METHOD
(Please check which test method is applicable)

- O SHEAR- ASTM D4437 / PEEL - ASTM D4437
- O SHEAR - ASTM D6214 / PEEL - ASTM D6214
- O SHEAR- ASTM D4437 NSF Modified Crosshead Speed = 2"/min / PEEL - ASTM D4437 NSF Modified Crosshead Speed = 2"/min
- O SHEAR- ASTM D4437 NSF Modified Crosshead Speed = 20"/min / PEE - ASTM D4437 NSF Modified Crosshead Speed = 20"/min
- O SHEAR- ASTM D6392 / PEEL-ASTM D6392 / HDPE
- O SHEAR - ASTM D3083 Crosshead Speed = 20"/min / PEEL - ASTM D413 Crosshead Speed = 2"/min
- O SHEAR - ASTM D6392 / PEEL - ASTM D6392 / LLDPE/PVC
- O SHEAR - ASTM D751 / PEEL - ASTM D413 Crosshead Speed = 2"/min

SPECIFICATIONS/NOTES:
OPEN on SATURDAYS for SEAM TESTING.
To ensure that your package is delivered/received on Saturdays; please fax, e-mail or call to let us know the AIRBILL # of your package. This helps us track for SATURDAY DELIVERY.

Thickness required? O Yes O NO
SOLVENT WELD
Curing Time:_____ Curing Temp:_____

REPORT TO:
NAME:_____
COMPANY:_____
ADDRESS:_____
_____
TEL NO:_____
FAX NO:_____
E-MAIL:_____

FIELD CONTACT:
NAME:_____
Pager:_____
Mobil:_____
Phone:_____
FAX:_____
E-mail:_____

RELEASED BY:
NAME:_____
COMPANY:_____
DATE/TIME:_____

RECEIVED BY:
NAME:_____
Precision Geosynthetic Labs
DATE/TIME:_____

Shipped Via
O Fedex
O UPS
O Airborne
O DHL
O US Mail
O Hand Carry
O Others

Page _____ of _____

white- REPORT/SAMPLE, yellow- LAB, pink- CLIENT

CONFORMANCE TEST CHAIN OF CUSTODY FORM

Page ____ of _____

PROJECT NAME / PROJECT NUMBER: _____

PROJECT LOCATION: _____

GEOMEMBRANE TESTING

SAMPLE ID	Thickness ASTM D5199 or D5994	Density ASTM D1505 or D792	Carbon Black Content ASTM D1603	Carbon Dispersion D3015/ D5596	Tensile ASTM D638 GM13 / NSF54	Tear Resistance ASTM D1004 (Die C)	Puncture D4833 /101CM2065	Melt Flow Index ASTM D1238, cond. E	Dimensional Stability ASTM D1204	Low Temp Brittleness D746/ D1790	NCTL ASTM D5397 Hours ____	Other ASTM ____

NONWOVEN OR WOVEN GEOTEXTILE TESTING

SAMPLE ID	Thickness ASTM D5199 or D1777	Mass Per Area ASTM D5261 or D3776	Grab Tensile ASTM D4632	Trapezoid Tear ASTM D4533	Puncture Resistance ASTM D4833	Mullen Burst ASTM D3776	Permittivity ASTM D4491	AOS ASTM D4751	Wide Width Tensile ASTM D4595	UV (hrs ____) ASTM D4355	Other ASTM ____	Other ASTM ____

GEOCOMPOSITE / GEONET / GEOGRID TESTING

SAMPLE ID	Thickness ASTM D5199 or D1777	Density ASTM D1505 or D792	Carbon Black Content ASTM D1603	Mass Per Area ASTM D5261 or D3776	Melt Flow Index ASTM D1238, cond. E	Peel ASTM D413, F904 or GRI-GC7	Transmissivity * ASTM D4716	Compression ASTM D1621	Tensile Strength ASTM D1682 or D5035	Wide Width Tensile ASTM D4595	Rib Tensile Strength GRI-GG1	Junction Strength GRI-GG2

* Transmissivity Test Parameters: Normal Load:_____, Gradient:_____, Seating Time:_____, Boundary Condition:_____

GCL TESTING

SAMPLE ID	Thickness ASTM D5199	Mass Per Area ASTM D5993	Grab Tensile ASTM D4632	Peel Strength ASTM D6496	Moisture Content ASTM D4643 or D2216	Hydraulic Conductivity ASTM D5084	Index Flux ASTM D5887	Swell Index ASTM D5890	Fluid Loss ASTM D5891	Internal Shear Strength ASTM D6243	Other ASTM ____	Other ASTM ____

SEND REPORT TO:

Name:_____

Company:_____

Address:_____

Phone:_____

Fax:_____

e-mail:_____

FIELD CONTACT:

Name:_____

Pager:_____

Mobil_____

Phone:_____

Fax:_____

e-mail:_____

Released by:

Name:_____

Date/Time_____

Received by:

Name:_____

PGL

Date/Time_____

Shipped Via:

O Fedex

O UPS

O Airborne

O DHL

O US Mail

O Others

SECTION 02374

GEOCOMPOSITE DRAINAGE LAYER

PART 1 - GENERAL

1.01 DESCRIPTION

A. The Contractor shall furnish labor, materials, tools, and equipment and perform operations necessary to furnish, deploy, and install the geocomposite drainage layer (GDL) in the areas indicated on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01010: Summary of Work.
B. Section 01330: Submittal Procedures.
C. Section 01450: Contractor Quality Control.
D. Section 02315: Earthwork.
E. Section 02372: Cap Geomembrane Liner.

1.03 REFERENCES

The publications listed below form a part of this Specification to the extent referenced. The reference is made to the most current version/edition of the publication, unless otherwise noted. The publications are referred to in the text by the basic designation only.

A. ASTM International, Inc. (ASTM):

1.	ASTM D1238	Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer
2.	ASTM D 1505	Standard Test Method for Density of Plastics by the Density-Gradient Technique
3.	ASTM D 1603	Standard Test Method for Carbon Black in Olefin Plastics
4.	ASTM D 4218	Standard Test Method for Determination of Carbon Black Content in Polyethylene Compounds By the Muffle-Furnace Technique
5.	ASTM D 4355	Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture, and Heat in a Xenon Arc Type Apparatus
6.	ASTM D 4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
7.	ASTM D 4533	Standard Test Method for Trapezoidal Tearing Strength of Geotextiles
8.	ASTM D 4595	Standard Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method
9.	ASTM D 4632	Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
10.	ASTM D 4716	Test Method for Determining the (In-plane) Flow Rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head

11. ASTM D 4751 Standard Test Method for Determining Apparent Opening Size of a Geotextile
12. ASTM D 4833 Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products
13. ADTM D 5035 Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
14. ASTM D 5199 Standard Test Method for Measuring Nominal Thickness of Geosynthetics
15. ASTM D 5261 Standard Test Method for Measuring Mass per Unit Area of Geotextiles
16. ASTM D 5321 Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method
17. ASTM D 6241 Standard Test Method for the Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe
18. ASTM F 904 Standard Test Method for Comparison of Bond Strength or Ply Adhesion of Similar laminates Made from Flexible Materials
19. ASTM G 154 Standard Practice for operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials

B. Geosynthetic Research Institute (GRI):
1. GRI GC-7 Determination of Adhesion and Bond Strength of Geocomposites
2. GRI GC-8 Determination of the Allowable Flow Rate of a Drainage Geocomposite

C. Environmental Protection Agency (EPA):
1. EPA/600/R-93/182 Daniel, D.E. and R.M. Koerner, (1993), *Technical Guidance Document: Quality Assurance and Quality Control for Waste Containment Facilities*

1.04 DEFINITIONS

A. Contractor: The Contractor is the firm or corporation with whom Honeywell has entered into agreement to construct the project. The Contractor is responsible for submittals by the Manufacturer and the Installer as required by the Specifications. The Contractor is also responsible for scheduling and coordination of the required work with the Manufacturer and the Installer to complete the project.
B. Engineer: The individual or firm responsible for the design and preparation of the Drawings and Specifications.
C. Geocomposite Manufacturer (Manufacturer): The Manufacturer is the firm or corporation contracted by the Contractor for production of the GDL to be used in the project. The Manufacturer shall produce a consistent product meeting the project specifications and shall provide quality control documentation for the product specified herein.
D. Quality Assurance Laboratory (QAL): Party independent from the Manufacturer and Installer, hired by the Contractor, responsible for conducting laboratory tests

on samples of GDL obtained at the site or during manufacturing. The QAL shall have a GRI certification.

E. Installer: The Installer is the firm or corporation hired by the Contractor to install the GDL. The Installer shall be the Manufacturer or a Manufacturer-approved Installer trained and certified to install the Manufacturer's product. The Installer shall be responsible for field handling, storing, placing, seaming, sampling, testing, and other aspects of the GDL.

F. Lot: A quantity of resin (usually the capacity of one rail car) used to manufacture polyethylene geocomposite rolls. The finished rolls shall be identified by a roll number traceable to the resin lot.

1.05 QUALIFICATIONS

A. Manufacturer: Manufacturer shall have manufactured a minimum of 10,000,000 square feet of GDL during the previous year.

B Installer:

1. Installation shall be performed by a Manufacturer-approved Installer. The Installer shall have installed a minimum of 1,000,000 square feet of GDL in the last 3 years.
2. Installer shall have worked in a similar capacity on at least 3 projects similar in complexity to the project described in the Contract Documents.
3. The Installation Supervisor shall have worked in a similar capacity on projects similar in size and complexity to the project described in the Contract Documents.

1.06 SUBMITTALS

The Contractor shall submit the following to the Engineer, at a minimum, in accordance with Section 01330, “Submittal Procedures”:

A. Manufacturer qualifications (see Paragraph 1.5A).

B. Installer Qualifications (see Paragraph 1.5B).

C. Prior to transporting the GDL to the Site, the Contractor shall submit the following information to the Engineer:

1. Mill Certificate: Copy of the mill certificate or affidavit signed by a legally authorized official of the Manufacturer attesting that the GDL meets the physical and manufacturing requirements stated in this Section.
2. Sample: One 12” x 12” sample of the GDL product.
3. A copy of the Manufacturer’s product specification data sheet listing test methods and property values as listed in this Section.
4. Manufacturer’s Quality Control Plan.
5. Manufacturer’s recommendations for shipping, handling, and storage of the GDL.

D. The Contractor shall submit to the Engineer the following information for the GDL delivered to the site:

1. Manufacturing quality control certificates for each shift’s production, signed by the responsible parties employed by the Manufacturer.
2. The quality control certificate shall include:
   a. Roll numbers and identification;

b. The results of quality control tests, including identification of the test methods, frequency used. At a minimum, the Manufacturing Quality Control test results and frequency of testing shall be as shown in Table 02374-3 in Paragraph 2.2.

1.07 WARRANTY

A. Material: Material shall be warranted, on a pro-rated basis against defects for a period of 1-year from the date of substantial completion of work.
B. Installation: Installation shall be warranted against defects in workmanship for a period of 1-year from the date of substantial completion of work.
C. Provide copies of warranty certificates to the Engineer.

1.08 MATERIAL LABELING, DELIVERY, STORAGE, AND HANDLING

A. Labeling: Each roll of GDL delivered to the site shall be wrapped and labeled by the Manufacturer. The label will identify:
   1. Manufacturer's name;
   2. Product identification;
   3. Roll dimensions;
   4. Geotextile type;
   5. Finished product lot; and
   6. Roll number.
B. Delivery: Rolls of GDL will be prepared to ship by appropriate means to prevent damage to the material and to facilitate off-loading.
C. Storage and Handling: The Installer shall be responsible for the handling, storage and care of the GDL from the time of delivery to the site until final acceptance of the completed work by the Contractor. Material storage and handling practices shall meet the Manufacturer's recommendations.

PART 2 - PRODUCTS

2.1 GEOCOMPOSITE DRAINAGE LAYER

A. Geocomposite Drainage Layer:
   1. The GDL shall be manufactured by extruding polyethylene to form a drainage net structure (a geonet) with a non-woven geotextile bonded to both sides.
   2. The locations where the GDL is to be installed are shown on the Drawings.
   3. Provide a material meeting or exceeding the requirements specified in Table 02374-1.

TABLE 02374-1

Geocomposite Drainage Layer		
Property	**Test Method**	**Value[(b)]**
Geonet Component [(a)]		
Thickness, mil	ASTM D 5199	200 (MAV)
Density, g/cm^3	ASTM D 1505	0.94 (MAV)
Tensile Strength (MD), lb/in	ASTM D 4595	45 (MAV)
Carbon Black Content, %	ASTM D 1603/D 4218	2 to 3 (range)
Geotextile Component [(a)]		
Mass Per Unit Area, oz/yd^2	ASTM D 5261	6 (MARV)
AOS, US Sieve (mm)	ASTM D 4751	0.25 (MaxARV)
Permittivity, sec^{-1}	ASTM D 4491 (Falling Head)	0.5 (MARV)
Flow Rate, gpm/ft^2	ASTM D 4491 (Falling Head)	100 (MARV)
Grab Tensile, lbs	ASTM D 4632	158 (MARV)
Sewn Seam Strength, lbs	ASTM D 4632	142 (MARV)
Tear Strength, lbs	ASTM D 4533	57 (MARV)
Puncture Strength, lbs	ASTM D 4833	57 (MARV)
UV Resistance, % retained	ASTM D 4355/G 154 (after 500 hours)	90 (MARV)
Geocomposite		
Ply Adhesion, lb/in	GRI GC-7 or ASTM F 904 (mod.)	0.5 (MAV)
Ultimate Transmissivity[(c, d)], m^2/sec	ASTM D 4716	(MAV) 8.0x10^{-4} @ gradient 0.316

Table 02374-1 Notes:

(a) Component properties prior to lamination.
(b) Values: minimum average values (MAV); minimum average roll value (MARV) in the weakest principal direction; maximum average roll value (MaxARV).
(c) The normal compressive load shall be 750 psf at a hydraulic gradient 0.316. Testing boundary conditions shall be steel plate/site-specific cover soil (Common Fill)/GDL/steel plate with a minimum seating time of 100 hours.
(d) The GDL Manufacturer shall provide a recommended creep reduction factor to the Engineer for use in evaluating the allowable transmissivity of the GDL. The recommended value shall be supported by product-specific testing data.

B. Resin:

1. Resin used to manufacture the geonet core shall be new first quality, compounded polyethylene resin. No post-consumer reclaimed polymer shall be added to the resin during the manufacture of the geonet material. Natural resin (without carbon black) shall meet the following additional minimum requirements provided in Table 02374-2.

TABLE 02374-2

Natural Resin		
Property	**Test Method**	**Value**
Density (g/cm^3)	ASTM D 1505	>0.94
Melt Flow Index (g/10 min)	ASTM D 1238	$\leq$ 1.0

C. Ties:
   1. Ties used to secure adjacent sheets of GDL shall be plastic fasteners or polymer braid.
   2. Metallic ties will not be allowed.
   3. Ties shall be yellow or white to facilitate inspection.

D. Thread:
   1. Thread used to seam the geotextile portion of the GDL shall be polymeric material with chemical resistance properties equal to or exceeding those of the geotextile. The thread shall be a different color than the geotextile to facilitate inspection.

2.2 MANUFACTURING QUALITY CONTROL

A. The GDL shall be manufactured in accordance with the Manufacturer's Quality Control Plan, as submitted to and approved by the Engineer. The GDL shall be tested according to the test methods and frequencies listed in Table 02374-3:

TABLE 02374-3

Characteristics	Test Method	Units	Frequency
Resin			
Polymer Density	ASTM D 1505	g/cm^3	Once Per Lot
Melt Flow Index	ASTM D 1238	g/10 min	Once Per Lot
Geonet Test			
Thickness	ASTM D 5199	mil	50,000 ft^2
Carbon Black	ASTM D 1603/D4218	%	50,000 ft^2
Tensile Strength, MD	ASTM D 4595	lbs/ft	50,000 ft^2
Geotextile Tests			
Mass per Unit Area	ASTM D 5261	oz/yd^2	Every 100,000 ft^2
Grab Tensile	ASTM D 4632	lbs	Every 100,000 ft^2
Tear	ASTM D 4533	lbs	Every 100,000 ft^2
Puncture	ASTM D 4833	lbs	Every 100,000 ft^2
AOS, US Sieve	ASTM D 4751	mm	Every 500,000 ft^2
Permittivity	ASTM D 4491	sec^{-1}	Every 500,000 ft^2
UV Resistance	ASTM D 4355/G 154 (after 500 hrs)	%	Once per resin formulation
Geocomposite Tests			
Ply Adhesion	GRI GC-7 or ASTM F 904 (mod.)	lbs/in.	100,000 ft^2
Transmissivity	ASTM D 4716	m^2/sec	200,000 ft^2

2.3 SITE-SPECIFIC REQUIREMENTS

A. Conduct interface friction and transmissivity testing using site-specific soils. The test methods and required results shall be as outlined in Table 02374-4.

TABLE 02374-4

GDL Site-Specific Properties[a]		
Property	**Test Method**	**Minimum Value**
Interface – GDL/Geomembrane[b][c]	ASTM D 5321	See Section 02372, "Cap Geomembrane Liner"
Interface – GDL/Cover Soil [b][c]	ASTM D 5321	Peak = 26 degrees[e] Residual = 22.5 degrees[e]
Transmissivity, m^2/sec[d]	ASTM D 4716	See Table 02374-1

Table 02374-4 notes:

(a) Site-specific testing shall be conducted at the frequency of 1 test/100,000 square feet unless otherwise noted.
(b) Perform interface tests at normal stresses of 1.5, 3.0, and 4.5 psi with a displacement rate of 0.04 in/min, under wet conditions, report peak and residual values.
(c) The Contractor shall provide site-specific soils (Common Fill) to the QCL along with the Manufacturer provided site-specific GDL.
(d) See Table 02374-1 for transmissivity testing parameters.
(e) For cohesion/adhesion intercept = 0 psf. Interface friction values less than those specified but containing cohesion/adhesion will be evaluated for acceptance by the Engineer.

PART 3 - EXECUTION

3.1 FAMILIARIZATION

A. Prior to installation, the Installer shall carefully inspect the subgrade verify that work is complete to the point where the installation of the GDL may properly commence without adverse impact. If the Installer has any concerns regarding the subgrade, he shall notify the Contractor.

3.2 PROTECTION

A. Prior to installation, the GDL shall not be placed on the ground and shall be covered in such a manner as to keep it dry and out of direct sunlight.

3.3 INSTALLATION

A. General:
   1. The GDL shall be installed in accordance with the Manufacturer's recommendations, as shown on the Drawings, and as specified herein.
B. Handling and Placement:
   1. The Installer shall handle the GDL in such a manner as to ensure it is not damaged.
   2. The predominant flow direction of the GDL is in the machined direction (roll direction) and the GDL shall be installed in the direction of flow

(deploying the GDL directly down the slope) unless an alternative drainage path is approved or specified by the Engineer.

3. The installation shall be conducted by using full length rolls from the top of the slope to the toe.
4. Minimize dragging of the GDL over the subgrade during installation.
5. No equipment shall be operated directly on the GDL surface.
6. At obstructions or penetrations, the GDL shall be cut and/or a penetration formed in a manner to fit around the object without a gap. The bottom geotextile and geonet shall be in close contact with the object. Provide excess upper geotextile material at the penetration to allow the excess material to be tucked back under the GDL to protect the geonet core and prevent soil particles from migrating into the geonet core.
7. Following deployment, folds or excessive wrinkles shall be removed to the extent practicable.

C. Seaming Procedures:

1. Horizontal seams shall not be allowed, except as part of a patch. If horizontal seams are required as part of a patch, offset adjacent horizontal seams.
2. Seams shall be along (running up/down the slope), not across the slope. At a minimum, the following requirements shall be met:
   a. Adjacent rolls/sheet of GDL shall be overlapped so that the geonet overlaps by 2 to 3 inches and the geotextiles overlap by at least 4 inches.
   b. Geonet tying shall be at a maximum of every 5 feet along the slope, every 6 inches in the anchor trench.
   c. Once the geonet is tied, the top geotextile of the GDL be continuously sewn. Thermally bonded seaming may be permitted as approved by the Engineer. Spot sewing or bonding is not allowed. The Installer shall pay particular attention to seams to ensure that no cover soil could be inadvertently inserted beneath the geotextile.
   d. Sewing shall be done using polymeric thread with chemical and ultraviolet light resistance properties equal to or exceeding those of the geotextile. Sewing shall be done using sewing machines specifically designed for this purpose as recommended by the GDL Manufacturer or as approved in writing by the Engineer.
   e. Thermally bonded seams, if approved by the Engineer, may be bonded using hot plate, hot knife, or ultrasonic devices. For thermally bonded seams, adjacent geotextile panels shall overlap 6-inches prior to seaming. The geotextile panels shall be completely clean prior to seaming. The geotextile panel edges shall lay flat against each other prior to seaming such that no gaps are formed in the seam. Manual or automatic machine driven seaming devices may be used; however, machine driven seaming equipment is preferred. Locations where heat bonding has melted through either geotextile panel shall be repaired. Heat seaming shall not be performed during rain or snow. Ambient temperatures for seaming should be above freezing, i.e. 32°F, unless it can be demonstrated that satisfactory seams (comparable to seams conducted a higher temperatures without melt through) can be

fabricated at lower temperatures. The use of a seaming board or slip sheet is recommended for some seaming operations. A seaming board or slip sheet may be a wood board or piece of geomembrane which is placed below the geotextile panels at the location of seaming. The board or sheet may be pulled with a rope or strap as seaming progresses. The purpose of the seaming board or slip sheet is to provide a firm, clean surface for seaming.

f. The bottom layer of geotextile shall be overlapped.

g. No end seams shall be installed in areas with 3H:1V slopes unless approved by the Engineer. Provide adequate anchorage and/or on run-out prior to placing cover on 3H:1V slopes, to prevent sliding of GDL on the subgrade.

D. Inspection:

1. Prior to covering installed GDL with cover soils, all areas shall be inspected by the Contractor and the Installer. During the inspection, the Installer shall repair defect areas identified to the satisfaction of the Contractor. A surface verification form shall be prepared indicating covering of the GDL can be conducted following a successful inspection.

E. Repair:

1. Rips, tears, or damaged areas of the GDL shall be removed and patched.
2. The patch for damaged geonet shall be secured to the deployed geonet by tying every 6 inches with plastic fasteners or polymeric braid. The patch shall be extended 12 inches beyond the edges of the damaged area.

F. Anchor Trench:

1. Where shown on the Drawings, GDL shall be secured in an anchor trench prior to the placement of cover soils. Sand bags or suitable weights may be utilized. The anchor trench shall not be backfilled until the cover soils have been placed and any slack, folds, or wrinkles that have developed in the GDL at the crest of the slope or in the anchor trench have been pulled taut.
2. Prevent compaction equipment from coming into direct contact with the GDL during trench backfilling.

G. Cover Soil (Common Fill) Placement:

1. The guidelines below apply to all soil placed over the GDL; including but not limited to, Cover Soil, Common Fill, etc.
2. See Section 02315, “Earthwork”, for additional requirements.
3. When placing material a minimum of 36 inches of loaded material shall be placed under loaded trucks operating over the GDL.
4. Cover soil shall be placed in such a manner as to prevent damaging or unnecessarily stressing the GDL.
5. Placement of the cover soil is recommended to proceed immediately. If cover soil placement can not be conducted immediately, cover the GDL with a temporary cover (black plastic sheeting). The GDL shall not be left exposed to sunlight for more than 2 weeks or as recommended by the GDL Manufacturer.
6. In applying cover material, no equipment shall drive directly on the GDL.
7. The specified cover material shall be placed and spread utilizing vehicles with a low ground pressure (LGP). The cover soils shall be placed on the GDL from the bottom of the slope proceeding upwards and in a manner which prevents instability of the cover soil or damage to the GDL.

8. Unless otherwise specified by the Engineer, all equipment for spreading fill materials atop the GDL shall comply with the following:

Max. Equipment Ground Pressure (psi)	Min. Separation Thickness (inches)
Max 5psi (low ground pressure related)	Min. 12”
Max 10 psi	Min. 18”
Max 40 psi	Min. 24”
Max 80 psi (fully loaded highway truck)	Min. 36”

9. Compaction of the initial lift of cover soil placed atop the GDL shall be performed in a manner that does not damage the GDL.
10. In the presence of wind, all geocomposites shall be weighted down with sandbags or the equivalent. Such sandbags shall be used during placement and remain until replaced with cover material.

-- END OF SECTION --

EXHIBIT 3

INTERIM GRADING PLANS

APPROXIMATE LOCATION CONSTRUCTION GROUNDWATER INFLUENT PIPE FROM SA-6 SOUTH

INTERIM GRADES TO MEET EXISTING GRADES AFTER DEMOLITION OF SEDIMENTATION BASIN. SEE SEDIMENTATION BASIN NOTES ON SHEET GN-004

HYDRAULIC BARRIER (SEE PLAN AND PROFILE SHEETS SN-201 THRU SN-203)

AL CN-125 CN-308 INSTALL INLET PROTECTION (TYP) INLET FILTER DETAIL

INTERIM GRADES TO MEET EXISTING GRADES AFTER DEMOLITION OF INCINERATION BUILDING SEE NOTE JC1 ON SHEET GN-004

T CN-125 CN-304 TYPICAL STORM TRENCH DETAIL AND FLARED STRUCTURE

65 L.F. 18" HDPE CULVERT W/F.E.S.
INV. IN=8.60
INV. OUT=6.35

AM CN-125 CN-308 OUTLET PROTECTION APRON

EXISTING SOIL CEMENT BENTONITE WALL (TYP) (SEE SHEETS S-204 AND S-205)

AJ CN-125 CN-308 INSTALL ROCK OUTLET FILTER

R CN-125 CN-304 TYPICAL VEGETATED SWALE

AH CN-125 CN-308 INSTALL SILTATION FENCE

S CN-125 CN-304 TYPICAL PAVED PARABOLIC SWALE

RELOCATED SA-7 PERIMETER ROAD

G CN-125 CN-02 CAP DRAINAGE PUMP STATION

EXISTING SA7 PERIMETER ROAD

SA-7

MATCH LINE SHEET CN-126

HIGHWAY ROUTE 440

NEW JERSEY STATE

NOTES:

1. REFER TO SHEET GN-003 AND GN-004 FOR GENERAL NOTES.
2. REFER TO SHEET GN-002 FOR LEGEND AND ABBREVIATIONS.
3. CONTOURS BASED ON MINIMAL FILL THICKNESS REQUIREMENTS. FINAL GRADES MAY VARY AFTER CONSTRUCTIBILITY REVIEW.
4. REFER TO APPENDIX K CONCEPTUAL REDEVELOPMENT PLANS (100% REMEDIAL DESIGN REPORT) FOR FUTURE UTILITY ALIGNMENTS AND PRELIMINARY ALTERNATIVE GRADING CONCEPTS.

0 20 40 80
SCALE IN FEET

SAMUEL G. SHALLARD
6/28/13
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 43507

NO.	DATE	DSGN	DR	CHK	APVD
0	06/07/13	TDD	TDD	RJR	TDD

ISSUED FOR CONSTRUCTION

BY	APVD
TDD	SGS

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SITES 087 AND 088
JERSEY CITY, NEW JERSEY

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100 PERCENT DESIGN DRAWINGS

INTERIM GRADING, DRAINAGE, AND SOIL EROSION SEDIMENT CONTROL PLAN

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Hamilton, NJ, 08619
(609) 689 - 2829
NJ Certificate of Authorization Number 24GA28010900

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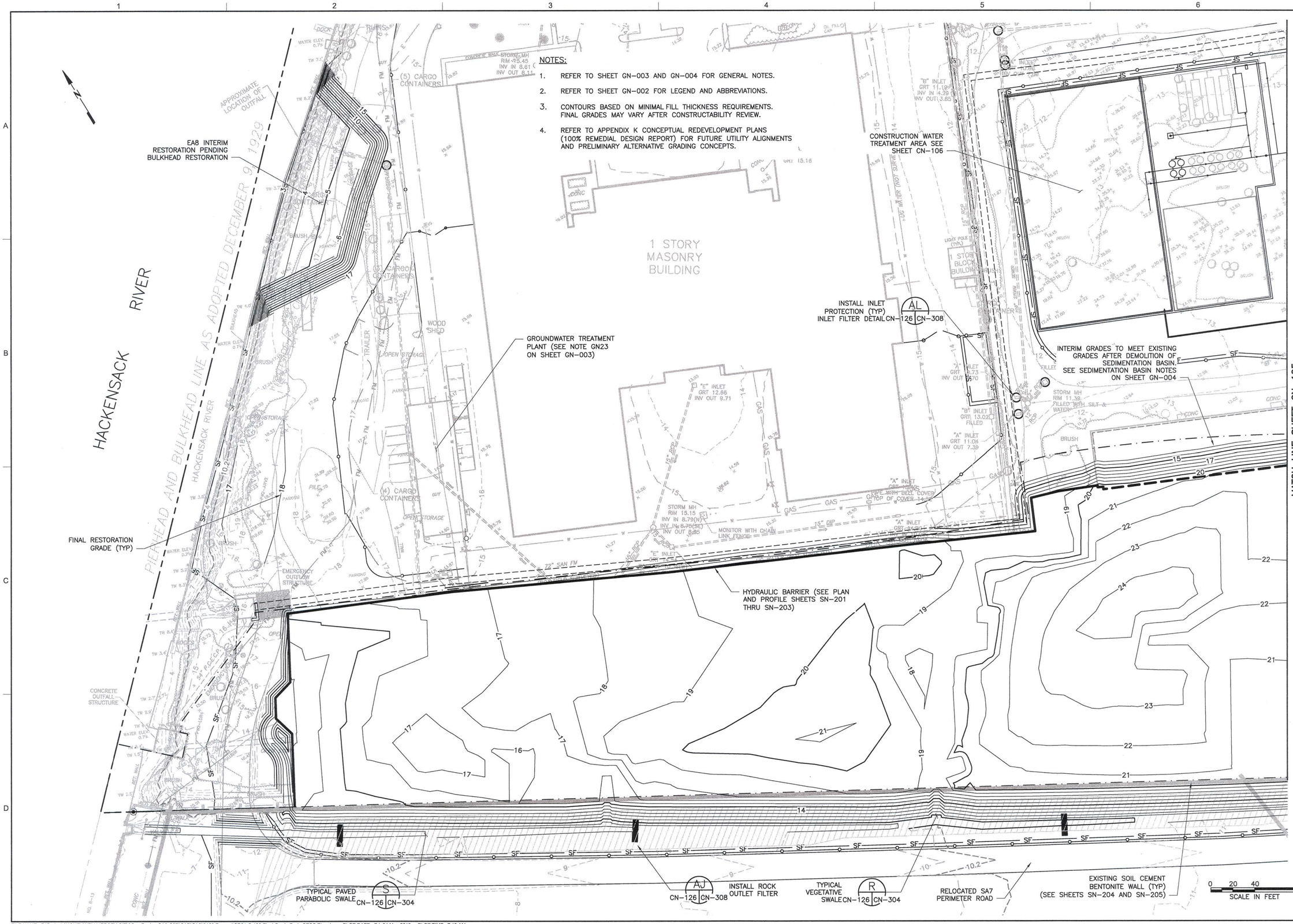
PROJ	3480-12-0317
DWG	CN-125
SHEET	30 OF 70

FILE NAME: Z:\Projects\HONEYWELL\JERSEY CITY\Cap Design-SA6-CSD\CAD\SA6N\100 Percent\CR30-C-125 Final Grade Drain SESC Plan.dwg PLOT DATE: Fri, 24 May 2013 PLOT TIME: 7:12 AM



NOTES:

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2. REFER TO SHEET GN-002 FOR LEGEND AND ABBREVIATIONS.
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4. REFER TO APPENDIX K CONCEPTUAL REDEVELOPMENT PLANS (100% REMEDIAL DESIGN REPORT) FOR FUTURE UTILITY ALIGNMENTS AND PRELIMINARY ALTERNATIVE GRADING CONCEPTS.

SAMUEL G. SHALLARD
6/28/13
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 43507

NO.	DATE	REVISION	BY	APVD
0	06/07/13	ISSUED FOR CONSTRUCTION	TDD	SGS

DSGN TDD | DR RJR | CHK TDD | APVD SGS

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INTERIM GRADING, DRAINAGE, AND SOIL EROSION SEDIMENT CONTROL PLAN

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SHEET	31 OF 70

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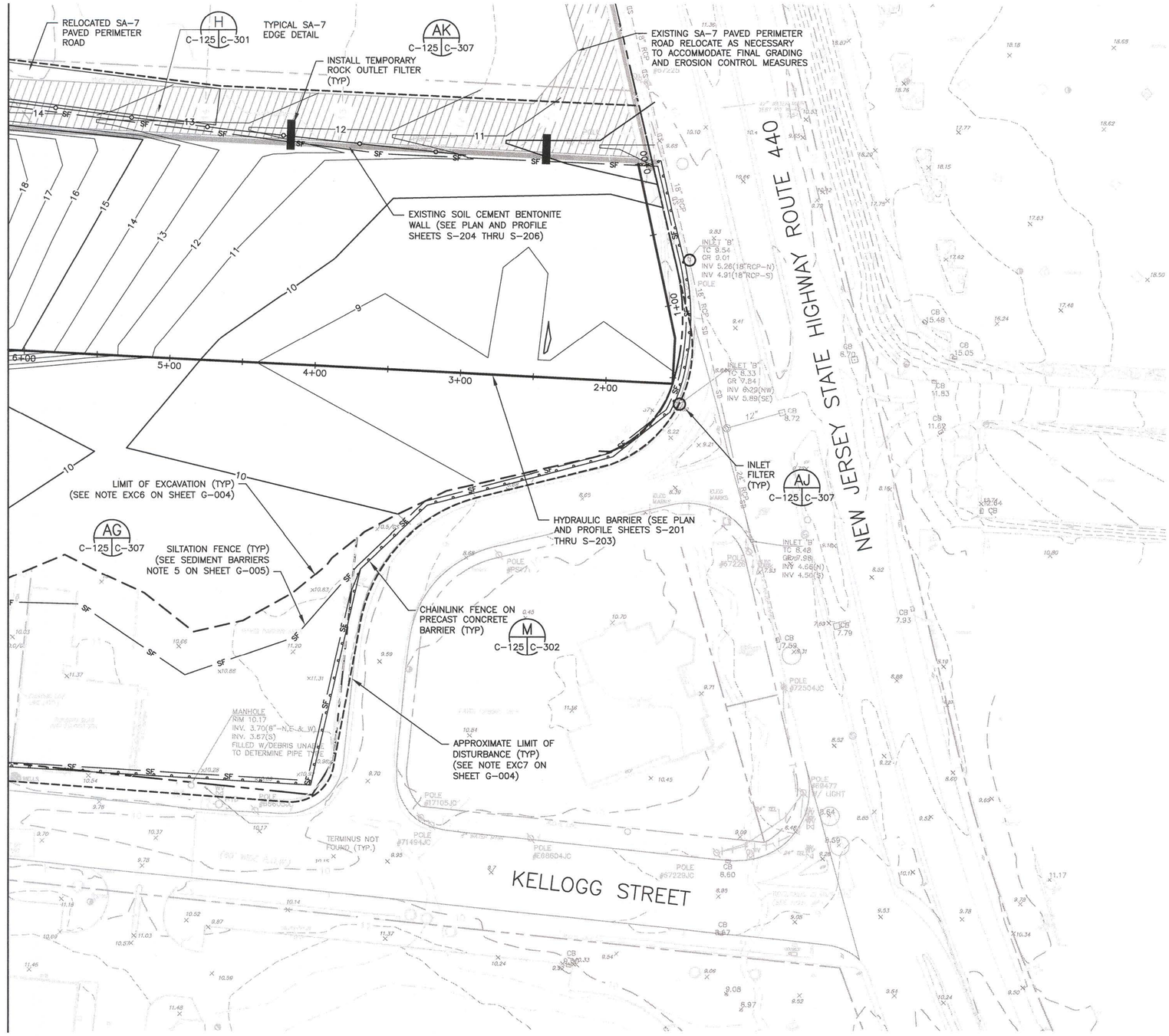
FILE NAME: Z:\Projects\HONEYWELL\JERSEY CITY\Cap Design-SA6-C3D\CAD\SA6N\100 Percent\CR31-C-126 Final Grade Drain SESC Plan.dwg PLOT DATE: Fri, 24 May 2013 PLOT TIME: 7:13 AM



NOTES:

1. REFER TO GENERAL NOTES SHEET G-003 AND G-004.
2. REFER TO LEGEND AND ABBREVIATIONS SHEET G-002

0 20 40 80
SCALE IN FEET

STEPHEN H. MITCHELL
5/24/13
STATE OF NEW JERSEY
STEPHEN H. MITCHELL
NO. 21932
PROFESSIONAL ENGINEER
NJ PROFESSIONAL ENGINEER
SHM LICENSE NUMBER 24GE04322400

NO.	DATE	DSGN	DR	CHK	APVD
0	06/07/13	TDD	RJR	TDD	APVD

ISSUED FOR CONSTRUCTION — TDD SHM
REVISION — BY APVD

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JERSEY CITY, NEW JERSEY

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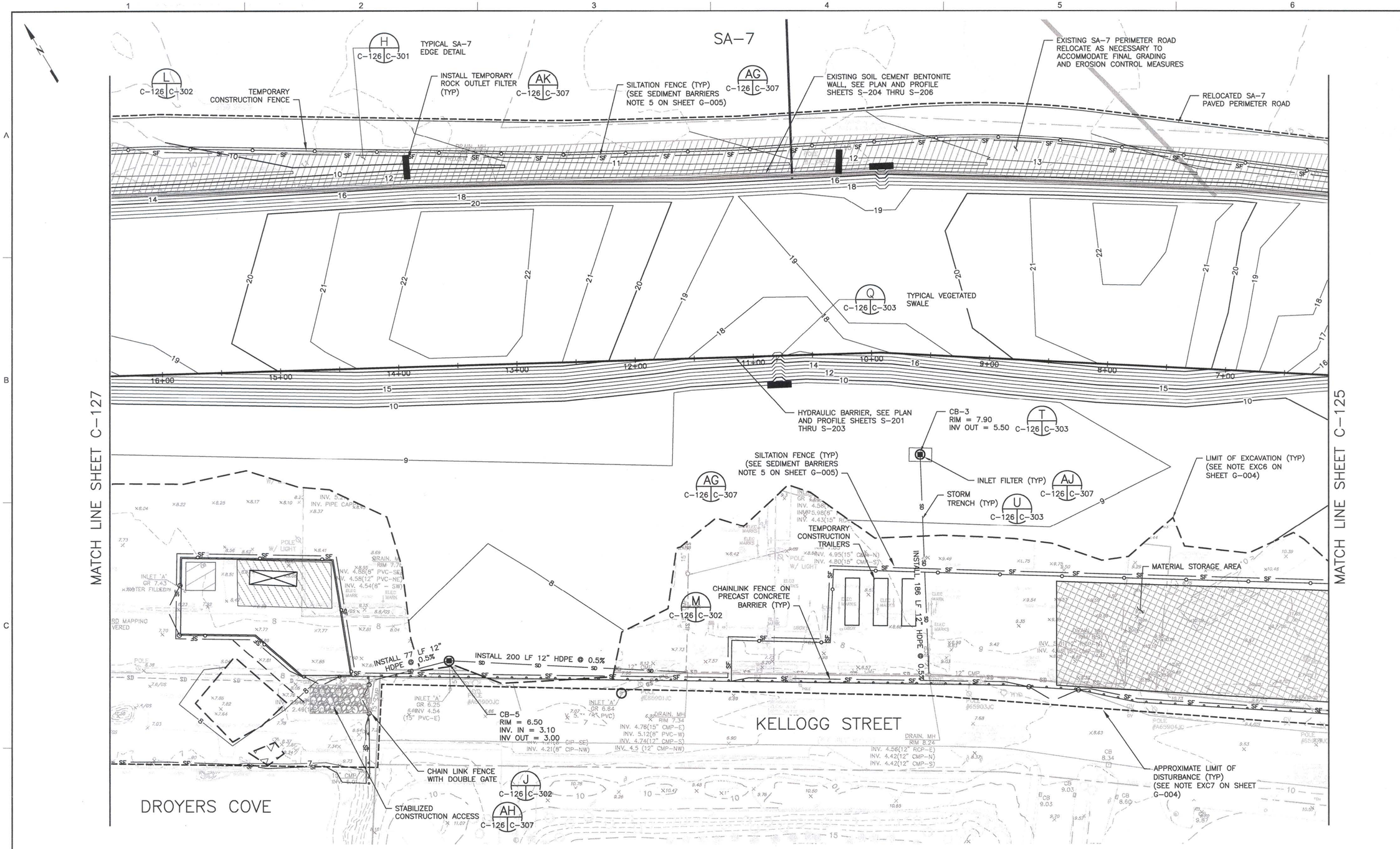
PROJ	3480-12-0317
DWG	C-125
SHEET	30 OF 66

FILE NAME: Z:\Projects\HONEYWELL\JERSEY CITY\Cap Design-SA6-C3D\CAD\SA6S\CR30-C-125 Final Grade Plan.dwg PLOT DATE: Fri, 24 May 2013 PLOT TIME: 10:26 AM



NOTES:

1. REFER TO GENERAL NOTES SHEET G-003 AND G-004.
2. REFER TO LEGEND AND ABBREVIATIONS SHEET G-002.

0 20 40 80
SCALE IN FEET

STEPHEN H. MITCHELL
5/24/13
STATE OF NEW JERSEY
STEPHEN H. MITCHELL
NO. 24GE03224
LICENSED PROFESSIONAL ENGINEER
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 24GE04322400

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DSGN TDD | DR RJR | CHK TDD | APVD SHM

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JERSEY CITY, NEW JERSEY

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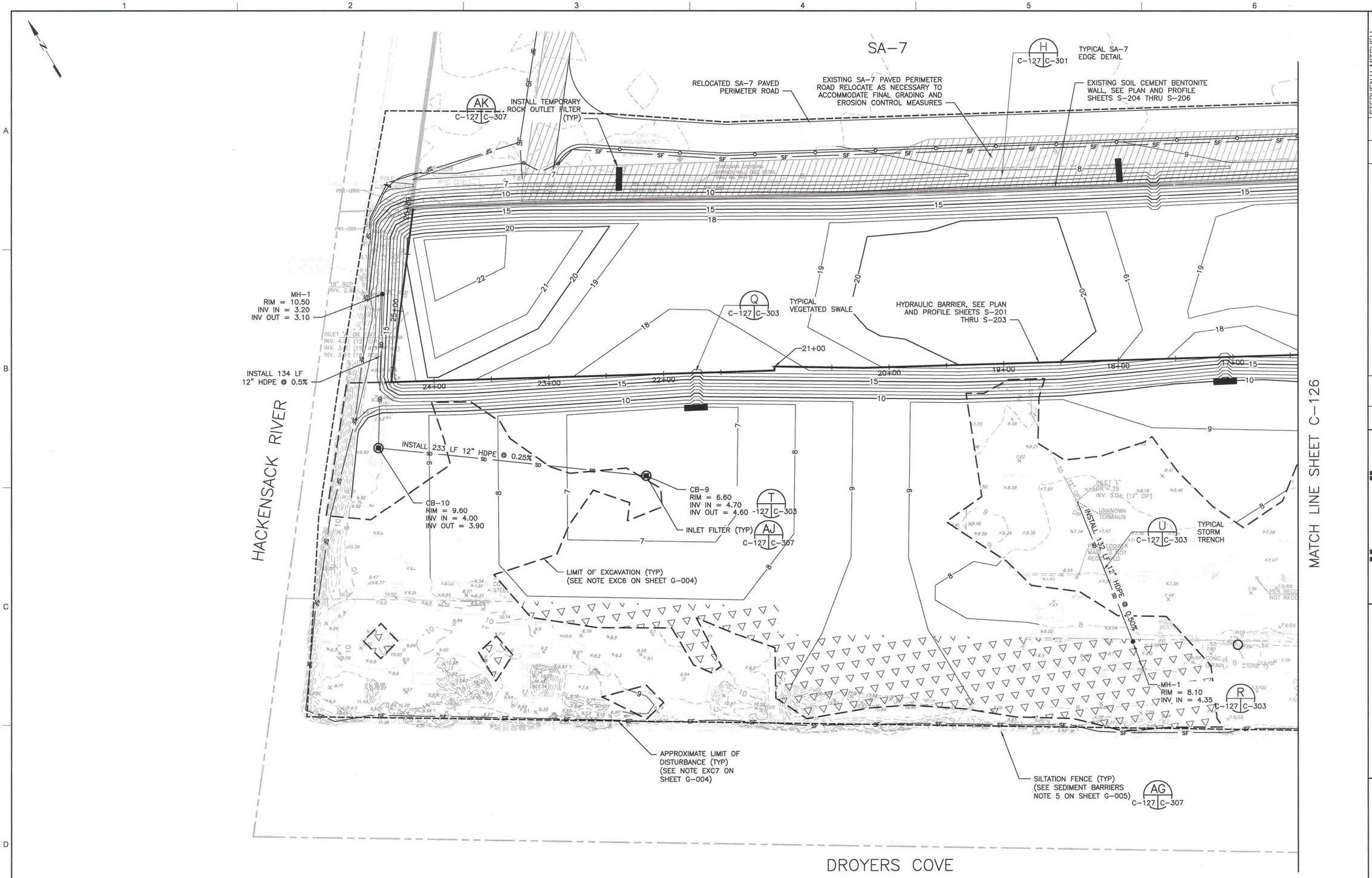

NOTES:

1. REFER TO GENERAL NOTES SHEET G-003 AND G-004.
2. REFER TO LEGEND AND ABBREVIATIONS SHEET G-002.

0 20 40 80
SCALE IN FEET

STEPHEN H. MITCHELL
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 24GE04322400

NO.	DATE	REVISION	BY	APVD
0	06/07/13	ISSUED FOR CONSTRUCTION	TDD	SHM

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REMEDIATION FINAL GRADING, DRAINAGE, AND SOIL EROSION SEDIMENT CONTROL PLAN

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SHEET	32 OF 66

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FILE NAME: Z:\Projects\HONEYWELL\JERSEY CITY\Cap Design-SA6-C3D\CAD\SA6S\CR32-C-127 Final Grade Plan.dwg PLOT DATE: Fri, 24 May 2013 PLOT TIME: 10:52 AM

EXHIBIT 4

SURCHARGE PILE HEIGHT PLANS

GROUNDWATER TREATMENT PLANT BUILDING (SEE NOTE GN23 ON SHEET GN–003)

BH CN–109 | CN–309 72" FORCE MAIN PROTECTION DETAIL

K CN–109 | CN–303 CONCRETE BARRIER

K CN–109 | CN–303 CONCRETE BARRIER

EXISTING 72" PCCP FORCE MAIN (SEE NOTE 10)

EXISTING 72" PCCP FORCE MAIN (SEE NOTE 10)

HYDRAULIC BARRIER

TEMPORARY BRIDGE (SEE NOTE 14)

EXISTING FORCE MAIN AND CONDUIT

ACCESS RAMP (SEE NOTE GN22 ON SHEET GN–003)

EXISTING SA–7 PERIMETER ROAD (SEE NOTE SS7 ON SHEET GN–003)

NEW SA–7 PERIMETER ROAD

BL CN–109 | CN–309 EXISTING SA–7 PAVED PERIMETER ROAD TO BE RELOCATED TO ACCOMMODATE SA–6 NORTH SURCHARGE PILES

EXISTING SOIL CEMENT BENTONITE WALL

EXISTING POWER SUPPLY (SEE NOTE 2)

SA–7 PERIMETER POOL FILL PIPE (SEE NOTE 9)

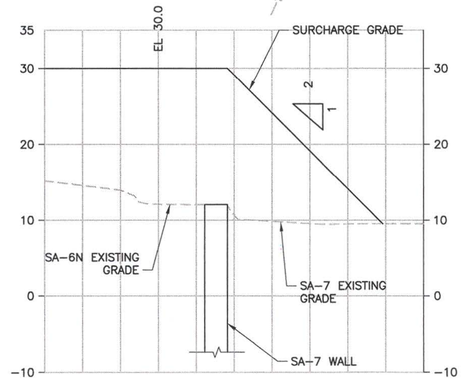
A CN–109 | CN–601

VRC1 VRC2 VRC3

SA–7 FINAL GRADE (ACTUAL GRADES VARY)

NOTES:

1. REMOVE SA–7 FENCE AND SA–7 FLOODLIGHTS PRIOR TO SURCHARGE PLACEMENT.
2. RELOCATE POWER SUPPLY TO PW1 AND PW2 PRIOR TO SURCHARGE.
3. GEOTECHNICAL MONITORING INSTRUMENTATION TO BE INSTALLED PRIOR TO SURCHARGE PLACEMENT.
4. TOE OF SURCHARGE PILE EXTENDS INTO THE SEDIMENTATION BASIN.
5. BEGIN SURCHARGE PLACEMENT PROXIMATE TO THE SEDIMENTATION BASIN IN AREAS REQUIRING THE MOST FILL AND WORK TOWARDS THE RIVER.
6. SURCHARGE PILE TO BE SLOPED TO SHED SURFACE WATER TO THE NORTH.
7. COORDINATE WITH SA–7 ENGINEER TO MAINTAIN ACCESS AND FUNCTION TO PERIMETER POOL INSTRUMENTATION AND RECHARGE SYSTEM.
8. SURCHARGE PILE SLOPE EXTENDS ONTO SA–7.
9. OBSERVATION, RECHARGE, AND MONITORING WELLS ON SA–7 WILL BE EXTENDED AS NECESSARY TO MAINTAIN OPERATIONAL CAPABILITY WHILE SURCHARGING.
10. EXISTING JCMUA 72" FORCE MAIN PROTECTIVE MEASURES TO BE COMPLETED PRIOR TO PLACING SURCHARGE WITHIN 50 FEET OF THE FM. SEE SHEET SN–206 FOR INSTALLATION OF GEOFOAM BLOCK PROTECTION FOR THE FM.
11. SOIL EROSION AND SEDIMENT CONTROL, (SESC) MEASURES WILL BE INSTALLED PRIOR TO COMMENCEMENT OF ROLLING SURCHARGE AND SHALL BE REMOVED, RELOCATED, AND ADJUSTED AS NECESSARY IN CONJUNCTION WITH THE ROLLING SURCHARGE. SESC MEASURES SHALL BE REMOVED FOLLOWING SURCHARGE COMPLETION.
12. THE DIVISION OF THE SURCHARGE AREAS MAY BE SUBJECT TO CHANGE. THE TOTAL AMOUNT OF SURCHARGE AND THE INSTRUMENT LOCATIONS AS SHOWN WILL DEPEND ON ANY REVISIONS TO THE INTERNAL BOUNDARIES BETWEEN THE SURCHARGE AREAS.
13. CONTRACTOR MAY ELECT TO BUILD VERTICAL MECHANICAL STABILIZED EMBANKMENT SLOPE IN LIEU OF TOE OF SLOPE SHOWN IN SURCHARGE PILE.
14. TEMPORARY BRIDGE BY OTHERS RELOCATED BY CONTRACTOR AS REQUIRED.
15. FILL LOW AREAS AND EXISTING DEPRESSIONS TO TARGET SURCHARGE ELEVATION.CUTS ARE NOT REQUIRED T OBE COMPLETED DURING SURCHARGE GRADING.
16. REFER TO GENERAL NOTES ON SHEETS GN–003 AND GN–004.
17. REFER TO LEGEND AND ABBREVIATIONS ON SHEET GN–002.



