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ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of Environmental Land Usage Restriction (Restriction) is made on this 19th day of November, 2014 by The Narragansett Electric Company, d/b/a National Grid, and their successors and/or assigns (hereinafter, the Grantor).

WITNESSETH:

WHEREAS, the Grantor, The Narragansett Electric Company, d/b/a National Grid, is the owner in fee simple of certain real property identified as Plat 46, Lot 489, located at 186 Allens Avenue in Providence, Rhode Island (the Property), more particularly described in Exhibit A (Legal Description) which is attached hereto and made a part hereof;

WHEREAS, the Property has been determined to contain soil and/or groundwater which is contaminated with certain hazardous materials and/or petroleum in excess of applicable Industrial/Commercial Direct Exposure Criteria and GB Groundwater Objectives criteria pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations);

WHEREAS, the Grantor and the Department have determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Rhode Island Department of Environmental Management ("Department") pursuant to R.I.G.L. § 23-19.14-1 and that this restriction shall be a Conservation Restriction pursuant to R.I.G.L. § 34-39-1 et seq. and shall not be subject to the 30 year limitation provided in R.I.G.L. § 34-4-21;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled: *Order of Approval* issued on May 9, 2013 pursuant to the Remediation Regulations and attached in Exhibit B;

WHEREAS, to prevent potential exposure to or migration of hazardous substances and to abate hazards to human health and/or the environment, and in accordance with the *Order of Approval,* the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the Property;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor's successors and assigns.
NOW, THEREFORE, Grantor agrees as follows:

A. Restrictions Applicable to the Property: In accordance with the *Order of Approval*, the use, occupancy and activity of and at the Property is restricted as follows:

i. No residential use of the Property shall be permitted that is contrary to Department approvals and restrictions contained herein;

ii. No groundwater at the Property shall be used as potable water;

iii. Neither the engineered control[1] (including the geosynthetic barrier) nor the underlying impacted soils at the Property shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in Section C below and the *Soil Management Plan (SMP)* approved by the Department in an *Order of Approval* dated May 9, 2013 attached hereto as Exhibit B;

iv. Humans engaged in activities at the Property shall not be exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved direct exposure criteria set forth in the Remediation Regulations;

v. Subsurface or at grade structures constructed on the Property shall be equipped with a Department approved vapor barrier/control system;

vi. The engineered control at the Property which encompasses the entire land based portion of the Property depicted in Exhibit C attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in industrial/commercial activity from being exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved industrial/commercial direct exposure criteria in accordance with the Remediation Regulations;

vii. The containment wall and monitoring and recovery well network on the Property shown in the figure contained in Exhibit C attached hereto shall not be disturbed and shall be properly maintained; and,

viii. In area where future activities are likely to have the potential for a release of hazardous materials to the ground surface, a Department approved impermeable barrier or containment structure shall be installed and properly maintained.

B. No action shall be taken, allowed, suffered, or omitted at the Property if such action or omission is reasonably likely to:

i. Create a risk of migration of hazardous materials and/or petroleum;
ii. Create a potential hazard to human health or the environment; or
iii. Result in the disturbance of the engineered controls utilized at the Property, except as permitted in the Department-approved SMP contained in Exhibit D.

C. Emergencies: In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.-vii) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:

[1] The "engineered control" is defined as the approximately 12 inch clean soil/gravel cap underlain by a geosynthetic barrier.

i. Grantor shall notify the Department's Office of Waste Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantors having learned of the emergency. (This does not remove Grantors obligation to notify any other necessary state, local or federal agencies.);

ii. Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;

iii. Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such suspension;

iv. Grantor shall communicate at the time of written notification to the Department its intention to conduct the emergency response actions and provide a schedule to complete the emergency response actions;

v. Grantor shall continue to implement the emergency response actions, on the schedule submitted to the Department, to ensure that the Property is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known environmental conditions at the Property, emergency maintenance and repair of utility lines shall only require restoration of the Property to its condition prior to the maintenance and repair of the utility lines; and

vi. Grantor shall submit to the Department, within ten (10) days after the completion of the emergency response action, a status report describing the emergency activities that have been completed.

D. Release of Restriction; Alterations of Subject Area: The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the Property inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration, which approval shall not be unreasonably withheld or delayed. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the Property from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the Property in accordance with applicable regulations. RIDEM's approval shall not be unreasonably withheld.