SECTION A–A

0 15 30 60
SCALE IN FEET

SAMUEL G. SHALLARD
NO. 43507
PROFESSIONAL ENGINEER
STATE OF NEW JERSEY
5/9/13

NO.	DATE	DSGN	DR	CHK	APVD
0	06/07/13	TDD	RJR	TDD	TDD

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BY APVD
TDD SGS
NJ PROFESSIONAL ENGINEER
SGS LICENSE NUMBER 43507

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CHROMIUM REMEDY
STUDY AREA 6 NORTH
SITES 087 AND 088
JERSEY CITY, NEW JERSEY

DRAWING STATUS
100 PERCENT DESIGN DRAWINGS

CAP AREA SURCHARGE
GRADING PLAN
AREA 1N

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SHEET	14 OF 70

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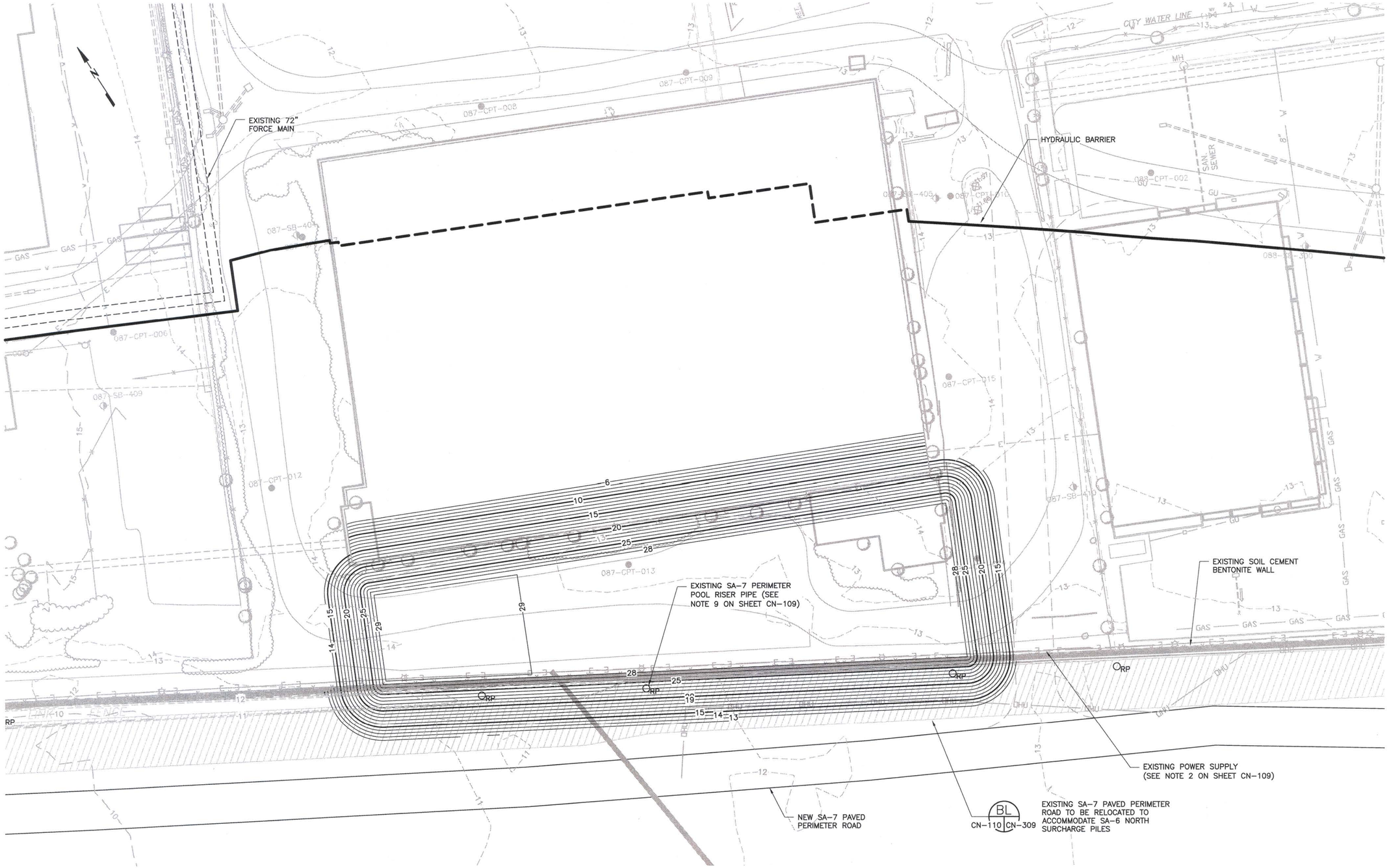

NOTES:

1. REFER TO SHEETS GN-003 AND GN-004 FOR GENERAL NOTES.
2. REFER TO SHEET GN-002 FOR LEGEND AND ABBREVIATIONS.
3. REFER TO SHEET CN-109 FOR ADDITIONAL NOTES.

SAMUEL G. SHALLARD
NJ PROFESSIONAL ENGINEER
LICENSE NUMBER 43507
SGS

NO.	DATE			
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		REVISION	BY	APVD
DSGN	TDD	DR	CHK	APVD
		RJR	TDD	

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CHROMIUM REMEDY
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DRAWING STATUS
100 PERCENT DESIGN DRAWINGS

CAP AREA SURCHARGE GRADING PLAN AREA 2N

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NJ Certificate of Authorization Number 24GA28010900

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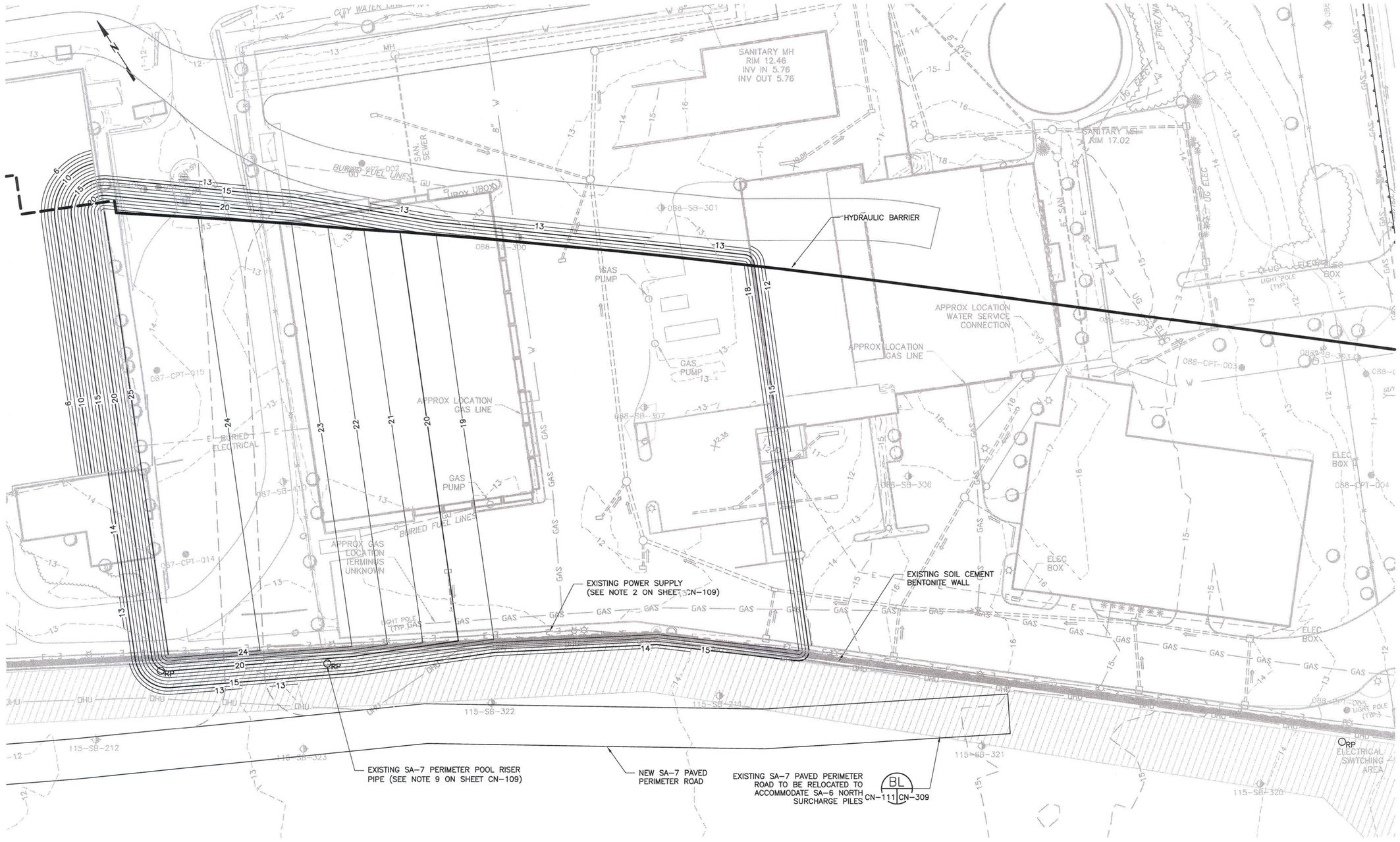
PROJ	3480-12-0317
DWG	CN-110
SHEET	15 OF 70

FILE NAME: Z:\Projects\HONEYWELL\JERSEY CITY\Cap Design-SA6-C3D\CAD\SA6N\100 Percent\CR15-C-110 Grading Surcharge Plan - Area 2.dwg PLOT DATE: Thu, 23 May 2013 PLOT TIME: 2:44 PM



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0 15 30 60
SCALE IN FEET

SAMUEL G. SHALLARD
5/9/13
NJ PROFESSIONAL ENGINEER
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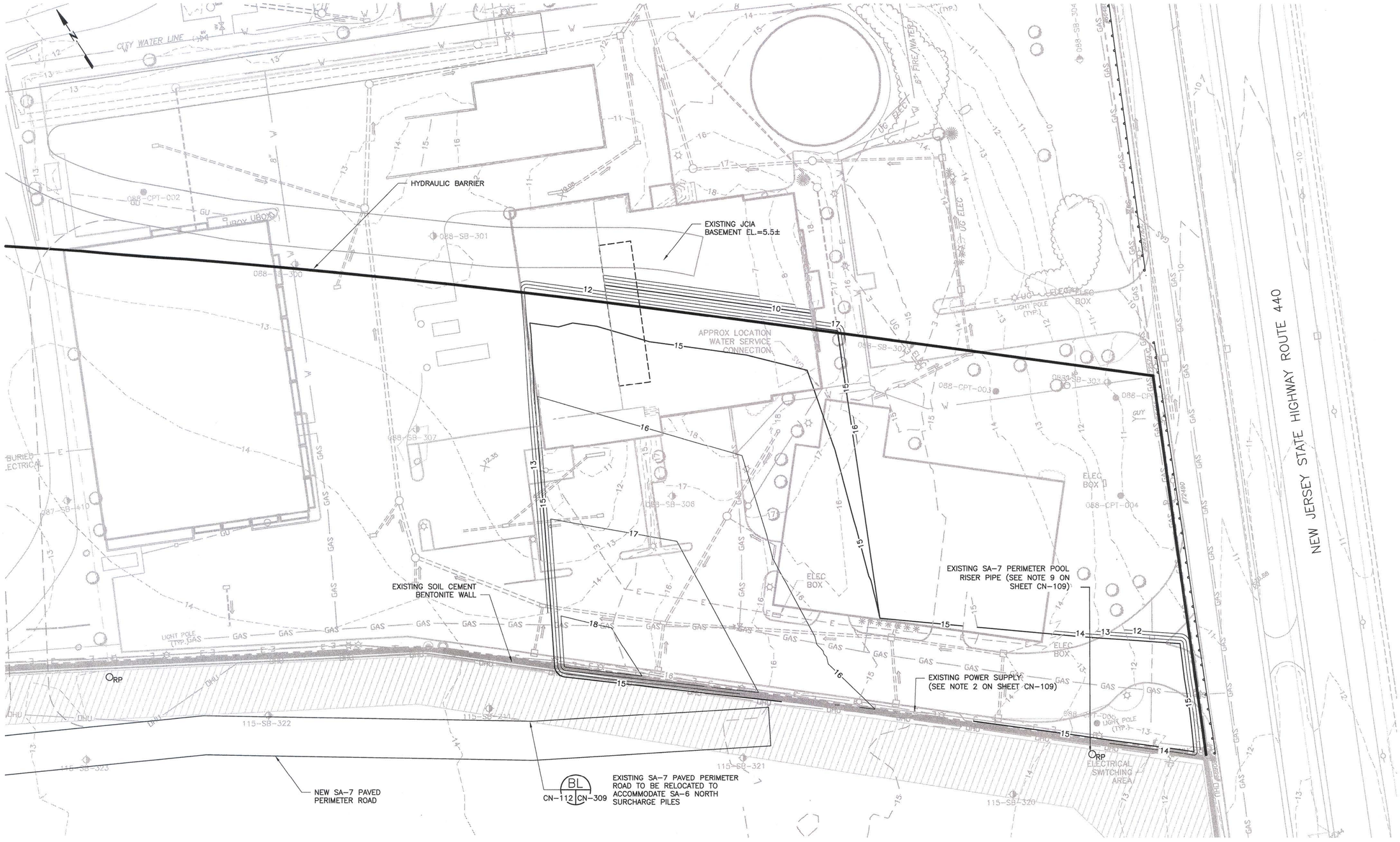

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3. REFER TO SHEET CN-109 FOR ADDITIONAL NOTES.

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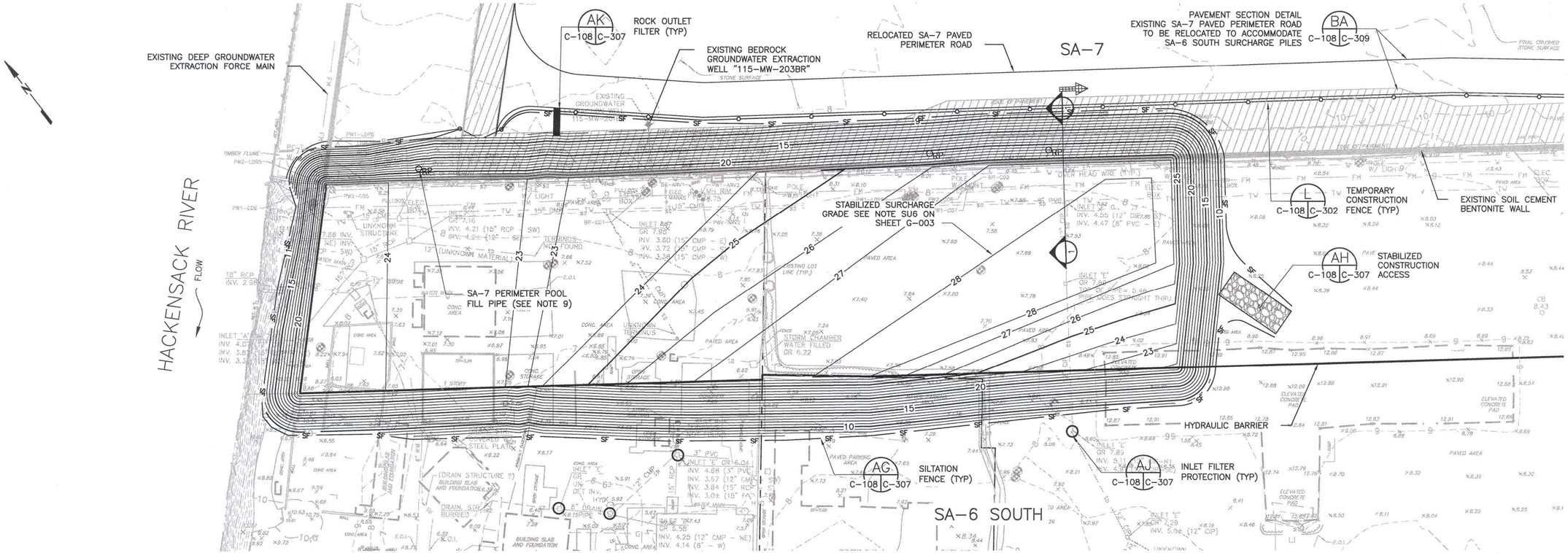

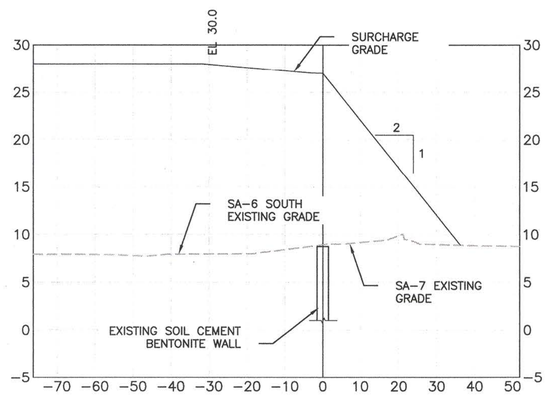

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SA–7

PAVEMENT SECTION DETAIL
EXISTING SA–7 PAVED PERIMETER ROAD TO BE RELOCATED TO ACCOMMODATE SA–6 SOUTH SURCHARGE PILES
BA C–109 | C–309

RELOCATED SA–7 PAVED PERIMETER ROAD

SA–7 PERIMETER POOL FILL PIPE (SEE NOTE 9 ON SHEET C–108)

L C–109 | C–302 TEMPORARY CONSTRUCTION FENCE (TYP)

EXISTING SOIL CEMENT BENTONITE WALL

STABILIZED SURCHARGE GRADE SEE NOTE SU6 ON SHEET G–003

AH C–109 | C–307 STABILIZED CONSTRUCTION ACCESS

SA–6 SOUTH
GR 7.8
INV. 5.21(12" PVC–S)
INV. PIPE CAPPED (N.E.)

AC C–109 | C–307 SILTATION FENCE (TYP)

HYDRAULIC BARRIER

AU C–109 | C–307 INLET FILTER PROTECTION (TYP)
INV. 4.58(12" RCP–N)
INV. 5.38(8" PVC–NE)
INV. 4.43(15" RCP–S)

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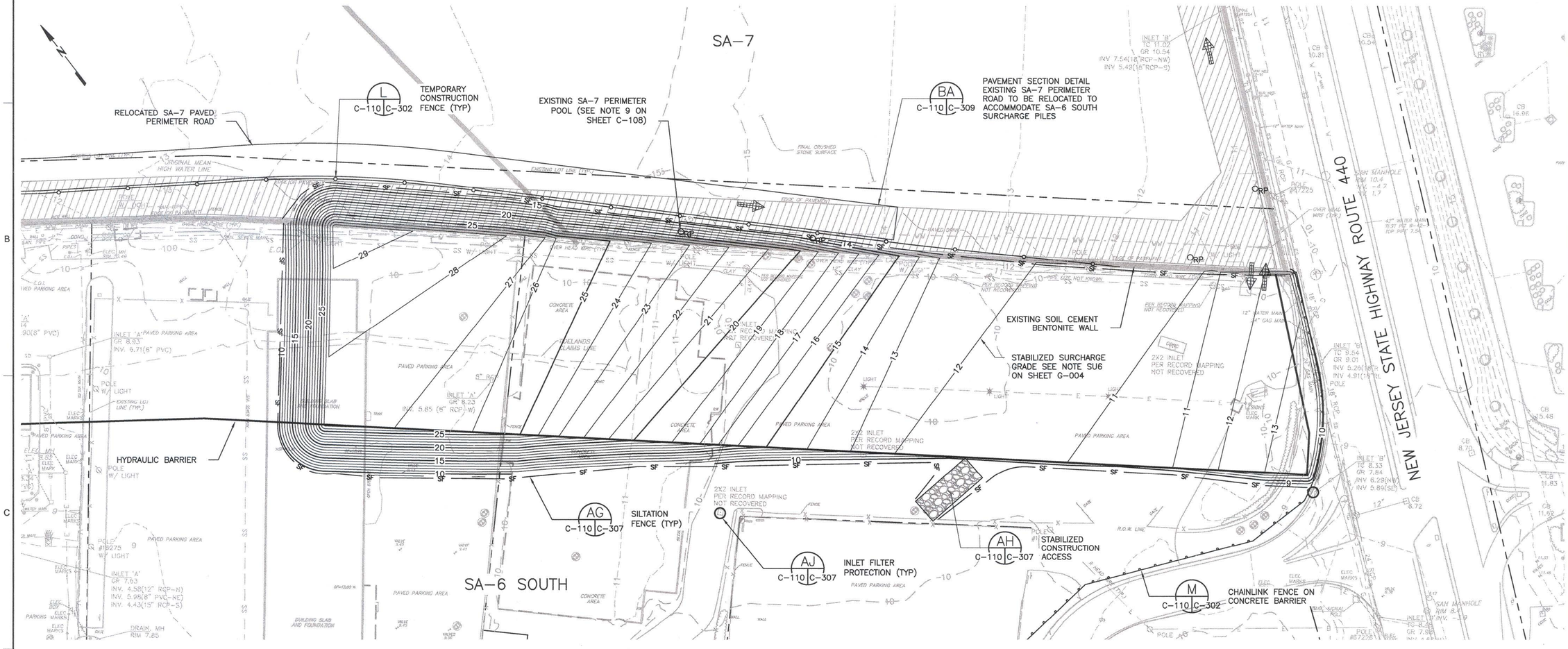

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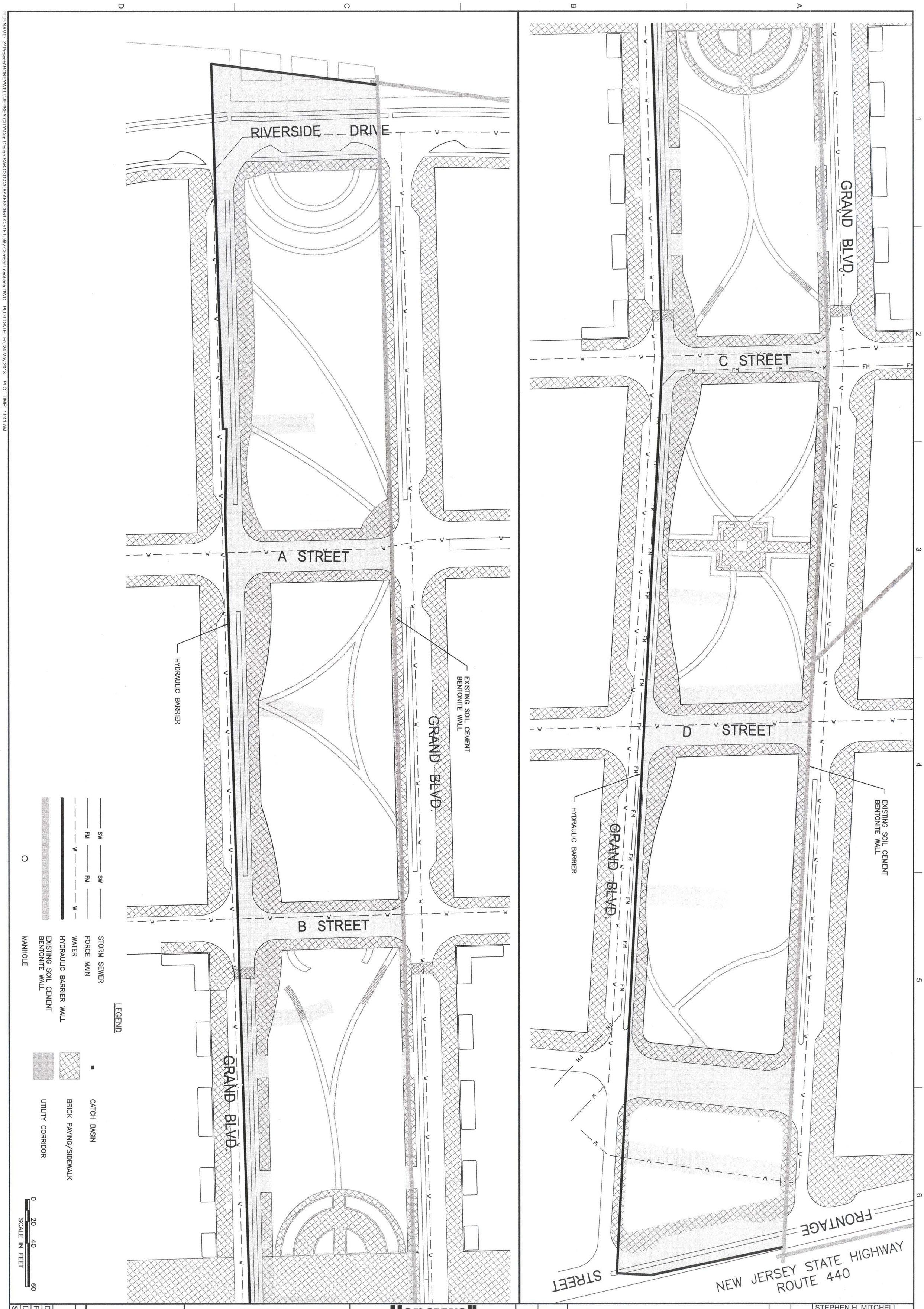

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AMERICAN STANDARD FOR NURSERY STOCK

ANSI Z60.1–2004

Approved May 12, 2004

AN&LA™
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Approved American National Standard
ANSI

DEDICATION

This edition of the *American Standard for Nursery Stock* is dedicated in memory of Ronnie Swaim, Gilmore Plant & Bulb Co., Inc. (NC)

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FOREWORD

One of the early activities of the American Nursery & Landscape Association, formerly the American Association of Nurserymen, was the development of a standardized system of sizing and describing plants to facilitate the trade in nursery stock. Since 1921, the Association has maintained an active committee on standards. Its first edition of "Horticultural Standards" was published in 1923. From time to time, these standards were revised and expanded to meet the needs of the industry.

After World War II the Association elected to make the standards a national standard by adhering to the procedures of the American Standards Association. The first edition published under the procedures of the American Standards Association (forerunner of the current American National Standards Institute, or "ANSI") was published on June 22, 1949.

The revisions included in the 2004 edition were developed by the Association's Horticultural Standards Committee from January, 1997, through May, 2003. The proposed revisions were then submitted to interested national and regional societies, associations, companies, individuals, and government agencies for their review and endorsement.

Nomenclature

The following manuals are suggested for general nomenclature use:

List of Names of Woody Plants; List of Names of Perennials. Research Station for Nursery Stock, P.O. Box 118, NL-2770 AC BOSKOOP, The Netherlands. 5th Revised Ed., 1995.

Datascape Guide to Commercial Nomenclature, American Nurserymen Publishing Co., Chicago, IL, 1996.

An Annotated Checklist of Woody Ornamental Plants of California, Oregon and Washington, Division of Agricultural Sciences, University of California, February, 1979.

Hillier's Manual of Trees and Shrubs, 6th Edition, 1993.

Manual of Cultivated Conifers, Den Ouden & Boon, 3rd Edition, 1982.

The following botanical manuals are suggested for nomenclature as well as descriptive and technical data:

Trees and Shrubs Hardy in the British Isles, Beam (four volumes).

Hortus Third, Liberty Hyde Bailey Hortorium, 1976.

Dictionary of Gardening, Royal Horticulture Society (five volumes).

A Technical Glossary of Horticultural and Landscape Terminology, Horticultural Research Institute, 1971.

HOW TO USE THIS PUBLICATION

A. General Information.

The purpose of the American Standard for Nursery Stock is to provide buyers and sellers of nursery stock with a common terminology in order to facilitate transactions involving nursery stock. For instance, the standards establish common techniques for (a) measuring plants, (b) specifying and stating the size of plants, (c) determining the proper relationship between height and caliper, or height and width, and (d) determining whether a root ball or container is large enough for a particular size plant. In other words, this book is a communication tool, and does not provide buyers with any assurance of the health or quality of the nursery stock being specified or sold.

In order to locate the specifications for a particular plant, you should know (a) what type of plant it is, such as whether it is a shade or flowering tree, a coniferous or broadleaf evergreen, a young plant (seedlings, ground covers, or lining out stock), a perennial or bulb, etc., (b) the growth habit of the particular species, (e.g., upright, conical, spreading, multi-stemmed, etc.), and (c) the method of production of the plant and the manner in which the plant will be sold (e.g., balled and burlapped, bare root, containerized, etc.).

B. Organization and Procedure

1. Locate the plant group to which the plant belongs. There are thirteen plant groups: Shade and Flowering Trees, Deciduous Shrubs, Coniferous Evergreens, Broadleaf Evergreens, Roses, Young Plants, Fruit Trees, Small Fruits, Understock, Seedlings, Bulbs, Corms, and Tubers, Perennials, and Christmas Trees.

2. Locate the section within that plant group which most likely contains the type of information you want to find. The first portion of each plant group section contains general information on how the plants in that group are measured, the conventions regarding how measurements are to be stated, and how different types of plants within the plant group are divided. Each plant group is further divided depending on the most important considerations for plants in that group. The sections for trees and shrubs, for instance, are divided based on growth habit and methods of production and sale. Other sections are divided based on propagation methods, specific plant families within the plant group, or other factors.

Examples of plant types within certain plant groups are only to clarify the factors used to determine plant types within each section. Only a few examples are listed, and are not complete lists of all genera within each plant type. Users must have horticultural knowledge or access to horticultural resources to determine the plant type of an unlisted species.

3. If you are unable to locate the information under the first plant group selected, you should go back to the Table of Contents and determine whether there may be another plant group to which the plant belongs.

4. The Appendix provides both a glossary of terms used in the Standard as well as a metric conversion table

1.6 Root ball guidelines

1.6.1 Root ball diameters - field grown trees

The following tables represent the recommended minimum root ball sizes for trees that are (a) grown in the ground in the nursery without artificial root restriction devices, such as containers or fabric bags, (b) grown under favorable growing conditions, having received the proper cultural treatment to develop a well branched root system, and (c) harvested with the ball of earth in which they are growing remaining intact (e.g., balled and burlapped).

Many factors affect the minimum root ball size. Although minimum ball size is not a required specification, parties to nursery stock transactions are encouraged to address minimum ball size in personal communications or specification documents prior to the transaction. The objective in all nursery stock transactions is for root balls to meet the following general requirement:

Ball sizes should always be of a diameter and depth to encompass enough of the fibrous and feeding root system as necessary for the full recovery of the plant.

Given the variety of acceptable cultural practices in the industry, the ball sizes set forth in this section are based on those factors which are objectively observable and measurable: the height or caliper measurement. Other cultural practices in the nursery, such as transplanting or root pruning practices or watering techniques, or soil types and local growing conditions, certainly affect the density of the roots, but are much more difficult to observe and measure within the context of the Standard.

It is recognized that plants having a coarse or wide-spreading root system because of natural habit of growth, soil condition, infrequent transplanting practice, or plants that are moved out of season, would require a root ball larger than the recommended size. It is also recognized that there may be circumstances where the sizes recommended may be excessive, such as stock grown in pots or other containers, field plants recently planted out from containers or with smaller balls, or plants which have been frequently transplanted or root pruned.

For example, if root density is of particular importance to a seller, buyer, or specifier, the nursery stock may be designated in marketing materials or in specification documents as being transplanted or root pruned a certain number of times. In such cases, the grower may ship the nursery stock with a root ball size smaller than shown in Table 6. **This approach is intended to assist those members of the trade who recognize the value of enhanced cultural practices in the nursery industry.**

Table 6 – Root ball diameters - field grown trees

Type 1 and Type 2 Shade Trees		Type 3 and Type 4 Small Upright and Small Spreading Trees	
Caliper	**Minimum diameter root ball**	**Height (to 5-6') Caliper (6' and over)**	**Minimum diameter root ball**
½ in.	12 in.	2 ft.	10 in.
¾ in.	14 in.	3 ft.	12 in.
1 in.	16 in.	4 ft.	14 in.
1 ¼ in.	18 in.	5 ft.	16 in.
1 ½ in.	20 in.	¾ in.	16 in.
1 ¾ in.	22 in.	1 in.	18 in.
2 in.	24 in.	1 ¼ in.	19 in.
2 ½ in.	28 in.	1 ½ in.	20 in.
3 in.	32 in.	1 ¾ in.	22 in.
3 ½ in.	38 in.	2 in.	24 in.
4 in.	42 in.	2 ½ in.	28 in.
4 ½ in.	48 in.	3 in.	32 in.
5 in.	54 in.	3 ½ in.	38 in.
5 ½ in.	57 in.	4 in.	42 in.
6 in.	60 in.	4 ½ in.	48 in.
7 in.	70 in.	5 in.	54 in.
8 in.	80 in.	5 ½ in.	57 in.
		6 in.	60 in.
		7 in.	70 in.
		8 in.	80 in.

1.6.2 Trunk in center of root ball

Plants dug to the specifications in the following tables should have the trunk or stem of the plant in the center of the earth ball. A tolerance of 10% of the diameter is the maximum deviation allowable (See Figure 8). For example: For a tree with a 30-inch root ball, the center of the trunk at ground level shall be within a circle 13 ½ inches from the outer edge of the ball.

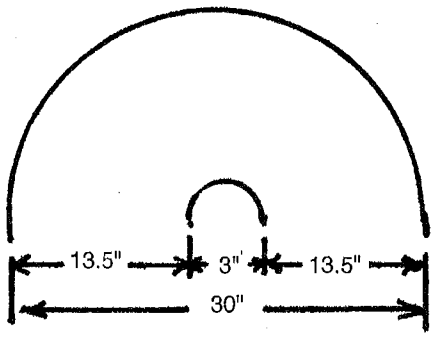

FIGURE 8 – Example: trunk in center of root ball

1.6.3 Root ball depths

Measurement: Depth of the ball is measured from the top of the ball, which in all cases shall begin at the root flare (see Figure 9). Soil above the root flare, from being deeply planted in the nursery as a young plant, as a result of maintenance practices in the nursery, or added during harvest, shall not be included in ball depth measurement, and should be removed.

Under certain soil and regional conditions, plants have root systems of proportionately less depth and greater diameter. These require a more shallow but wider ball to properly encompass the roots. Conversely, in other soils, and in certain regions, roots develop greater depth and less spread, requiring an exceptionally deep ball, which may be smaller in diameter and greater in depth than the size recommended.

For the greater part of the country, ball depths will carry the following ratios:

Balls with diameters less than 20 inches - depth not less than 65% of the diameter of the ball.

Balls with diameters of 20 inches and up - depth not less than 60% of the diameter of the ball.

APPENDIX D-2

INTEGRATED GROUNDWATER SAMPLING AND ANALYSIS PLAN

INTEGRATED GROUNDWATER SAMPLING AND ANALYSIS PLAN

STUDY AREAS 5, 6, AND 7 JERSEY CITY, NEW JERSEY

Prepared for

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(revised March 12, 2014)

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Figure B-1b GWET LTMP Groundwater Quality Monitoring Wells – Deep Zone

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Figure B-2 S-3 Injection Mass Removal Plan Monitoring Locations

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1 INTRODUCTION

This Sampling and Analysis Plan (SAP) was developed as a guide for implementation of the Integrated Groundwater Monitoring Plan (IGWMP) to monitor the various groundwater remedies within Study Areas 5, 6, and 7 (Project Area). The objective of the plan is to characterize regional groundwater conditions and document compliance with area-specific remedial objectives. These monitoring activities generally consist of the collection of water level measurements and groundwater quality samples, and the reporting of these data in accordance with site-specific work plans. Because well locations and sampling frequencies vary from plan to plan and over time, there is a potential for duplication of efforts and inefficiency, both in the field, and in reporting. The specific objectives of the SAP and associated annual report are to:

- Improve consistency and efficiency in field procedures including sample collection and scheduling.
- Provide a central database for monitoring well specifications and status.
- Provide regional groundwater flow interpretations that consider the impact of features such as subsurface barrier walls, drains, caps, and drawdown from pumping.
- Provide localized groundwater flow maps consistent with the regional contour maps.
- Facilitate preparation of CEA biennial certifications.

The contents of this SAP will be reviewed and re-issued on an annual basis to document such occurrences as:

- a change in contractor,
- modifications to field procedures, equipment, or reporting that may be necessary due to changes in field conditions,
- changes in regulatory requirements or standards,
- changes in consent decrees, monitoring plans or remedial designs.

The results of this review will be reported in the Annual Integrated Groundwater Performance Report and reflected in a revised SAP to be issued annually.

2 FIELD PROCEDURES

2.1 Groundwater Level Measurements

Groundwater level measurements are required in the various monitoring plans listed in column B on **Table A**. The associated consent order or consent decree that requires these plans to be implemented is listed in column C on **Table A**. The individual wells associated with each plan are identified on **Sub-tables A-1 through A-8** and a key to the appropriate Sub-table is provided in column F.

The frequency of water level measurement ranges from monthly in the SA-7 perimeter pools and SA-6 North and South containment cells (once constructed), to quarterly, semi-annually, or annually in other plans. The mainstay of the IGMP is the quarterly round currently conducted in all available wells as part of the GWET Long Term Monitoring Plan (LTMP). These data will be plotted for each of the four flow zones (Shallow, Intermediate, Deep, and Bedrock) and will be used to define regional flow conditions in the annual report. For those plans requiring monthly measurements, the events will be coordinated to the extent feasible to occur on the same day to improve efficiency.

Accuracy and consistency in water level measurements are critical considering the close tolerances in performance standards used to demonstrate capture zones, inward/outward gradients across barrier walls, and the like. As a result, groundwater level measurements will be conducted in accordance with the procedures provided below.

Field Procedures. The depth to groundwater will be measured manually with an electronic depth indicating sounder. The sequence of manual water level measurements at a given well cluster will be pre-determined on the basis of existing groundwater quality data. Generally, the least contaminated well (in terms of hexavalent chromium concentration) will be measured first proceeding to progressively more contaminated wells based upon historic water quality data. The calibrated cable on the depth indicator will be checked against a surveyor's steel tape at the beginning of each quarterly event and replaced if more than 0.01 feet in error. The following procedures will be used for each water level measurement.

- The well cap will be removed and the well head allowed to vent for a short period of time.
- A new pair of latex gloves will be donned.
- The probe will lowered into the well until the meter indicates water is reached.

- The probe will be raised above the water level and slowly lowered again until water is indicated.

- The cable will be held against the side of the inner well at the point designated for water level measurements and a depth reading taken.

- This procedure will be followed three times or until a consistent value is obtained.

- The value will be recorded to the nearest 0.01 feet in a field notebook.

- The time of the measurement and the reference point on the well head will be recorded in a field notebook.

- The probe will be raised to the surface and, together with the amount of cable that was wetted in the well, will be decontaminated as described in **Appendix A**.

Tidal Corrections. Groundwater levels in wells that are tidally influenced will rise and fall throughout the day in response to the rise and fall of the Hackensack River. The magnitude of this fluctuation relative to the magnitude of the tidal change defines the tidal efficiency of the well. The time delay between the river fluctuation and the associated groundwater fluctuation is the tidal lag. The objective of tidal corrections is to determine the average groundwater elevation in a tidally-influenced well. Wells affected by the tides are generally within 500 feet of the river and are screened below the Meadow Mat. A list of the wells that are tidally influenced is provided in **Table D.** The tidal efficiency and tidal lag values shown on **Table D** were determined during prior tidal studies using pressure transducers. The tidal correction procedure for each well is as follows.

1. Hackensack river tidal fluctuations are plotted for a 5-day period centered on the date of the manual groundwater measurement. Tidal data are recorded in 6-minute intervals at the tide gauge on the SA-7 bulkhead.

2. A graph of the predicted groundwater fluctuations in the well of interest is then generated for this 5-day period based on the tidal lag and efficiency properties of the well as shown on **Table D**.

3. The date and time of the manual groundwater measurement is located on this chart and the correction amount is calculated as the difference between the manually- measurement head and the average head for this well during the 5-day period.

4. The calculated head correction value is then added to, or subtracted from, the measured (raw) groundwater elevation to determine the corrected groundwater elevation for that well. For example, if the measurement was taken at time when groundwater levels in this well are predicted to be above

the average, the correction value is subtracted from the manual reading and vice versa.

2.2 Groundwater Sample Collection

Groundwater sample collection for laboratory analysis is required in the various monitoring plans listed on **Table B**. The associated consent order or consent decree that requires these plans to be implemented is listed in column C on **Table B**. The individual wells associated with each plan are identified on **Sub-tables B-1 through B-8** and a key to the appropriate Sub-table is provided in column F. The frequency of sampling varies from approximately every six weeks as part of the S-3 injection mass removal effort, to quarterly and annually for other plans. In most monitoring plans, the frequency decreases over time to annual or biennial after two years.

Accuracy and consistency in groundwater sampling methods are critical and thus, groundwater sample collection will be conducted using a dedicated field team familiar with the nuances associated with the various well locations.

Field Procedures.

- A well maintenance check that includes visual observation of the condition of the protective casing and surface seal will be performed. In addition, the well will be checked for other signs of damage or unauthorized entry.
- Plastic sheeting will be placed on the ground around the well (on the up-wind side of well) for a clean work area.
- The well cap will be removed and the well head allowed to vent for a short period of time before collecting a water level measurement.
- The static water level in each well/piezometer will be measured manually and recorded.
- The Grunfos Redi-flow 2 submersible sampling pump will be placed in the well such that the intake is in the middle of the screened interval.
- The gasoline-powered electric generator will be positioned down-wind and as far from the well as feasible.
- The discharge tubing from the pump will be attached to the in-line flow cell fitted with the probes to monitor the appropriate indicator parameters.
- The generator will be started and the control box used to set the pumping rate.
- The pump discharge rate will be measured and calculated using a graduated vessel and stop watch.
- The static water level in each well/piezometer will be measured manually and recorded.
- The discharge rate will be adjusted to minimize drawdown.

- Purging will continue until three consecutive readings have stabilized as follows:
  - pH (+/- 0.1 pH units)
  - Specific Conductivity (+/- 3%)
  - Temperature (+/- 3%)
  - ORP (+/- 10mv)
  - Dissolved Oxygen (+/- 10%)
  - Turbidity (+/- 10%)
- Upon stabilization, samples will be collected in appropriate containers in accordance with the analytical methods as provided in **Table C**. Each container will be filled to the appropriate volume required for analysis. VOC vials will be filled to capacity, with no head space.

Sample Labeling and Handling. Samples destined for chemical analysis will be given sample designations. Sample designations will consist of the following information:

- Project name
- Sample identification
- Sample location
- Sample date and time
- Sample matrix
- Analyses to be performed
- Sample preservation, if appropriate.

The sample designation information will be printed on a waterproof label affixed to each sample container. Upon collection of each analytical sample, it will immediately be placed in a cooler. The contents of the cooler will be maintained at approximately 4°C with ice or cold packs. At the end of each day, the samples will be packed in the cooler(s) and prepared for pickup. The appropriate chain-of-custody form will be completed and the sampler's copies retained. The remaining copies will be placed inside a zip-lock bag and taped to the inside of the respective cooler lid. Sufficient ice/cold packs will be added to the cooler to ensure 4°C is maintained during delivery/shipment. The lid will then be closed and securely taped using nylon fiber strapping or duct tape. Two signed and dated custody seals will be affixed across the seam of the cooler/lid (one on the front of the cooler and the other on the back).

Field QA/QC Samples. In addition to groundwater samples from the identified wells, one set of QA/QC samples will also be submitted for analysis for those events which consists of between five and twenty field samples (wells). If more than 20 field samples are collected, a second set of QA/QC samples will be submitted for analyses and will be associated with this second "batch" of samples, and so on. Each batch of 20 (or fewer) samples will include the following QA/QC samples:

- One field duplicate
- One equipment rinsate blank
- One matrix spike and one matrix spike duplicate
- One trip blank per cooler containing samples for VOC analysis.

2.3 Laboratory Analysis and Reporting

The laboratory analyses of groundwater samples will be performed by AccuTest Laboratories in Dayton, New Jersey. The analytical methods, containers, preservatives, and hold times are provided on **Table C**. Due to the relatively short hold time for hexavalent chromium, samples should be collected as late in the day as feasible and a pickup arranged as early in the day as feasible. Coordination between the laboratory and field staff on meeting hold times should be conducted by the project manager in advance of the sampling event. Special arrangements may be necessary when samples are collected on a Friday and need to be analyzed on the following Saturday. In general, sampling on Friday should be avoided.

Laboratory deliverables will include electronic transfer of data both Excel spreadsheet and Access database formats, and in hardcopy. Case narratives describing observations made in the lab or the reasons for any "qualified" data will be provided in PDF format and in hardcopy. Standard turn-around time for this project is 2 weeks unless otherwise requested.

3 ANNUAL REPORTING

Groundwater data collected as part of the IGMP will be compiled and reported on an annual basis. Requirements for more frequent reporting (S-3 injection plan for example), will met through supplemental submissions as necessary. An outline of the proposed report format is provided as **Attachment B**. The primary section headings are:

General Conditions.

This section will summarize factors that have influenced groundwater conditions during the year, such as the total annual precipitation, significant storm events, and subsurface remedies that were completed such as barrier walls, caps, or dewatering operations. Changes to the monitoring well network will also be documented in this section. This may include wells that were temporarily out of service due to soil surcharging operations, wells that were permanently abandoned within the SA-6 North and South containment cells, and wells that were added/replaced. The results of the "well search" of NJDEP files required for the biennial certification of the groundwater Classification Exception Areas (CEA) will also be reviewed and reported in the Annual Integrated Groundwater Performance Report.

Groundwater Extraction.

This section will document groundwater pumping history and rate for the GWET system and the contingent pumping systems that may have been in operation at SA-6 North, SA-6 South, and NJCU. The data will be provided in tables and graphs as appropriate.

Hydraulic Monitoring

This section will include groundwater level data in tabular form and groundwater elevation contour maps of the four flow zones based on the quarterly data. Subsections will be provided for each Study Area to include various tables and charts illustrating the performance of the local hydraulic remedy. For the GWET system this will include the capture zone of the downgradient extraction wells, and for the other Study Areas, it will include a comparison of hydraulic gradients across the barrier walls with the site-specific performance criteria.

The water-level data will be examined to ensure that hydraulic gradients meet the requirements of remediation plans such as:

- Outward gradient from SA7
- Inward gradient into containment cells on SA6 North and South
- Inward hydraulic gradients on the New Jersey City University property

- Plume capture by the GWET system.

Groundwater Quality Monitoring.

This section will include groundwater quality data in tabular form and groundwater concentration maps of the four flow zones based on the annual LTMP sampling round. Subsections will be provided for each Study Area to include various tables and charts illustrating the local groundwater quality. Time-series charts depicting water quality trends in the GWET extraction wells, injection wells, and monitoring wells in this program will also be provided.

In general, detections of chromium above the New Jersey Ground Water Quality Standard of 0.07 ppm in a well that previously met the standard, or a substantial increase in chromium concentrations, will require further evaluation. *A detection of hexavalent chromium in a well where hexavalent chromium was not previously detected will also be noted."* Major ion data from the one-time sampling of "L" and "T" horizons will be evaluated to confirm slow movement of groundwater in that area.

S-3 Injection and Mass Removal Program.

This section will summarize the performance of the S-3 mass removal (reductant injection) program during the year. Tabulations of the amount of reductant and water injected (by well), the sulfide content of the calcium polysulfide, and the stoichiometric equivalent amount of hexavalent chromium that has been treated will be provided in tables and graphs.

Conclusions and Recommendations

This section will summarize the performance of the various groundwater remedies and recommend modifications to the plan as appropriate. These recommendations may include:

- Addition or subtraction of wells within the monitoring network
- Changes to water level and/or water quality sampling frequency
- Changes to analytical parameters/methods
- Changes to pumping rates
- Changes to performance criteria
- Other recommendations

APPENDIX A

DECONTAMINATION PROCEDURES

An important aspect of quality control is the decontamination of field equipment. Improperly cleaned equipment can lead to cross-contamination and misinterpretation of data. The decontamination procedures used in this project are outlined in the following paragraphs.

Water Level Indicators and Water Quality Probes
Upon completion of the measurement, the probe will decontaminated with the following procedure:

- Wipe with Nitric Acid (only if coated with non-Cr petroleum contaminants)
- Wash in potable water and non-phosphate detergent
- Rinse with potable water
- Rinse with deionized water

Redi-flow 2 Sampling Pump and Other Non-dedicated Sampling Equipment
Non-dedicated equipment used for the collection of samples will be decontaminated between each use by the following procedure.

- Submerge the pump in a clean bucket containing non-phosphate detergent and potable water and pump this mixture through the pump and flow-through cell.
- Pump deionized water through the pump and flow-through cell
- Replace tubing prior to sampling next well.
- Air dry
- Wrap in foil unless used immediately.

APPENDIX B

ANNUAL INTEGRATED GROUNDWATER MONITORING REPORT OUTLINE

1.0 INTRODUCTION
- *1.1 General*
- *1.2 Purpose and Objectives*
- *1.3 Status of Integrated Monitoring Requirements for 20xx*
- *1.4 Document Organization*

2.0 GENERAL CONDITIONS
- *2.1 Annual Precipitation*
- *2.2 Tidal Monitoring*
- *2.3 Monitoring Well Inventory*

3.0 GROUNDWATER EXTRACTION
- *3.1 GWET System Operation*
  - *3.1.1 Pumping Rates*
  - *3.1.2 Force Main Acid Flushing*
  - *3.1.3 Well Redevelopment*
- *3.2 SA-6 North Contingent Pumping System*
- *3.3 SA-6 South Contingent Pumping System*
- *3.4 SA-5 NJCU Contingent Pumping System*

4.0 HYDRAULIC MONITORING
- *4.1 Regional Groundwater Flow*
  - *4.1.1 Shallow Zone*
  - *4.1.2 Intermediate Zone*
  - *4.1.3 Deep Zone*
  - *4.1.4 Bedrock Zone*
- *4.2 GWET System Capture Zone*
- *4.3 New Jersey City University*
- *4.4 SA-7 Perimeter Pools*
- *4.5 SA-6 North Containment Cell*
- *4.6 SA-6 South Containment Cell*
- *4.7 SA-5 Site 117*
- *4.8 Miscellaneous Events*

5.0 GROUNDWATER QUALITY MONITORING
- *5.1 Deep Overburden Regional Plume Monitoring*
- *5.2 GWET Extraction Wells*
- *5.3 SA-6 South*
- *5.4 SA-6 North*
- *5.5 New Jersey City University*
- *5.6 SA-6 Site 117*
- *5.7 SA-5 Sites 079/153*

6.0 S-3 INJECTION AND MASS REMOVAL PROGRAM
- *6.1 CaSx Injection Events in 20xx*
- *6.2 Mass Removal Summary*
- *6.3 Groundwater Quality Monitoring*
- *6.4 Planned Activities for 20xx*

7.0 CONCLUSIONS AND RECOMMENDATIONS
- *7.1 Compliance with Monitoring Requirements*
- *7.2 Status of Groundwater CEA Certifications*
- *7.3 Recommendations for Monitoring Well Network*
- *7.4 Recommendations for Water Level Monitoring Frequency*
- *7.5 Recommendations for Groundwater Quality Monitoring Frequency*
- *7.6 Other Recommendations*

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2-3 Hackensack River Tides in 20xx

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4-2 Groundwater Elevation Contours – Intermediate Zone

4-3 Groundwater Elevation Contours – Deep Zone

4-4 Groundwater Elevation Contours – Bedrock

4-5 Groundwater Elevations in Cross-Section

4-6 SA-5 NJCU Groundwater Elevation Contours – March 20xx

4-7 SA-5 NJCU Groundwater Elevation Contours – June 20xx

4-8 SA-5 NJCU Groundwater Elevation Contours – September 20xx

4-9 SA-5 NJCU Groundwater Elevation Contours – December 20xx

4-10 Location of SA-7 Perimeter Pools

5-1 Hexavalent Chromium Trends in GWET Extraction Wells

5-2 Trichloroethylene Trends in GWET Pumping Wells

6-1 Location of Injection Wells Used in 20xx

6-2 Stoichiometrically Equivalent Cr(VI) Mass Reduced in S-3 Sand by Injection

6-3 Cumulative Mass Cr(VI) Removed from Groundwater by Pumping

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1-2 Summary of Groundwater Quality Monitoring Requirements

2-1 20xx Monthly Precipitation Data

2-2 Groundwater Monitoring Well Inventory List

3-1 GWET Pumping Outages in 20xx

4-1 Groundwater Elevation Data from Quarterly Rounds in 20xx

4-2 Summary of Groundwater Elevations Near NJCU

4-3 Annual Average Groundwater Elevations Near Perimeter Pools

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5-2 Summary of Groundwater Quality in Intermediate Zone - SA-6 South

5-3 Summary of Groundwater Quality in Shallow Zone - SA-6 South

5-4 Summary of Groundwater Quality in Intermediate Zone - SA-6 North

5-5 Summary of Groundwater Quality in Shallow Zone - SA-6 North

5-6 Summary of Quarterly Groundwater Quality Monitoring - NJCU

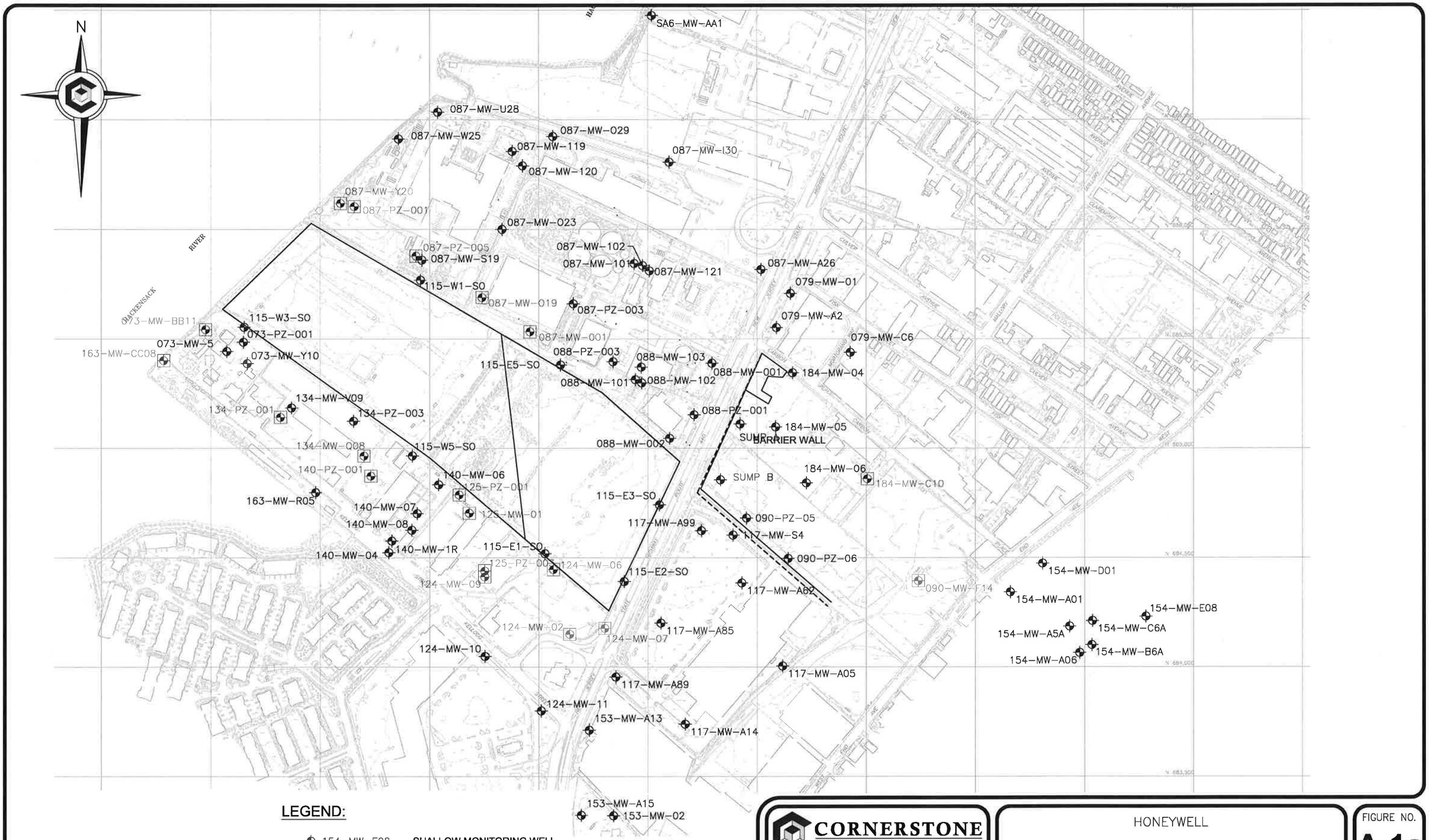
6-1 Summary of S-3 Injection Events for 20xx

6-2 Calculation of Percent Sulfide in CaSx Samples

6-3 Summary of Stoichiometrically Equivalent Cr(VI) Mass Reduced

APPENDICES

APPENDIX A	*SA-7 Perimeter Pool Hydrographs*
APPENDIX B	*Results of Pre-injection Monitoring of Injection Wells in 20xx*
APPENDIX C	*Results of Pre-injection Monitoring of Monitoring Wells in 20xx*



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HONEYWELL

GWET LTMP

GROUNDWATER LEVEL MONITORING WELLS SHALLOW ZONE

FIGURE NO. **A-1a**

PROJECT NO.

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MHONSF-A-1a.dwg Layout: FIGURE 2-2 SHALLOW ZONE User: magda.mendola Apr 29, 2014 - 12:27pm

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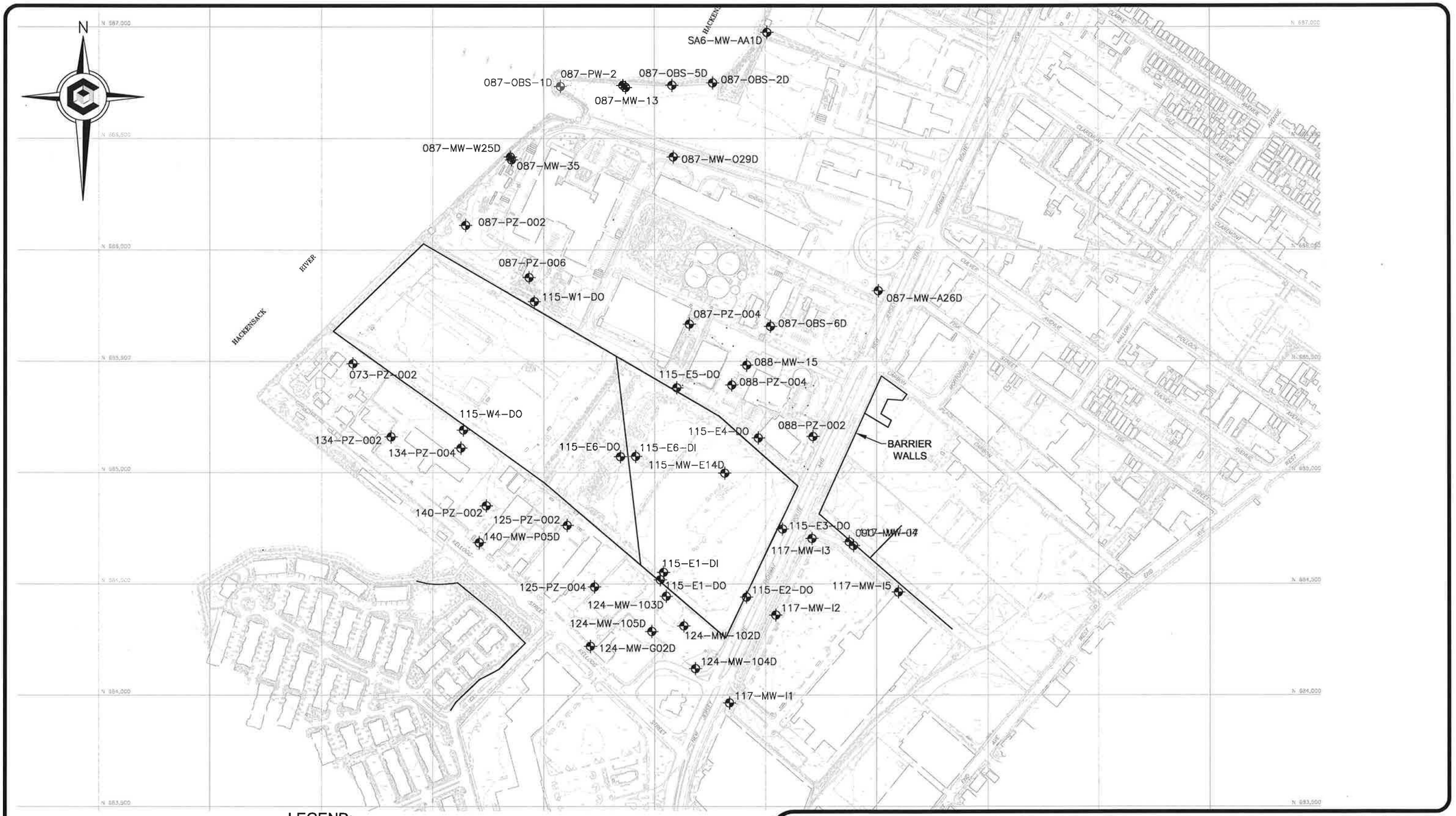

LEGEND:

087-MW-029D — INTERMEDIATE ZONE MONITORING WELL

154-MW-E08 — ABANDONED WELL

0 400 800

SCALE IN FEET

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HONEYWELL

GWET LTMP
GROUNDWATER LEVEL MONITORING WELLS
INTERMEDIATE ZONE

FIGURE NO.

A-1b

PROJECT NO.

1" 1/4" 1/2" 3/4" 0" 1"

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF-A-1c.dwg Layout: FIGURE A-1c User: magda.mendola Apr 29, 2014 - 12:33pm

N

N 687,000
N 686,500
N 686,000
N 685,500
N 685,000
N 684,500
N 684,000
N 683,500

HACKENSACK RIVER

SA6-MW-AA1T
087-MW-08
087-OBS-3L
087-PW-1
087-OBS-1L
087-OBS-5T
087-MW-34
087-OBS-1T
087-OBS-4T
087-MW-W25T
087-MW-01
087-MW-03
087-MW-A26T
088-MW-G19T
BARRIER WALL
090-MW-09
115-MW-E14T
115-PW-21
090-MW-07
117-MW-I4
124-MW-107T
115-MW-E08TR
124-MW-106T
124-MW-06
124-MW-103L
117-MW-D3
124-MW-105T
117-MW-D2
124-MW-102T
124-MW-G02T
124-MW-104L
124-MW-104T
119-MW-01T
117-MW-D1
119-MW-02T
153-MW-A13T

LEGEND:

- 087-MW-029D DEEP ZONE MONITORING WELL
- 087-MW-029D ABANDONED WELL

0 400 800
SCALE IN FEET

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HONEYWELL

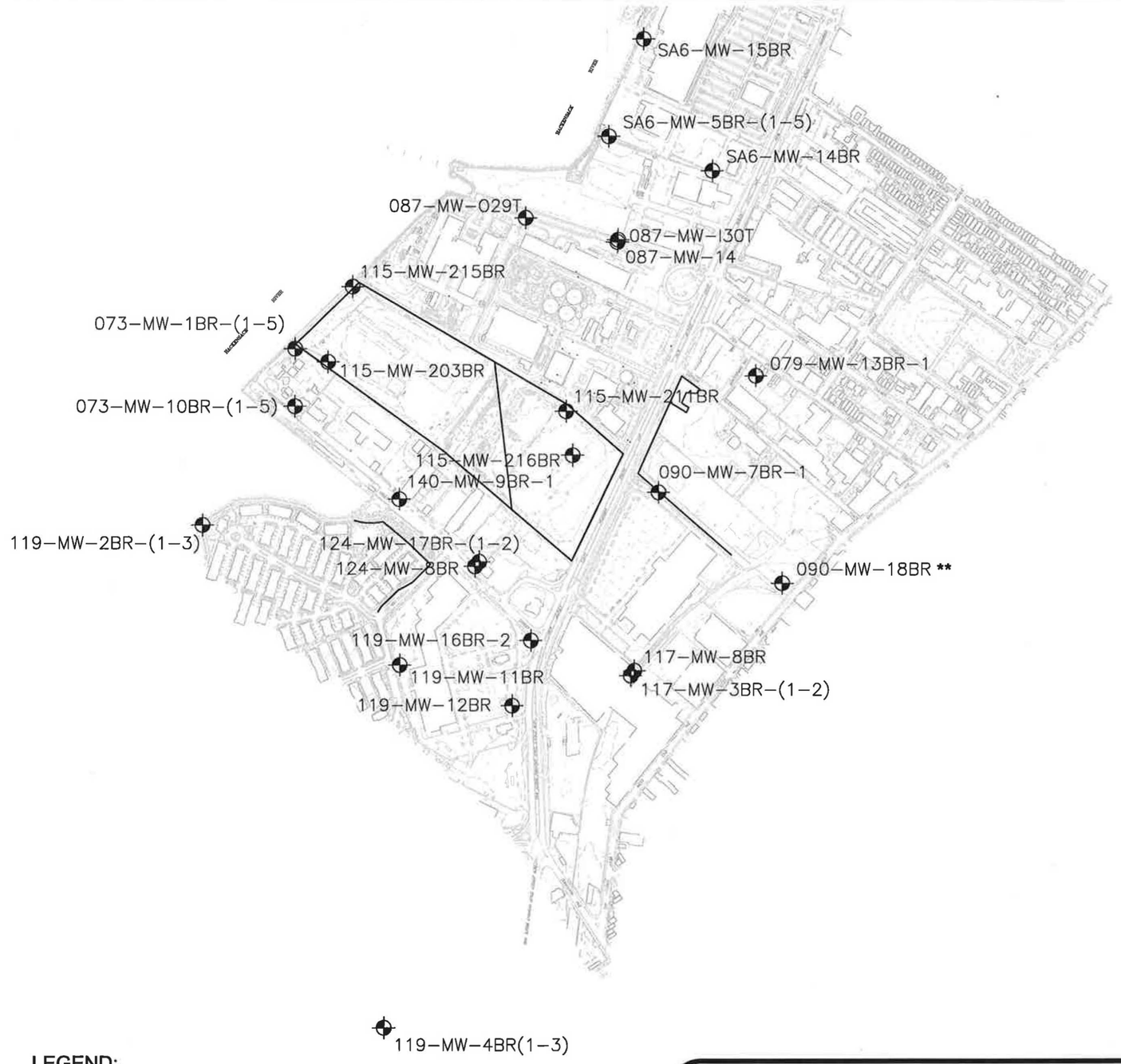
GWET LTMP
GROUNDWATER LEVEL MONITORING WELLS
DEEP ZONE

FIGURE NO.
A-1c
PROJECT NO.

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF-A-1D.dwg Layout: FIGURE 4-4 BEDROCK ZONE User: magda.mendola Apr 29, 2014 - 12:36pm

1" 1/4" 1/2" 3/4" 0" 1"

N



LEGEND:

119-MW-11BR **BEDROCK ZONE MONITORING WELL**

* **INOPERATIVE IN 2013: STATUS UNDER EVALUATION**

** **ABANDONED BY NJCU CONTRACTORS: STATUS UNDER EVALUATION**

0 750 1500

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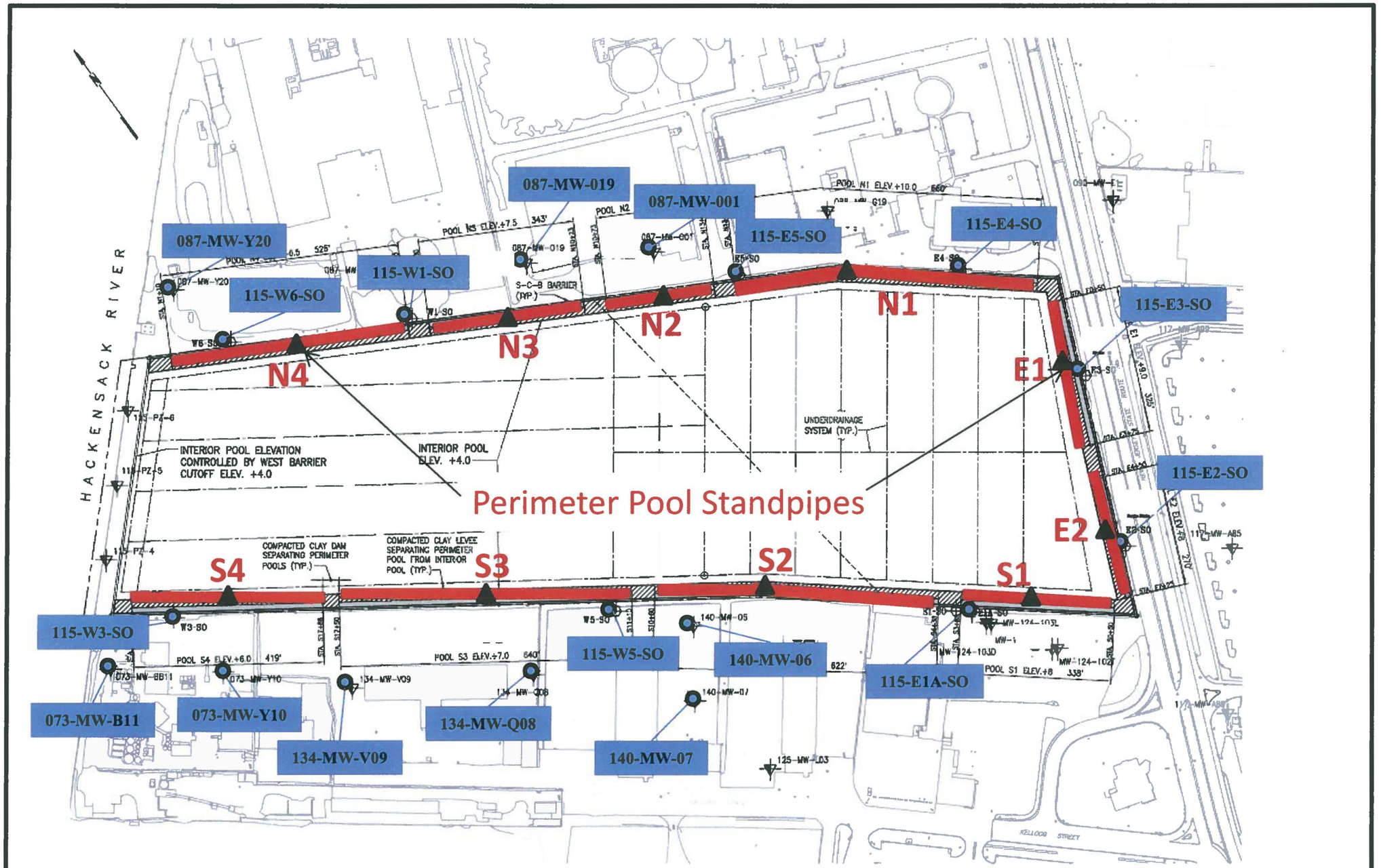
HONEYWELL

GWET LTMP
GROUNDWATER LEVEL MONITORING WELLS
BEDROCK ZONE

FIGURE NO.

A-1d

PROJECT NO.



115-W3-SO

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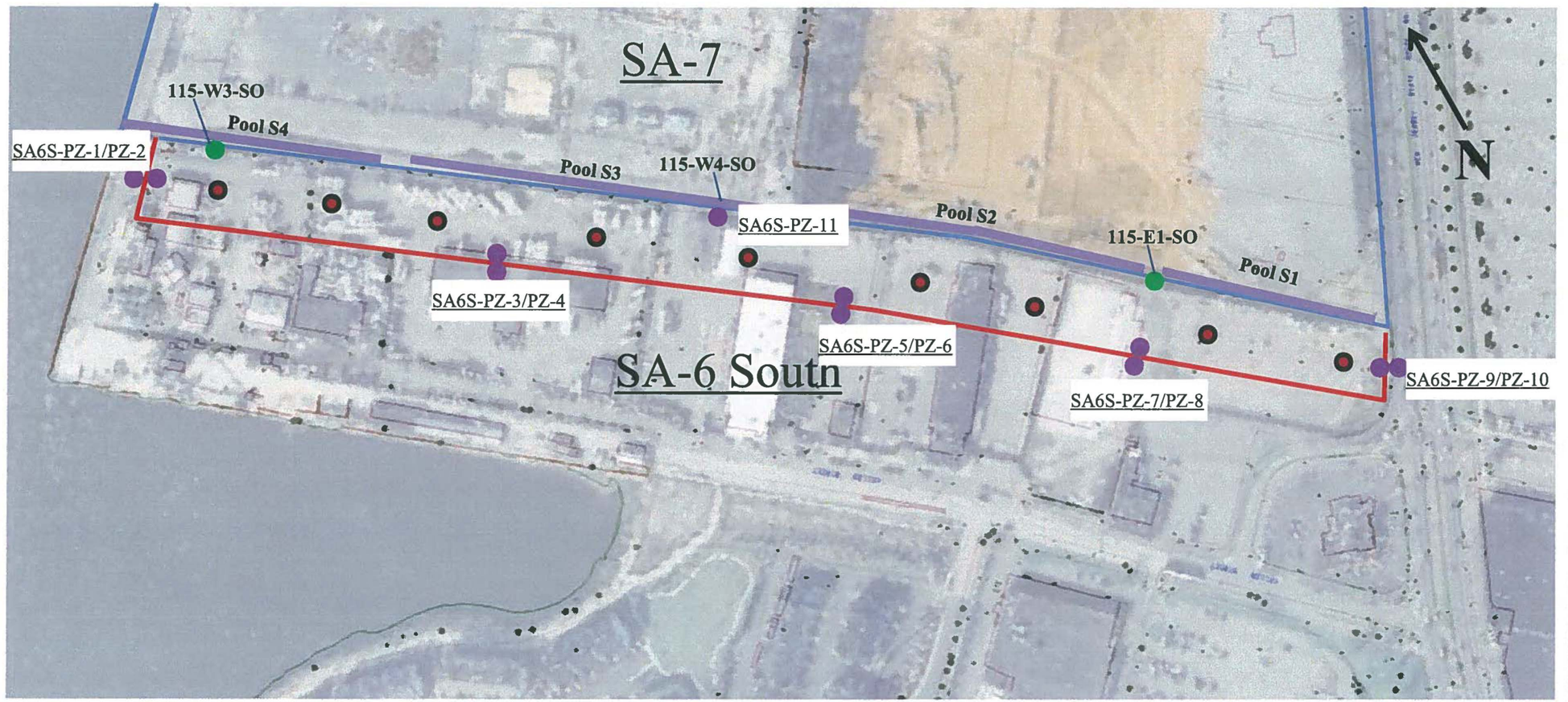
HONEYWELL

Jersey City, New Jersey

SA-7 Perimeter Pool Monitoring Locations

Figure A-2



NTS

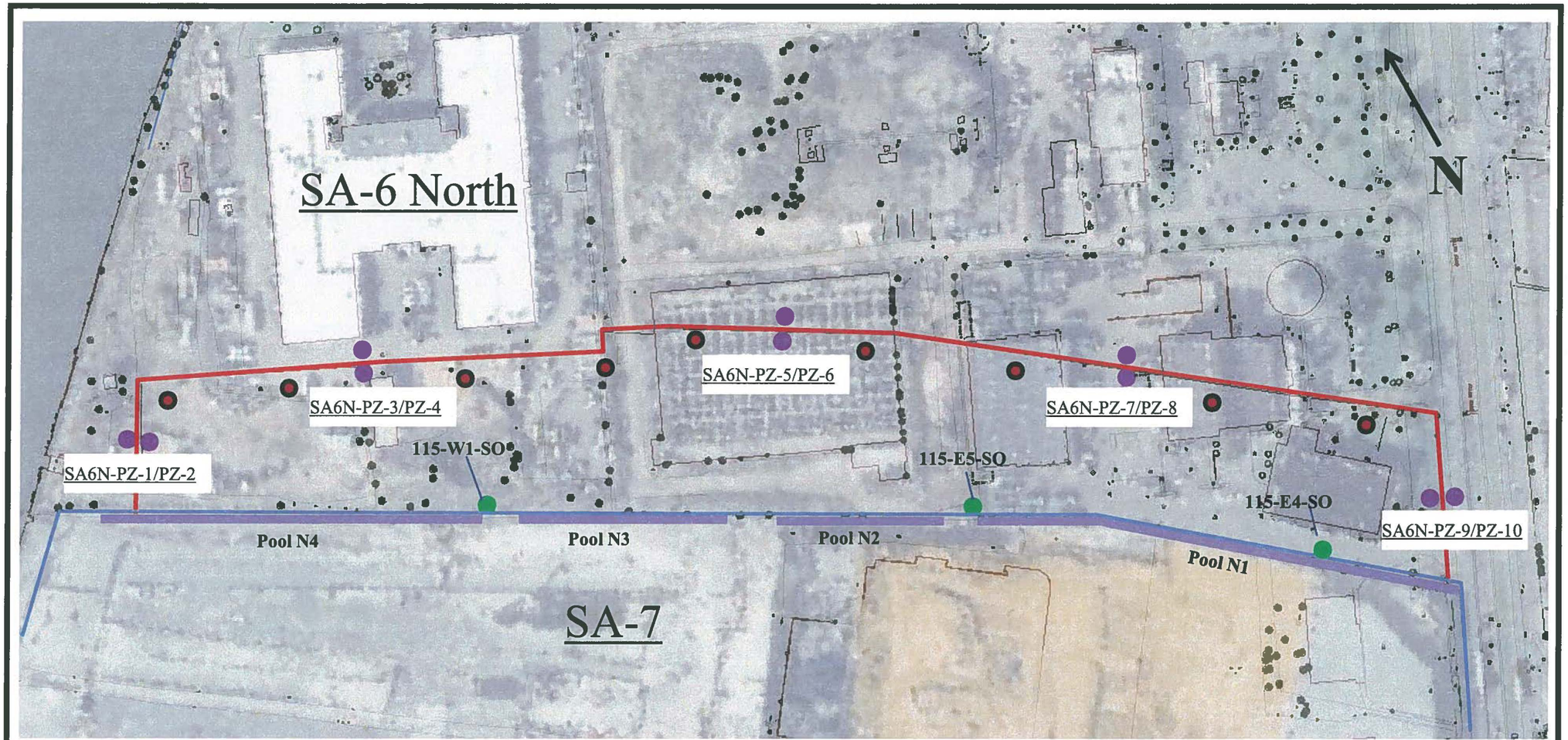
LEGEND

- SA-7 SCB
- SA-6S Hydraulic Barrier
- SA-7 Perimeter Pool (Pool S4)
- 115-W4-SO — Existing Piezometer
- Proposed Piezometer
- Contingent Pumping Well

FIGURE A-3

Groundwater Level Monitoring Plan Locations - SA-6 South

Study Areas 6 North & South
Jersey City, NJ



NTS

LEGEND

- SA-7 SCB
- SA-6N Hydraulic Barrier
- SA-7 Perimeter Pool
  Pool S4
- Existing Piezometer
- Proposed Piezometer
- Contingent Pumping Well

FIGURE A-4

Groundwater Level Monitoring Plan Locations – SA-6 North

Study Areas 6 North & South
Jersey City, NJ

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF-01.dwg Layout: FIGURE 4-1 SHALLOW ZONE User: Blayne.Gibbons Mar 06, 2014 - 3:54pm

1" 3/4" 1/2" 1/4" 0" 1"

N

RIVER

HACKENSACK

079-MW-01

079-MW-A2

184-MW-04

SUMP A

184-MW-05

184-MW-06

SUMP B

184-MW-S10

090-PZ-05

117-MW-A99

BARRIER WALLS

090-PZ-06

090-MW-F14

117-MW-A82

SOCIETY HILL SLURRY WALL

117-MW-A85

117-MW-A05

117-MW-A89

153-MW-A13

117-MW-A14

153-MW-A15

153-MW-02

153-MW-05

N 684,500

N 683,500

LEGEND:

90-MW-F14	SITE 90 + 184 LTMP
079-MW-A2	SITE 079 LTMP
154-MW-E08	SITE 153 SOUTH REMEDIAL ACTION PERMIT FOR GROUNDWATER
117-MW-A05	SITE 117 SOUTH REMEDIAL ACTION PERMIT FOR GROUNDWATER
90-MW-F14	SITE 90 + 184 LTMP

0 400 800

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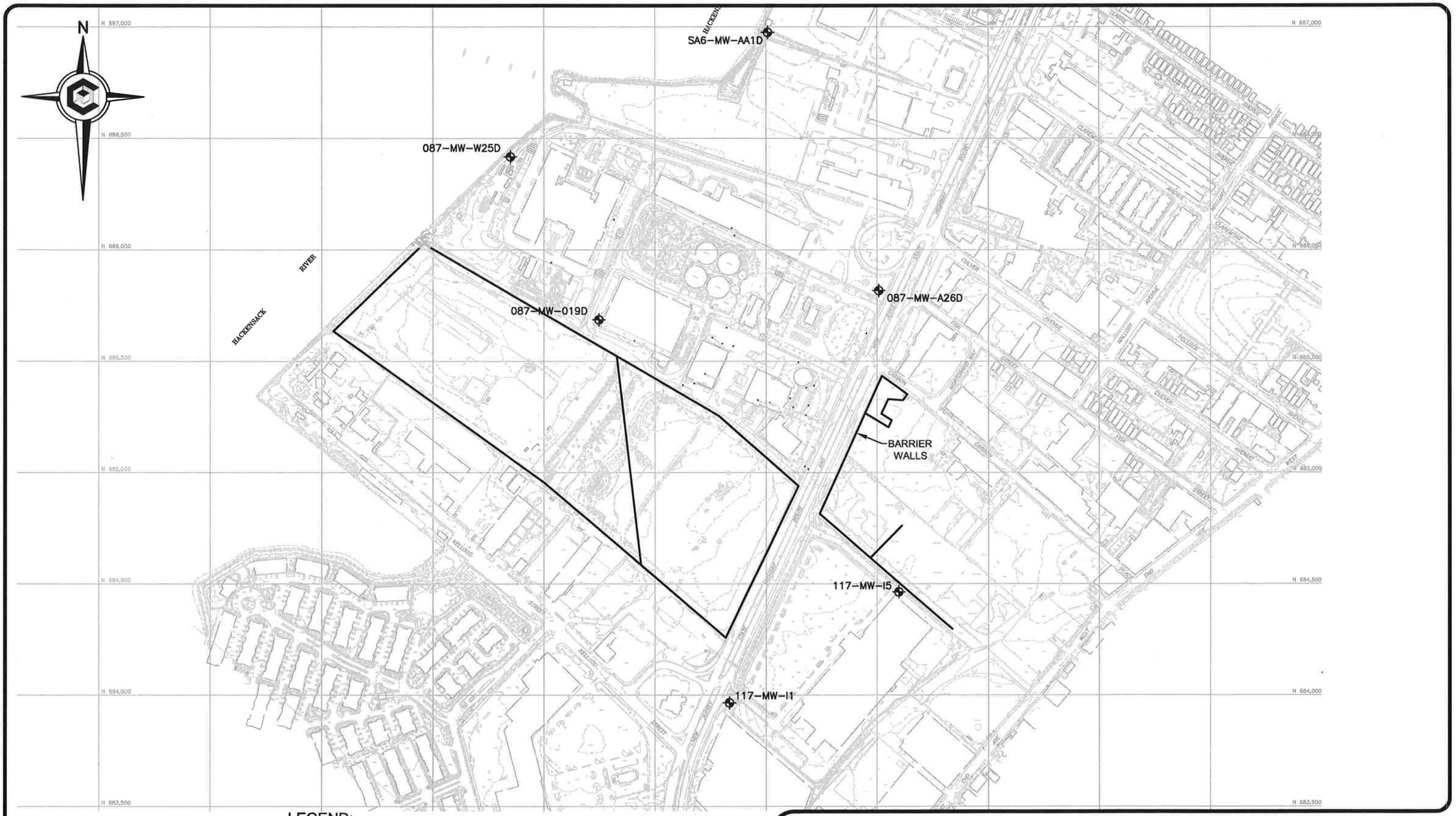
HONEYWELL

STUDY AREA 5
GROUNDWATER MONITORING WELLS
SHALLOW ZONE

FIGURE NO.
A-5
PROJECT NO.



LEGEND:

087–MW–029D INTERMEDIATE ZONE MONITORING WELL

0 400 800

SCALE IN FEET

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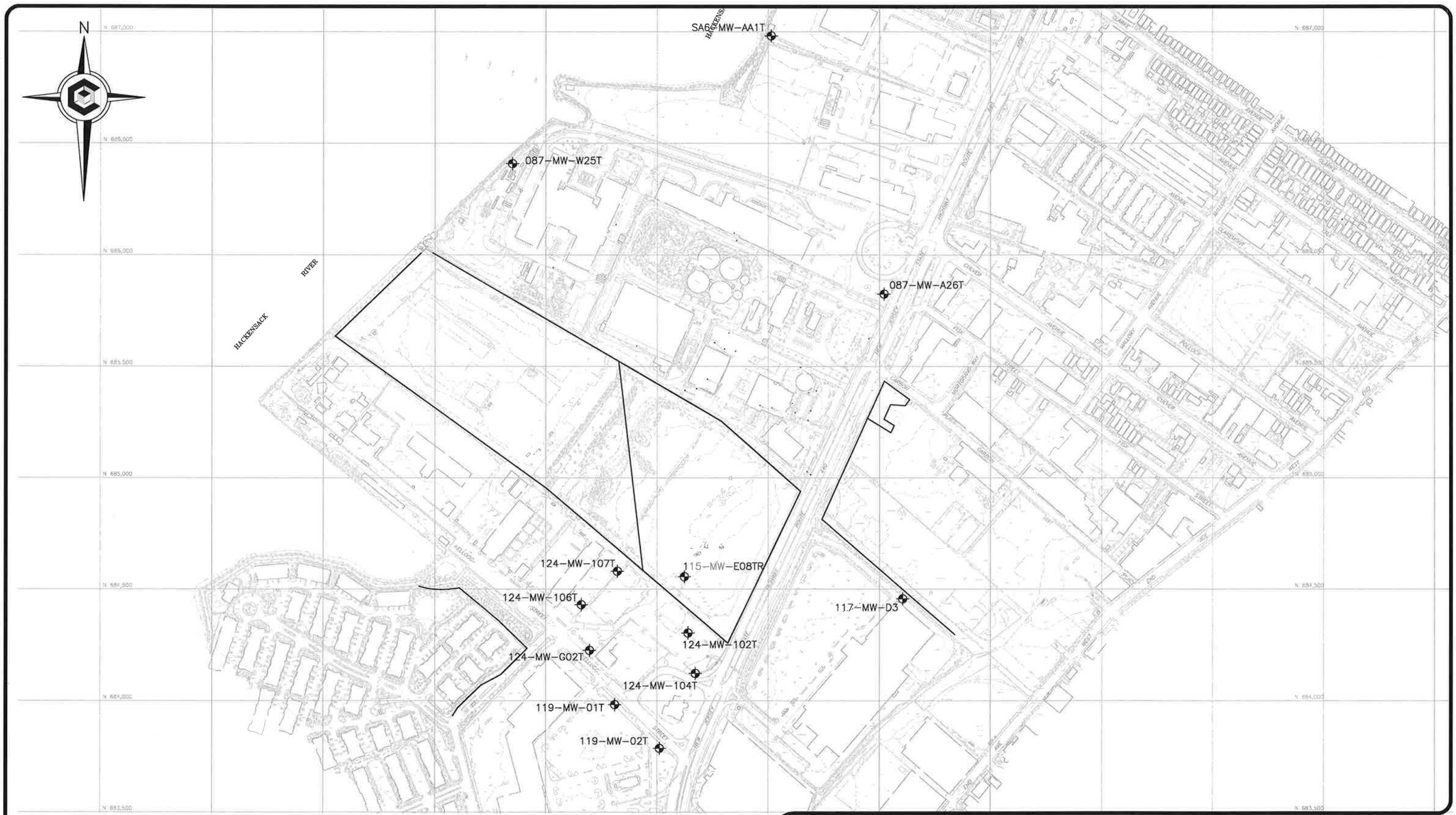
HONEYWELL

GWET LTMP
GROUNDWATER QUALITY MONITORING WELLS
INTERMEDIATE ZONE

FIGURE NO. **B-1a**

PROJECT NO.