E. Notice of Lessees and Other Holders of Interests in the Property: The Grantor, or any future holder of any interest in the Property, shall cause any lease, grant, or other transfer of any interest in the Property to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the Property.

F. **Enforceability:** If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.

G. **Binding Effect:** All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each owner and any other party entitled to control, possession or use of the Property during such period of ownership or possession.

H. **Inspection & Non-Compliance:** It shall be the obligation of the Grantor, or any future holder of any interest in the Property, to provide for annual inspections of the Property for compliance with the ELUR in accordance with Department requirements.

A qualified Environmental Professional will, on behalf of the Grantor or future holder of any interest in the Property, evaluate the compliance status of the Property on an annual basis. Upon completion of the evaluation, the Environmental Professional will prepare and within 60 days of the compliance evaluation submit to the Department and to the Grantor or future holder of any interest in the Property an evaluation report detailing the findings of the inspection, and noting any compliance violations at the Property. If the Property is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the Property shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the Property into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the Property may be voided at the sole discretion of the Department.

I. **Terms Used Herein:** The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand and seal on the day and year set forth above.

The Narragansett Electric Company d/b/a National Grid

By:

Grantor (signature) Charles Willard _____

Grantor (typed name) Charles Willard _____

STATE OF New York

COUNTY OF Onondaga

In Syracuse, in said County and State, on the 19th day of November, 2014, before me personally appeared Charles Willard, to me known and known by me to be the party executing the foregoing instrument and (he/she) acknowledged said instrument by (him/her) executed to be (his/her) free act and deed.

Notary Public: Gayl Franssen

GAYL ~~LYNN~~ FRANSSEN
Notary Public, State of New York
No. 01FR6220451
Qualified in Onondaga County
Commission Expires Apr. 12, 2018

My Comm. Expires: _____

Exhibits:

A – Legal Description

B – Order of Approval

C - Survey Plan

D – Soil Management Plan

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EXHIBIT A

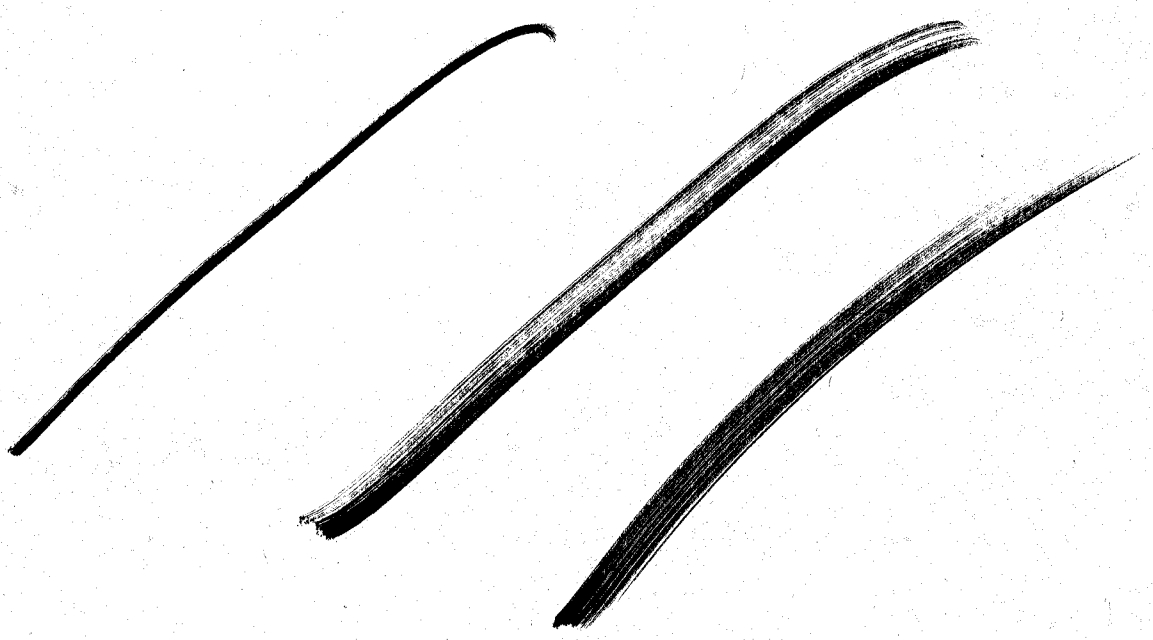

EXHIBIT "A"