File: X:\PROJECTS\HONEYWELL\090354 – SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF–02.dwg Layout: FIGURE 4–2 INTERMEDIATE ZONE User: magda.mendola Apr 29, 2014 – 12:17pm



LEGEND:

087-MW-08	**DEEP ZONE MONITORING WELL**
087-MW-08	**ABANDONED WELL**

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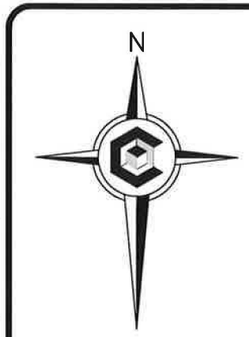
HONEYWELL

GWET LTMP
GROUNDWATER QUALITY MONITORING WELLS
DEEP ZONE

FIGURE NO.
B-1b
PROJECT NO.

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF-B-1b.dwg Layout: FIGURE 4-3 DEEP ZONE User: magda.mendola Apr 29, 2014 - 12:19pm





0 750 1500

SCALE IN FEET

LEGEND:

119–MW–11BR **BEDROCK ZONE MONITORING WELL**

* **INOPERATIVE IN 2013: STATUS UNDER EVALUATION**

** **ABANDONED BY NJCU CONTRACTORS: STATUS UNDER EVALUATION**

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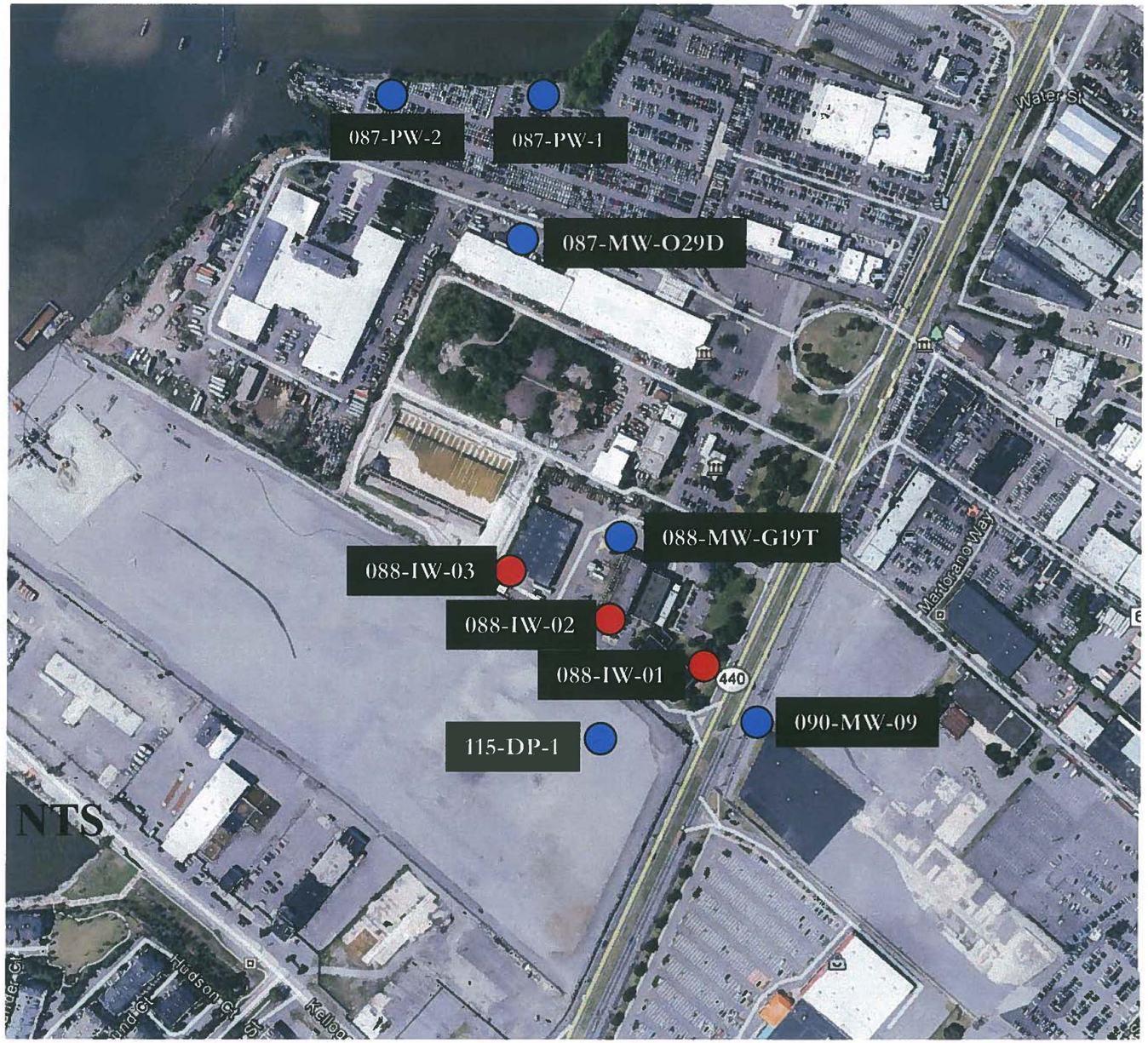
HONEYWELL

GWET LTMP
GROUNDWATER QUALITY MONITORING WELLS
BEDROCK ZONE

FIGURE NO. **B-1c**

PROJECT NO.

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF-B-1c.dwg Layout: FIGURE 4-4 BEDROCK ZONE User: magda.mendola Apr 29, 2014 - 12:24pm



LEGEND

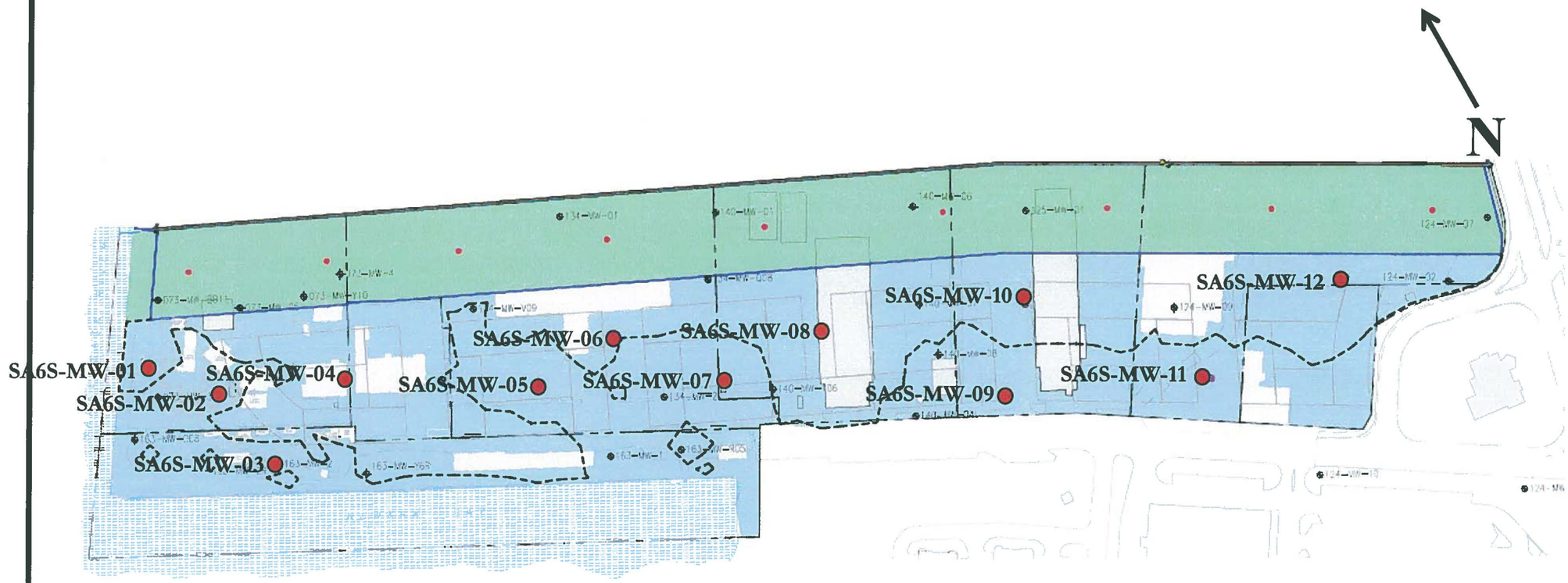
N

- Monitoring Well
- Injection Well

FIGURE B-2

S-3 Injection Mass Removal Plan
Monitoring Locations

Study Areas 6 North & South
Jersey City, NJ



LEGEND

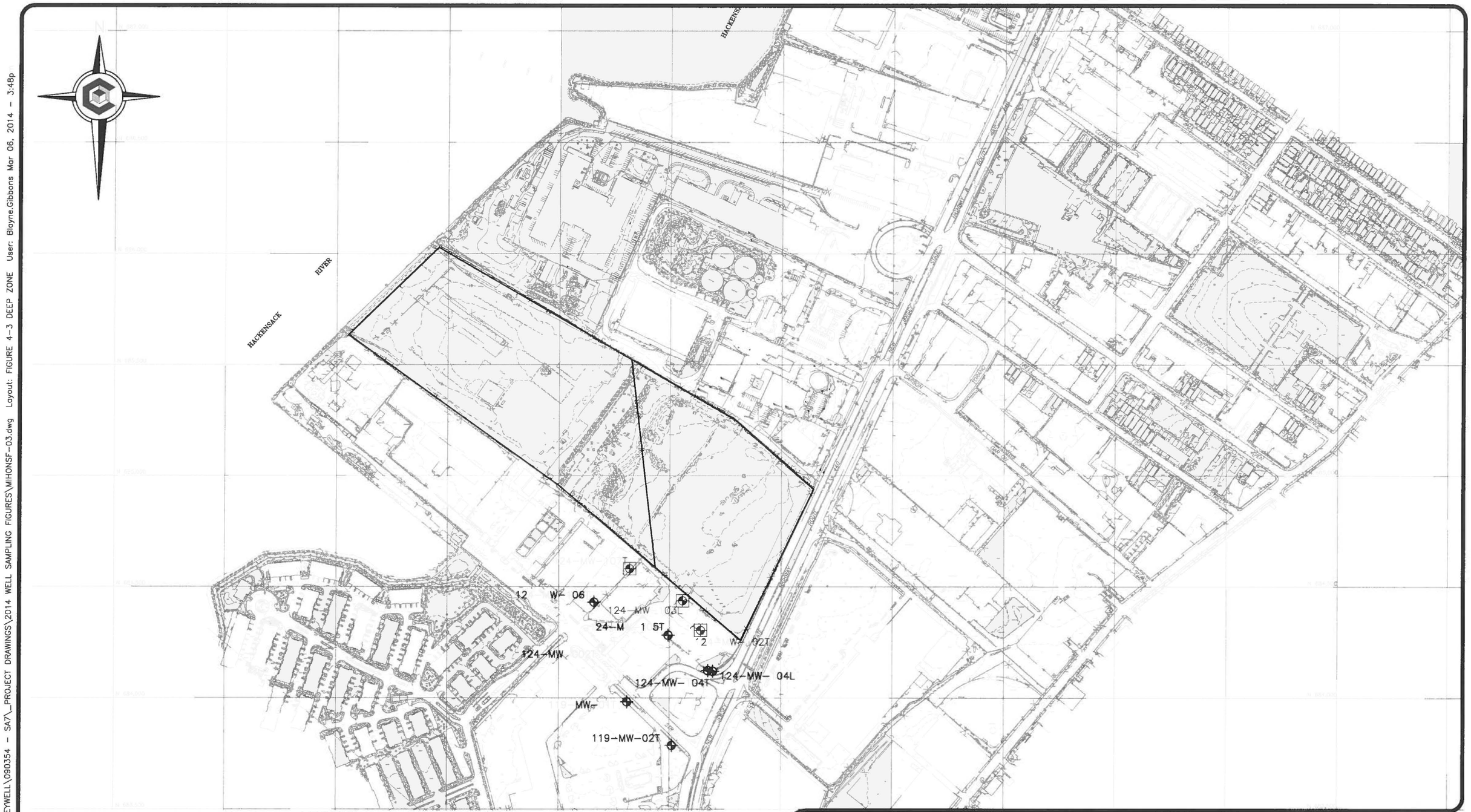
● Monitoring Well (to be installed)

NTS

FIGURE B-3

SA-6 South Development AOC
Monitoring Locations

Study Areas 6 North & South
Jersey City, NJ



LEGEND:

087-MW — DEEP ZONE MONITORING WELL

087-MW-08 — ABANDONED WELL

0 400 800

SCALE IN FEET

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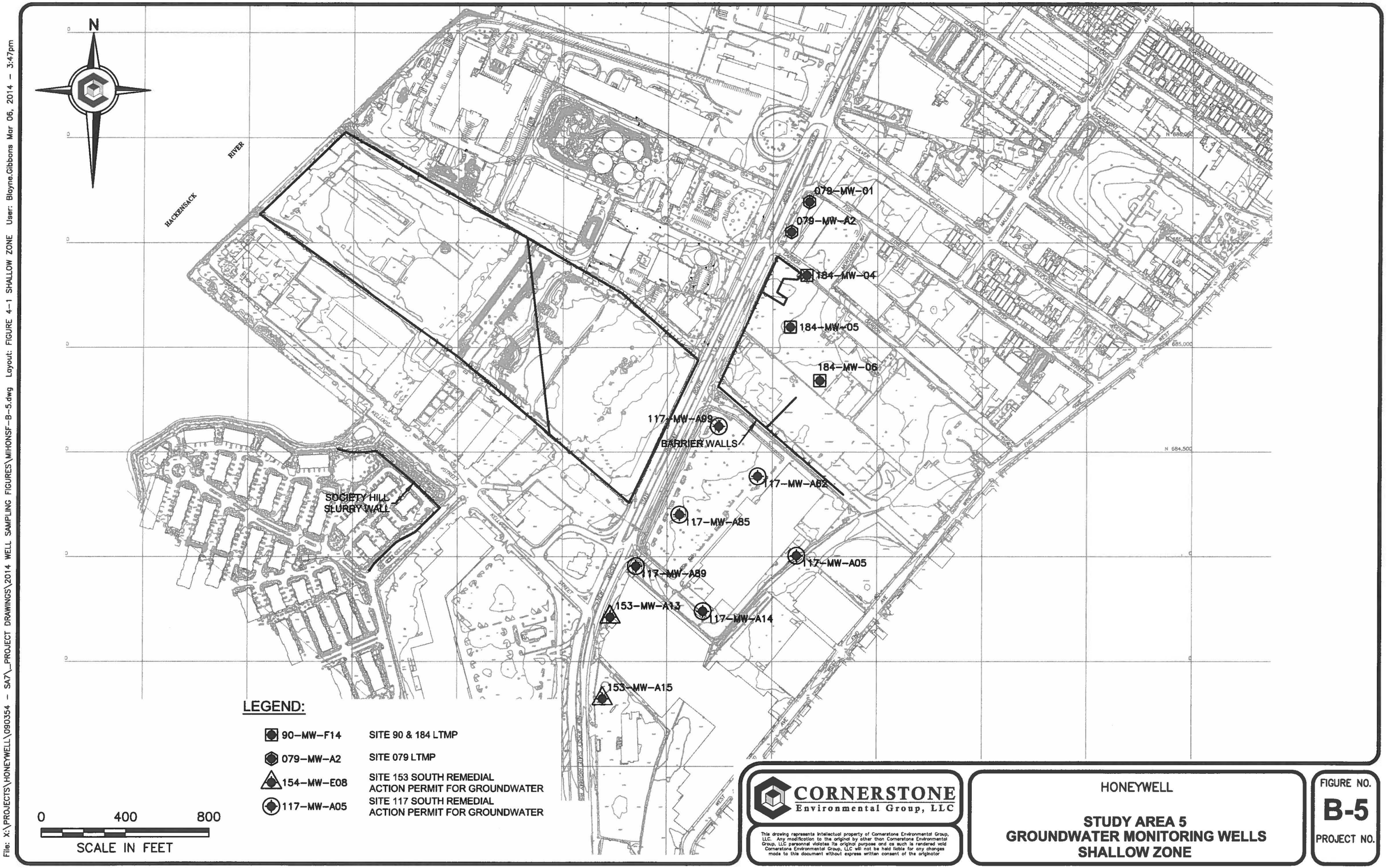
HONEYWELL

SA-6 SOUTH "L ZONE"
GROUNDWATER MONITORING WELLS
DEEP ZONE

FIGURE NO. **B-4**

PROJECT NO.

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF-03.dwg Layout: FIGURE 4-3 DEEP ZONE User: Blayne.Gibbons Mar 06, 2014 - 3:48p



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HONEYWELL

STUDY AREA 5
GROUNDWATER MONITORING WELLS
SHALLOW ZONE

FIGURE NO.
B-5
PROJECT NO.

File: X:\PROJECTS\HONEYWELL\090354 - SA7_PROJECT DRAWINGS\2014 WELL SAMPLING FIGURES\MIHONSF-B-5.dwg Layout: FIGURE 4-1 SHALLOW ZONE User: Blayne.Gibbons Mar 06, 2014 - 3:47pm

TABLE A
GROUNDWATER LEVEL MONITORINGREQUIREMENTS
for Integrated Groundwater Monitoring Plan

A	B	C	D	E	F	F	G				
Location	**Monitoring Plan**	**Consent Decree**	**Depth**	**Frequency**	**# Wells (ref table)**	**Figure Ref. #**	**Estimated Start Date**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**
Regional[1]	GWET Long Term Monitoring Plan June 10, 2008	Deep Overburden and Bedrock Groundwater Remedies Consent Order	All Zones	Quarterly	150 (A-1)	A-1	On-going	x	x	x	x
Study Area 7	SA-7 Perimeter Pools	Final Judgement, ICO v Honeywell	Shallow and Interm.	Monthly	30 (A-2)	A-2	On-going	x(3)	x(3)	x(3)	x(3)
SA-6 South	SA-6 South GW Level Monitoring Plan Appendix J of SA-6 South 100% Design June 28, 2013	First Amended Consent Decree Regarding Remediation and Redevelopment of SA-6 South	Shallow and Interm.	1st year - Monthly 2nd year - Quarterly 3rd year -Semi-Annual	13 (A-3)	A-3	Post Remedy (2017)				
SA-6 North	SA-6 North GW Level Monitoring Plan Appendix J of SA-6 North 100% Design June 28, 2013	First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 North	Shallow and Interm.	1st year - Monthly 2nd year - Quarterly 3rd year -Semi-Annual	13 (A-4)	A-4	Post Remedy (2017)				
Study Area 6 N&S	"Long Term Monitoring Plan" Due October 1, 2015	Same Consent Decrees as Above for SA-6 South and SA-6 North	Shallow	Quarterly	TBD	TBD	Post Remedy (2017)				
SA-5 (NJCU) Sites 90 & 184	Long Term Monitoring Plan (2/29/12)[2]	Consent Decree Regarding Remediation of the New Jersey City University Redevelopment Area	Shallow	Quarterly through 2013 future TBD[2]	7 (A-5)	A-5	On-going	x	x	x	x
SA-5: Site 079	"Long Term Monitoring Plan" (9/07/11)[3]	Consent Decree Regarding Remediation of the Study Area 5 Shallow Groundwater and the Site 79 Residential Properties	Shallow	March 2014 then Annual	2 (A-6)	A-5	On-going				x
SA-5: Site153 South	Remedial Action Permit for GW[4]	Consent Decree Regarding Sites 79 and 153 South	Shallow	Annual	2 (A-7)	A-5	2015				
SA-5 Site 117	Remedial Action Permit for GW[4]	Consent Decree Regarding Remediation of the Study Area 5 Shallow Groundwater and the Site 79 Residential Properties	Shallow	Annual	7 (A-8)	A-5	2015				

[1] Includes available wells on SA-5, SA-6, SA-7, and surrounding areas historically considered part of the Deep Overburden Plume investigation..

[2]Post-remedy triggers plan under NJCU Consent Decree; plan expected to be updated 1st quarter 2014; future monitoring frequency TBD pending updated LTMP

[3]Plan currently being updated

[4]Remedial Action Permit application in progress

TABLE A
GROUNDWATER LEVEL MONITORINGREQUIREMENTS
for Integrated Groundwater Monitoring Plan

A	B																			
Location	**Monitoring Plan**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**
Regional[1]	GWET Long Term Monitoring Plan June 10, 2008	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Study Area 7	SA-7 Perimeter Pools	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)	x(3)
SA-6 South	SA-6 South GW Level Monitoring Plan Appendix J of SA-6 South 100% Design June 28, 2013	SA-6 North and South Construction												12-month equilibrium period				x(3)	x(3)	x(3)	x(3)	x	x	x
SA-6 North	SA-6 North GW Level Monitoring Plan Appendix J of SA-6 North 100% Design June 28, 2013	SA-6 North and South Construction												12-month equilibrium period				x(3)	x(3)	x(3)	x(3)	x	x	x
Study Area 6 N&S	"Long Term Monitoring Plan" Due October 1, 2015	SA-6 North and South Construction												12-month equilibrium period				x	x	x	x	x	x	x
SA-5 (NJCU) Sites 90 & 184	Long Term Monitoring Plan (2/29/12)[2]	TBD																			
SA-5: Site 079	"Long Term Monitoring Plan" (9/07/11)[3]					x				x				x				x			
SA-5: Site153 South	Remedial Action Permit for GW[4]									x				x				x			
SA-5 Site 117	Remedial Action Permit for GW[4]									x				x				x			

[1] Includes available wells on SA-5, SA-6, SA-7, and surrounding areas historically considered part of the Deep Overburden Plume investigation..

[2]Post-remedy triggers plan under NJCU Consent Decree; plan expected to be updated 1st quarter 2014; future monitoring frequency TBD pending updated LTMP

[3]Plan currently being updated

[4]Remedial Action Permit application in progress

Table A-1
Monitoring Wells for Groundwater Level Measurements
GWET Long-term Monitoring Plan

(refer to Figures A-1a through A-1d)

Monitoring Zone	Well ID	Comments
Shallow	073-MW-5	
Shallow	073-MW-BB11	Abandonded Feb. 2014 for soil excavation
Shallow	073-MW-Y10	
Shallow	073-PZ-001	
Shallow	079-MW-01	
Shallow	079-MW-A2	
Shallow	079-MW-C6	
Shallow	087-MW-001	
Shallow	087-MW-101	
Shallow	087-MW-102	
Shallow	087-MW-119	
Shallow	087-MW-120	
Shallow	087-MW-121	
Shallow	087-MW-A26	
Shallow	087-MW-I30	
Shallow	087-MW-O19	Abandonded Feb. 2014 for soil excavation
Shallow	087-MW-O23	
Shallow	087-MW-O29	
Shallow	087-MW-S19	
Shallow	087-MW-U28	
Shallow	087-MW-W25	
Shallow	087-MW-Y20	Abandonded Feb. 2014 for soil excavation
Shallow	087-PZ-001	Abandonded Feb. 2014 for soil excavation
Shallow	087-PZ-003	
Shallow	087-PZ-005	Abandonded Feb. 2014 for soil excavation
Shallow	088-MW-001	Abandonded Feb. 2014 for soil excavation
Shallow	088-MW-002	
Shallow	088-MW-101	
Shallow	088-MW-102	
Shallow	088-MW-103	
Shallow	088-PZ-001	
Shallow	088-PZ-003	
Shallow	090-MW-F14	Abandoned for NJCU Development
Shallow	090-PZ-05	
Shallow	090-PZ-06	
Shallow	115-E1-SO	
Shallow	115-E2-SO	
Shallow	115-E3-SO	
Shallow	115-E5-SO	
Shallow	115-W1-SO	

Table A-1
Monitoring Wells for Groundwater Level Measurements
GWET Long-term Monitoring Plan

(refer to Figures A-1a through A-1d)

Monitoring Zone	Well ID	Comments
Shallow	115-W3-SO	
Shallow	115-W5-SO	
Shallow	117-MW-A05	
Shallow	117-MW-A14	
Shallow	117-MW-A62	
Shallow	117-MW-A85	
Shallow	117-MW-A89	
Shallow	117-MW-A99	
Shallow	117-MW-I4S	
Shallow	124-MW-02	Abandonded Oct. 2013 for soil excavation
Shallow	124-MW-06	Abandonded Oct. 2013 for soil excavation
Shallow	124-MW-07	Abandonded Oct. 2013 for soil excavation
Shallow	124-MW-09	Abandonded Oct. 2013 for soil excavation
Shallow	124-MW-10	
Shallow	124-MW-11	
Shallow	125-MW-01	Abandonded Feb. 2014 for soil excavation
Shallow	125-PZ-001	Abandonded Feb. 2014 for soil excavation
Shallow	125-PZ-003	Abandonded Feb. 2014 for soil excavation
Shallow	134-MW-2	
Shallow	134-MW-Q08	Abandonded Feb. 2014 for soil excavation
Shallow	134-MW-V09	
Shallow	134-PZ-001	Abandonded Feb. 2014 for soil excavation
Shallow	134-PZ-003	
Shallow	140-MW-04	
Shallow	140-MW-06	
Shallow	140-MW-07	
Shallow	140-MW-08	
Shallow	140-MW-1R	
Shallow	140-PZ-001	Abandonded Feb. 2014 for soil excavation
Shallow	153-MW-02	
Shallow	153-MW-05	
Shallow	153-MW-A13	
Shallow	153-MW-A15	
Shallow	154-MW-A01	
Shallow	154-MW-A06	
Shallow	154-MW-A5A	
Shallow	154-MW-B6A	
Shallow	154-MW-C6A	
Shallow	154-MW-D01	
Shallow	154-MW-E08	

Table A-1
Monitoring Wells for Groundwater Level Measurements
GWET Long-term Monitoring Plan

(refer to Figures A-1a through A-1d)

Monitoring Zone	Well ID	Comments
Shallow	163-MW-R05	Abandonded Feb. 2014 for soil excavation
Shallow	184-MW-001	
Shallow	184-MW-04	
Shallow	184-MW-05	
Shallow	184-MW-06	
Shallow	184-MW-C10	Abandoned for NJCU Development
Shallow	SA6-MW-AA1	
Shallow	Sump A	
Shallow	Sump B	
Intermediate	073-PZ-002	
Intermediate	087-MW-13	
Intermediate	087-MW-35	
Intermediate	087-MW-A26D	
Intermediate	087-MW-O29D	
Intermediate	087-MW-W25D	
Intermediate	087-OBS-1D	
Intermediate	087-OBS-2D	
Intermediate	087-OBS-5D	
Intermediate	087-OBS-6D	
Intermediate	087-PW-2	
Intermediate	087-PZ-002	Abandonded Feb. 2014 for soil excavation
Intermediate	087-PZ-004	
Intermediate	087-PZ-006	Abandonded Feb. 2014 for soil excavation
Intermediate	088-MW-15	
Intermediate	088-PZ-002	
Intermediate	088-PZ-004	
Intermediate	090-MW-07	
Intermediate	115-E1-DI	
Intermediate	115-E1-DO	
Intermediate	115-E2-DO	
Intermediate	115-E3-DO	
Intermediate	115-E4-DO	
Intermediate	115-E5-DO	
Intermediate	115-E6-DI	
Intermediate	115-E6-DO	
Intermediate	115-MW-20	
Intermediate	115-MW-E14D	
Intermediate	115-W1-DO	
Intermediate	115-W4-DO	
Intermediate	117-MW-I1	

Table A-1
Monitoring Wells for Groundwater Level Measurements
GWET Long-term Monitoring Plan

(refer to Figures A-1a through A-1d)

Monitoring Zone	Well ID	Comments
Intermediate	117-MW-I2	
Intermediate	117-MW-I3	
Intermediate	117-MW-I5	
Intermediate	124-MW-102D	Abandonded Oct. 2013 for soil excavation
Intermediate	124-MW-103D	Abandonded Oct. 2013 for soil excavation
Intermediate	124-MW-104D	Abandonded Oct. 2013 for soil excavation
Intermediate	124-MW-105D	Abandonded Oct. 2013 for soil excavation
Intermediate	124-MW-G02D	
Intermediate	125-PZ-002	Abandonded Feb. 2014 for soil excavation
Intermediate	125-PZ-004	Abandonded Feb. 2014 for soil excavation
Intermediate	134-PZ-002	
Intermediate	134-PZ-004	
Intermediate	140-MW-P05D	
Intermediate	140-PZ-002	Abandonded Feb. 2014 for soil excavation
Intermediate	SA6-MW-AA1D	
Deep	087-MW-01	
Deep	087-MW-03	
Deep	087-MW-08	
Deep	087-MW-34	
Deep	087-MW-A26T	
Deep	087-MW-W25T	
Deep	087-OBS-1L	
Deep	087-OBS-1T	
Deep	087-OBS-3L	
Deep	087-OBS-4T	
Deep	087-OBS-5T	
Deep	087-PW-1	
Deep	088-IW-01	
Deep	088-IW-02	
Deep	088-IW-03	
Deep	088-MW-G19T	
Deep	090-MW-09	
Deep	115-MW-A12T	
Deep	115-MW-E14T	
Deep	115-OMW-E08TR	
Deep	115-PW-21	
Deep	117-MW-D1	
Deep	117-MW-D2	
Deep	117-MW-D3	
Deep	117-MW-I4	

Table A-1
Monitoring Wells for Groundwater Level Measurements
GWET Long-term Monitoring Plan

(refer to Figures A-1a through A-1d)

Monitoring Zone	Well ID	Comments
Deep	119-MW-01T	
Deep	119-MW-02T	
Deep	124-MW-06	
Deep	124-MW-102T	Abandonded Oct. 2013 for soil excavation
Deep	124-MW-103L	Abandonded Oct. 2013 for soil excavation
Deep	124-MW-104L	
Deep	124-MW-104T	
Deep	124-MW-105T	
Deep	124-MW-106T	
Deep	124-MW-107T	Abandonded Oct. 2013 for soil excavation
Deep	124-MW-G02T	
Deep	153-MW-A13T	
Deep	SA6-MW-AA1T	
Bedrock	073-MW-10BR-1	
Bedrock	073-MW-10BR-2	
Bedrock	073-MW-10BR-3	
Bedrock	073-MW-10BR-4	
Bedrock	073-MW-10BR-5	
Bedrock	073-MW-1BR-1	
Bedrock	073-MW-1BR-2	
Bedrock	073-MW-1BR-3	
Bedrock	073-MW-1BR-4	
Bedrock	073-MW-1BR-5	
Bedrock	079-MW-13BR-1	
Bedrock	079-MW-13BR-2	
Bedrock	079-MW-13BR-3	
Bedrock	087-MW-14	
Bedrock	087-MW-I30T	
Bedrock	087-MW-O29T	
Bedrock	090-MW-18BR	Abandoned 2013: status under evaluation
Bedrock	090-MW-7BR-1	
Bedrock	090-MW-7BR-2	
Bedrock	090-MW-7BR-3	
Bedrock	115-MW-203BR	
Bedrock	115-MW-211BR	
Bedrock	115-MW-215BR	
Bedrock	115-MW-216BR	
Bedrock	117-MW-3BR-1	
Bedrock	117-MW-3BR-2	
Bedrock	117-MW-8BR	

Table A-1
Monitoring Wells for Groundwater Level Measurements
GWET Long-term Monitoring Plan

(refer to Figures A-1a through A-1d)

Monitoring Zone	Well ID	Comments
Bedrock	119-MW-11BR	
Bedrock	119-MW-12BR	
Bedrock	119-MW-16BR-1	
Bedrock	119-MW-16BR-2	
Bedrock	119-MW-16BR-3	
Bedrock	119-MW-2BR-1	
Bedrock	119-MW-2BR-2	
Bedrock	119-MW-2BR-3	
Bedrock	119-MW-4BR-1	
Bedrock	119-MW-4BR-2	
Bedrock	119-MW-4BR-3	
Bedrock	124-MW-17BR-1	
Bedrock	124-MW-17BR-2	
Bedrock	124-MW-8BR	
Bedrock	140-MW-9BR-1	
Bedrock	140-MW-9BR-2	
Bedrock	140-MW-9BR-3	
Bedrock	SA6-MW-14BR	
Bedrock	SA6-MW-15BR	
Bedrock	SA6-MW-5BR-1	
Bedrock	SA6-MW-5BR-2	
Bedrock	SA6-MW-5BR-3	
Bedrock	SA6-MW-5BR-4	
Bedrock	SA6-MW-5BR-5	

Table A-2
Monitoring Locations for Groundwater Level Measurements
SA-7 Perimeter Pool Monitoring
(refer to Figure A-2)

Perimter Pool	Pool Standpipe	Frequency	Related Monitoring Well	Frequency
N-1	N-1 Standpipe	bi-weekly	115-E4-SO	Monthly
			115-E5-SO	Monthly
N-2	N-2 Standpipe	bi-weekly	087-MW-001	Monthly
N-3	N-3 Standpipe	bi-weekly	115-W1-SO	Monthly
			087-MW-O19	Monthly
N-4	N-4 Standpipe	bi-weekly	087-MW-Y20	Monthly
			115-W6-SO	Monthly
E-1	E-1 Standpipe	bi-weekly	115-E3-SO	Monthly
E-2	E-2 Standpipe	bi-weekly	115-E2-SO	Monthly
S-1	S-1 Standpipe	bi-weekly	115-E1A-SO	Monthly
S-2	S-2 Standpipe	bi-weekly	115-E1A-SO	Monthly
			140-MW-06	Monthly
			140-MW-07	Monthly
S-3	S-3 Standpipe	bi-weekly	115-W5-SO	Monthly
			134-MW-V09	Monthly
			134-MW-Q08	Monthly
S-4	S-4 Standpipe	bi-weekly	115-W3-SO	Monthly
			073-MW-B11	Monthly
			073-MW-Y10	Monthly

Table A-3
Monitoring Locations for Groundwater Level Measurements
SA-6 South Groundwater Level Monitoring Plan

(refer to Figure A-3)

Monitoring Zone	Well ID	Comments
Shallow	SA6S-PZ-1	Outside wall
Shallow	SA6S-PZ-2	Inside wall
Shallow	SA6S-PZ-3	Outside wall
Shallow	SA6S-PZ-4	Inside wall
Shallow	SA6S-PZ-5	Outside wall
Shallow	SA6S-PZ-6	Inside wall
Shallow	SA6S-PZ-7	Outside wall
Shallow	SA6S-PZ-8	Inside wall
Shallow	SA6S-PZ-9	Outside wall
Shallow	SA6S-PZ-10	Inside wall
Shallow	SA6S-PZ-11	Inside wall
Shallow	115-W3-SO	Outside wall
Shallow	115-W4-SO	Outside wall
Shallow	115-E1-SO	Outside wall

Table A-4
Monitoring Locations for Groundwater Level Measurements
SA-6 North Groundwater Level Monitoring Plan

(refer to Figure A-4)

Monitoring Zone	Well ID	Comments
Shallow	SA6N-PZ-1	Outside wall
Shallow	SA6N-PZ-2	Inside wall
Shallow	SA6N-PZ-3	Outside wall
Shallow	SA6N-PZ-4	Inside wall
Shallow	SA6N-PZ-5	Outside wall
Shallow	SA6N-PZ-6	Inside wall
Shallow	SA6N-PZ-7	Outside wall
Shallow	SA6N-PZ-8	Inside wall
Shallow	SA6N-PZ-9	Outside wall
Shallow	SA6N-PZ-10	Inside wall
Shallow	115-W1-SO	Outside wall
Shallow	115-E4-SO	Outside wall
Shallow	115-E5-SO	Outside wall

Table A-5
Monitoring Locations for Groundwater Level Measurements
SA-5 (NJCU) Sites 90 & 184 Long-term Monitoring Plan
(refer to Figure A-5)

Monitoring Zone	Well ID	Comments
Shallow	090-PZ-05	
Shallow	090-PZ-06	
Shallow	090-MW-F14	abandoned 2013 by NJCU development
Shallow	184-MW-04	
Shallow	184-MW-05	
Shallow	184-MW-06	
Shallow	184-MW-C10	abandoned 2013 by NJCU development
Shallow	Sump A	
Shallow	Sump B	

Table A-6
Monitoring Locations for Groundwater Level Measurements
SA-5 Site 079 Long-term Monitoring Plan

(refer to Figure A-5)

Monitoring Zone	Well ID	Comments
Shallow	079-MW-01	
Shallow	079-MW-A02	

Table A-7
Monitoring Locations for Groundwater Level Measurements
SA-5 Site 153 South Remedial Action Permit for Groundwater
(refer to Figure A-5)

Monitoring Zone	Well ID	Comments
Shallow	153-MW-2	
Shallow	153-MW-5	
Shallow	153-MW-A13	
Shallow	153-MW-A15	

Table A-8
Monitoring Locations for Groundwater Level Measurements
SA-5 Site 117 Remedial Action Permit for Groundwater
(refer to Figure A-5)

Monitoring Zone	Well ID	Comments
Shallow	117-MW-A05	
Shallow	117-MW-A14	
Shallow	117-MW-A62	
Shallow	117-MW-A85	
Shallow	117-MW-A89	
Shallow	117-MW-A99	

TABLE B
GROUNDWATER QUALITY MONITORING REQUIREMENTS
for Integrated Groundwater Monitoring Plan

								2013			
Location	**Monitoring Plan**	**Consent Decree**	**Depth**	**Frequency**	**# Wells (ref table)**	**Figure Ref. #**	**Estimated Start Date**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**
Regional	GWET Long Term Monitoring Plan June 10, 2008	Deep Overburden and Bedrock Groundwater Remedies Consent Order	Shallow	Biennial	0 (B-1)						x
			Intermediate	Biennial	6 (B-1)	B-1a	Dec. 2013				x
			Deep	Biennial	12 (B-1)	B-1b	future events TBD				x
			Bedrock	Biennial	10 (B-1)	B-1c					x
Regional	S-3 Injection Mass Removal Operations Work Plan Final Feb. 28, 2012	Deep Overburden and Bedrock Groundwater Mass Removal Consent Decree, May 18, 2010	Deep	Every injection event	4 (B-2)	B-2	On-going (# events)	x	x	x(2)	x(2)
				Semi-annual Sampling	6 (B-2)				x		x
SA-6 South	SA-6 South Development AOC Appendix D of SA-6 South 100% Design Report June 28, 2013	First Amended Consent Decree Regarding Remediation and Redevelopment of SA-6 South	Shallow	Qtly first year[1]	12 (B-3)	B-3	Post Remedy (2017)[2]				
SA-6 South	L-zone Wells (Plume Diversion Area) Appendix E of SA-6 South 100% Design June 28, 2013	First Amended Consent Decree Regarding Remediation and Redevelopment of SA-6 South	Deep	Pre-Remedy Baseline	12 (B-4)	B-4	Completed May 2013		x		
				Post Remedy	12* (B-4)		Post Remedy (2017)				
SA-5 (NJCU) Sites 90 & 184	Long Term Monitoring Plan (2/29/12)[3]	Consent Decree Regarding Remediation of the New Jersey City University Redevelopment Area	Shallow	Years 1 and 2 - Quarterly Year 3 + TBD	3 (B-5)	B-5	On-going	x	x	x	x
SA-5 Site 117	Remedial Action Permit for GW (in progress)	Consent Decree Regarding Remediation of the Study Area 5 Shallow Groundwater and the Site 79 Residential Properties	Shallow	Biennial[2]	7 (B-6)	B-5	2015				
SA-5: Site 079	Long Term Monitoring Plan[2]	Consent Decree Regarding Remediation of the Study Area 5 Shallow Groundwater and the Site 79 Residential Properties	Shallow	Once 2014 then TBD[4]	2 (B-7)	B-5	2014				x
SA-5: Site153 South	Remedial Action Permit for GW (in progress)	Consent Decree Regarding Sites 79 and 153 South	Shallow	Biennial[2]	2 (B-8)	B-5	2015				

* Number and location of wells subject to field conditions during and after remedy construction.
Biennial = every two years

[1]Monitoring begins 12 months after construction is complete

[2]Revised/updated LTMP(in progress).

[3]Post-remedy triggers plan under NJCU Consent Decree; plan expected to be updated 1st quarter 2014; future monitoring frequency TBD pending updated LTMP

[4]TBD based on water level monitoring data per LTMP

TABLE B
GROUNDWATER QUALITY MONITORING REQUIREMENTS
for Integrated Groundwater Monitoring Plan

		2014				2015				2016				2017				2018			
Location	**Monitoring Plan**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**
Regional	GWET Long Term Monitoring Plan June 10, 2008																				
Regional	S-3 Injection Mass Removal Operations Work Plan Final Feb. 28, 2012	x(2)	x(2) x	x(2)	x(2) x	x(2)	x(2) x	x(2)	x(2) x	x(2)	x(2) x	x(2)	x(2) x	x(2)	x x						
SA-6 South	SA-6 South Development AOC Appendix D of SA-6 South 100% Design Report June 28, 2013	SA-6 North and South Construction								12-month equilibrium period				x	x	x		x	x	x	x
SA-6 South	L-zone Wells (Plume Diversion Area) Appendix E of SA-6 South 100% Design June 28, 2013	SA-6 North and South Construction								12-month equilibrium period				x							
SA-5 (NJCU) Sites 90 & 184	Long Term Monitoring Plan (2/29/12)[3]	x	TBD																		
SA-5 Site 117	Remedial Action Permit for GW (in progress)									x						x					
SA-5: Site 079	Long Term Monitoring Plan[2]																				
SA-5: Site153 South	Remedial Action Permit for GW (in progress)									x						x					

* Number and location of wells subject to field conditions during and after remedy construction.
Biennial = every two years

[1]Monitoring begins 12 months after construction is complete

[2]Revised/updated LTMP(in progress).

[3]Post-remedy triggers plan under NJCU Consent Decree; plan expected to be updated 1st quarter 2014; future monitoring frequency TBD pending updated LTMP

[4]TBD based on water level monitoring data per LTMP

Table B-1
Monitoring Wells for Groundwater Quality Sampling
GWET Long-term Monitoring Plan
(refer to Figures B-1a through B-1c)

Monitoring Zone	Well ID	Analytical Parameters	Analytical Methods
Shallow	None*	NA	NA
Intermediate	087-MW-O19D	Note 1	Note 2
Intermediate	087-MW-W25D	Note 1	Note 2
Intermediate	087-MW-A26D	Note 1	Note 2
Intermediate	117-MW-I1	Note 1	Note 2
Intermediate	117-MW-I5	Note 1	Note 2
Intermediate	SA6-MW-AA1D	Note 1	Note 2
Deep	087-MW-W25T	Note 1	Note 2
Deep	087-MW-A26T	Note 1	Note 2
Deep	115-MW-E08Tr	Note 1	Note 2
Deep	117-MW-D3	Note 1	Note 2
Deep	119-MW-01T	Note 1	Note 2
Deep	119-MW-02T	Note 1	Note 2
Deep	124-MW-G02T	Note 1	Note 2
Deep	124-MW-102T	Abandoned	
Deep	124-MW-104T	Note 1	Note 2
Deep	124-MW-106T	Note 1	Note 2
Deep	124-MW-107T	Abandoned	Note 2
Deep	SA6-MW-AA1T	Note 1	Note 2
Bedrock	079-MW-13BR	Note 1	Note 2
Bedrock	090-MW-18BR**	Note 1	Note 2
Bedrock	117-MW-8BR	Note 1	Note 2
Bedrock	119-MW-2BR-1	Note 1	Note 2
Bedrock	119-MW-16BR-1	Note 1	Note 2
Bedrock	124-MW-8BR	Note 1	Note 2
Bedrock	140-MW-9BR-1	Note 1	Note 2
Bedrock	SA6-MW-14BR	Note 1	Note 2
Bedrock	SA6-MW-15BR	Note 1	Note 2

*** Shallow groundwater is not considered part of the Deep Overburden Groundwater Plume.**

**** Abandoned in 2013 by NJCU Contractors; future status under evaluation**

Note 1: Total Cr (filtered and unfiltered), Hex Cr. (filtered and unfiltered)

Note 2: Total Cr method EPA 200.7; hex Cr method SW846-7199

Table B-2
Monitoring Wells for Groundwater Quality Sampling
S-3 Injection Mass Removal Program

(refer to Figure B-2)

Well Type	Well ID	Analytical Parameters	Analytical Methods
Monitoring	087-PW-1	Total Chromium, calcium, iron	EPA 200.7
		Hexavalent chromium	SW846-7199
		Sulfate	EPA 300/SW846 9056A
Monitoring	087-PW-2	same as above	same as above
Monitoring	090-MW-09	same as above	same as above
Monitoring	088-MW-G19T	same as above	same as above
Monitoring	087-MW-O29D	same as above	same as above
Monitoring	115-DP-1	same as above	same as above
Injection	088-IW-01	same as above	same as above
Injection	088-IW-02	same as above	same as above
Injection	088-IW-03	same as above	same as above

Table B-3
Monitoring Wells for Groundwater Quality Sampling
SA-6 South Development AOC

(refer to Figure B-3)

Monitoring Zone	Well ID	Comments	Analytical Parameters	Analytical Methods
Shallow	SA6S-MW-01	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-02	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-03	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-04	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-05	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-06	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-07	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-08	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-09	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-10	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-11	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	SA6S-MW-12	New Installation	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199

Table B-4
Monitoring Wells for Groundwater Quality Sampling
SA-6 South "L-zone Wells" Plume Diversion Area

(refer to Figure B-4)

Monitoring Zone	Well ID	Comments	Analytical Parameters	Analytical Methods
Deep	124-MW-103L	abandoned	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	124-MW-102T	abandoned	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	124-MW-105T	retain*	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	124-MW-106T	retain*	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	124-MW-107T	abandoned	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	124-MW-G02T	retain	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	119-MW-02T	retain	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	119-MW-01T	retain	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	124-MW-104T	retain*	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Deep	124-MW-104L	retain*	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199

*** retain if feasible per SA-6 South Monitoring Well Abandonment Plan or optionally collect in-situ groundwater samples using direct push methods**

Table B-5
Monitoring Wells for Groundwater Quality Sampling
SA-5 (NJCU) Sites 090 and 184 Long Term Monitoring Plan
(refer to Figure B-5)

Monitoring Zone	Well ID	Analytical Parameters	Analytical Methods
Shallow	184-MW-04	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	184-MW-05	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	184-MW-06	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199

Table B-6
Monitoring Wells for Groundwater Quality Sampling
SA-5 Site 117 Remedial Action Permit for GW

(refer to Figure B-5)

Monitoring Zone	Well ID	Analytical Parameters	Analytical Methods
Shallow	117-MW-A05	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	117-MW-A14	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	117-MW-A62	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	117-MW-A85	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	117-MW-A89	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	117-MW-A99	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199

Table B-7
Monitoring Wells for Groundwater Quality Sampling
SA-5 Sites 079 Long Term Monitoring Plan

(refer to Figure B-5)

Monitoring Zone	Well ID	Analytical Parameters	Analytical Methods
Shallow	079-MW-01	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	079-MW-A02	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199

Table B-8
Monitoring Wells for Groundwater Quality Sampling
SA-5 Site 153 South Remedial Action Permit for GW

(refer to Figure B-5)

Monitoring Zone	Well ID	Analytical Parameters	Analytical Methods
Shallow	153-MW-A13	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199
Shallow	153-MW-A15	Total and Hexavalent Chromium	EPA 200.7 and SW846-7199

TABLE C
ANALYTICAL METHODS, CONTAINERS, PRESERVATION, AND HOLD TIMES

Analytical Parameter	Method	Container	Preservation	Hold Time
Total Chromium	EPA 200.7	500 ml poly	cool 4° C*	6 months
Hexavalent Chromium	SW846-7199	500 ml poly	cool 4° C*	24 hours
Iron	EPA 200.7	500 ml poly	cool 4° C*	6 months
Sulfate	EPA 300/SW846 9056A	500 ml poly	cool 4° C	6 months
Calcium	EPA 200.9	500 ml poly	cool 4° C*	6 months
VOC	EPA 624	40 ml glass (3)	cool 4° C	14 days

* Nitric acid to pH < 2 for dissolved (filtered) samples.

TABLE D
SUMMARY OF TIDAL EFFICIENCY AND TIDAL LAG

Well ID	Screened Zone	Tidal Efficiency (%)	Tidal Lag (minutes)
073-PZ-002	Intermediate	26.00%	50
087-MW-13	Intermediate	61.50%	18
087-MW-35	Intermediate	41.20%	22
087-MW-O29D	Intermediate	15.40%	107
087-MW-W25D	Intermediate	40.00%	22
087-OBS-1D	Intermediate	62.20%	25.5
087-OBS-2D	Intermediate	29.00%	19
087-OBS-5D	Intermediate	30.00%	20
087-PZ-002	Intermediate	30.00%	40
087-PZ-006	Intermediate	20.00%	100
115-MW-20	Intermediate	1.80%	285
115-W1-DO	Intermediate	20.00%	100
115-W4-DO	Intermediate	20.00%	100
125-PZ-002	Intermediate	2.00%	300
134-PZ-002	Intermediate	19.00%	60
134-PZ-004	Intermediate	12.50%	90
140-MW-P05D	Intermediate	3.60%	45
140-PZ-002	Intermediate	8.50%	92
SA6-MW-AA1D	Intermediate	44.10%	10
087-MW-03	Deep	3.90%	110
087-MW-08	Deep	45.70%	3.5
087-MW-34	Deep	29.10%	19
087-MW-W25T	Deep	33.00%	40
087-OBS-1L	Deep	62.20%	25.5
087-OBS-1T	Deep	48.40%	18
087-OBS-3L	Deep	45.00%	18
087-OBS-4T	Deep	18.50%	56.2
087-OBS-5T	Deep	30.00%	20
SA6-MW-AA1T	Deep	34.20%	4
073-MW-10BR	Bedrock	40.00%	20
073-MW-1BR	Bedrock	38.90%	32.8
087-MW-I30T	Bedrock	67.00%	100
087-MW-O29T	Bedrock	20.30%	39
115-MW-203BR	Bedrock	38.70%	25
115-MW-215BR	Bedrock	40.50%	14
119-MW-2BR	Bedrock	43.80%	16.4
119-MW-4BR	Bedrock	23.70%	7.5
SA6-MW-14BR	Bedrock	3.90%	183.7
SA6-MW-15BR	Bedrock	18.70%	187.1
SA6-MW-5BR	Bedrock	13.50%	53.7

APPENDIX D-3

L-WELL GROUNDWATER MONITORING PLAN

APPENDIX E

L-WELL GROUNDWATER MONITORING PLAN

STUDY AREA 6 SOUTH
SITES 073, 124, 125, 134, 140, AND 163
JERSEY CITY, NJ

Prepared for

Honeywell

101 Columbia Road
Morristown, NJ 07962

Prepared by

AMEC Environment & Infrastructure, Inc.
200 American Metro Boulevard, Suite 113
Hamilton, New Jersey 08619

JUNE 2013
ISSUED FOR CONSTRUCTION

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Figure 1: Locations of the L-Wells

1.0 INTRODUCTION

This L-Well Groundwater Monitoring Plan (L-Well GWMP) was prepared by AMEC Environment & Infrastructure, Inc. (Amec) on behalf of Honeywell International Inc. (Honeywell), as part of the investigation and remediation activities at Study Area 6 South (SA-6 South or Site), located in Jersey City, Hudson County, New Jersey. This L-Well GWMP was prepared as part of the Chromium Remedial Design for the Chromium Remedy and establishes the monitoring requirements for the so-called "plume diversion area" (as described more fully below and in Section 2) following completion of the Chromium Remedy field activities at the Site. The L-Well GWMP is Appendix E to the SA-6 South Chromium Remedy 100% Design Report. Additional background information pertaining to the SA-6 South Site is found in the SA-6 South Chromium Remedy 100% Design Report.

The L-Well Groundwater is located within what has been referred to as the plume diversion area. The plume diversion area is located near the southeast corner of Study Area 7 (SA-7) near the former Roosevelt Lanes Bowling Alley property at SA-6 South (NJDEP Site 124) and represents a portion of the Deep Overburden Plume that is detached from the main body of the plume. The area was delineated during the initial deep groundwater investigation as reported in the Final Groundwater Investigation Report (FGIR) [Hydroqual, 2007]). Delineation was accomplished through the advancement of nine soil borings and the installation of 12 overburden monitoring wells. The majority of these wells were screened in the Intermediate and Deep Zones (see explanation of the various groundwater zones in Section 2). However, at two locations, monitoring wells were also screened between the Deep and Intermediate zones and assigned the suffix "L" for lacustrine. Thus, the term "L-Well Groundwater" has been used to refer to this portion of the Deep Overburden Plume.

2.0 PURPOSE/SCOPE OF L-WELL GROUNDWATER MONITORING

2.1 OBJECTIVES AND SCOPE

The purpose of the L-Well GWMP is to address the requirements of Paragraph 72 of the First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South between Honeywell, Hackensack Riverkeeper, Inc. and the City of Jersey City, which was entered by the United States District Court, District of New Jersey on August 13, 2012 (SA-6 South Consent Decree). Paragraph 72 of the SA-6 South Consent Decree specifies that one round of monitoring be conducted to evaluate whether the groundwater in the plume diversion area remains contained following implementation of the Chromium Remedy. The plume diversion area represents a portion of the Deep Zone plume (see explanation of the various groundwater zones below) that is detached from the remainder of the plume as evidenced by the low chromium levels in wells 124-MW-105T and 124-MW-104L and 104T. The horizontal extent of the detached portion has been defined by perimeter wells 124-MW-106T, 124-MW-107T, 124-MW-G02T, 119-MW-01T and 119-MW-02T as documented in the FGIR. The cause of this separation in the extent of the plume is not known, but may be related to historic pumping from one or more deep overburden wells to the south.

The subsurface environment at SA-6 South and the surrounding vicinity has been defined in terms of both geologic strata, such as the "S-1 Lacustrine Sand," and hydrostratigraphic zones, such as the "Intermediate Zone." Hydrostratigraphic zones are useful for mapping and monitoring groundwater levels and groundwater quality data and have been defined based on the position of monitoring well screened intervals. The identified hydrostratigraphic zones are as follows:

- Shallow Zone – above the Stratum D/meadow mat and generally in fill material ("S" suffix well designations);
- Intermediate Zone – within the lacustrine deposits just below the Stratum D/meadow mat ("I"-suffix well designations);
- Lacustrine deposits between the Intermediate and Deep Zone ("L" suffix well designations)

- Deep Zone – within the lacustrine deposits just above the glacial till/ice contact deposits ("T" suffix well designations); and
- Upper Bedrock Zone – just below the top of bedrock.

The principal components of this L-Well GWMP include the following:

- Monitoring Locations;
- Monitoring Well Sampling;
- Water Quality Parameters; and
- Reporting.

Honeywell will develop a Long-Term Monitoring Plan (LTMP) which will comprehensively address all long-term monitoring requirements for both soils and groundwater for the SA-6 South Site. The LTMP will be submitted to the NJDEP and other parties as specified in paragraph 86(c) of the SA-6 South Consent Decree on or before October 13, 2013. Any modifications required to this L-Well GWMP that arise between the submission of the 100% Design Report and submission of the LTMP will be incorporated in the LTMP.

2.2 SUMMARY OF L-WELL GROUNDWATER REMEDY

In accordance with Paragraph 72 of the SA-6 South Consent Decree, the L-Well Groundwater Remedy shall be based on the monitoring of total and hexavalent chromium, and major ion chemistry, to determine if the L-Well Groundwater remains contained following implementation of the Chromium Remedy. If there is no substantial change detected in the total and hexavalent chromium and the major ion chemistry, no further action is required unless total chromium is detected in the delineation wells at concentration above the NJDEP Ground Water Quality Standards (GWQS) of 70 micrograms per liter (µg/L).

For the purposes of the L-Well Groundwater monitoring and prior to the initiation of ground-intrusive activities at the SA-6 South Chromium Remedy, Honeywell proposes to conduct one baseline groundwater sampling event in 2013. The baseline sampling results will be used to compare the results of the post-remedy L-Well Groundwater monitoring and determine whether or not a "substantial change" in major ion chemistry has occurred. If there is a substantial change in the major ion

chemistry, Honeywell shall propose further monitoring of the L-Well Groundwater. This monitoring plan is subject to review and comment by all parties and approval by the Special Master in accordance with the SA-6 South Consent Decree Paragraph 86 (c)(ix). If the initial monitoring or the monitoring conducted to further assess the L-Well Groundwater demonstrates that the proximate waters have total chromium concentration in excess of 70 µg/L, regardless of whether there is a change in major ion chemistry, Honeywell shall propose a remediation plan for the L-Well Groundwater. This remediation plan is subject to review and comment by the SA-6 South Consent Decree parties and approval by the Special Master.

3.0 GROUNDWATER QUALITY MONITORING

3.1 MONITORING LOCATIONS

As discussed in Section 2, the extent of the groundwater quality in the plume diversion area has been delineated by the five Deep Zone (T-wells). These wells are located around the perimeter of the plume diversion area and will be used to monitor downgradient water quality. These wells are indicated below and shown on **Figure 1**:

- 124-MW-106T;
- 124-MW-G02T;
- 119-MW-01T; and
- 119-MW-02T.

In addition to the above wells, Honeywell will retain, to the extent practical, the monitoring wells located outside of the cap area (124-MW-104L, 124-MW-104T, and 124-MW-105T) and sample these wells as required in Paragraph 72 of the Consent Decree. In addition, Honeywell may use geoprobe (or another appropriate drilling method) for sampling for the one initial round required at the locations that are within the cap area (currently wells 124-MW-102T, 124-MW-103L and 124-MW-107T). The timing for this initial geoprobe sampling event would be after placement of excavated materials and installation of barrier walls and prior to the installation of the cap. If further monitoring of the L-well horizon is necessary in order to comply with the Consent Decree, Honeywell will include provisions in the site Long-Term Monitoring Plan. The Long-Term Monitoring Plan is a future deliverable to be submitted after this initial L-well evaluation is completed.

3.2 MONITORING WELL SAMPLING

As indicated in Section 2.2, Honeywell will conduct one baseline sampling event in the second quarter 2013. The baseline sampling will be conducted at the same wells and for the same analytical parameters specified herein. In accordance with paragraph 72 of the SA-6 South Consent Decree, a single round of groundwater sampling will be conducted using low-flow purge and sampling methods and collected from the L-Wells after one full year of seasonal hydrologic fluctuations following completion of the Chromium Remedy. Based upon the current schedule,

the Chromium Remedy is estimated to be completed on March 31, 2016; therefore, L-Well sampling is estimated to be in the latter half of March 2017.

All groundwater monitoring activities proposed herein will be performed by personnel trained in proper sampling protocol, and in accordance with the NJDEP's *Field Sampling Procedures Manual,* August 2005 and the Data Validation Report which is Appendix H of the SA-6 North Chromium Remedy 100% Design Report recently revised and re-submitted to the NJDEP on June 7, 2012. The Data Validation Report consisted of the Quality Assurance Project Plan and the Data Management Plan, both of which will apply to the sampling proposed in this L-Well GWMP. If Site conditions change, all activities related to monitoring at the Site will be reviewed and scrutinized for completeness and integrity and any modifications required will be documented in an addendum to this L-Well GWMP.

3.3 WATER QUALITY PARAMETERS

Groundwater samples from the five L-wells will be analyzed for total and hexavalent chromium (unfiltered and filtered samples) and major ion chemistry. All samples will be submitted to Accutest Laboratories of Dayton, NJ or another certified and Honeywell-approved laboratory for laboratory analysis. Specific analytical methodology and sample preservation information for total and hexavalent chromium, and major ion chemistry are provided in **Table 1**.

Table 1: Analytical Parameters

Groundwater	Analytical Methodology	Container Type	Preservation	Holding Time
Total Chromium	EPA Method 200.7	500 ml polyethylene bottle	Nitric Acid	6 months
Hexavalent Chromium	EPA Method 7199	500 ml polyethylene bottle	Cool, 6°C	24 hours
Calcium	EPA Method 200.7	500 ml polyethylene bottle	Nitric Acid	6 months
Magnesium	EPA Method 200.7	500 ml polyethylene bottle	Nitric Acid	6 months
Sodium	EPA Method 200.7	500 ml polyethylene bottle	Nitric Acid	6 months
Potassium	EPA Method 200.7	500 ml polyethylene bottle	Nitric Acid	6 months

Groundwater	Analytical Methodology	Container Type	Preservation	Holding Time
Carbonate	SM20 4500 CO2 D	950 ml polyethylene bottle	Cool, 6°C	14 days
Bicarbonate	SM20 4500 CO2 D	950 ml polyethylene bottle	Cool, 6°C	14 days
Sulfide	SM20 4500S2 F	2 X 250 ml polyethylene bottles	NaOH to pH >12, Zinc Acetate, Cool, 6°C	7 days
Sulfate	EPA Method 300.0	950 ml polyethylene bottle	Cool, 6°C	28 days
Chloride	EPA Method 300.0	950 ml polyethylene bottle	Cool, 6°C	28 days
pH[1]	In Field (DSAM)[2]	Not Applicable (NA)	NA	15 Minutes

Notes:

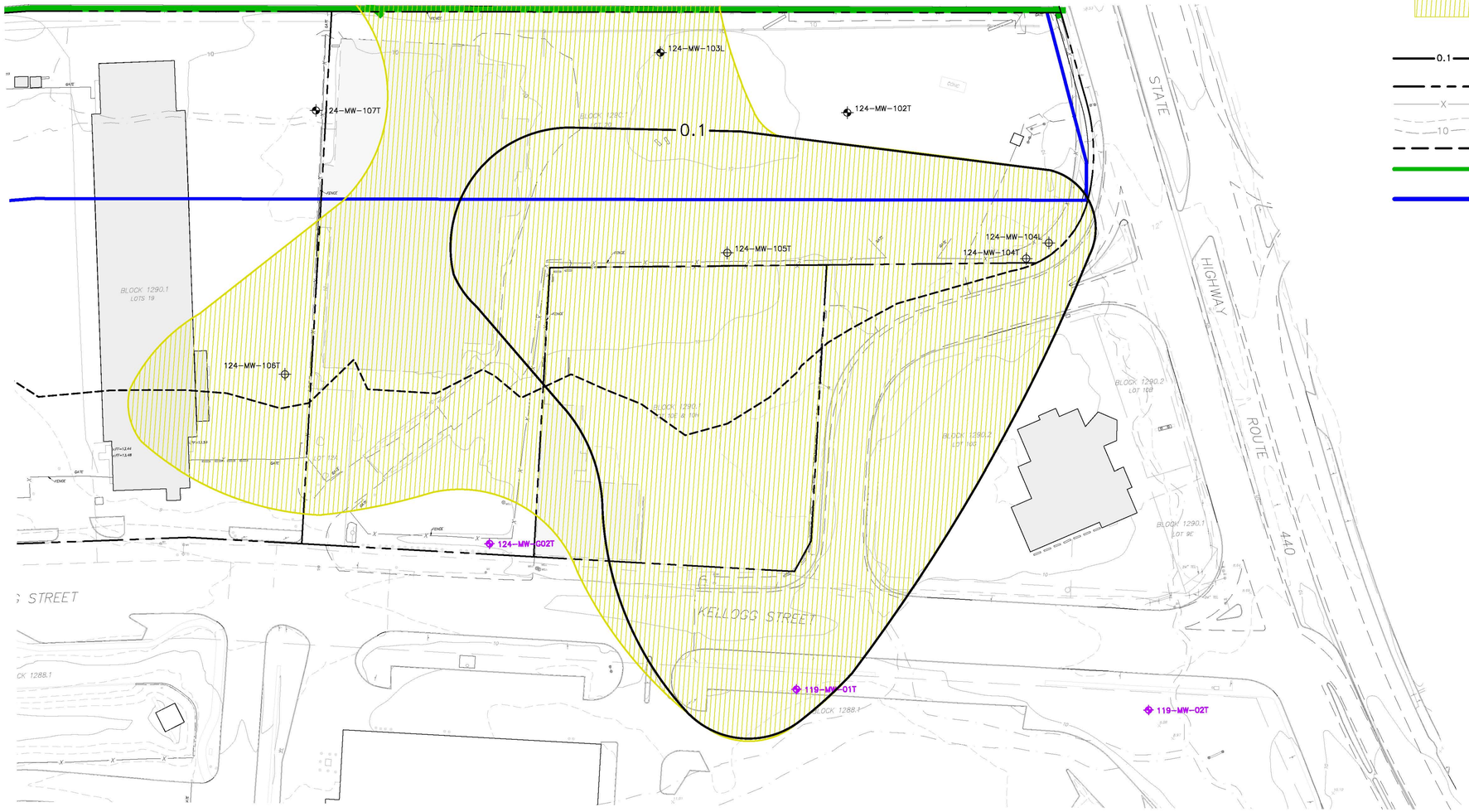
1. pH will be measured by a NJDEP-certified laboratory in accordance with N.J.A.C 7:18, Subchapter 8.
2. Department Sanctioned Analytical Method (DSAM) specified for pH in accordance with N.J.A.C 7:18.1(a).

4.0 SCHEDULE AND REPORTING

Honeywell will notify the Riverkeeper and NJDEP via electronic mail correspondence indicating the scheduled date for well sampling activities. After completion of the well sampling, a report of results, noting whether or not the plume diversion area remains contained, will be submitted in accordance with the requirements of the Consent Decree (Paragraphs 72 and 86[c]). Based upon the current schedule, the estimated timing for the single round of groundwater sampling is in the latter half of March 2017. Thus, it is anticipated that the submittal of a report of results would follow during the second quarter of 2017. Honeywell will modify the SA-6 South Master Schedule to reflect this sampling schedule and will request that the Special Master approve the change to the Schedule in a separate transmittal. Pursuant to paragraph 86(i) of the SA-6 South Consent Decree, this schedule change will not have a material impact on schedule milestones established in Paragraph 54 of the SA 6 South Consent Decree, and will not require modifications to any necessary permits or authorizations for the Chromium Remedy.

FIGURE 1

LOCATIONS OF THE L-WELLS



LEGEND

- EXISTING L-WELL LOCATION TO BE MONITORED
- EXISTING L-WELL LOCATION TO BE MONITORED (WELL LOCATION WITHIN EXCAVATION – RETAINED IF POSSIBLE)
- EXISTING L-WELL LOCATION TO BE MONITORED (WELL LOCATION WITHIN CAP AREA– SAMPLING MAY BE CONDUCTED BY GEOPROBE OR OTHER APPLICABLE DRILLING METHOD)
- EXISTING BUILDING
- DEMOLISHED BUILDING LOCATION
- TOTAL CHROMIUM PLUME DIVERSION AREA IN DEEP GROUNDWATER (SOURCE: FINAL GROUNDWATER INVESTIGATION REPORT, HYDROQUAL, FEBRUARY 2007)
- 0.1 TOTAL CHROMIUM CONCENTRATION IN GROUNDWATER
- SITE BOUNDARY
- EXISTING FENCE
- EXISTING ELEVATION CONTOUR
- LIMIT OF PROPOSED CHROMIUM REMEDIAL ACTION
- EXISTING HYDRAULIC BARRIER WALL (SA-7)
- PROPOSED HYDRAULIC BARRIER WALL (SA-6 SOUTH)

0 25 50 100
SCALE IN FEET

SOURCE:
BASEMAP: DRAWING TITLED " UTILITY AND TOPOGRAPHIC SURVEY, STUDY AREA 6 SOUTH", JERSEY CITY, NEW JERSEY. COMPLETED BY MASER CONSULTING, P.A., 331 NEWMAN SPRINGS RD., SUITE 203, RED BANK, NEW JERSEY. JOB # 10000292A, DATED DEC 17, 2010.

TOTAL CHROMIUM PLUME: DRAWING TITLED "FIGURE 4.5-6 TOTAL CHROMIUM IN GROUNDWATER – DEEP ZONE" STUDY AREA 7 JERSEY CITY, NEW JERSEY. COMPLETED BY HYDROQUAL

REV.	DATE	STATUS	PRPD BY	CHKD BY
1	04/10/13	REVISED WELL DESIGNATIONS	STR	DEN

AMEC PROJECT No. 3480100027
DRAWING: L WELL GW MONITORING LOCATION

PREPARED/DATE: STR 07/21/11
CHECKED/DATE: US 07/21/11

amec
ENVIRONMENT & INFRASTRUCTURE
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

FIGURE 1
L-WELL GROUNDWATER MONITORING LOCATION
100% REMEDIAL DESIGN REPORT
STUDY AREA 6 SOUTH
JERSEY CITY, NEW JERSEY

P:\CAD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\CHROME 100% REMEDIAL DESIGN\L-WELL GW MONITORING PLAN\L WELL GW MONITORING LOCATION.dwg Wed, 10 Apr 2013 - 11:39am scott.rodkin Layout: SITE

APPENDIX D-4

IN-SITU TREATMENT MONITORING WORK PLAN

UPDATED
WORK PLAN FOR IN-SITU TREATMENT
OF
CHROMIUM IMPACTED SOILS
AT THE NORTHERN AREA SECTION OF
TREATMENT AREA 10

STUDY AREA 6 NORTH
CHROMIUM REMEDIAL DESIGN
NJDEP SITES 087 AND 088

JERSEY CITY, NEW JERSEY

Prepared for

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Morristown, New Jersey 07962

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amec
foster
wheeler

UPDATED AUGUST 2015

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APPENDIX

Appendix A: Material Safety Data Sheets

1.0 INTRODUCTION

1.1 OBJECTIVES OF IN-SITU TREATMENT PROGRAM

This Updated Work Plan (Updated WP) was prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) for the in-situ treatment of hexavalent chromium (Cr(VI)) impacted soils at one targeted location at Study Area 6 (SA-6) North (Site), located at 575 Route 440 in Jersey City, New Jersey (**Figure 1**). The treatment location addressed by this Updated WP is part of an area (Treatment Area 10) which is adjacent to an active sanitary sewer pipeline within Area of Concern (AOC) 1 - Residential Area. (The treatment area addressed by this workplan is referred to in this document as "TA-10-1")

Treatment Area 10 (TA-10) is shown on **Figure 2** in relation to the rest of the Site, along with Treatment Areas 7 and 8 (TA-7 and TA-8). TA-7 and TA-8 are also Cr(VI)-impacted areas adjacent to critical infrastructure at the Site and were addressed in previously submitted Work Plans.

Paragraph 55(d) of the Consent Decree regarding the Remediation and Redevelopment of SA-6 North (Consent Decree) specifies excavation as the presumptive remedial action for these areas. The Consent Decree also provides the option of recommending in-situ treatment as a remedial action, where excavation is not feasible.

The in-situ treatment is selected as a safer alternative to the presumptive excavation remedy for the following reasons:

- The excavation remedy is technically impracticable at TA-10-1 due to the depth of contamination and proximity to the 72 inch forcemain (FM) that is part of the Jersey City Municipal Utility Authority (JCMUA) operation to be maintained at the Site. Excavation at this location could result in structural damage and catastrophic failure to this critical utility;
- The impacted zone has well delineated low concentration levels of Cr(VI) in discrete 2 feet thick intervals and are relatively small areas (approximately 800 square feet) that can be readily treated with targeted in-situ injection of reductants;

- Clean fill required for the proposed redevelopment will provide the additional buffer between the treated zone and final grade; and
- TA 10-1 is at sufficient distance away from the 72 inch FM to allow for safe use of treatment agents without any concerns to the structural integrity of the force main
- The balance of Treatment Area 10 which is not being treated will be controlled long term through engineering and institutional controls, which are the subject of separate agreements and correspondence among the parties and beyond the scope of this Updated WP. The goal of the treatment program is to reduce Cr(VI) concentrations in the treated area to less than 20 milligrams per kilogram (mg/kg).

The In-Situ Work Plan addressing TA-7, TA-8, and TA-10 was originally submitted to the New Jersey Department of Environmental Protection (NJDEP) on January 5, 2012. NJDEP issued a New Jersey Pollution Discharge Elimination System (NJPDES) Discharge to Groundwater Permit-by-Rule (DGW-PBR) authorization dated April 30, 2012. Since then Honeywell and parties to the SA-6 North Consent Decree governing implementation of the Chromium Remedy at SA-6 North (Plaintiffs) and the Special Master overseeing the legal proceedings have had further correspondence and discussions concerning the scope of the in-situ treatment program and revisions to the Work Plan were prepared and submitted.

Subsequently, in June 2013, Amec Foster Wheeler implemented the in-situ program for TA-7 and TA-8 in accordance with the April 30, 2012 NJDEP-issued NJPDES DGW-PBR. At that time, the implementation of the in-situ program in TA-10 was suspended pending finalization of the relocation of the hydraulic barrier in the area and evaluation of the potential impact on the adjacent 72-inch FM from sulfate production during injection of CaSx. In June 2014, Amec Foster Wheeler implemented the performance assessment soil sampling program in TA-7 and TA-8 in accordance with the February 2013 Revised WP. The results of the performance assessment soil sampling program were submitted to all parties by Honeywell on September 12, 2014.

Additionally, Honeywell authorized Amec Foster Wheeler and Mutch Associates to implement a bench scale test to test the efficacy of an organic substrate in treating Cr(VI)-impacted soils in TA-10 in accordance with the *Bench Scale Work Plan to Test*

Efficacy of Treatment of Chromium-Impacted Soil Using 3DME Organic Substrate, dated June 9, 2014 (Bench Scale Work Plan) prepared by Amec Foster Wheeler and Mutch. On May 5, 2015, Honeywell submitted to all parties a summary of the results of the bench scale test, which concluded that the organic substrate did not offer any significant benefit in reducing Cr(VI) concentrations in soils.

Consequently, at the Special Master All-Hands meeting on May 19, 2015, Honeywell indicated that it will implement CaSx injections in TA-10-1, the area north of the northern curbline for the future Stegman Boulevard to be constructed during the Bayfront Redevelopment project, in lieu of the organic substrate. On July 20, 2015, Honeywell submitted an Addendum to the February 2013 *Revised Work Plan for In-situ Treatment of Chromium Impacted Soils*, prepared by Amec Foster Wheeler originally submitted on February 19, 2013 which outlined the proposed revised injection program for subarea TA-10-1. On August 17, 2015, Plaintiffs issued a letter requesting Honeywell submit a stand-alone Work Plan in lieu of an addendum to a previously submitted document.

Based upon the planned approach to be implemented in subarea TA-10-1, Amec Foster Wheeler prepared a *Summary of Proposed In-Situ Treatment Program for Hexavalent Chromium Impacted Soils, SA-6 North, Site 087* which was submitted to NJDEP on July 8, 2015. On July 14, 2015, NJDEP issued a new DGW-PBR for the proposed TA-10-1 injection program.

1.2 IN-SITU TREATMENT APPROACH

The in-situ treatment program entails the application of calcium polysulfide using direct injection though the Geoprobe® tool string. Amec Foster Wheeler has increased the estimated stoichiometry ratio to 5X to account for the potential for ambient soil reductant demand. The planned tasks include:

- Preparation of this Updated WP (Completed);
- Obtaining Discharge to Ground Water (DGW) permit (Completed);
- Install monitoring wells (MWs), temporary well points (TWPs), and conduct baseline groundwater monitoring (Completed);
- In-situ treatment program implementation;
- Post-treatment monitoring; and

- Reporting.

1.3 WORK PLAN ORGANIZATION

This Updated WP contains the following sections:

1. *Introduction*. This section contains an overview of the WP for the in-situ treatment of Cr(VI) impacted soils and program objectives.
2. *Site Setting*. This section describes Site location, history, and setting including geology, hydrogeology, and topography.
3. *Implementation Plan:* This section describes the procedures performance and assessment sampling for the treatment program.
4. *Residuals Management*. This section describes the types of wastes that will be generated and the methods for containerizing, staging and disposing of wastes.
5. *DGW Permit Information*. This section contains the information necessary for the NJDEP to issue a permit-by-rule for the proposed work.
6. *Reports*. This section describes the reports that will be generated in the course of the work.
7. *Project Team Organization and Schedule*. The organizational structure of the project team and an anticipated work schedule is presented in this section.
8. *References*. List of documents referenced in this WP.
9. *List of Acronyms and Abbreviations*.

2.0 SITE SETTING

2.1 SITE LOCATION

Study Area 6 North consists of Site 087 (JCIA Site) and Site 088 (JCIA Well Site), located next to each other on the west side of Route 440 (**Figure 1**). The street addresses for these properties are 525 and 575 Route 440 (Site 087), and 501 Route 440 (Site 088), Jersey City, New Jersey.

The proposed treatment area (subarea TA-10-1) is located on Site 087. Site 087 occupies approximately 38 acres and consists of an industrial/municipal facility occupied by the JCMUA and formerly by Jersey City Department of Public Works (JCDPW). Recently, JCDPW relocated operations to another part of Jersey City. The property extends from Route 440 to the Hackensack River and is bordered on the north by a car dealership; on the east by Route 440; on the south by the JCIA Well Site (Site 088) and Study Area 7; and on the west by the Hackensack River. Existing facilities (now mostly abandoned) and structures include a guard shack at the site entrance, an administration building, maintenance building, materials storage areas, and a sewage pumping station and 72 inch sewer main for transfer of sewage to the Passaic Valley Sewerage Commission (PVSC). The JCMUA portion of the property also contains former sewage treatment facilities (digestion tanks, sedimentation tanks) and piles of debris and fill.

Site utilities include electrical service, water, sanitary sewer, storm sewer, and Underground Storage Tanks (USTs) and fuel oil lines. Most utilities are located underground with the exception of the electrical lines, which include both overhead and underground lines.

2.2 IN-SITU TREATMENT AREA 10

The area of impacted soils in is located immediately proximate to the 72 inch force main (FM) (see **Figure 5A** (**Revised**)). The 72 inch FM is installed at an approximate invert elevation of 3.0 feet msl or approximately 12 feet below grade (source: Record Drawings No. 7 Plan, Existing Outfall and No. 8 Profiles, Emergency Overflow Structures prepared by LMS, Inc.) The depth

to the chromium impacted material is 12 to 14 feet below existing grade. Therefore, excavation of impacted soils in TA-10 would potentially result in undermining of the FM during removal of the impacted soils. Although the 72 inch FM is supported by a pile foundation system, there is still a risk of joint separation during soil excavation activities due to the fact that one or more unrestrained pipe joints may exist along this straight run portion of piping.

As indicated in **Section 1.1**, Honeywell will implement CaSx injections in subarea TA-10-1, north of the northern curbline for the future Stegman Boulevard to be constructed during the Bayfront Redevelopment project. This subarea is approximately 800 square feet. Honeywell has reviewed this proposed CaSx injection program with NJDEP and PVSC to allay concerns about impacts to the FM from sulfate. To monitor sulfate conditions in shallow groundwater, Honeywell installed one permanent MW (087-MW-132) in the center of the injection area and two permanent MWs (087-MW-133 and 087-MW-134) between subarea TA-10-1 and the FM. As a contingency, Honeywell further proposes that if the sulfate concentrations in either one or both of 087-MW-133 and 087-MW-134 reach 150 mg/L, that clean potable water will be injected into both wells to dilute the sulfate concentrations in the shallow groundwater adjacent to the FM. Both agencies agree that these proposed measures address their concerns about the sulfate in shallow groundwater in the vicinity of the FM.

2.3 ENVIRONMENTAL SETTING

2.3.1 Current Site Conditions

Formerly Site 087 was an active industrial/commercial facility occupied by the JCMUA and JCDPW. Recently, JCDPW relocated operations to another part of Jersey City; however, JCMUA operations continue unchanged. TA-10 is located on the now abandoned JCDPW portion of the Site. For the most part, all facilities and structures remain; however, they have been abandoned. Formerly occupied facilities and structures on the JCDPW portion of the Site include a guard shack at the site entrance, an administration building, maintenance building, materials storage areas, and a sewage pumping station and 72 inch FM for transfer of sewage to the

PVSC. The JCMUA portion of the property also contains former sewage treatment facilities (digestion tanks, sedimentation tanks) and piles of debris and fill. It is anticipated that current Site operations will continue for the foreseeable future.

2.3.2 Site-Specific Geology

A description of the Site geological strata encountered during soil boring efforts (in order of depth) is given below. A generalized stratigraphic column is presented on **Illustration 1.**

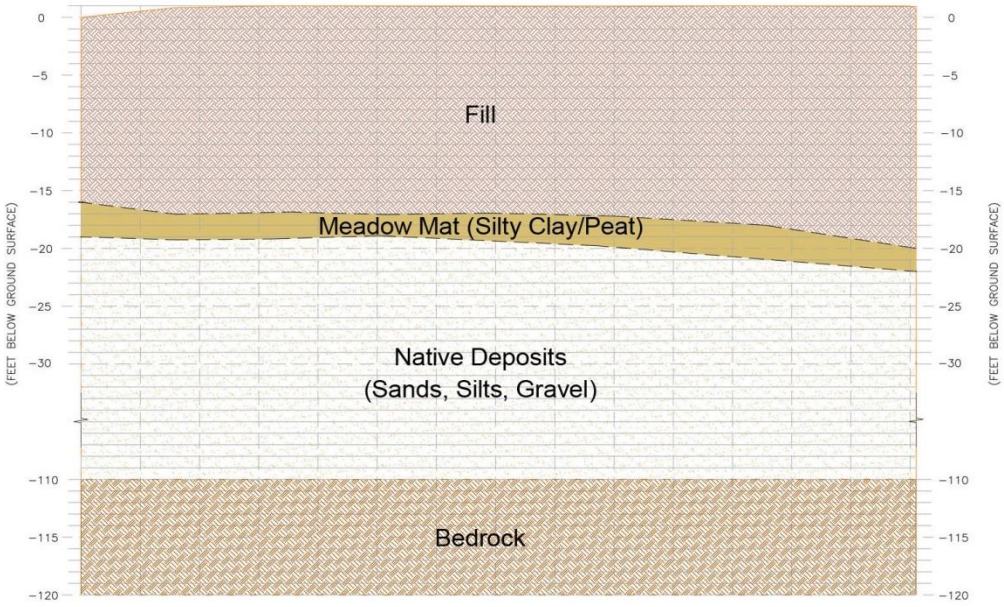


Illustration 1: Generalized Stratigraphic Column

- **Fill Material:** The majority of the ground surface at the Site is covered with asphalt (parking lots) or buildings, which overlie a continuous layer of historic fill material. The fill ranges in thickness from approximately 10 to 20 feet (average thickness 15 feet) and generally consists of silty sand with other fill such as brick, coal ash, glass, metal fragments, wood, and concrete.
- **Meadow Mat:** Meadow mat consists of a highly organic deposit of peat and fine-grained sediments that directly underlies the fill across the majority of the Site, ranging from less than 1 foot to several feet

thick. The meadow mat was encountered at depths ranging from approximately 10 to 16 feet, beneath the majority of the Site.

A sequence of native deposits consisting (in descending order) of Lacustrine Sands, Glacial Till/Ice Contact Lacustrine Deposits and Bedrock underlies the till. These units will not be affected by the proposed study and are not discussed here.

2.3.3 Site-Specific Hydrogeology

Groundwater beneath the Site occurs within the fill material under unconfined conditions, in underlying lacustrine sand deposits under semi-confined conditions, and within the underlying bedrock under confined conditions.

Groundwater flow in the area of the Site has been mapped as part of the comprehensive Study Area 7 (SA-7) investigation, which has identified four hydro-stratigraphic zones as follows:

- Shallow Zone – above the meadow mat and generally in fill material;
- Intermediate Zone – within the lacustrine deposits just below the meadow mat;
- Deep Zone – within the lacustrine deposits just above the glacial till/ice contact deposits; and
- Upper Bedrock Zone – Just below the top of bedrock.

Previous investigations results (HydroQual, 2007) indicate that groundwater flow in the fill material (Shallow Zone) at SA-6 is influenced by near-surface features, such as the storm sewer along Route 440 and paved surfaces. Generally, shallow groundwater flow is toward the north/northeast in the eastern half of the Site, and to the west/northwest toward Hackensack River in the western half of the Site. Groundwater flow in the lacustrine deposits (Intermediate and Deep Zone) is to the west-northwest, with little or no influence from near-surface features.

Groundwater flow within the Upper Bedrock Zone beneath SA-7 is to the northwest, and similar conditions are expected beneath the Site. Additional bedrock data is currently being collected as part of the ongoing SA-7 investigation.

Based on the July 2000 Remedial Investigation Report (RIR), slug test data for shallow wells within SA-6 indicated hydraulic conductivity values for the fill ranging from 0.78 foot/day to 18.26 feet/day, with a mean hydraulic conductivity of 2.9 feet/day. Slug test data for intermediate (D-series) wells indicated hydraulic conductivity values ranging from 4.02 feet/day to 40.9 feet/day, with a mean hydraulic conductivity of 5.1 feet/day. Aquifer tests conducted at SA-7 indicated the hydraulic conductivity of the S-3 sand to be significantly higher, on the order of 150 feet/day. Permeability test data for samples collected from the meadow mat and a clay deposits indicated permeability values of $1.3x10^{-7}$ centimeters per second (cm/sec) ($3.7x10^{-4}$ feet/day) and $1.5x10^{-7}$ cm/sec ($4.3x10^{-4}$ feet/day), respectively. Based on the measured overall flow gradients, hydraulic conductivities for SA-6 and SA-7 and an assumed effective porosity of 0.25, the average linear groundwater flow gradients likely range from 15 feet/year for the S-2 lacustrine sands, to 600 feet/year for the S-3 sand.

Based on information from the July 2000 RIR, there are no public water supply wells located in Hudson County. A previous file search was conducted during 1999 at the NJDEP Department of Water Allocation Division office in Trenton, NJ. Coordinates of the study area were supplied, and microfilm records of wells within one mile of the study area were obtained. A review of the information indicates that there are no industrial or public water supply wells downgradient from the Site.

2.3.4 Nature and Extent of Contamination

The horizontal and vertical extent of Cr(VI) above the NJDEP Soil Cleanup Criteria has been characterized. Delineation has been completed in TA-10. Impacts to shallow (i.e. above the meadow mat) and deeper (i.e. below the meadow mat) groundwater have been delineated (Mactec, August 2006). Groundwater above the meadow mat does not show evidence of chromium impacts in the area proposed for treatment.

In the proposed treatment area, the impacted soils are contaminated at Cr(VI) levels less than 40 mg/kg, limited to 1 or 2 foot thick intervals, located adjacent to critical utilities and structures and are generally found at depths greater than 10 feet below existing grade. **Figure 5A (Revised)** summarize the nature and extent of contamination in the three areas.

3.0 IMPLEMENTATION PLAN

3.1 OVERVIEW

The in-situ treatment program is developed with enough flexibility to allow adjustments of the approach in the field, such that that knowledge gained during the implementation of the program can be incorporated into subsequent activities and changes in site conditions can be accommodated.

As described in **Section 1.2**, the program comprises the following activities:

- Preparation of this Updated WP;
- Obtaining DGW permit (Completed);
- Install MWs, TWPs, and conduct baseline groundwater monitoring (Completed);
- In-situ treatment program implementation;
- Post-Pilot Test monitoring; and
- Reporting.

3.2 IN-SITU TREATMENT WORK PLAN AND PERMITTING

As indicated in **Section 1.1**, NJDEP issued a new DGW-PBR for the proposed subarea TA-10-1 injection program on July 14, 2015.

3.3 IMPLEMENTATION

3.3.1 General

The selection of the reductant and the delivery methods are based on past bench, pilot and full scale work conducted by Honeywell. Direct injection of calcium polysulfide (CaS_x) aqueous solution will be used for this treatment program. A Geoprobe® (or similar) drill-rig will be utilized to advance the tools to the desired treatment depth. The reductant will be injected into the formation directly from the drill tool string, without the need to construct injection wells. The CaS_x solution will be delivered to the Site in aqueous solution form, 29% CaS_x by weight, and will be stored in suitable containers in a secondary containment area. Field changes may be implemented and the program may be adjusted as additional data becomes available.

The contaminated interval targeted by the treatment program is approximately 2 feet thick. To ensure adequate coverage and good permeation of the targeted interval by the reductant, the injection will span a zone from 2 feet above to 2 feet below the contaminated zone. Injections will not continue below the meadow mat.

Based on our experience from the previously completed in-situ treatment programs at TA-7, TA-8, Site 079, Site 163, and the pilot program at Site 124, the injection program is designed based on 30 percent porosity and 25 percent volume exchange. A 10 percent excess was included in the final injectant volume estimate. Because CaS_x contains a mixture of polysulfides with x ranging from 2 to 5, we have used x=5 (the least favorable formulation) as the basis for estimating stoichiometric demand. Additionally, Amec Foster Wheeler has increased the stoichiometric ratio of the CaS_x solution to approximately 5X to account for potential ambient soil reductant demand. Detailed calculations are provided below.

	Subarea TA-10-1
Area of injection, SF	800
Zone of contamination (feet below grade)	12 to 14
Height of contaminated zone (feet)	2
Soil Volume for reagent addition (bulk cubic yards)	59
Soil pore volume (gallons at 30%)	3,591
Cr(VI) Concentration, mg/kg	39
Assumed soil density (tons/cubic yard)	1.6
Weight of soil in treatment zone (lbs)	189,630
Total mass load exceeding 20 mg/kg Cr(VI)	4
CaS_x dose at 1X => 25.3 lbs of CaS_x 29% sol'n per 1 lb of Cr(VI) [x=5]	25.3
CaS_x stoichiometric dosage @29% solution	5.0
CaS_x dose at 5X [at 1X => 25.3 lbs of CaS_x 29% solution per 1 lb of Cr(VI)]	126.5
CaS_x (lbs) @29% solution for total Cr(VI) mass at 5X	456
CaS_x 29% solution density, lbs/gallon	10.6
CaS_x (gallons) @29% solution for total Cr(VI) mass at 5X	43
CaS_x solution application volume (gallons at 25% volume exchange)	**898**
Addn volume for 2 ft interval above and below contaminated interval	86
Total injection interval (feet below grade)	10 to 16
Total volume of injection solution (including 10% margin) (gallons)	3,000

For planning purposes the number of injection points was estimated based on the expected site hydraulic conditions. Subarea TA-10-1, proposed injection points (IPs), MWs, TWPs, and treatment intervals are shown on **Figure 5A (Revised).**

Amec Foster Wheeler has retained Environmental Remediation and Financial Services, LLC (ERFS) of Sea Girt, New Jersey to execute the work as described herein. ERFS will provide the tanks, pumps, hoses, and mixing and metering equipment to store, manage, and handle the chemicals safely at the Site, as may be required. ERFS will be responsible to ensure and demonstrate that the reductant is distributed throughout the treatment zone.