AP 46, Lot 489

A certain piece of land together with all buildings and improvements located thereon being shown and designated as: "Parcel 3 Assessor's Plat 46, Lot 489 RHODE ISLAND STATE PIER PROPERTIES, LLC LAND: 75,952 SQ. FT. (TO M.H.W. LINE) WATER: 11,775 SQ. FT." on a certain map or survey entitled:: "SURVEY OF PROPERTY PARCELS 1 2 3 4 5 6 7 Allens Avenue & Public Street Providence, Rhode Island Prepared for: RHODE ISLAND STATE PIER PROPERTIES, LLC APRIL 3, 2006 Revised August 4, 2006: New "as built" surface elevations and contours on parcels North of Public Street Revised July 7, 2007:: Survey Certification added for Parcel 1 and Parcel 2, SCALE 1" – 40 FEET Gilbert & Maloney Engineers & Land Surveyors 170 Rhodes Street Providence, RI 02903 3907M3.dwg", which map or plan was recorded on August 7, 2007 at 1:20 p.m. in the Office of Recorder of Deeds in the City of Providence, Rhode Island, and to which reference may be had in Plan Book 76, Page 54.

Said premises are more particularly bounded and described as follows:

Beginning at the intersection of the easterly line of Allens Avenue and the northerly line of Public Street;

Thence running N. 18° 17' 52" W along on said Allens Avenue one hundred eighty-two and no/100 (182.00) feet to a point;

Thence turning an interior angle of 91° 30' 21" and running N. 70° 11' 47" E on other land now or formerly of the Rhode Island State Pier Properties, LLC three hundred thirty-six and 01/100 (336.01) feet to a point;

Thence turning an interior angle of 88° 29' 39" and running S 18° 17' 52" E on land now or formerly of Pearl Trust, Patrick T. Conley, Trustee sixty-five and no/100 (65.00) feet to a point;

Thence turning an exterior angle of 89° 08' 33" and running N. 70° 50' 41" E along said land now or formerly of Pearl Trust, Patrick T. Conley, Trustee two hundred and 02/100 (200.02) feet to a point;

Thence turning an interior angle of 89° 08' 33" and running S 18° 17' 52" E on said land now or formerly of Pearl Trust, Patrick T. Conley Trustee one hundred twenty seven and 50/100 (127.50) feet to a point in the northerly line of said Public Street;

Thence turning an interior angle of 90° 08' 29" and running S. 71° 33' 39" W along said Public Street five hundred thirty five and 90/100 (535.90) feet to the point and place of beginning making an interior angle of 89° 51' 31" with the first described course.

Contains 87,727 square feet or 2.014 acres of land.

Property Address:

186 Allens Avenue
Providence, RI
Plat 46, Lot 489

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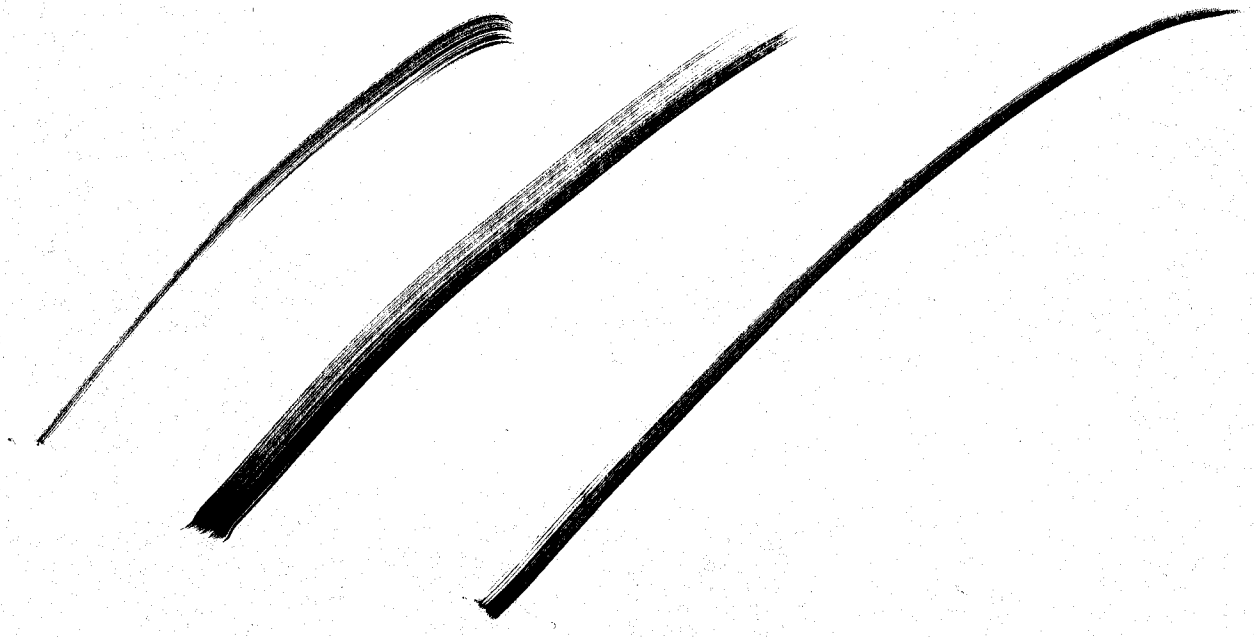
EXHIBIT B