3.3.2 Utility Survey

Prior to initiating work, a survey of subsurface utilities was conducted to accurately locate the network of subsurface features in the area.

3.3.3 Monitoring Well Installation and Baseline Monitoring

ERFS subcontracted Summit Drilling (Summit) of Bridgewater, New Jersey to install MWs and TWPs prior to the implementation of the in-situ injection program. Summit obtained well permits from NJDEP prior to mobilizing to the Site. MWs were installed on August 10, 2015 and TWPs on August 11, 2015. Summit's New Jersey-licensed well driller utilized a Geoprobe® rig outfitted with hollow stem augers to drill and install the MWs and TWPs at the locations shown on **Figure 5A (Revised**) in accordance with NJDEP well drilling and construction standards in N.J.A.C. 7:9D and as described below:

- One (1) permanent 2-inch diameter MW was installed in the center of subarea TA-10-1 and two permanent MWs were installed between subarea TA-10-1 and the FM to monitor sulfate in the shallow groundwater.
- Five (5) 1-inch diameter TWPs were installed adjacent to (around the perimeter of) subarea TA-10-1.

The MWs and TWPs were constructed as follows:

- MWs were constructed of 10 feet of 2-inch diameter polyvinyl chloride (PVC) 0.010-inch slotted well screen/riser pipe with screens set from 6 to 16 feet below ground surface (bgs). The annular space around the screen was filled with No. 1 graded sand to 12 inches above the top of the screen. At least 12 inches of hydrated bentonite seal was placed above the sand pack, and the remaining annular space was filled with a neat bentonite/cement grout.
- A steel, flush-mounted traffic-rated protective well cap was installed at the top of each MW well borehole.
- TWP boreholes were drilled with a combination of the hollow stem augers for the first 5 feet below ground surface (ft bgs) and 2-inch diameter direct push hollow casing sleeves fitted with an expendable drive point for the remainder of the borehole. All TWP boreholes were drilled to 16 feet bgs.
- The TWPs were constructed from 1-inch diameter PVC 0.010-inch slotted well screen/riser pipe with screens set from 10 to 16 feet. Once the TWP boreholes were drilled, the PVC well screens/risers were installed within the casing sleeves/hollow stem augers. A sand pack was installed around the well screens to approximately 12 inches above the screen and a combination of hydrated bentonite chips and bentonite/cement grout was placed within the remaining annular space to grade to mitigate any short-circuiting of injection fluids. The tops of the PVC riser pipes protrude above the ground surface and are affixed with threaded caps.

Following the installation of the MWs and the TWPs all of the wells were developed by pumping until the pumped water ran clear. On August 14, 2015, groundwater samples from each MW and TWP were collected for analysis of sulfide and sulfate to assess baseline groundwater conditions in subarea TA-10-1. Additionally, the horizontal positions and the elevations of the tops of the riser pipes on each MW and TWP were surveyed by a New Jersey-licensed surveyor from Maser Consulting, P.A. of Red Bank, New Jersey.

The following measurements will be taken and recorded in the MWs and TWPs prior to the start of injections (baseline) as follows:

- Depth to groundwater;
- Groundwater quality parameters, including pH, oxidation/reduction potential (ORP), specific conductivity (SC), and total dissolved solids (TDS);
- Hydrogen sulfide (H_2S) and volatile organic compounds (VOCs) in the headspace of the PVC riser pipe; and
- Groundwater color and/or odor.

3.3.4 Direct Injection

The locations of the five (5) injection points in subarea TA-10-1 are shown on **Figure 5A (Revised)**. Based on site hydraulic data, it is estimated that the radius of influence will be approximately 15 feet. The actual injection scheme may be modified in the field based on actual conditions. ERFS will be required to ensure that injectant is distributed throughout the treatment zone. Therefore, the contractor may elect to adjust the number and location of the injection points.

A Geoprobe® rig will advance the injection tooling into the subsurface. The stock solution will be diluted to the required working strength on-site, in the containment area, using potable water. Polyethylene tanks will be utilized for the mixing. Portable pumps will be utilized for reagent transfer and injection. Connections will be made using chemical-grade hoses with quick disconnect couplers. Pumping rates and pressures will be controlled manually by the chemical feed operators.

Injections will be carried out as follows:

- Means and methods will generally follow ERFS' In-Situ Chemical Reduction Implementation Work Plan, dated September 2013; and ERFS' Health and Safety Plan, dated June 2013 (Revised July 2014).
- Injections in subarea TA-10-1 will occur from 10 to 16 feet below grade.

- Injections will occur over a 6-foot vertical profile.
- A total of 150 gallons of 29% CaSx will be mixed with approximately 3,000 gallons of potable water to produce the CaSx solution.
- The 3,150 gallons of CaSx solution will be injected into 5 IPs.
- Areas surrounding injection locations will be monitored for evidence of daylighting.
- If daylighting occurs, the liquid will be contained at the daylighting site and be allowed to seep back into the ground.
- Injection activities will be adjusted as necessary to eliminate excessive daylighting.
- The breathing zones at storage, mixing, and injection areas will be monitored for hydrogen sulfide (H2S).
- The breathing zones at drilling locations will be monitored for volatile organic compounds (VOCs) and H2S.

Other types of proprietary injection tooling and methodologies may be utilized at the recommendation of the injection contractor, provided it meets the objectives of the program.

Should it become necessary, NJDEP-approved Geoprobe® "Pre-constructed Pre-packed Well Screen" units with 1.5 inch diameter, schedule 40 polyvinyl chloride (PVC) materials, screened directly within the targeted injection zone may be used. Upon completion of the injection, the injection points will be promptly decommissioned, as may be necessary.

3.3.5 Injection Monitoring

Injection monitoring will include visual observations of "day-lighting" to the ground surface of any injected reductant or groundwater. Sand bags will be placed around the work area to prevent accidental entry of "day-lighted" reductant or groundwater into storm sewer inlets or storm and sanitary sewer manholes located topographically downgradient of the work locations. If "day-lighting" occurs, injections will immediately cease and the liquids contained by the sand bags will be cleaned up and disposed of appropriately.

The injection program will be adjusted accordingly, so that the planned amount of reagent can be injected in the targeted zone.

ERFS will be responsible to assure and demonstrate that reductant has been delivered throughout the treatment zone. Measurements in the MWs and TWPs will be taken during injections and following completion of injections as follows:

- Depth to groundwater;
- Groundwater quality parameters, including pH, ORP, SC, and TDS;
- H_2S and VOCs in the headspace of the PVC riser pipe; and
- Groundwater color and/or odor.

Additionally, groundwater samples from the MWs and TWPs will be collected immediately following completion of the injection program and at least for several weeks following completion, depending on results, for sulfide and sulfate to monitor groundwater conditions in the area. As indicated above, of particular interest will be sulfate concentrations in the two MWs located between subarea TA-10-1 and the 72 inch FM, 087-MW-133 and 087-MW-134.

3.3.6 Liquid Storage and Secondary Containment

Liquid form reductant (29% CaS_x solution) will be delivered in appropriate containers, stored in a protected area, and in accordance with local chemical storage requirements. Secondary containment will be provided for all liquid storage tanks in accordance with local, state, and federal requirements.

3.3.7 Dry Material and Equipment Storage

Solid-form chemicals, hand-held tools, and portable equipment (e.g. generators, compressors, portable pumps, etc.) will be stored either in secure trailers or buildings, at the direction of the Site manager.

3.4 PERFORMANCE ASSESSMENT

The first round of soil sampling will be conducted approximately 6 months after completing the in-situ injection program (weather permitting) to evaluate the effectiveness of the in-situ treatment. A second round of soil

sampling will be conducted 3 years after completion of the field program. Honeywell has advised it may seek to conduct the second sampling event sooner than 3 years after the completion of the TA-10-1 injection program. In the event Honeywell seeks to advance the second sampling event, Honeywell will provide a proposal to the parties for their review and comment.

Soil samples will be collected from two borings to be installed no more than 15 feet apart, straddling the locations of the Remedial and Pre-Design Investigation borings. Samples will be collected from the intervals where Cr(VI) was previously detected in concentrations above 20 mg/kg. Samples will be collected at 1 foot intervals and the entire 1 foot interval will be homogenized and sampled. This is a deviation from the NJDEP requirement that samples be collected from discreet 6-inch intervals. However, this procedure will ensure that the sampling results are not biased by hand-specimen-scale inhomogeneities and variability in contaminant distribution and reagent propagation. The samples will be analyzed for Cr(VI) (3060A/7199), Eh and pH. In addition, soils samples will be analyzed for Sulfides using USEPA Method 9030b.

If the data shows that the treatment objectives were not met and that the reductant has been exhausted, Honeywell will evaluate whether to undertake further remediation or to impose institutional controls. If the reductant has not been exhausted, interim institutional controls will be imposed until either the treatment objectives are met or a decision is made to maintain the institutional controls in perpetuity.

If the data does not pass validation and a decision is made to continue sampling, the decision when to resample will be based on the reasons for data rejection. For example, if the rejection is due to strong reducing conditions it would be appropriate to allow adequate time for conditions to return to neutral before resampling (e.g. wait until 3 years from treatment or 12 months beyond the 3 years, as the case may be); if the rejection is due to other reasons, it may be appropriate to resample as soon as practicable.

This decision protocol is presented in **Illustration 2.**

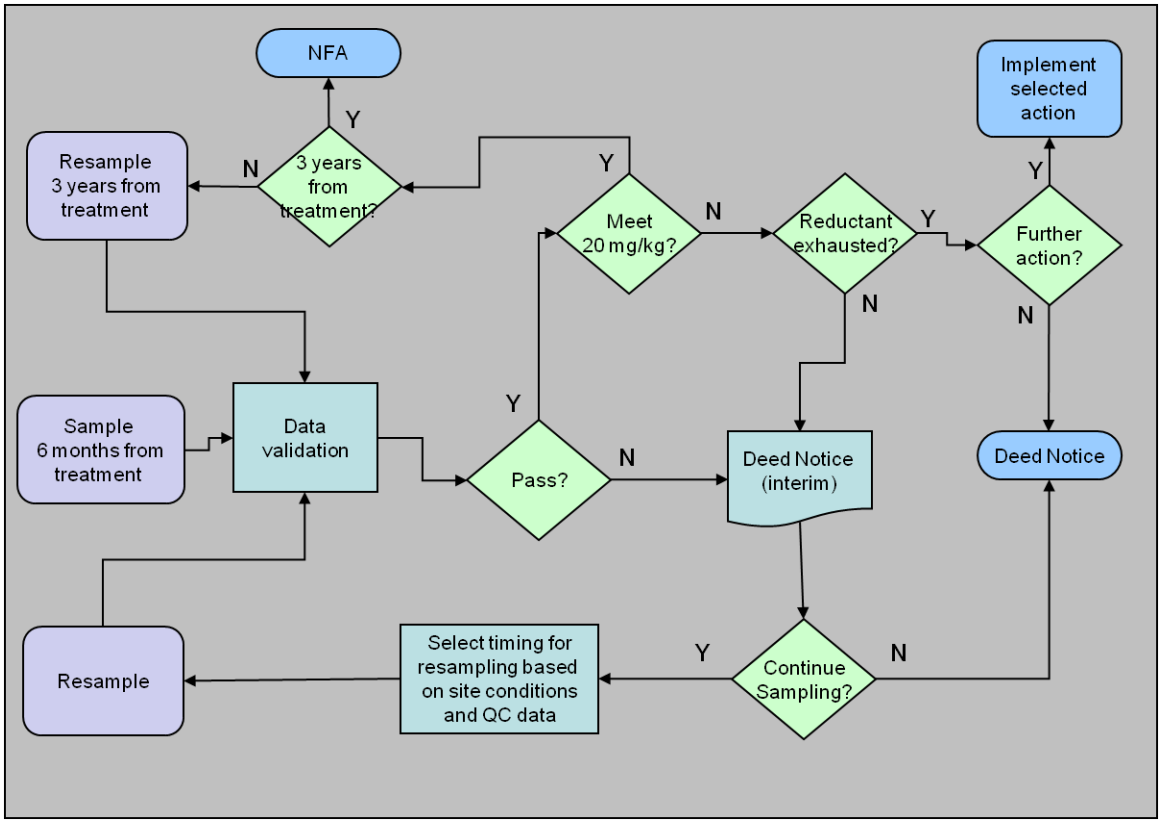


Illustration 2: Post-Treatment Sampling Data Evaluation Logic Flow Diagram

3.4.1 Analytical Program

Samples will be collected and analyzed in accordance with the methods established in the approved Master Sampling and Analysis Plan (Mactec 2005). **Table 1** summarizes the proposed sampling and analysis program.

3.4.2 Data Validation

Laboratory analytical data will be subject to data validation to ensure laboratory compliance with quality assurance requirements of the selected analytical methods. Data validation will be conducted for all samples analyzed for total and hexavalent chromium using the "NJDEP Standard Operating Procedures for Analytical Data Validation, Bureau of Environmental Measurements and Quality Assurance. 5.a.3 (Revision 2 - April 17, 1990), 5.a.4 (Revision 1 - April 17, 1990), and 5.a.16 (Revision 0 - October 4, 1994)."

The data validation will include a signed document provided to the NJDEP attesting that the data was validated according to the aforementioned protocols.

3.4.3 Health and Safety

ERFS prepared a work-specific Health and Safety Plan (HASP) and a Work Plan, which included a Spill Prevention Plan for the Site 163 in-situ injection program conducted in 2014. Since the approach is the same for subarea TA-10-1, ERFS will utilize their HASP and Work Plan to govern their employees' health and safety and operations.

4.0 RESIDUALS MANAGEMENT

4.1 SOLID WASTE

Residual solids such as drill cuttings will be collected and stored in DOT-approved (or equivalent) 55-gallon drums in a designated on-site storage area. Alternatively, residual materials may be placed directly into dumpsters, or securely stockpiled in an appropriate manner. These residual materials will be analyzed to determine waste classification and will be managed in accordance with applicable federal and state regulations. Management options include placement under the cap or off-site disposal.

4.1.1 Personal Protective Equipment

Personal protective equipment (PPE) will be collected in appropriate waste bins until off-site transportation is arranged.

4.2 LIQUID WASTE

Residual fluids, such as decontamination and well purge and/or development water, will be collected and stored in DOT-approved (or equivalent) 55-gallon drums in a designated on-site storage area. If large volumes of a given type of residual material are generated, the drums may be emptied into tank trucks for storage. All tanks, hoses, and equipment will be thoroughly rinsed to remove chemical reductant residue at the end of each day. Rinse water will be collected and containerized directly into tanks for storage, if practicable. These residual materials will be analyzed to determine waste classification and will be managed in accordance with applicable federal and state regulations. Management options include treatment utilizing existing or future on-site water treatment systems or off-site disposal. Any storage tank decontamination fluids will be handled in the same manner.

5.0 DGW PERMIT INFORMATION

On July 14, 2015, NJDEP issued a new DGW-PBR for the proposed TA-10-1 injection program detailed in this Updated WP.

6.0 REPORTS

6.1 REMEDIAL ACTION REPORT

A brief Summary Report will be prepared following completion of the in-situ injection program and subsequent groundwater monitoring to document the injection activities and the groundwater results.

A second brief Summary Report will be prepared following the 6-month soil sampling event to document the interim soil sample results. A Final Report will be prepared after the final (3-year) sampling event, and will be part of the overall SA-6 North Remedial Action Report.

The Final Report will include a narrative, tables and figures, photographs, logs, and laboratory data packages.

7.0 PROJECT TEAM ORGANIZATION AND SCHEDULE

7.1 PROJECT TEAM ORGANIZATION

Honeywell Project Manager – Ms. Maria Kaouris, Remediation Manager

Honeywell has designated Maria Kaouris as the Remediation Manager and primary contact for this project. Her business address and telephone number are indicated below:

Honeywell
101 Columbia Road
Morristown, NJ 07962
Phone (973) 445-3302

NJDEP Primary Contact –Mr. Thomas Cozzi, Assistant Director

The primary contact for the NJDEP for this project will be the NJDEP Case Manager, Mr. Cozzi. His business address and telephone number are indicated below:

Mr. Thomas Cozzi
Assistant Director
New Jersey Department of Environmental Protection
401 East State Street, Mail Code 401-06
P.O. Box 028
Trenton, NJ 08625-0420
Phone: (609) 984-2905

Environmental Consultant – AMEC Foster Wheeler Environment and Infrastructure, Inc.

Amec Foster Wheeler is responsible for remediation oversight activities, including the collection of environmental samples for laboratory analyses and technical report preparation. Amec's address and telephone number are indicated below:

AMEC Environment and Infrastructure, Inc.
American Metro Center
200 American Metro Blvd, Suite 113

Hamilton, NJ 08619
Phone: (609) 689-2829
Fax: (609) 689-2838

Primary Amec contacts are as follows:

Project Responsibility	Name	Telephone Number
Program Manager	Joe Clifford	609-631-2903
Project Manager	Stuart Bills	252-202-1411
QA/QC, Technical Oversight	Theodoros Toskos	973-455-3362
Task Manager/Field Operations	Dennis Nagg	609-631-2928
Site Health & Safety Officer	TBD	TBD
Designated Local Health & Safety Officer	Andrew Shust	609-631-2921

Laboratory – Accutest Laboratories – Mr. Marty Vitanza

Accutest Laboratories (Accutest) will be responsible for laboratory analysis of environmental samples. The address and telephone number are indicated below.

Accutest Laboratories
2235 Route 130
Dayton, New Jersey 08810
Phone 732-329-0200

Remediation Contractors– Mr. Ron Adams, P.E., Executive Vice President, Remediation

ERFS has been selected as the remediation contractor to implement this WP. The address and telephone number for ISOTEC are indicated below:

Environmental Remediation and Financial Services, LLC
2150 Highway 35, Suite 250
Sea Girt, NJ 08750
Ph: (732) 974-3570

7.2 SCHEDULE

The proposed injection program will take 2 days to complete. Upon approval of this Updated WP, Amec Foster Wheeler and ERFS will determine a mutually-agreeable start date and that start date shall be communicated to all parties by Honeywell.

8.0 REFERENCES

HydroQual, Inc., 2007. Final Groundwater Investigation Report, Study Area 7. February 2, 2007.

MACTEC Engineering and Consulting, Inc., May 2005. Master Sampling and Analysis Plan for the Hudson County Chromate Sites. May 2005.

MACTEC Engineering and Consulting, Inc., August 2006, Supplemental Remedial Investigation Report, Study Area 6, NJDEP Sites 087 and 088, Jersey City Incineration Authority Site, Jersey City Incineration Authority Well Site, Jersey City, New Jersey.

TetraTech, Inc., July 2000. Draft, Remedial Investigation Report, Study Area 6 NJDEP Site No. 073, 087, 088, 124, 125, 134, 140 and 163, Jersey City, New Jersey. July 2000.

9.0 LIST OF ACRONYMS AND ABBREVIATIONS

CaS_x	Calcium Polysulfide
CEA	Classification Exception Area
CLP	Contract Laboratory Program
cm/sec	centimeters per second
Cr(VI)	Hexavalent Chromium
Cr(III)	Trivalent Chromium
CSO	Combined Sewer Overflow
DGW	Discharge to Ground Water
GWQS	Groundwater Quality Standards
mg/kg	milligrams per kilogram
MSDS	Material Safety Data Sheets
msl	mean sea level
MW	monitoring Well
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
PPE	Personal Protective Equipment
PVC	polyvinyl chloride
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
RIR	Remedial Investigation Report
USEPA	US Environmental Protection Agency
TWP	temporary well point
WP	Work Plan

TABLES

Table 1A: Soil Sampling and Analysis Program

Treatment Area	Number Of Borings	Sampling Method	Sampling Interval (feet below surface)	Analytical Parameters
10	10	Geoprobe Macrocore	12-13, 13-14	Total Chromium, Hexavalent Chromium, Sulfide

Notes:

1. Borings will not be advanced below the meadow mat or organic clay stratum
2. Samples will be collected at 1 foot intervals and homogenized
3. Quality assurance/quality control (QA/QC) samples will be collected at a rate of 5% of the total number of soil; and field blank samples at a rate of one per day.
4. Laboratory analytical results will be reported using NJDEP Regulatory Format IV, Reduced Data Deliverables, Non-CLP Methods.
5. Laboratory analytical methods, preservation, and holding times as follows:

Parameter/ Methods	Preservation	Holding Times
Total Chromium 3050B/6010B	Cool 4°C	6 months
Hexavalent Chromium 3060A/7199	Cool 4°C	30 days extraction; 7 days analysis
Sulfide 9030b/3040	Cool 4°C	7 days

Table 1B: Groundwater Sampling and Analysis Program

Treatment Area	Number of MWs/TWPs	Diameter	Screen Interval	Analytical Parameters
10	3/5	2 inch/1-inch	6 to 16	Sulfide Sulfate

Notes:

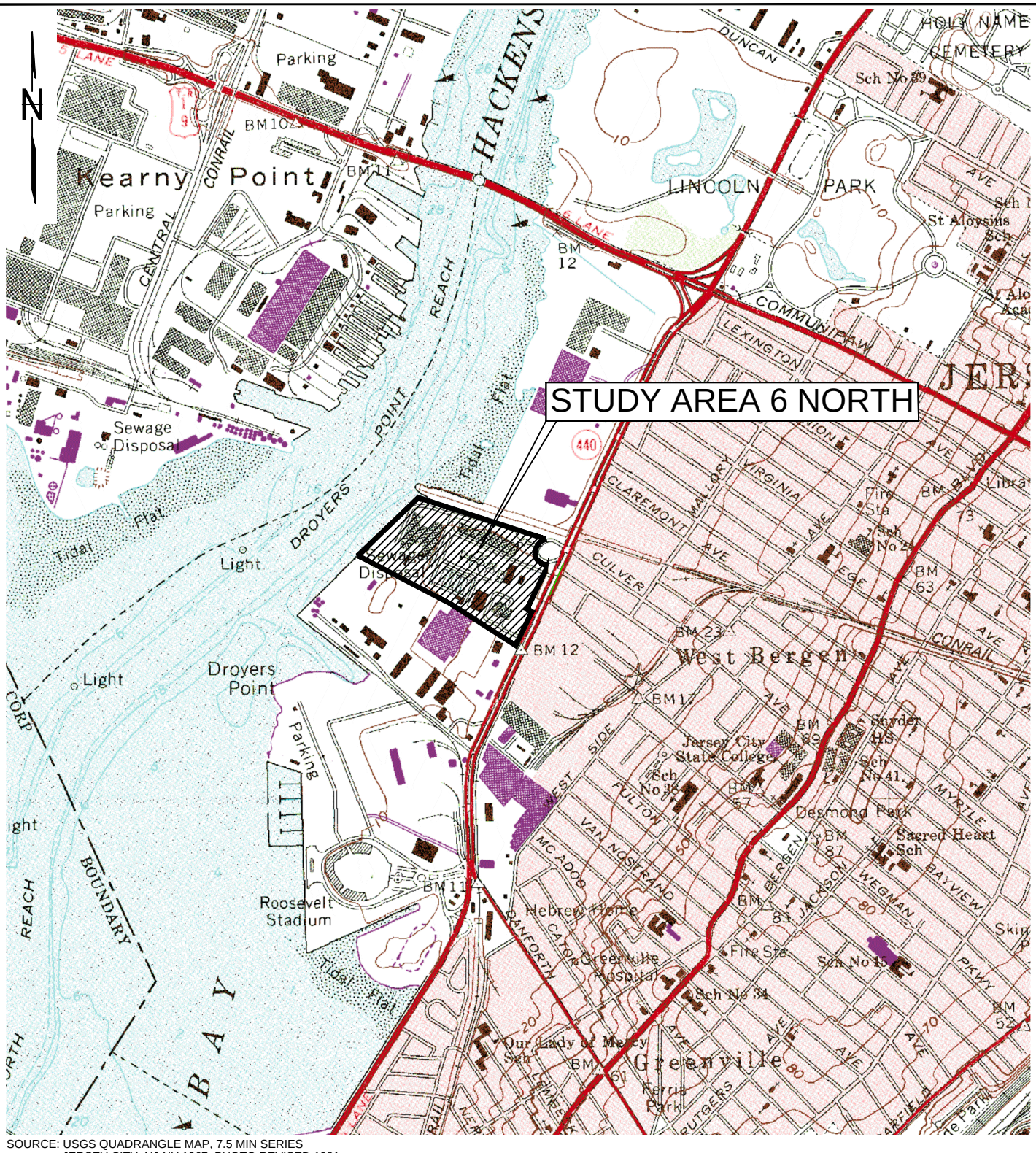
1. Quality assurance/quality control (QA/QC) samples will be collected at a rate of 5% of the total number of soil; and field blank samples at a rate of one per day.

2. pH and Eh will be measured in the field using portable equipment.

3. Laboratory analytical methods, preservation, and holding times as follows:

Parameter/ Methods	Preservation	Holding Times
Sulfide SM 4500 S2 F11	Cool 4°C, add zinc acetate and NaOH to pH > 9	7 days
Sulfate EPA 300	None	28 days

FIGURES



SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

0 1000 2000 4000
SCALE IN FEET

AMEC PROJ No.: 3480080011 *DRAWING:* FIGURE 1 SITE LOCATION MAP	
PREPARED/DATE: STR 03/08/10	*CHECKED/DATE:* TT 03/08/10

amec
ENVIRONMENT & INFRASTRUCTURE
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

FIGURE 1
SITE LOCATION MAP
TARGETED IN-SITU TREATMENT AREAS
STUDY AREA 6 NORTH - SITES 087 & 088
JERSEY CITY, NEW JERSEY

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\REPORT\FIGURE 1 SITE LOCATION MAP.dwg Mon, 05 Dec 2011 - 4:36pm strudkin



UTILITY LOCATIONS BASED ON ALTA/ASCM LAND TITLE SURVEY FOR BLOCK 1290.1 – LOTS 2D,2E,15D, 15B & 16A, DATED 5/23/08

REV.	DATE	STATUS	PRPD BY	CHKD BY

Amec Foster Wheeler PROJECT No. 3480150438
DRAWING: TARGETED IN–SITU TREATMENT AREAS–03

PREPARED/DATE: STR 06/09/15

CHECKED/DATE: DN 06/09/15

amec foster wheeler
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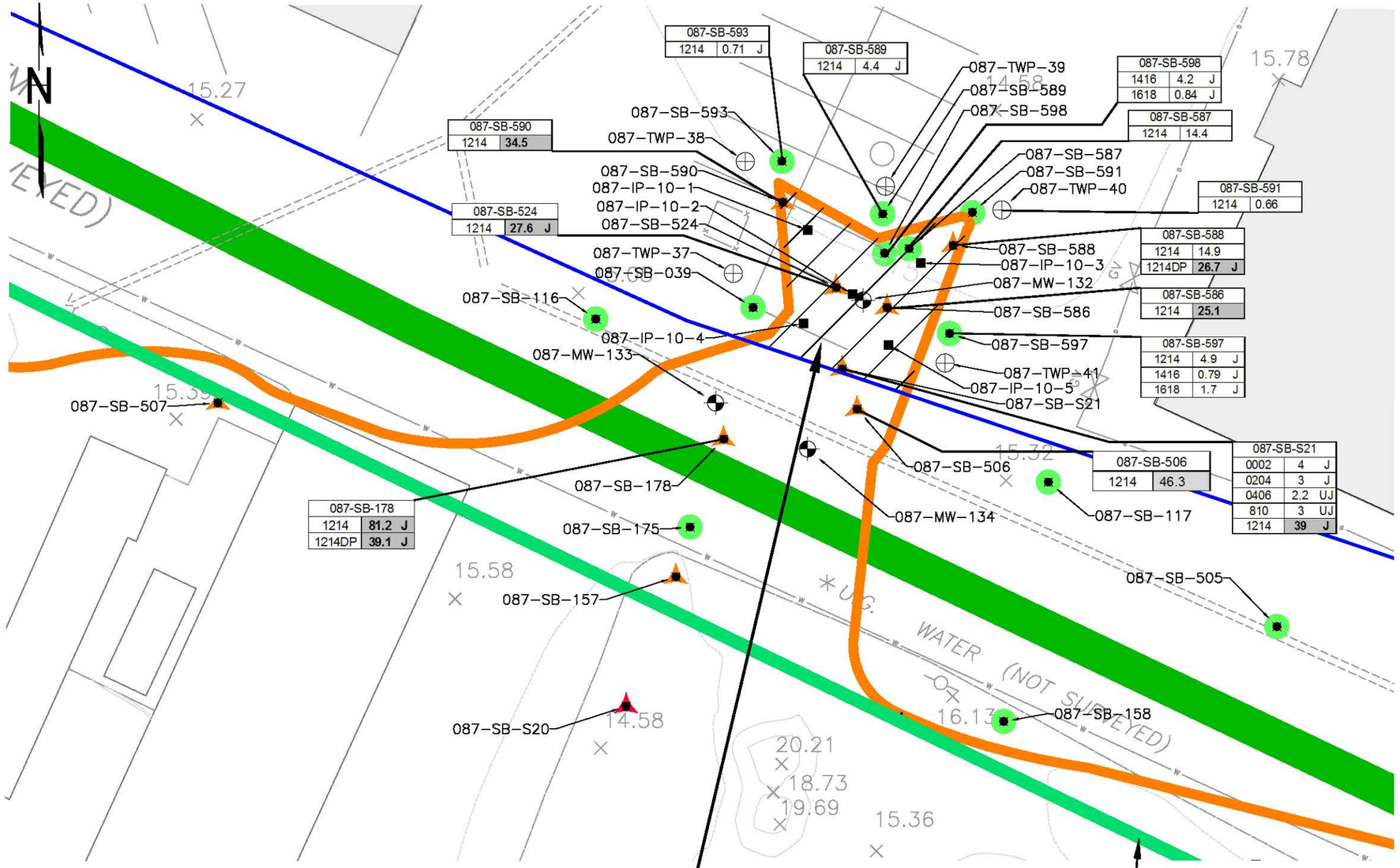
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

FIGURE 2 (REVISED)
TARGETED IN-SITU TREATMENT AREAS
STUDY AREA 6 NORTH
JERSEY CITY, NEW JERSEY

P:\JCity\NorthWell\Jersey City\6 North\Report\3480150438\5.0\10\Current Drawings\Targeted In-Situ Treatment Areas-03.dwg Tue, 09 Jun 2015 - 3:04pm woodruffd Layout: Fig 2



LEGEND

- PREVIOUS SOIL BORINGS
- PROPOSED NEW PERMANENT MONITORING WELL LOCATION
- INJECTION POINT LOCATION
- PROPOSED OBSERVATION TEMPORARY WELL POINT (TWP)
- <20 ppm HEXAVALENT CHROMIUM SAMPLE LOCATION
- 20–240 ppm HEXAVALENT CHROMIUM SAMPLE LOCATION
- >240 ppm HEXAVALENT CHROMIUM SAMPLE LOCATION
- BLOCK/LOT LINE (APPROXIMATE LOCATION)
- STORM SEWER
- 72" FORCEMAIN SANITARY SEWER
- 54" OUTFALL (ABANDONED)
- NORTHERN EDGE OF BAYFRONT REDEVELOPMENT CURBLINE OF NEW STEGMAN BOULEVARD
- LIMITS OF TARGETED IN-SITU TREATMENT
- RELOCATED HYDRAULIC BARRIER
- APPROXIMATE LIMITS OF AREA WHERE DETECTED HEXAVALENT CHROMIUM CONCENTRATION VALUES >20 mg/kg
- EXISTING BUILDINGS
- IN-SITU TREATMENT AREA
- U NOT DETECTED
- J ESTIMATED CONCENTRATION

UTILITY LOCATIONS BASED ON ALTA/ASCM LAND TITLE SURVEY FOR BLOCK 1290.1 – LOTS 2D,2E,15D, 15B & 16A, DATED 5/23/08

NOTE:

SEE FIGURE 2 FOR LOCATION OF DETAIL MAP.

TARGETED TREATMENT AREA 10-1
- 5 INJECTION POINTS – SPACED @ 15' O.C.
- CONTAMINATED ZONE 12'-14'
- INJECTION ZONE 10'-16'
- NUMBER OF INJECTION POINTS MAY BE ADJUSTED IN THE FIELD

AREA = APPROX. 800 SF

PROPOSED HYDRAULIC BARRIER WALL.

0 10 20 40
SCALE IN FEET

REV.	DATE	STATUS	PRPD BY	CHKD BY
	12/05/11			

Amec Foster Wheeler PROJECT No. 3480150438
DRAWING: TARGETED IN-SITU TREATMENT NORTHERN PORTION

PREPARED/DATE: STR 06/05/15
CHECKED/DATE: DN 06/05/15

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

FIGURE 5A (REVISED)
PROPOSED TARGETED IN-SITU INJECTION NORTHERN PORTION OF TREATMENT AREA 10-1
STUDY AREA 6 NORTH
JERSEY CITY, NEW JERSEY

APPENDIX A

MATERIAL SAFETY DATA SHEETS

Material Safety Data Sheet

Calcium polysulfide solution

MSDS Number 6100 (Revised: 10/25/05) 6 Pages

Section 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

1.1 Product Name ..... **Calcium polysulfide solution**
Chemical Family ..... Inorganic salt solution
Synonyms ..... Calcium polysulfide, CaPS, calcium sulfide, lime sulphur
Formula ..... CaS_x

1.2 Manufacturer ..... Tessenderlo Kerley Inc.
2255 N. 44th Street, Suite 300
Phoenix, Arizona 85008-3279
Information ....(602) 889-8300

1.3 Emergency Contact ..... (800) 877-1737 (Tessenderlo Kerley)
(800) 424-9300 (CHEMTREC)

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

2.1 Chemical Ingredients (% by wt.)

Calcium polysulfide	CAS #:1344-81-6	24 - 29%
Water	CAS #:7732-18-5	71 - 76%

(See Section 8 for exposure guidelines)

Section 3: HAZARDS IDENTIFICATION

NFPA: Health - 2 Flammability - 0 Reactivity - 1

EMERGENCY OVERVIEW

Warning:
Avoid inhalation of product fumes (hydrogen sulfide) near openings on storage container. Release of the product to the environment may cause the evolution of highly toxic hydrogen sulfide vapors. Product solution is alkaline and may cause irritation to the skin. Eye contact will cause eye irritation and possible corneal damage. Ingestion will result in irritation of tissues and the release of hydrogen sulfide in the gastrointestinal tract.

Section 3: HAZARDS IDENTIFICATION (Cont.)

3.1 POTENTIAL HEALTH EFFECTS

EYE: Contact with the eyes by product mist or solution will cause irritation and a burning sensation. Eye contact may result in severe corneal injury.

SKIN CONTACT: Contact with product mist or solution will cause skin irritation and may result in corrosion of the skin.

SKIN ABSORPTION: Absorption is unlikely to occur.

INGESTION: Ingestion of product solution will cause irritation and corrosion of the gastrointestinal tract to include nausea, vomiting and diarrhea. Contact with stomach acid will cause highly toxic hydrogen sulfide to evolve.

INHALATION: Inhalation of product vapors (hydrogen sulfide) may cause dizziness and unconsciousness possibly resulting in serious falls from elevated positions..

CHRONIC EFFECTS/CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA.

Section 4: FIRST AID MEASURES

4.1 EYES: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain immediate medical attention.

4.2 SKIN: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain immediate medical attention.

4.3 INGESTION: DO NOT INDUCE VOMITING. If victim is conscious, immediately give large quantities of water. If vomiting does occur, continue to give fluids. Obtain immediate medical attention.

4.4 INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

FLASH POINT: Not flammable (See Section 5.4) **METHOD USED:** NA

5.2 FLAMMABLE LIMITS **H_2S** **LFL**: 4% **UFL**: 44%

5.3 EXTINGUISHING MEDIA: Water spray or foam or as appropriate for combustibles involved in fire.

Section 5: FIRE FIGHTING MEASURES (Cont.)

5.4 FIRE & EXPLOSIVE HAZARDS: When heated or diluted, hydrogen sulfide vapors will evolve. This gas may form explosive mixtures with air. (See Section 5.2) Keep containers/storage vessels in fire area cooled with water spray.

5.5 FIRE FIGHTING EQUIPMENT: Because of the possible presence of toxic gases and the irritating nature of the product, wear self-contained breathing apparatus, positive pressure, (MSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Small releases: Confine and absorb small releases on sand, earth or other inert absorbent. Released material may contain residual sulfides. Spray with weak (~5%) hydrogen peroxide to oxidize sulfides.

6.2 Large releases: Confine area to qualified personnel. Wear proper protective equipment. Shut off release if safe to do so. Dike spill area to prevent runoff into sewers, drains (possible toxic or explosive mixtures) or surface waterways (potential aquatic toxicity). Spray product vapors with fine water spray or mist. Recover as much of the solution as possible. Treat remaining material as a small release (above).

Section 7: HANDLING and STORAGE

7.1 Handling: Handle in enclosed containers to avoid breathing product. Avoid contact with skin and eyes. Dilute only in enclosed containers. Use in a well ventilated area. Wash thoroughly after handling.

7.2 Storage: Store in well ventilated areas in enclosed containers. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store tote, drums and small containers out of direct sunlight at moderate temperatures [<90ºF (32ºC)]. (See Section 10.4 for materials of construction)

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 RESPIRATORY PROTECTION: Have self-contained breathing apparatus, positive pressure, MSHA/NIOSH (approved or equivalent) available in case of spillage or equipment failure.

8.2 SKIN PROTECTION: Gloves, boots, and chemical suit should be worn to prevent liquid contact. Wash contaminated clothing prior to reuse. Contaminated shoes cannot be cleaned and should be discarded

8.3 EYE PROTECTION: Chemical goggles and a full face shield.

8.4 EXPOSURE GUIDELINES:

	OSHA		ACGIH	
	TWA	STEL	TLV	STEL
Hydrogen sulfide	20 ppm (ceiling)		10 ppm (ceiling)	

8.5 ENGINEERING CONTROLS: Use adequate exhaust ventilation to prevent inhalation of product vapors. Maintain eyewash/safety shower in areas where chemical is handled.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 APPEARANCE:	Ruby red liquid
9.2 ODOR:	Strong oder of rotten eggs
9.3 BOILING POINT:	Not determined
9.4 VAPOR PRESSURE:	Not determined (Believed to be minimal)
9.5 VAPOR DENSITY:	Not determined
9.6 SOLUBILITY IN WATER:	Dissolves with precipitation of elemental sulfur.
9.7 SPECIFIC GRAVITY:	1.20 - 1.27 (10.0 - 10.6 lbs/gal)
9.8 FREEZING POINT:	Not determined
9.9 pH:	10.0 - 11.7
9.10 VOLATILE:	Not applicable

Section 10: STABILITY and REACTIVITY

10.1 STABILITY: This is a stable material

10.2 HAZARDOUS POLYMERIZATION: Will not occur.

10.3 HAZARDOUS DECOMPOSITION PRODUCTS: Heating this product will evolve hydrogen sulfide vapors. Continued heating will also cause oxides of sulfur to be released.

10.4 INCOMPATIBILITY: Strong oxidizers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness. Acids, acidic materials or dilution with water will cause the release of hydrogen sulfide, a highly toxic gas.

Section 11: TOXICOLOGICAL INFORMATION

11.1 ORAL: Oral Rat LD_{50} : 820 mg/kg

11.2 DERMAL: Dermal Rabbit LD_{50} : 2,000 mg/kg

11.3 INHALATION: INH-Rat LC_{50}: 3.6 mg/L (4 Hr. Exposure)

11.4 CHRONIC/CARCINOGENICITY: No evidence available

11.5 TERATOLOGY: Data not available

11.6 REPRODUCTION: Data not available

11.7 MUTAGENICITY: Data not available

Section 12: ECOLOGICAL INFORMATION

No data available.

Section 13: DISPOSAL CONSIDERATIONS

If released to the environment for other than its intended purpose, this product should be checked to see it meets the criteria of a reactive sulfides D003, Reactive waste.

Section 14: TRANSPORT INFORMATION

14.1 DOT Shipping Name: Calcium Polysulfide solution

14.2 DOT Hazard Class: NA

14.3 UN/NA Number: NA

14.4 Packing Group: NA

14.5 DOT Placard: NA

14.6 DOT Label(s): NA

14.7 IMO Shipping Name: Not Determined

14.8 RQ (Reportable Quantity): NA

14.9 RR STCC Number: Not Determined

Section 15: REGULATORY INFORMATION

15.1 OSHA: This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

15.2 SARA TITLE III:

a. **EHS** (Extremely Hazardous Substance) List: No

b. Section 311/312, (Tier I,II) Categories:

Immediate (acute)	Yes
Fire	No
Sudden release	No
Reactivity	Yes
Delayed (chronic)	No

c. Section 313 (Toxic Release Reporting-Form R): No

Chemical Name	CAS Number	Concentration

d. **TPQ** (Threshold Planning Quantity): No

15.3 CERCLA/SUPERFUND: RQ (Reportable Quantity) No

15.4 TSCA (Toxic Substance Control Act) Inventory List: Yes

Section 15: REGULATORY INFORMATION (Cont.)

15.5 RCRA (Resource Conservation and Recovery Act) Status:	Possible D003 (See Section 13)
15.6 WHMIS (Canada) Hazard Classification:	NA
15.7 DOT Hazardous Material: (See Section 14)	No
15.8 CAA Hazardous Air Pollutant (HAP)	No

Section 16: OTHER INFORMATION

REVISIONS: The entire MSDS was reformatted to comply to ANSI Standard Z400.1-1993, by Technical Services-Tessenderlo Kerley, Inc.

Address updated, 4/30/99
Section 8.3, Eye Protection revised and logo revised, 4/29/02
Revised Section 2.1, Ingredients, 3, Hazard Identification, 9,Physical characteristics, 11, Toxicological Information, 14, Transportation, 1/14/05
Section 8.1, Respiratory Protection, revised, 6/20/05
Section 11.1, 11.2, revised toxicity data, 10/25/05.

THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG, AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSARY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE MATERIAL SAFETY DATA SHEETS PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.

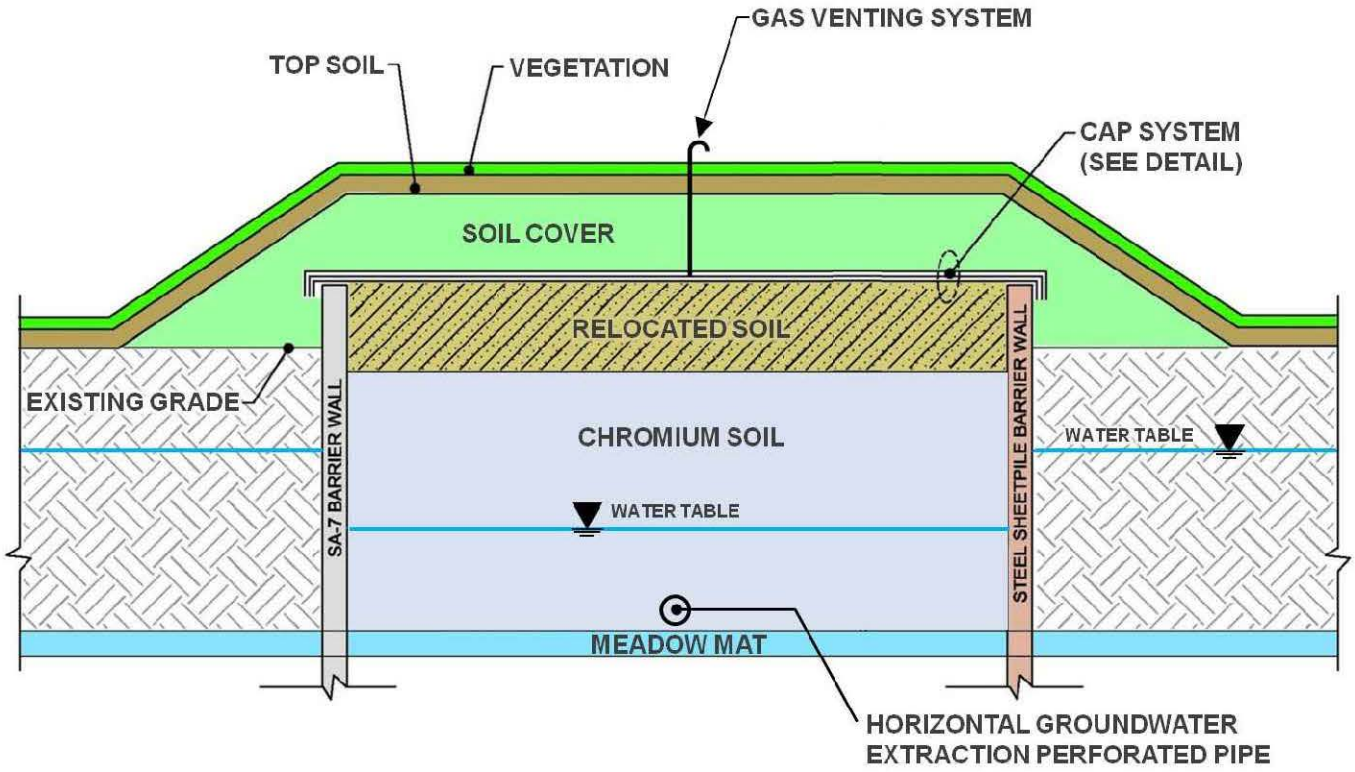
APPENDIX E

ENGINEERING CONTROL FIGURES FROM DEED NOTICES

DEED NOTICE #1
SA-6 SOUTH OPEN SPACE

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (1) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (2) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT WAS DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\571004\deed notice\deed notice 1\5100\CURRENT DRAWINGS\3480150438-5710-CPCS-1000.dwg Tue, 14 Nov 2017 - 7:38am



CHROMIUM REMEDY COMPONENTS

NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150438-5710-CPCS-1000		amec foster wheeler	**EXHIBIT B-2A** CHROMIUM REMEDY COMPONENTS BLOCK 24601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE #1 SA-6 SOUTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 03/10/16	*CHECKED/DATE:* DEN 03/10/16	ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	

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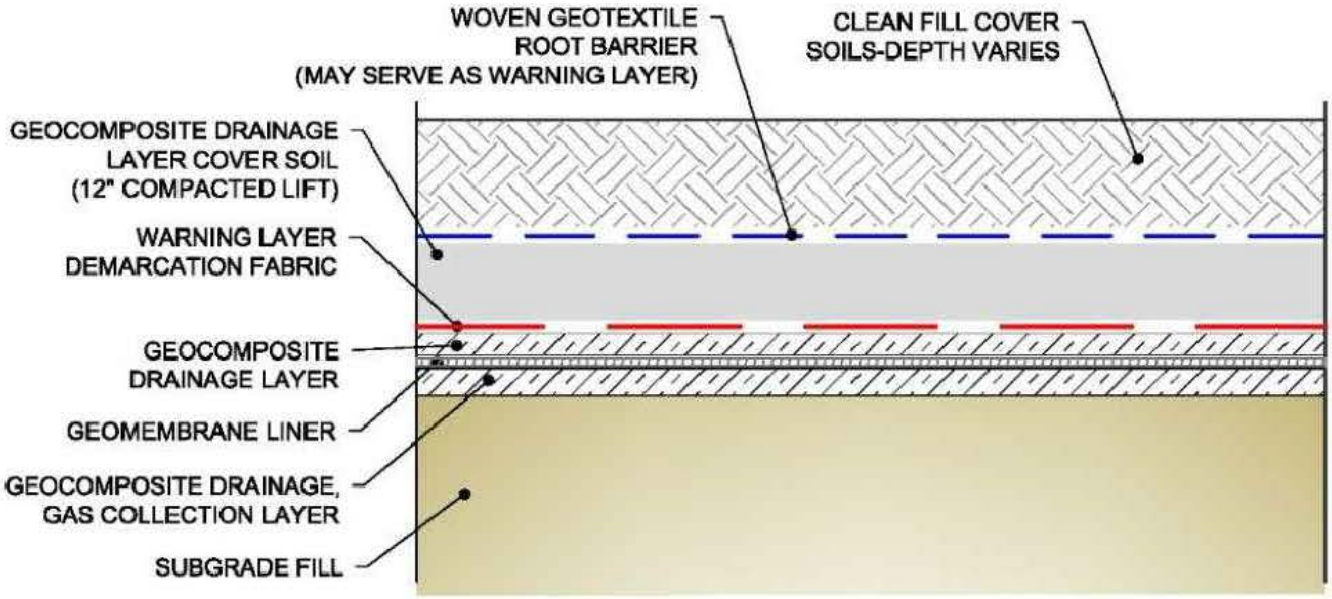
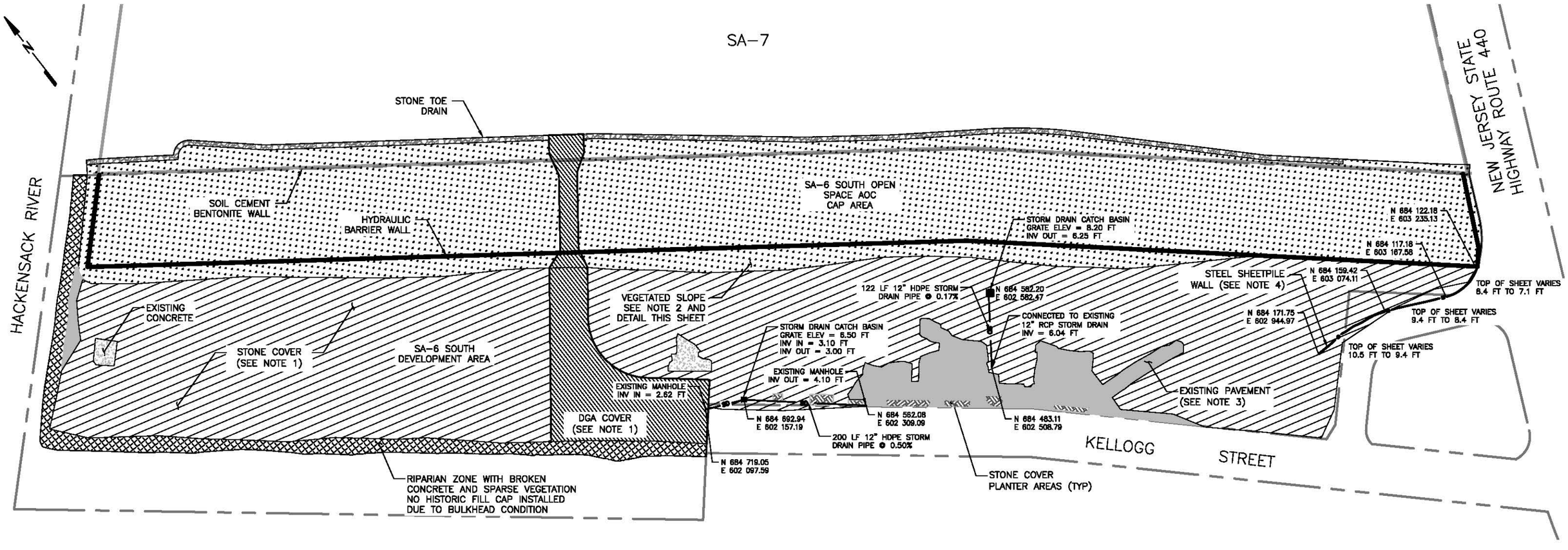
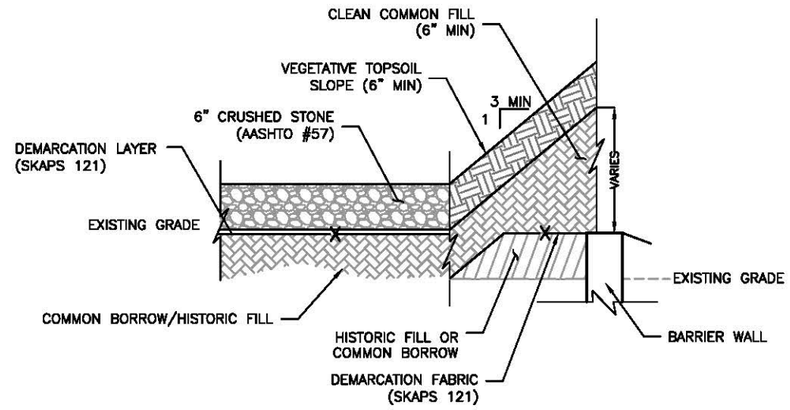


CAP SYSTEM DETAIL

NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150438-5710-CSD0-1000		amec foster wheeler	**EXHIBIT B-2B** CAP SYSTEM DETAIL BLOCK 21601 LOTS 1-8 & BLOCK 21901 LOT 8 DEED NOTICE # 1 SA-6 NORTH OPEN SPACE AOC PROPERTY JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 03/10/16	CHECKED/DATE: DEN 01/31/17	ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	





NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA–7

TYPICAL VEGETATED SLOPE
NTS

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE ON THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL AS SHOWN ON THE TYPICAL VEGETATED SLOPE DETAIL. THE VEGETATED SLOPE ALONG SA–7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. EXISTING PAVEMENT WAS FIELD INSPECTED BY LSRP AND SUBJECT TO MINOR CRACK FILLING TO SATISFY HISTORIC FILL CAP REQUIREMENTS.
4. STEEL SHEETPILE WALL WAS INSTALLED AS EXCAVATION SUPPORT ALONG THIS AREA AND THEN CUT BELOW CURRENT GRADE AND LEFT IN PLACE. THE TOP OF SHEETPILE IS GENERALLY 0.5 TO 2.0 FT BELOW CURRENT GRADES.

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: AS BUILT RESTORATION PLAN SA–6 SOUTH – SHEET 001 12/12/16

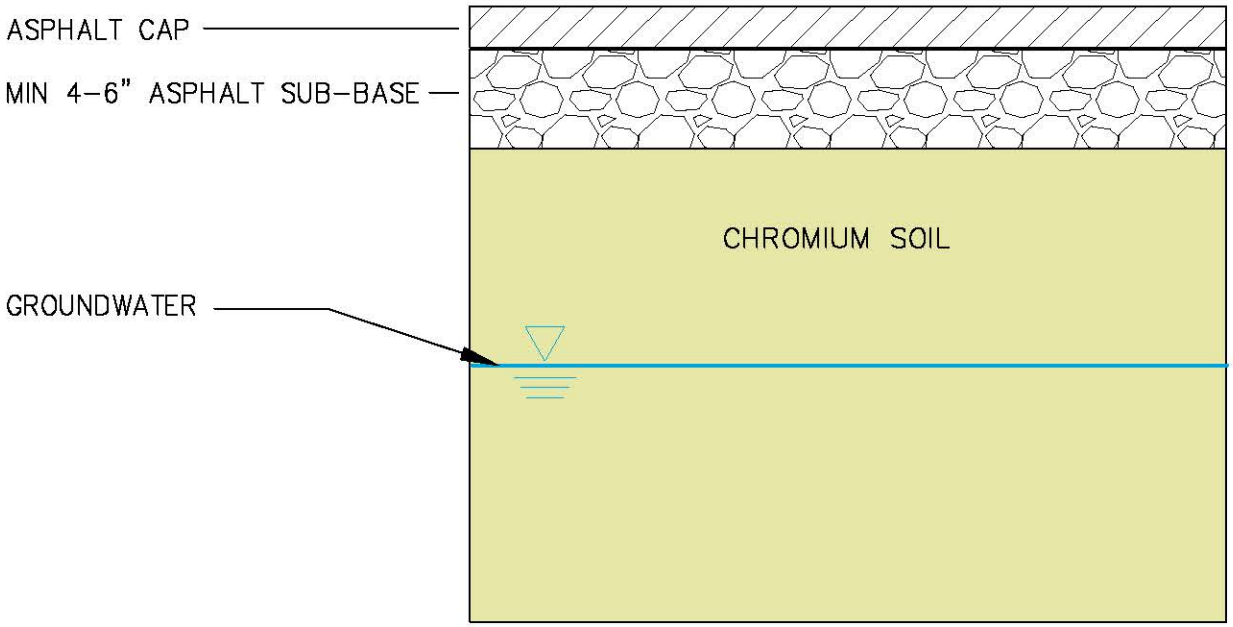
PROJECT NAME & LOCATION: HONEYWELL SA–6 REMEDIATION JERSEY CITY, NJ

EXHIBIT B-2C

DEED NOTICE #2
SA-6 SOUTH RT 440 DEFERRED AREA

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (1) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (2) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\571004\deed notice\deed notice 2\3480150450-5100-B200-2000.dwg Tue, 14 Nov 2017 - 1:34pm scott.rudkin

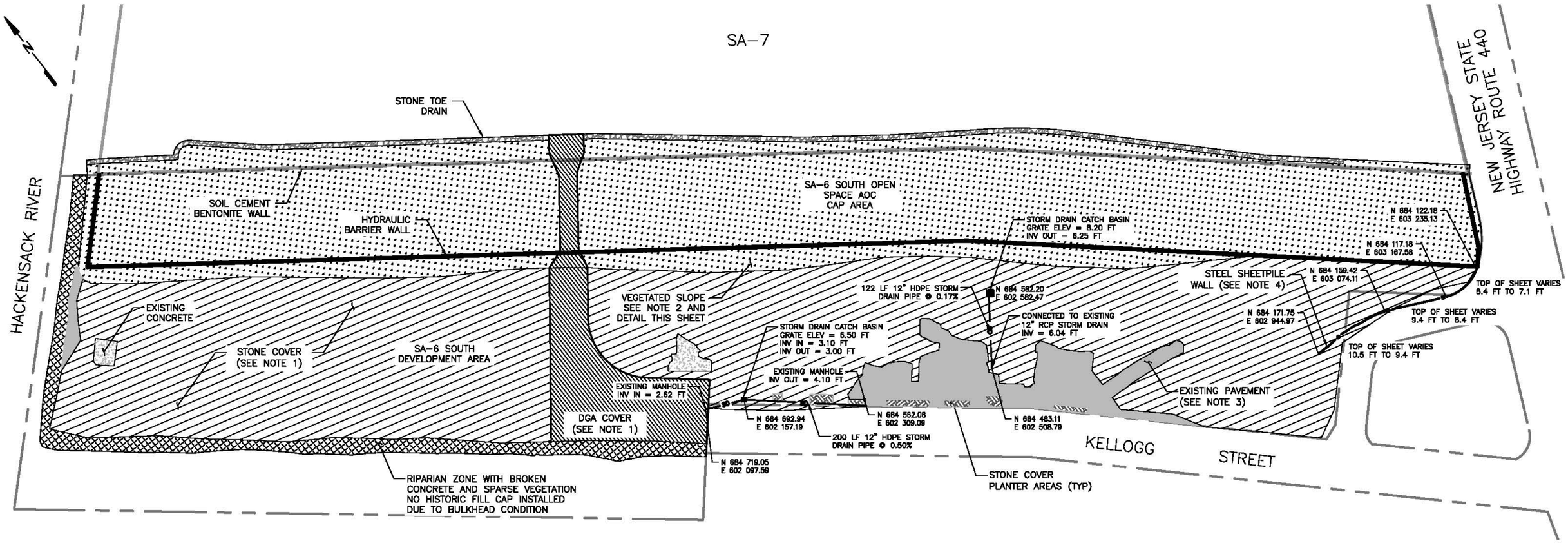


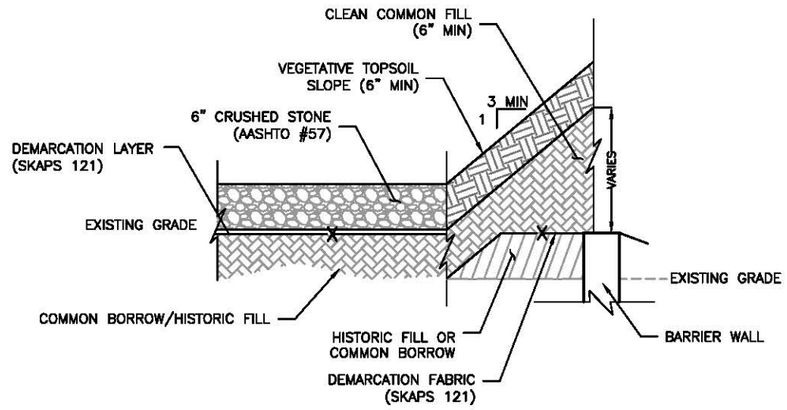
CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150450-5100-B200-2000	
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1B
CAP SYSTEM DETAIL
BLOCK 24601 LOT 8
DEED NOTICE #2 SA-6 SOUTH
DEFERRED AREA ADJACENT TO ROUTE 440 R.O.W.
JERSEY CITY, NEW JERSEY





NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA–7

TYPICAL VEGETATED SLOPE
NTS

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE ON THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL AS SHOWN ON THE TYPICAL VEGETATED SLOPE DETAIL. THE VEGETATED SLOPE ALONG SA–7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. EXISTING PAVEMENT WAS FIELD INSPECTED BY LSRP AND SUBJECT TO MINOR CRACK FILLING TO SATISFY HISTORIC FILL CAP REQUIREMENTS.
4. STEEL SHEETPILE WALL WAS INSTALLED AS EXCAVATION SUPPORT ALONG THIS AREA AND THEN CUT BELOW CURRENT GRADE AND LEFT IN PLACE. THE TOP OF SHEETPILE IS GENERALLY 0.5 TO 2.0 FT BELOW CURRENT GRADES.

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: AS BUILT RESTORATION PLAN SA–6 SOUTH – SHEET 001 12/12/16

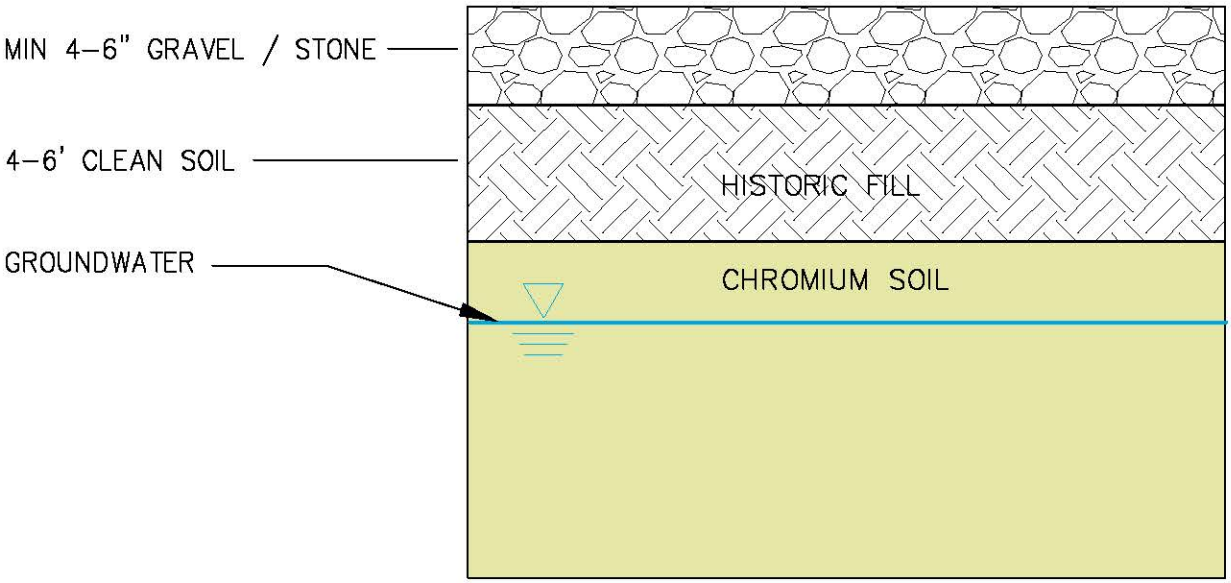
PROJECT NAME & LOCATION: HONEYWELL SA–6 REMEDIATION JERSEY CITY, NJ

EXHIBIT B-1C

DEED NOTICE #3
SA-6 SOUTH SITE 163

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (i) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (ii) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\571004\deed notice\deed notice 3\3480150450-5100-B200-3000.dwg Tue, 14 Nov 2017 - 1:36pm scott.radkin



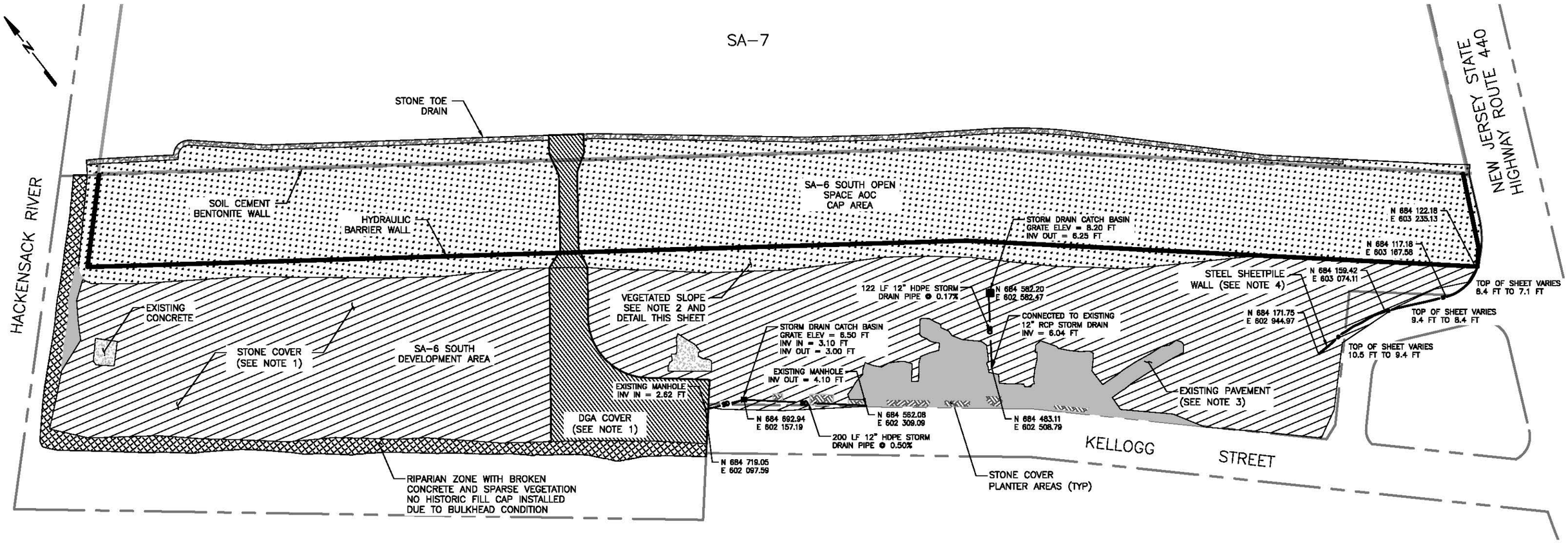
CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150450-5100-B200-3000	
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1B
CAP SYSTEM DETAIL
BLOCK 24601 LOT 11
DEED NOTICE # 3 SA-6 SOUTH SITE 163
JERSEY CITY, NEW JERSEY



NOTE:

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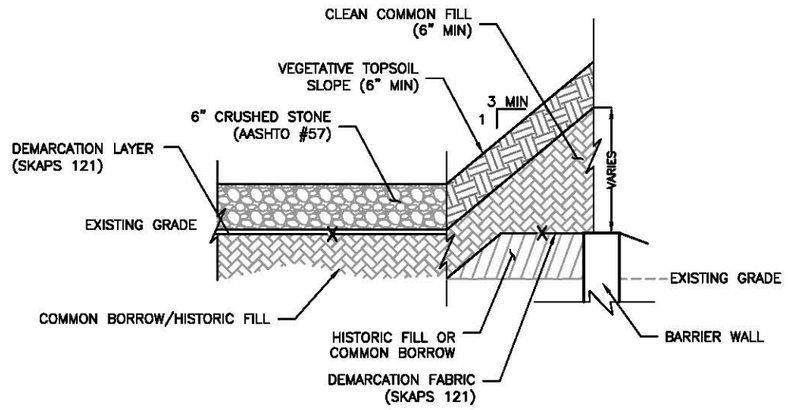


NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA–7

TYPICAL VEGETATED SLOPE
NTS

EXHIBIT B-1C

STONE COVER | STONE COVER IN PLANTER AREAS | STEEL SHEETPILE WALL
VEGETATED COVER | RIPARIAN ZONE | STORM DRAIN PIPE
PAVEMENT COVER | DGA COVER | STORM DRAIN CATCH BASIN
CONCRETE COVER | STONE TOE DRAIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

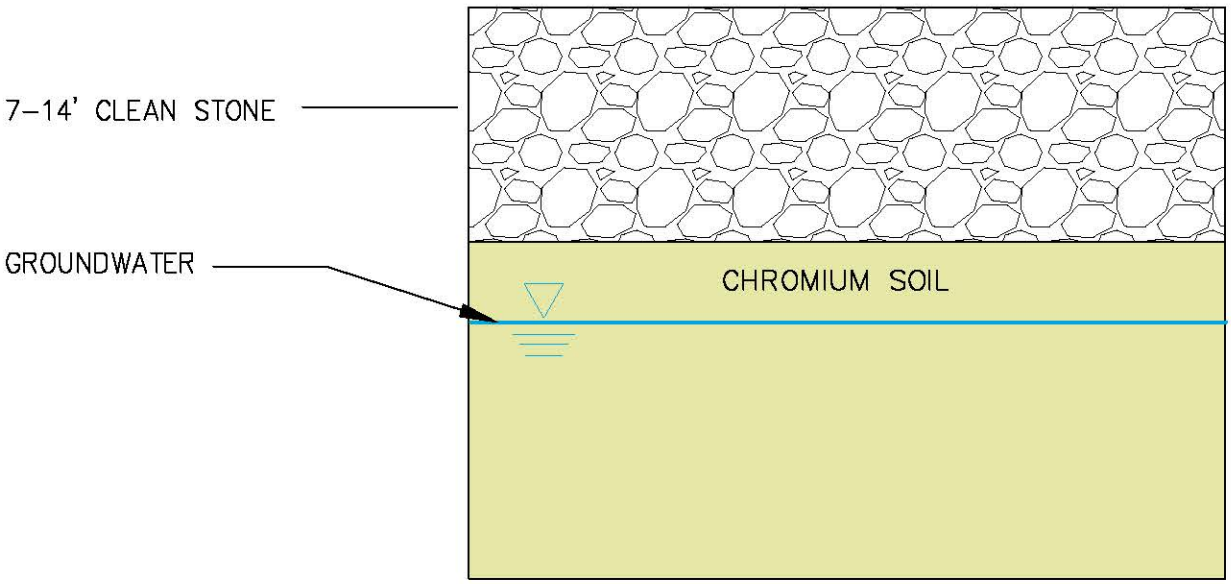
DRAWING NAME: AS BUILT RESTORATION PLAN SA–6 SOUTH – SHEET 001 12/12/16

PROJECT NAME & LOCATION: HONEYWELL SA–6 REMEDIATION JERSEY CITY, NJ

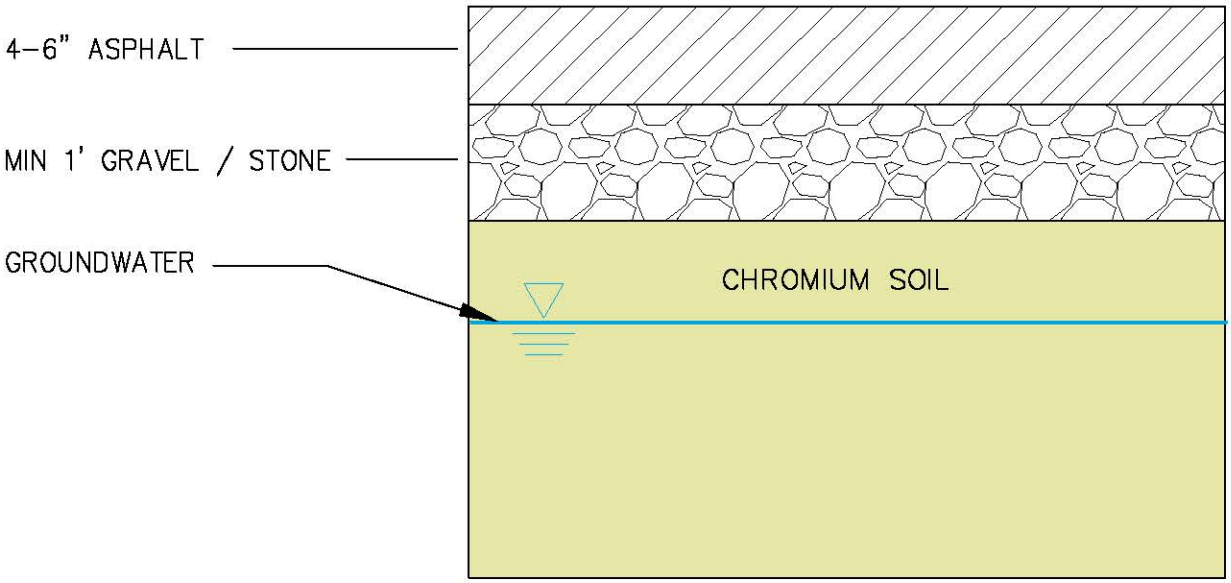
DEED NOTICE #4
SA-6 SOUTH SITE 073 AND SA-7

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 SOUTH\3480150488\5710\57100\deed notice\deed notice 4\3480150450-5100-B200-4000.dwg Tue, 14 Nov 2017 - 1:36pm scott.rudkin

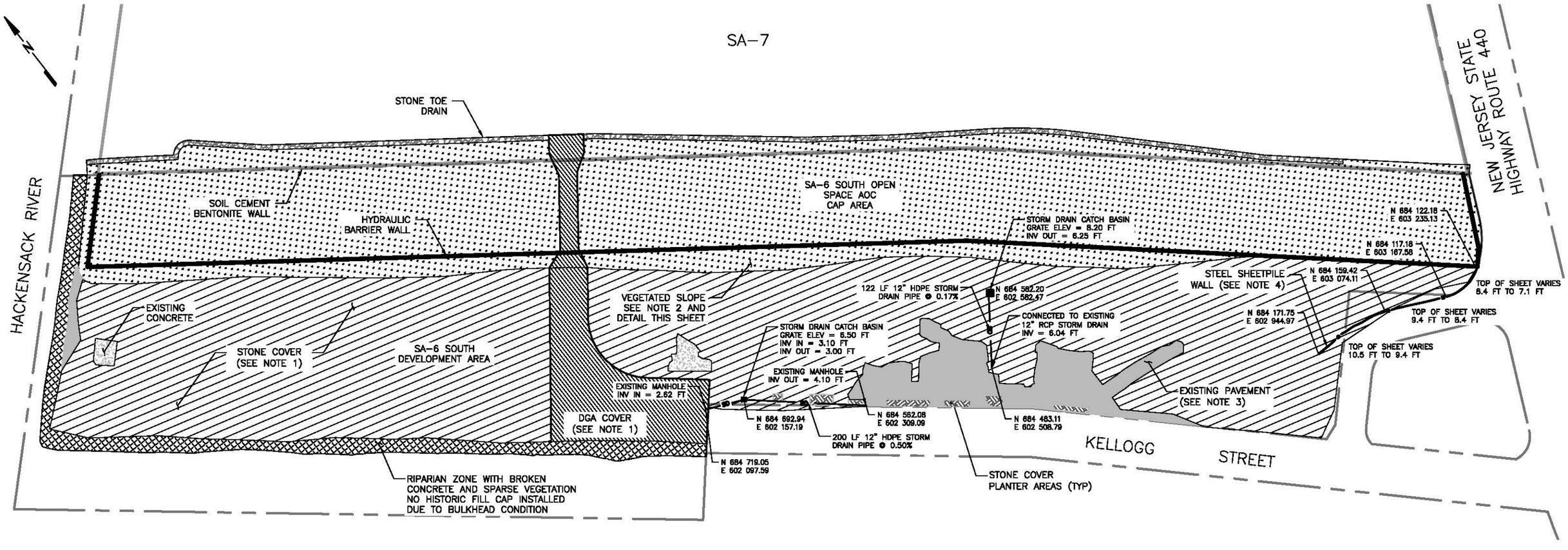


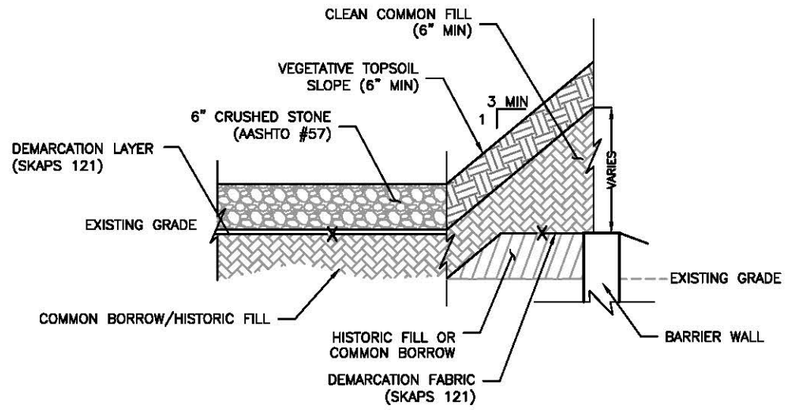
CAP SYSTEM DETAIL
TRACT 1
NTS



CAP SYSTEM DETAIL
TRACT 2
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150450-5100-B200-4000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAILS BLOCK 24601 LOT 1 & BLOCK 21901 LOTS 8 & 10 DEED NOTICE # 4 SA-6 SOUTH SITE 073 DEFERRED AREA AND SA-7 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 01/25/17 | *CHECKED/DATE:* NW 01/31/17		





NOTE: NO HISTORIC FILL SHALL BE PLACED ON SA–7

TYPICAL VEGETATED SLOPE
NTS

NOTE:

1. REFER TO FIGURE 2 FOR CONSTRUCTION CONTROL GRID AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
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STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
STONE COVER IN PLANTER AREAS
RIPARIAN ZONE
DGA COVER
STONE TOE DRAIN
STEEL SHEETPILE WALL
STORM DRAIN PIPE
STORM DRAIN CATCH BASIN

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	12/12/16	EJP	AE	AE	AS BUILT RESTORATION PLAN

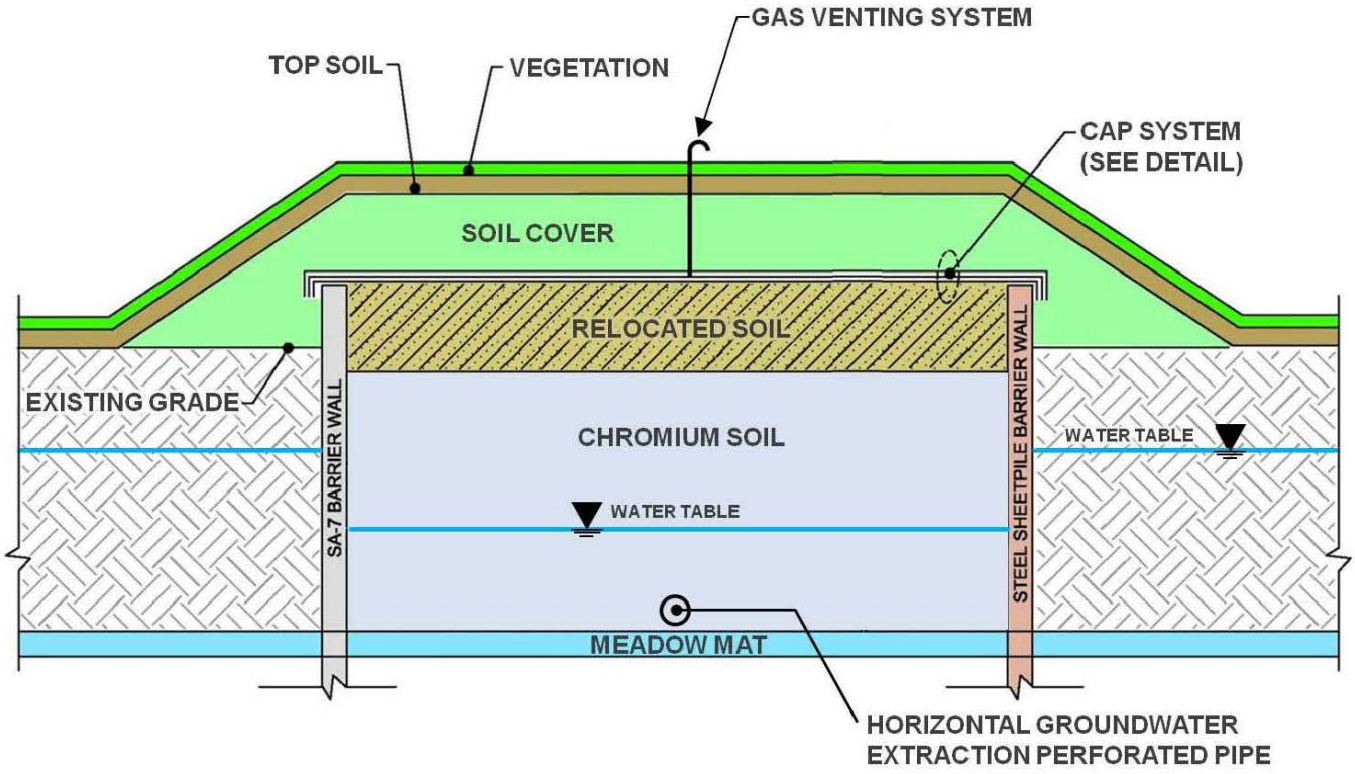
ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME: AS BUILT RESTORATION PLAN SA–6 SOUTH – SHEET 001 12/12/16

PROJECT NAME & LOCATION: HONEYWELL SA–6 REMEDIATION JERSEY CITY, NJ

EXHIBIT B-1C

DEED NOTICE #5
SA-6 NORTH OPEN SPACE



CHROMIUM REMEDY COMPONENTS

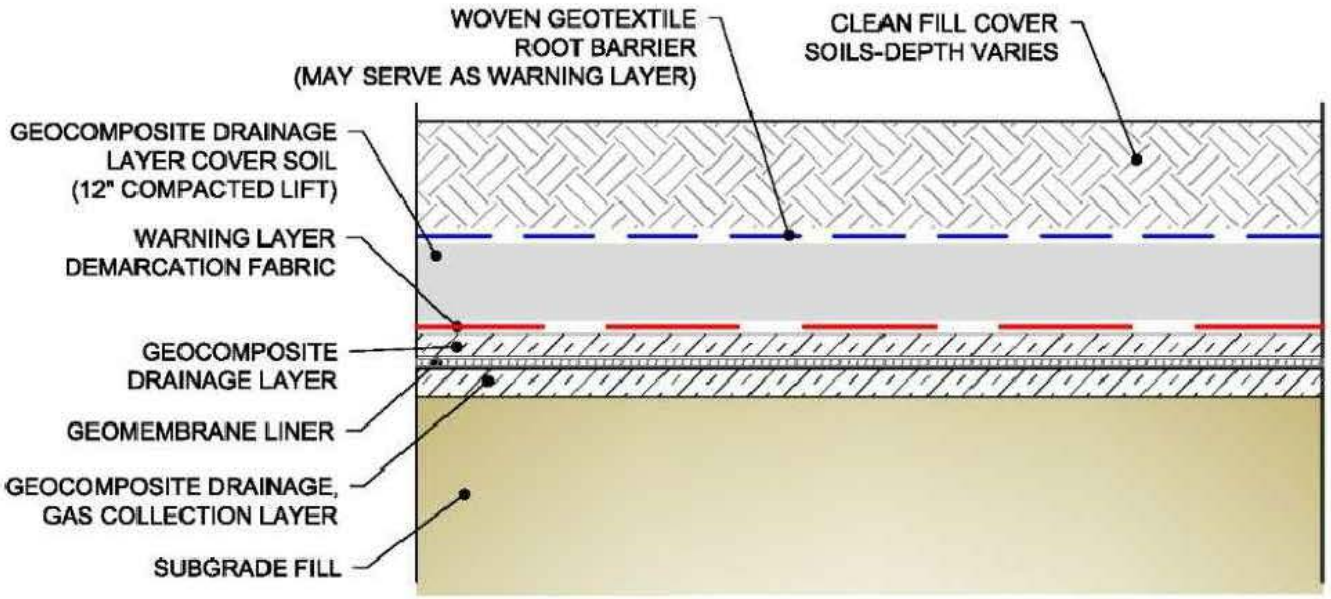
NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150487-6100-CPCS-5000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-2A** CHROMIUM REMEDY COMPONENTS BLOCK 21901 LOTS 5-10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE # 5
PREPARED/DATE: STR 03/10/16	CHECKED/DATE: DEN 01/31/17		

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\61001\DEED NOTICE\DN 5\3480150487-6100-CPCS-5000.dwg Wed, 29 Nov 2017 - 9:06am scott.rudkin

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (1) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (2) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\61001\DEED NOTICE\DN 5\3480150487-6100-CSDD-5000.dwg Wed, 29 Nov 2017 - 9:07am scott.rudkin



CAP SYSTEM DETAIL

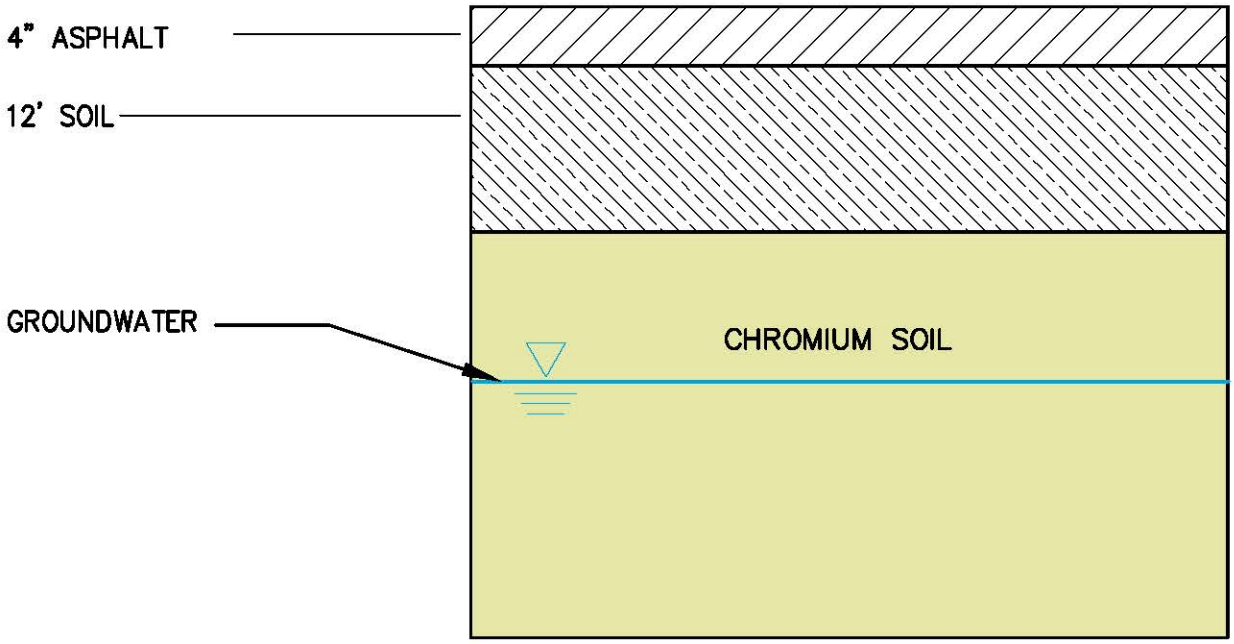
NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150487-6100-CSDD-5000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619
PREPARED/DATE: STR 03/10/16	CHECKED/DATE: DEN 01/31/17	

EXHIBIT B-2B
CAP SYSTEM DETAIL
BLOCK 21901 LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE # 5

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT, (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 5\3480150487-6100-C005-0000.dwg Wed, 29 Nov 2017 - 9:57am scott.rudkin

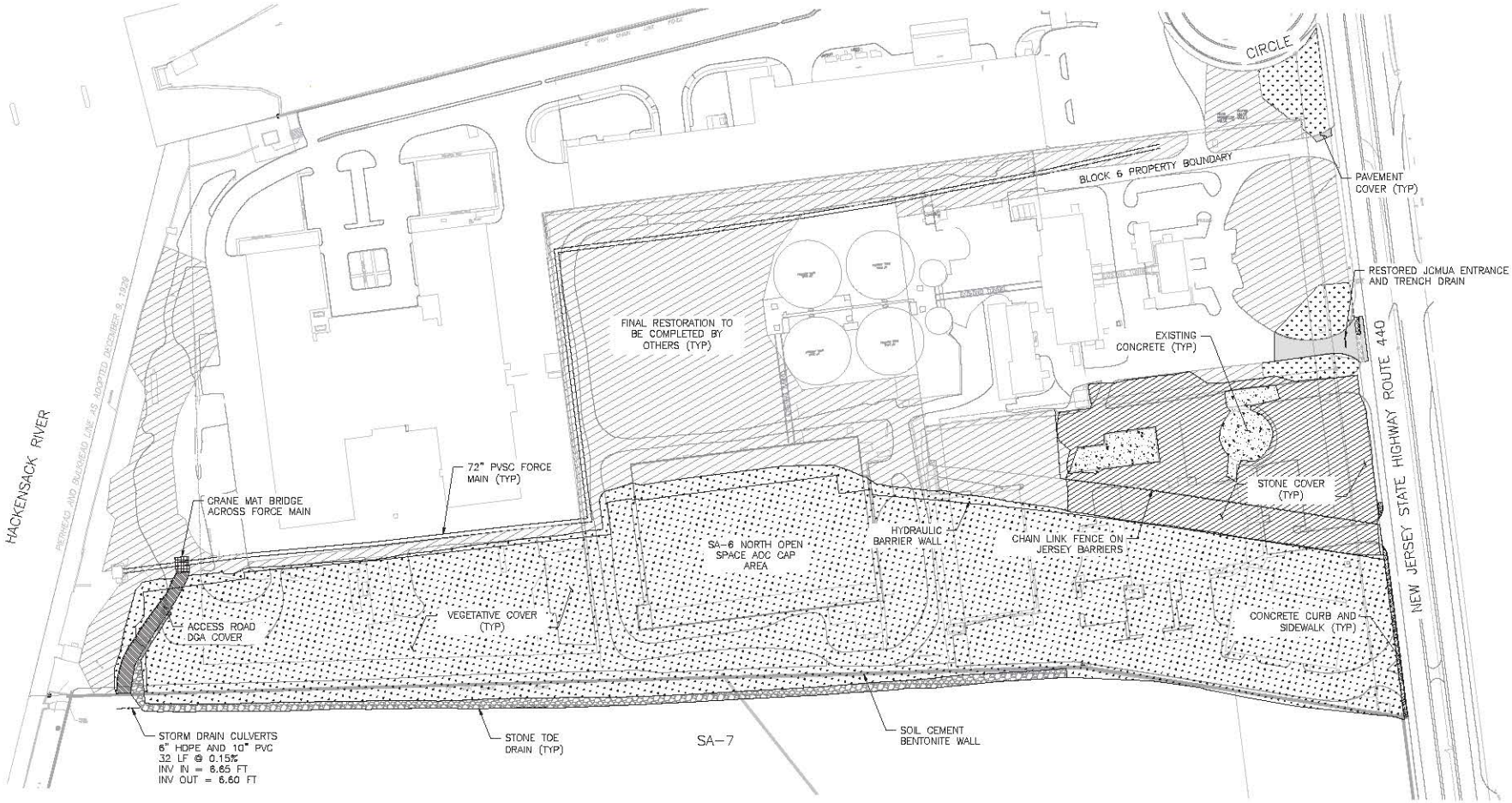


CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150487-6100-C005-0000	
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler
ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-2C
CAP SYSTEM DETAIL
BLOCK 21901; LOTS 5-10
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE # 5



NOTE:

1. REFER TO CONSTRUCTION CONTROL GRID FIGURE AND ATTACHED TABLES FOR SURVEY DOCUMENTATION OF 6 INCH GRAVEL HISTORIC FILL CAP INSTALLATION.
2. OPEN SPACE CAP AREA WITHIN LIMITS OF THE BARRIER WALLS IS COVERED WITH CLEAN IMPORTED SOILS TO THE DEPTHS IDENTIFIED IN THE DESIGN. THE VEGETATED SLOPE WITHIN THE DEVELOPMENT AREA IS COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN IMPORTED FILL. THE VEGETATED SLOPE ALONG SA-7 WAS CONSTRUCTED ENTIRELY FROM CLEAN IMPORTED FILL.
3. REMAINING RESTORATION AREAS IDENTIFIED ON THE CHROMIUM REMEDY 100% DESIGN DRAWINGS WILL BE ADDRESSED AS PART OF THE NON CHROMIUM REMEDIATION WORK CURRENTLY BEING COMPLETED. FINAL RESTORATION OF ALL AREAS IS SCHEDULED TO BE COMPLETE IN MARCH 2017.

EXHIBIT B-2D

STONE COVER
VEGETATED COVER
PAVEMENT COVER
CONCRETE COVER
DGA COVER
RESTORATION BY OTHERS
STONE TOE DRAIN
SD STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

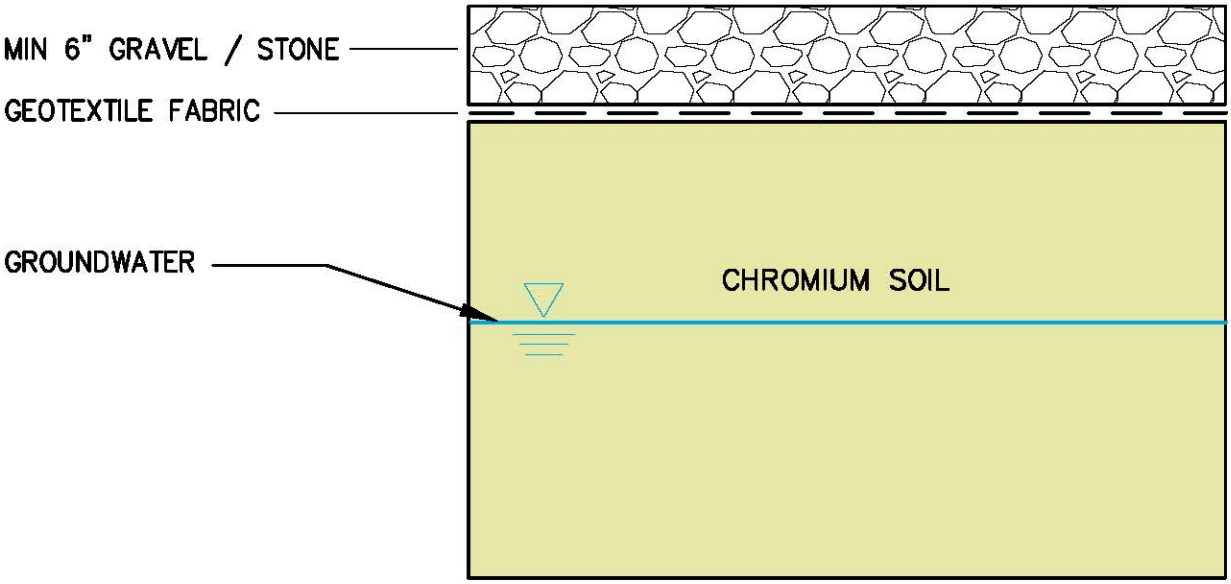
DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH - SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

DEED NOTICE #6
SA-6 NORTH RT 440 DEFERRED AREA

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (1) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED, AND (2) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

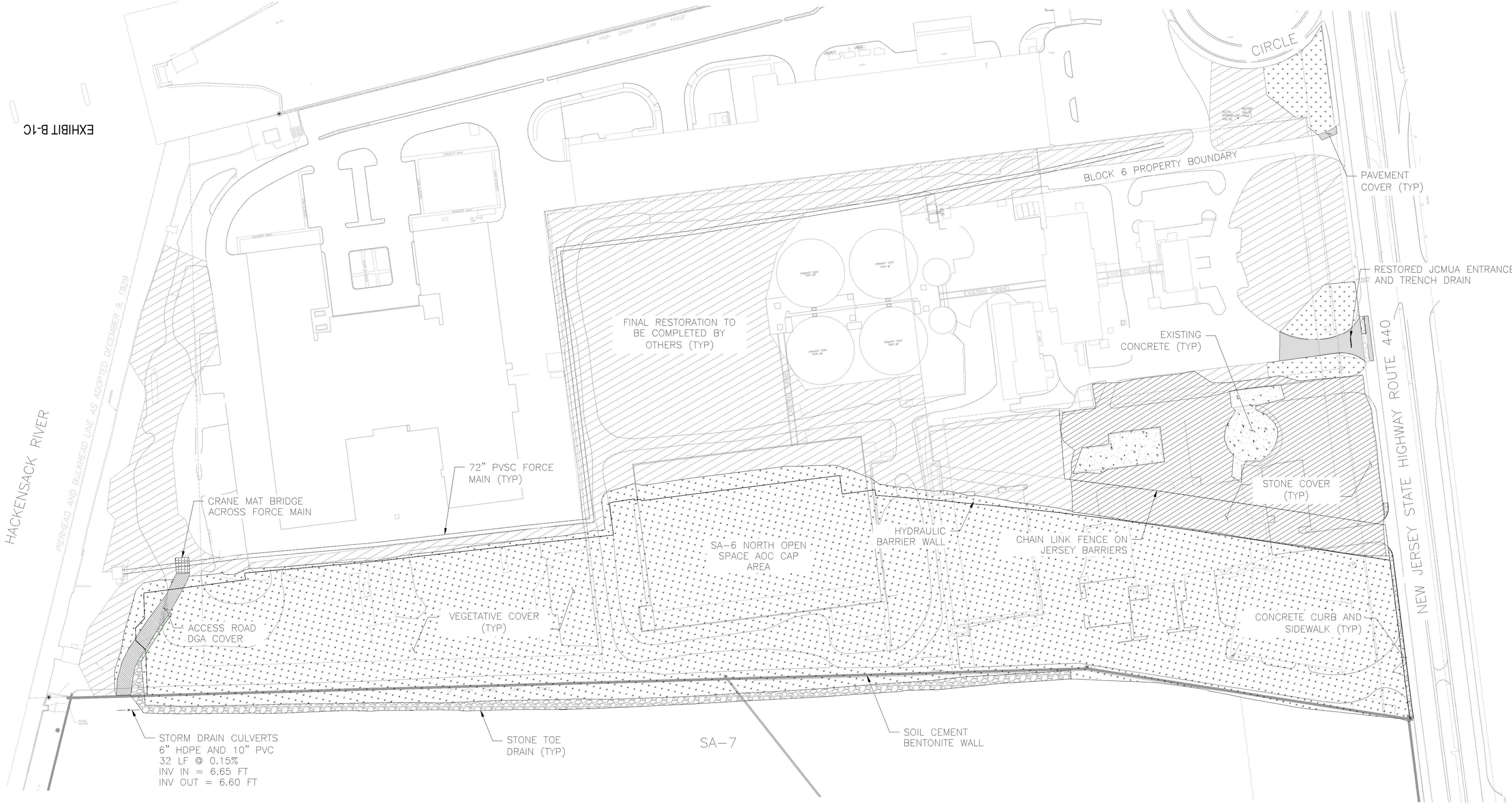
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 6\3480150450-6100-B206-0000.dwg Tue, 28 Nov 2017 - 10:22am scott.rudkin



CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150450-6100-B206-0000	amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 21901; LOT 5 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE # 6
PREPARED/DATE: STR 01/25/17 | *CHECKED/DATE:* NW 01/31/17		

EXHIBIT B-1C



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STONE COVER
DGA COVER
VEGETATED COVER
RESTORATION BY OTHERS
PAVEMENT COVER
STONE TOE DRAIN
CONCRETE COVER
SD — STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

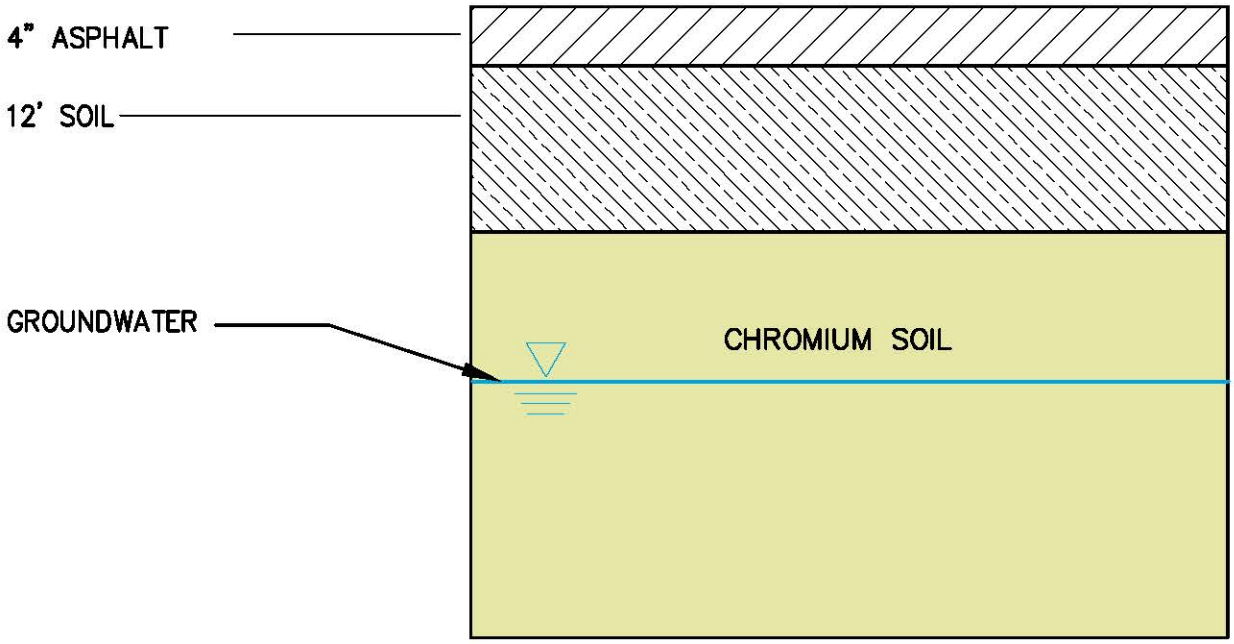
DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH – SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

DEED NOTICE #7
SA-6 NORTH TA-10-1

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT, (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 7\3480150487-6100-B207-0000.dwg Tue, 28 Nov 2017 - 10:30am scott.rudkin



CAP SYSTEM DETAIL
NTS

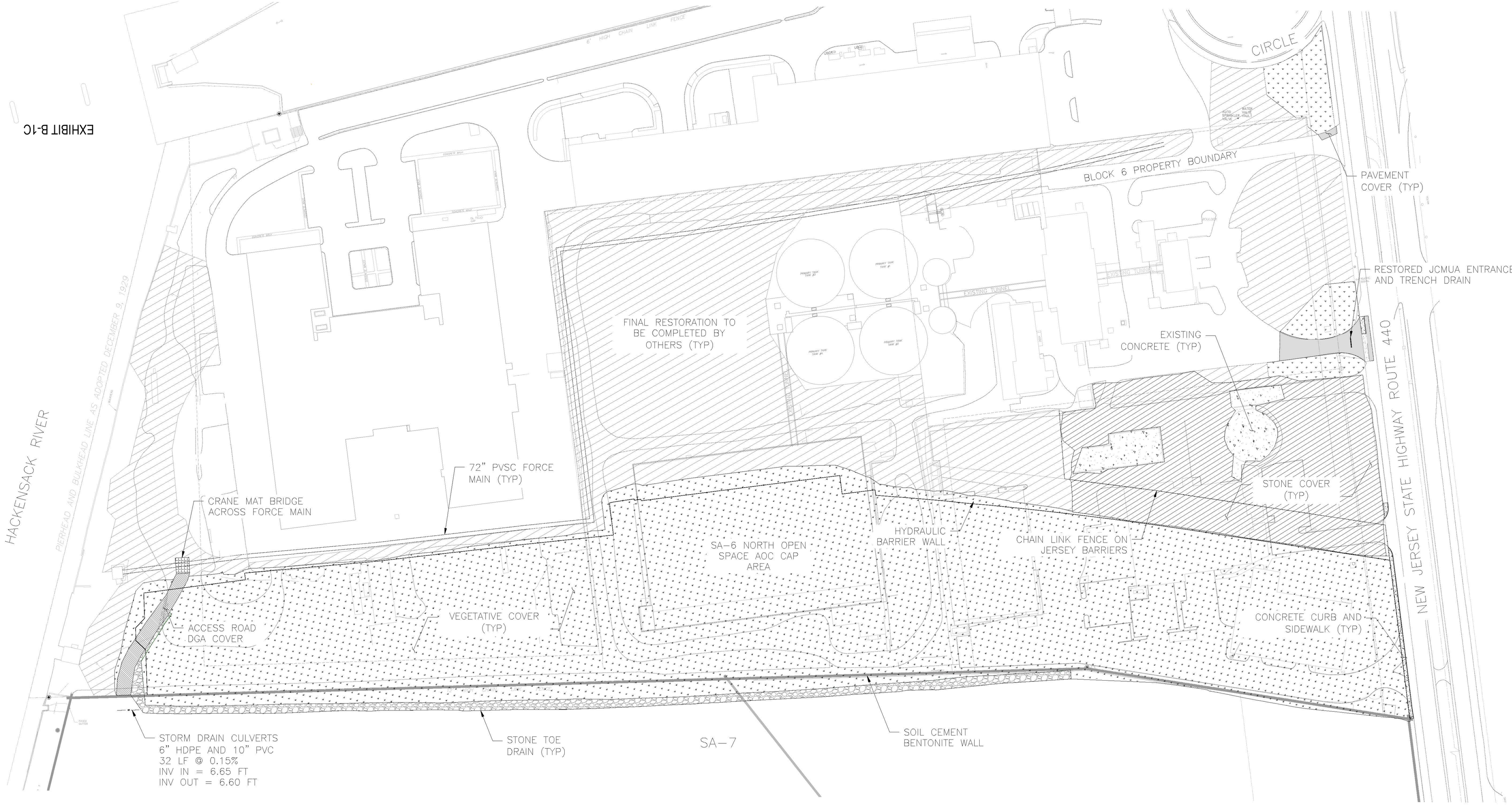
Amec Foster Wheeler PROJECT No. 3480150488 *DRAWING:* 3480150487-6100-B207-0000	
PREPARED/DATE: STR 01/25/17	*CHECKED/DATE:* NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE. Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1B
CAP SYSTEM DETAIL
BLOCK 21901, LOT 9
SA-6 NORTH
JERSEY CITY, NEW JERSEY
DEED NOTICE # 7

EXHIBIT B-1C



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DGA COVER
VEGETATED COVER
RESTORATION BY OTHERS
PAVEMENT COVER
STONE TOE DRAIN
CONCRETE COVER
SD — STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

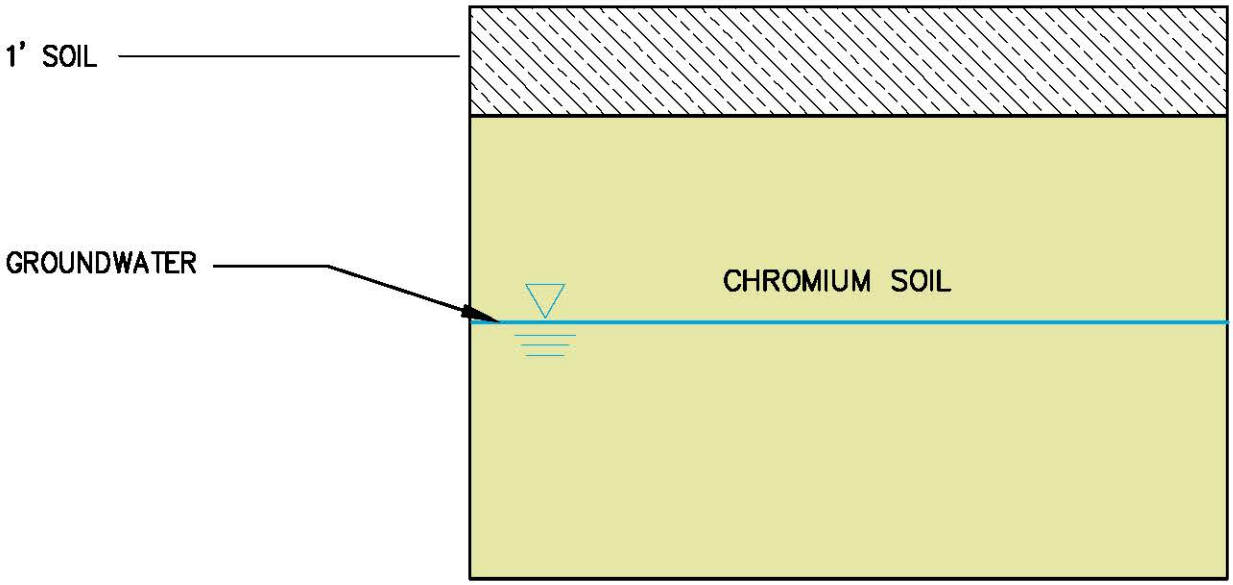
DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH – SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

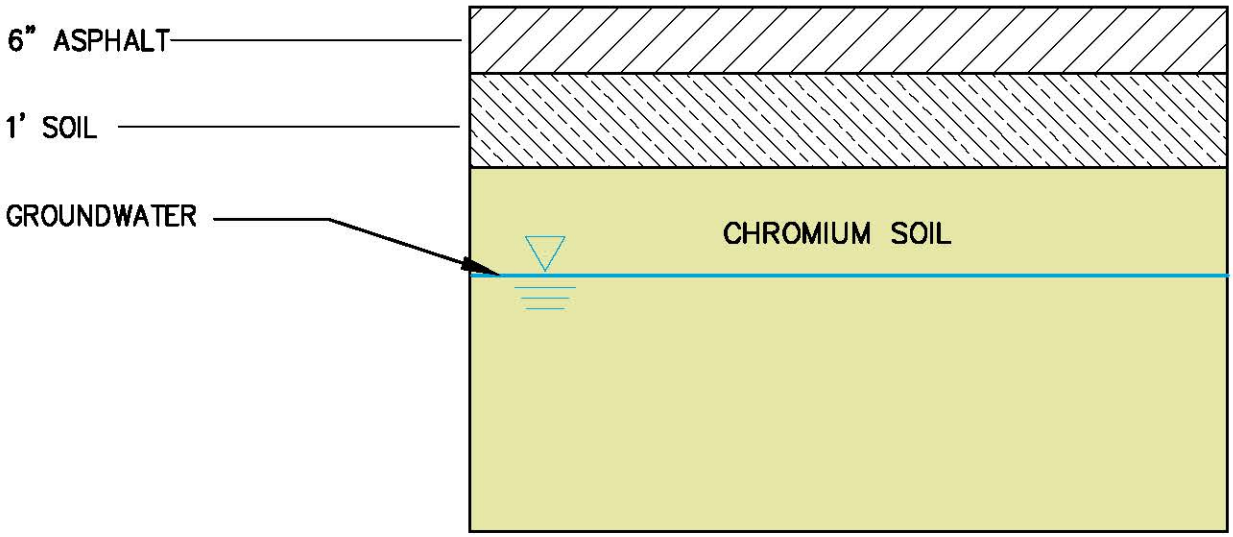
DEED NOTICE #9
SA-6 NORTH FORMER TRENK

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT: (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSES FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610D01\DEED NOTICE\DN 9\3480150487-6100-B209-0000.dwg Tue, 28 Nov 2017 - 10:44am scott.rudkin



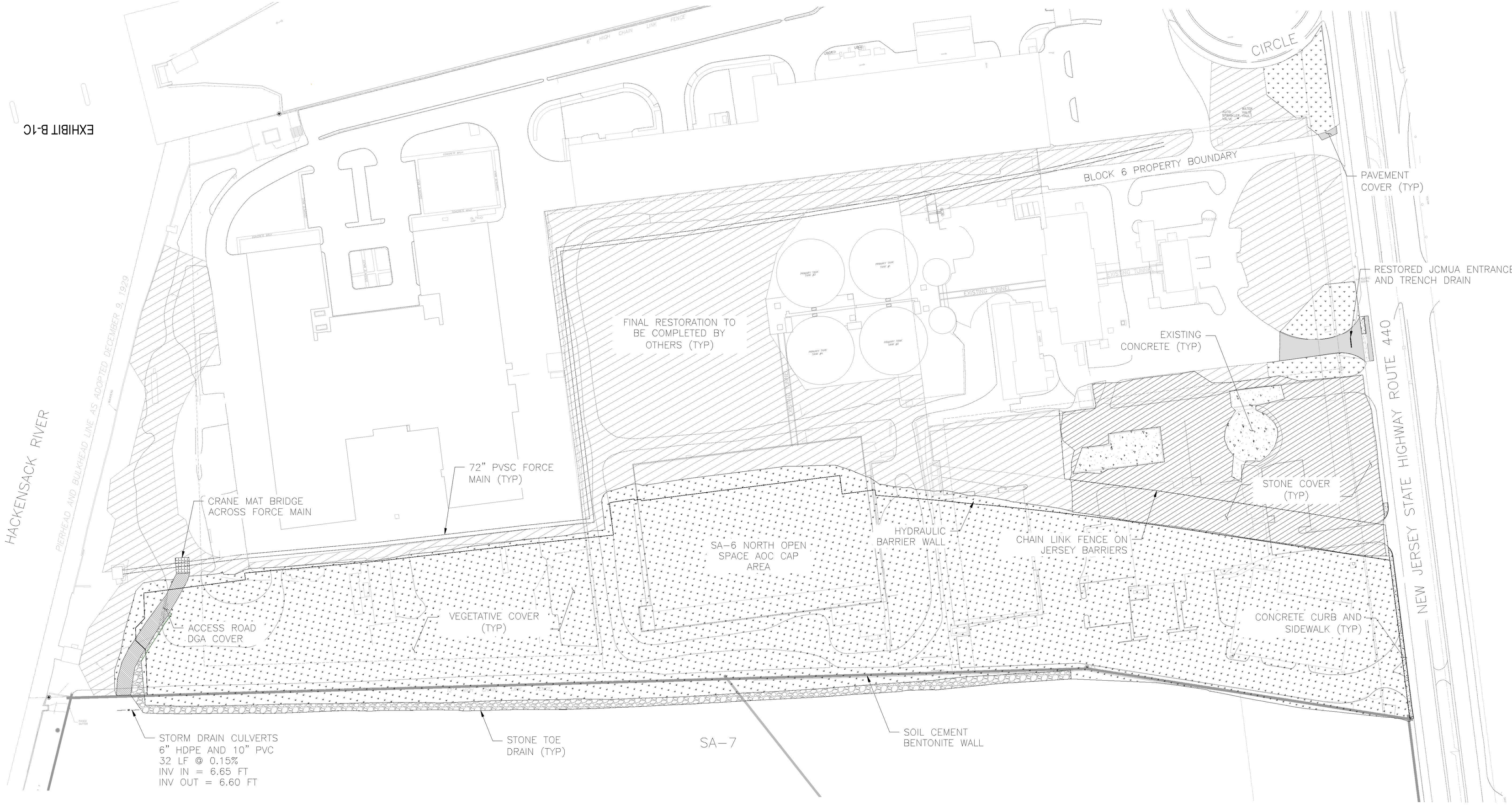
CAP SYSTEM DETAIL
(NORTHERN PARCEL)
NTS



CAP SYSTEM DETAIL
(SOUTHERN PARCEL)
NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150487-6100-B209-0000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 21901; LOT 4 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #9
PREPARED/DATE: STR 01/25/17	CHECKED/DATE: NW 10/24/17		

EXHIBIT B-1C



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STONE COVER
DGA COVER
VEGETATED COVER
RESTORATION BY OTHERS
PAVEMENT COVER
STONE TOE DRAIN
CONCRETE COVER
SD — STORM DRAIN PIPE

0 80 160 FEET
SCALE

REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

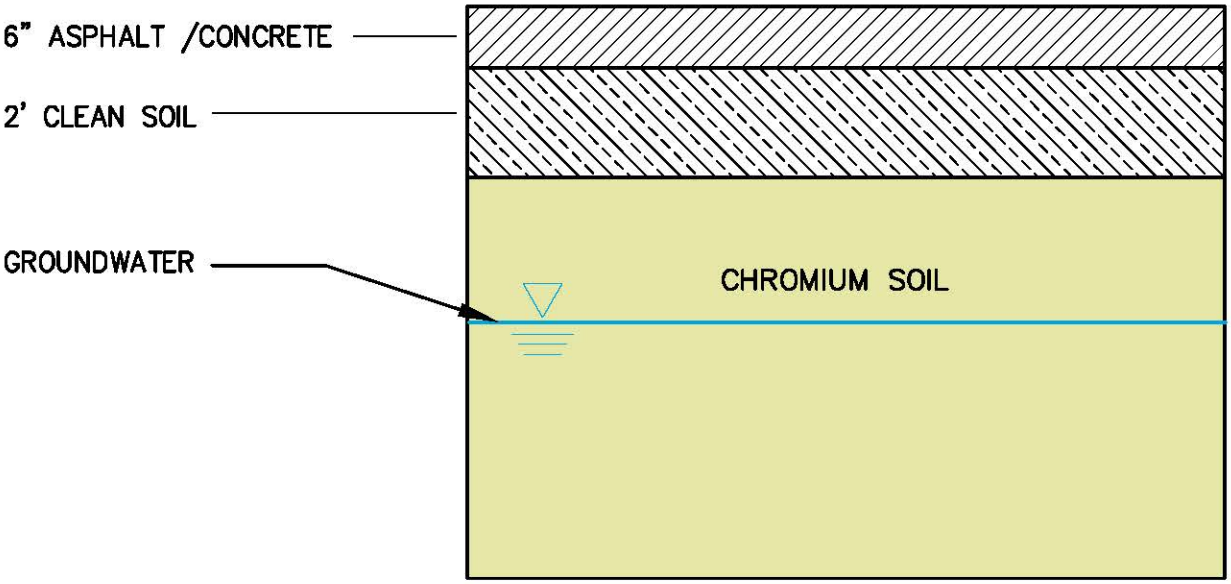
DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH – SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

DEED NOTICE #10
TA-7

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT, (I) THIS DOCUMENT CONTAINS INFORMATION, DATA, AND DESIGN THAT IS CONFIDENTIAL AND NOT TO BE DISCLOSED, AND (II) THIS DOCUMENT WAS PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT IN THE COURSE OF AMEC FOSTER WHEELER'S PROFESSIONAL SERVICES FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

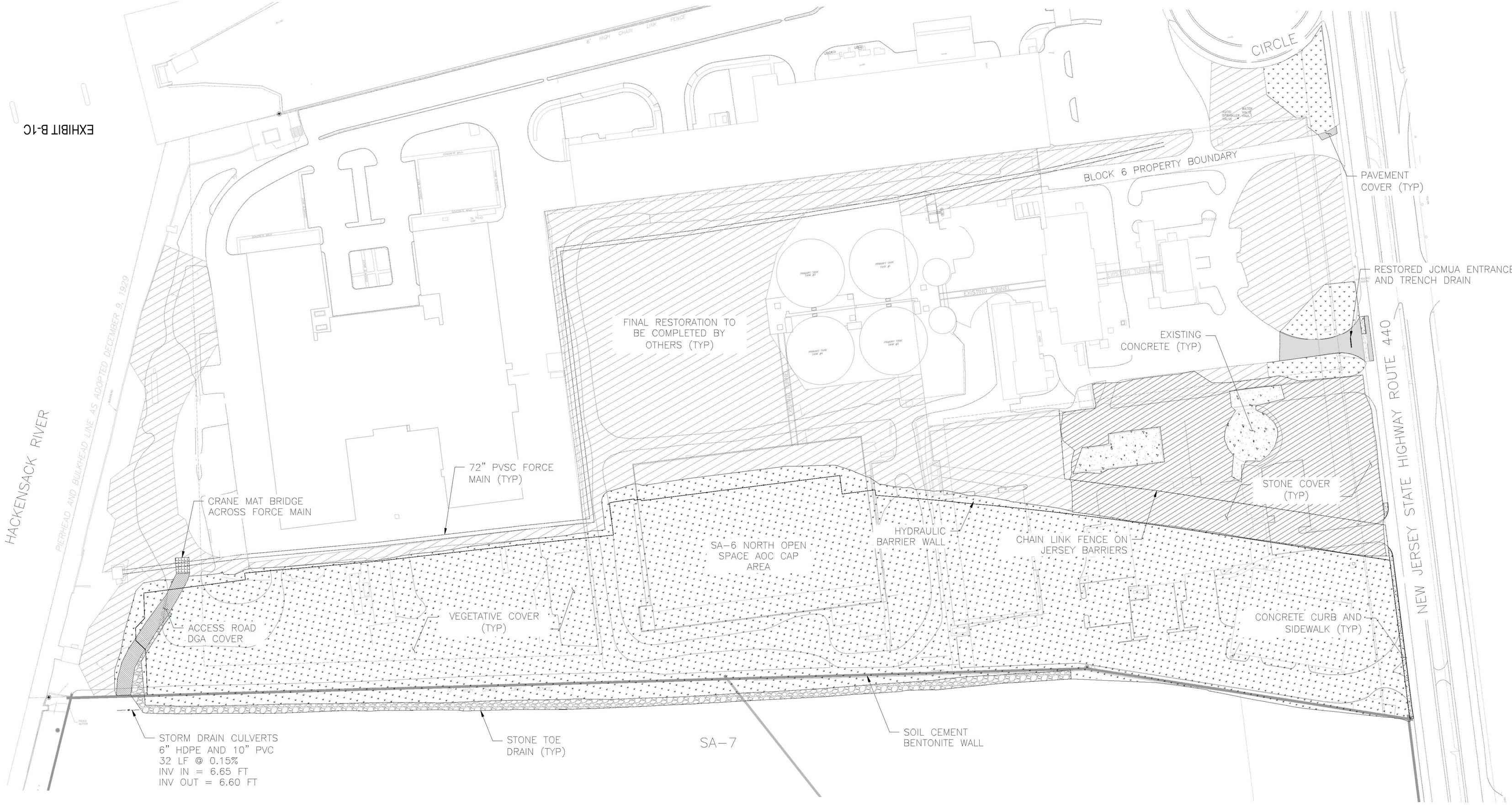
P:\CADD\HONEYWELL\JERSEY CITY\SA 6 NORTH\3480150487\6100\610001\DEED NOTICE\DN 10\3480150487-6100-B210-0000.dwg Tue, 28 Nov 2017 - 10:51am scott.rudkin



CAP SYSTEM DETAIL
NTS

Amec Foster Wheeler PROJECT No. 3480150488 DRAWING: 3480150487-6100-B210-0000		amec foster wheeler ENVIRONMENT & INFRASTRUCTURE. Inc. 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	**EXHIBIT B-1B** CAP SYSTEM DETAIL BLOCK 21901; LOT 10 SA-6 NORTH JERSEY CITY, NEW JERSEY DEED NOTICE #10
PREPARED/DATE: STR 01/25/17	CHECKED/DATE: NW 01/31/17		

EXHIBIT B-1C



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RESTORATION BY OTHERS
PAVEMENT COVER
STONE TOE DRAIN
CONCRETE COVER
SD — STORM DRAIN PIPE

0 80 160 FEET
SCALE

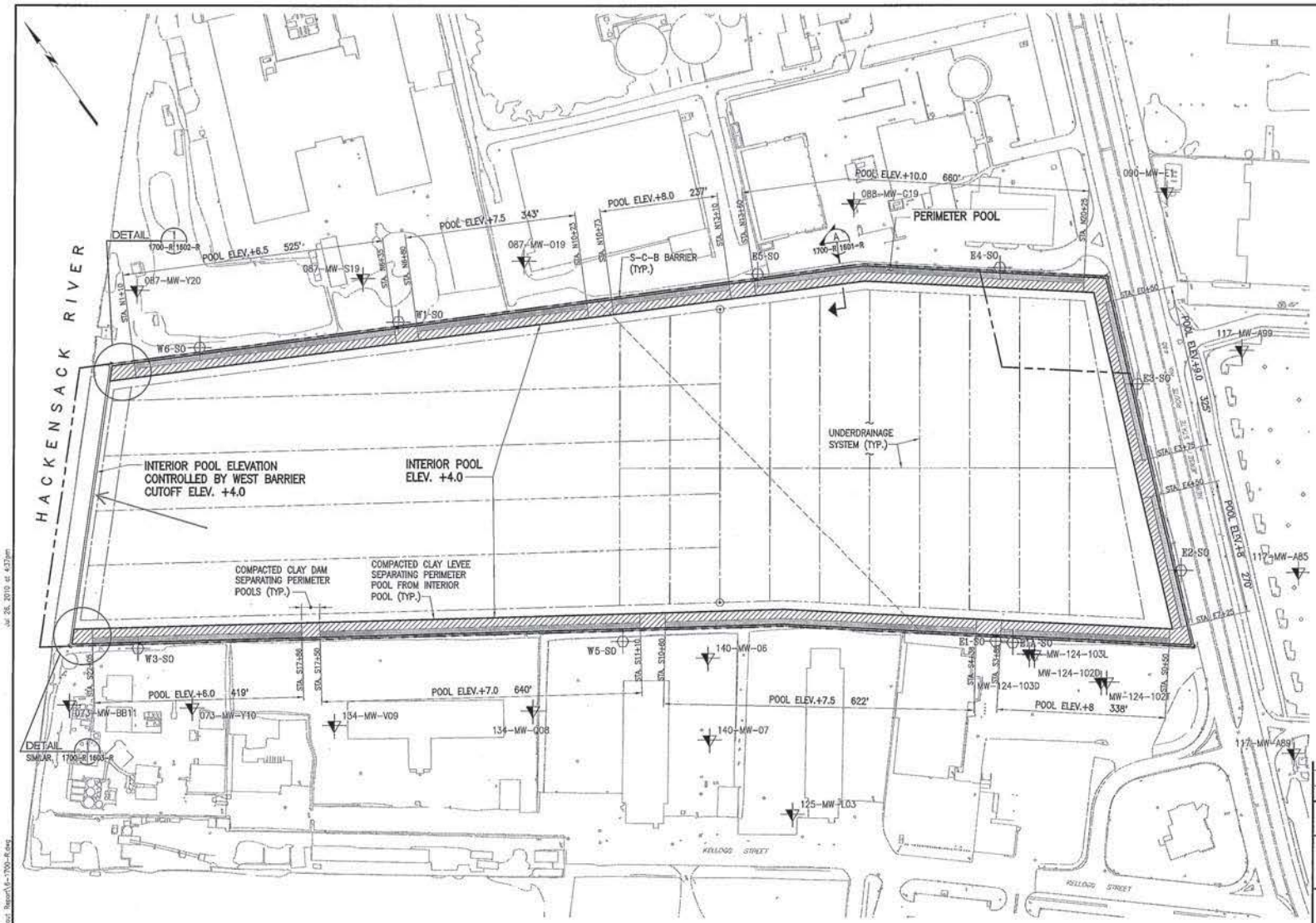
REV	DATE	BY	CHKD	APVD	DESCRIPTION
0	1/7/17	EJP	AE	AE	AS BUILT RESTORATION PLAN

ENTACT 302 Unity Plaza Latrobe, PA 15650

DRAWING NAME
AS BUILT RESTORATION PLAN
SA-6 NORTH – SHEET 001
1/6/17

PROJECT NAME & LOCATION
HONEYWELL SA-6 REMEDIATION
JERSEY CITY, NJ

DEED NOTICE #14
SA-7 PERIMETER POOL



Note:

1. Perimeter details and pipe systems are illustrated on Drawings 1701–R, 1702–R and 1703–R

Legend:

- FILL TYPE A CLAY
- FILL TYPE B GRANULAR FILL
- E2-SO — SHALLOW PIEZOMETER
- 090-MW-E1 — MONITORING WELL

GRAPHIC SCALE

100' 50' 0 100' 200'

REV.	DATE	BY	DESCRIPTION

STUDY AREA 7

JERSEY CITY NEW JERSEY

Honeywell

101 COLUMBIA ROAD, MORRISTOWN, NEW JERSEY 07962

PROJECT NO. 35037

MUESER RUTLEDGE CONSULTING ENGINEERS

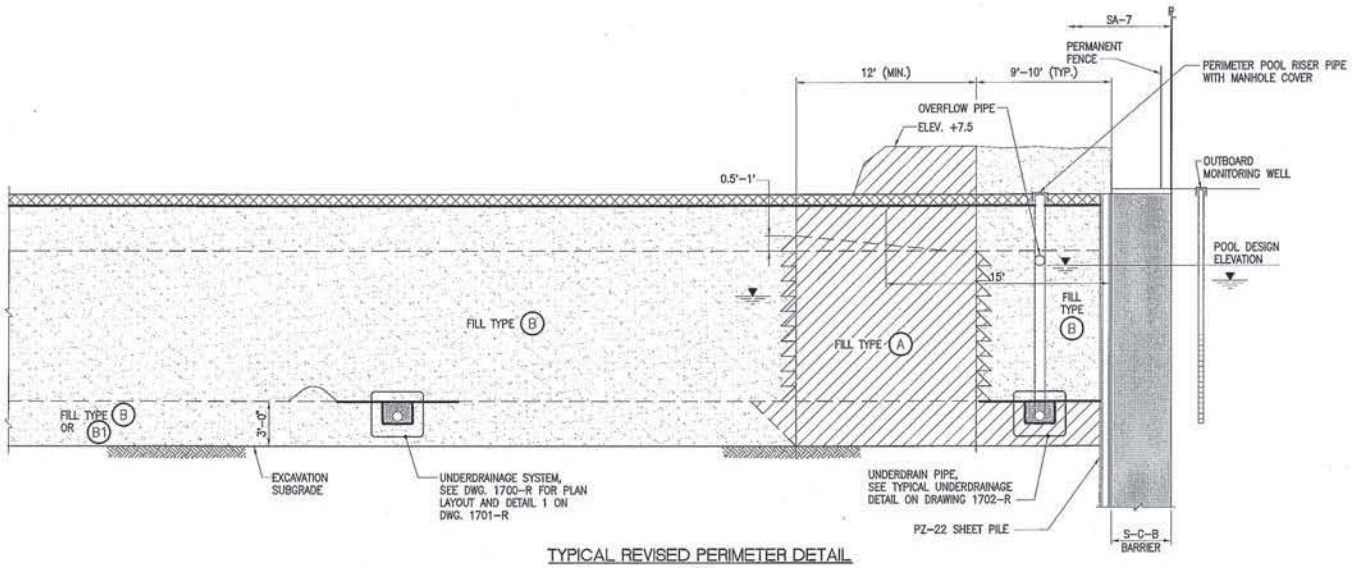
14 PENN PLAZA – 225 W. 34TH STREET, NEW YORK, NY 10122

Exhibit B-1B

SCALE	MADE BY	DATE	FILE NO.
AS NOTED	B.B.	07-13-10	10210
	CHKD BY K.R.	DATE 07-13-10	DRAWING NO.

RECORD PLAN
PERIMETER POOL

1700–R



TYPICAL REVISED PERIMETER DETAIL

SECTION A

SCALE: 1/4"=1'-0" 1700-R 1601-R

REV.	DATE	BY	DESCRIPTION

STUDY AREA 7

JERSEY CITY NEW JERSEY

Honeywell

101 COLUMBIA ROAD, MORRISTOWN, NEW JERSEY 07962

PROJECT NO. 35037

MUESER RUTLEDGE CONSULTING ENGINEERS

14 PENN PLAZA – 225 W. 34TH STREET, NEW YORK, NY 10122

Exhibit B-1C

SCALE	MADE BY B.B.	DATE 07-13-10	FILE NO.
GRAPHIC	CHK'D BY D.W.C.	DATE 07-13-10	10210

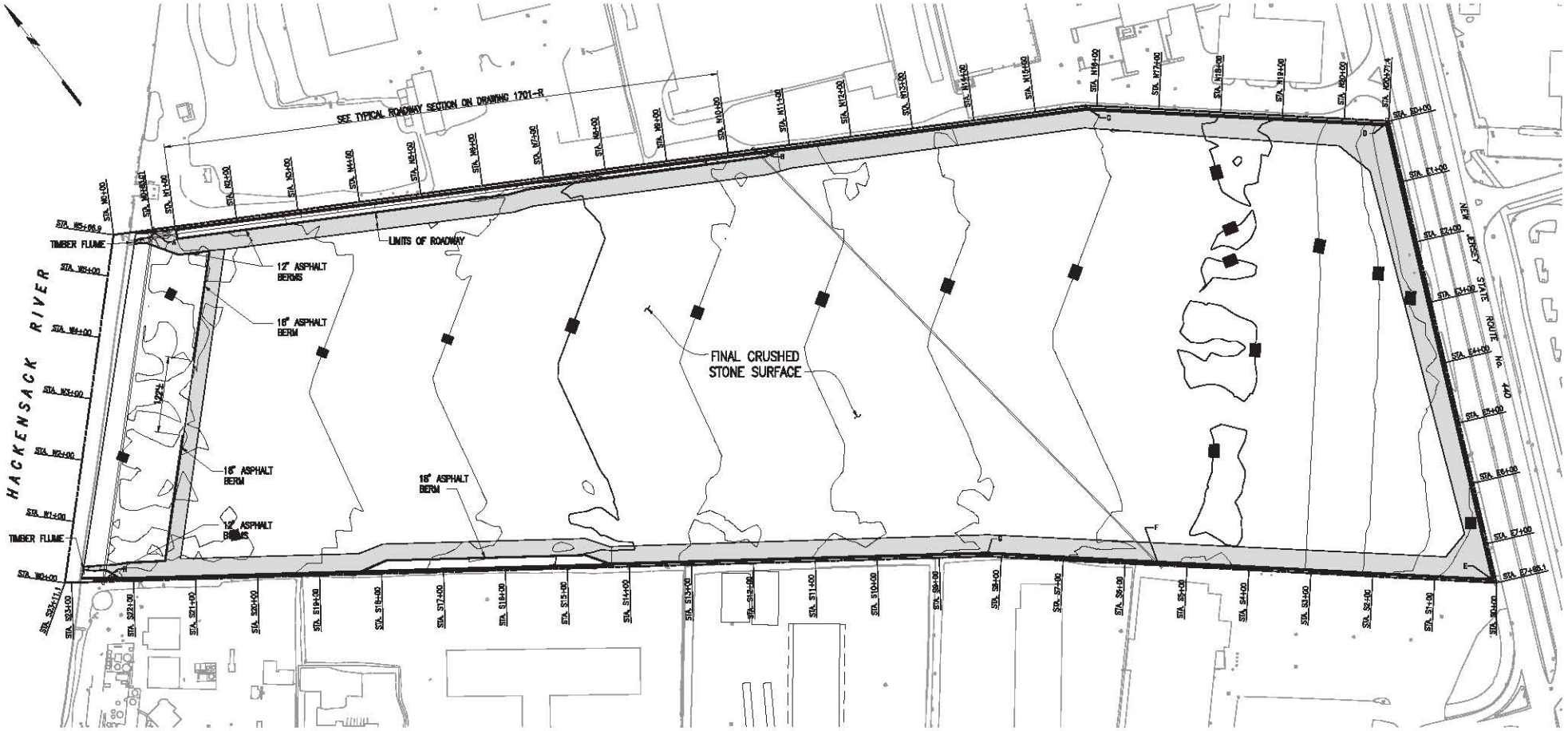
MODIFIED PERIMETER DETAIL TYPICAL SECTION AND SEQUENCE NOTES

DRAWING NO. 1601-R

PETER W. DEKING
STATE OF NEW JERSEY
LICENSED PROFESSIONAL ENGINEER
M.J. PROFESSIONAL ENGINEER
NO. 46022, JULY 26, 2010

Jul 26, 2010 at 4:49pm

G:\DWGS\102\10210\Contract 5 - Closeout Report\5-1601-R.dwg



Legend:

- ASPHALT ROADWAY
- 18" ASPHALT BERM
- 12" ASPHALT BERM
- CONTOUR OF FINISHED GRADE

Notes:

1. For locations of perimeter pools and under drains see Drawing No. 1700-R.
2. For locations of underground utilities see Drawing No. 1701-R.
3. As-Built information was taken from final grades Drawing, SA7 and SA6 North/South, prepared by Entact, Dated 04/12/2010.

GRAPHIC SCALE

80' 40' 0 80' 160'

REV.	DATE	BY	DESCRIPTION

STUDY AREA 7

JERSEY CITY NEW JERSEY

Honeywell

101 COLUMBIA ROAD, MORRISTOWN, NEW JERSEY 07962

PROJECT NO. 35037

MUESER RUTLEDGE CONSULTING ENGINEERS

14 PENN PLAZA – 225 W. 34TH STREET, NEW YORK, NY 10122

Exhibit B-1D

SCALE	MADE BY	DATE	FILE NO.
GRAPHIC	B.B.	07-13-10	10210
	CH'KD BY D.W.C.	07-13-10	DRAWING NO.

FINAL SITE PLAN

1800-R

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Jul 28, 2010 at 4:10pm

Inavo