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

ORDER OF APPROVAL May 9, 2013
CASE No. 98-042 (Including 98-042a & 98-042b)

CERTIFIED MAIL

Mr. Kenneth E. Lento - Project Manager – Site Investigation & Remediation
National Grid
40 Sylvan Road
Waltham, MA 02451-1120

RE: Northeast Petroleum, Inc.
170 Allens Avenue
Providence, Rhode Island
Plat 46 / Lots 128, 325, 481, 489 and 501

Dear Mr. Lento:

Enclosed please find the Order of Approval (the Order) for the proposed Remedial Action Work Plan (RAWP), received December 3, 2012, for the encapsulation of contaminated soils, the physical containment of non-aqueous phase liquid (NAPL) impacts by the installation of a partially penetrating wall/stone collection trench along the downgradient site boundary, with monthly focused light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL) recovery, implementation of an Environmental Land Usage Restriction (ELUR) on the entire property, periodic long-term groundwater monitoring with monitored natural attenuation, and annual cap and containment wall inspections and maintenance at the abovementioned property. Please review the stipulations of this Order thoroughly to ensure your compliance with the requirements.

Please notify this office 48 hours prior to the beginning of any work related to the remediation of the property. If you have any questions regarding this letter or would like the opportunity to meet with Department personnel, please contact me by telephone at (401) 222-2797, ext. 7109, or by E-mail at joseph.martella@dem.ri.gov.

This Order shall be recorded in the land evidence records of the City of Providence within thirty (30) days of execution and a recorded copy returned to the Department within fifteen (15) days of recording.

Sincerely,

Joseph T. Martella II
Senior Engineer
Office of Waste Management

cc: Terrence D. Gray, P.E., Assistant Director, RIDEM/AW&C
Leo Hellested, P.E., Chief, RIDEM/OWM
Kelly J. Owens, RIDEM/OWM
Sofia Kaczor, RIDEM/OWM
Eric Beck, RIDEM/OWR/RIPDES
Alisa Richardson, RIDEM/OWR
Neal Personeus, RIDEM/OWR/WQC
Susan Forcier, Esq., RIDEM/OLS
David S. Reis, RI CRMC
Joseph Baker, Cargill
Patrick T. Conley, Esq. & Gail Conley
Robin Main, Esq., HA&S
Jennifer Sulla, Esq., Mintz Levin P.C.
David Rusczyk, GZA
William T. McCune, Arcadis
Donald D. Gralnek, PRA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

In the matter of the application for Remedial Action Approval at:
Northeast Petroleum, Inc.
170 Allens Avenue
Providence, Rhode Island
Case No. 98-042 (Including 98-042a & 98-042b)

ORDER OF APPROVAL

In the above entitled matter The Narragansett Electric Company d/b/a/ National Grid (National Grid) is Owner and Responsible Party for Plat 46 / Lots 481, 489 and 501, Cargill Incorporated is Owner and Responsible Party for Plat 46 / Lot 128, and Ms. Gail Conley is Owner and Responsible Party for Plat 46 / Lot 325. Wherein National Grid in its capacity as Performing Party for the remediation of the property located at 170 Allens Avenue (the Site), Providence Plat 46 / Lots 128, 325, 481, 489 and 501, filed with the Rhode Island Department of Environmental Management (the Department) the following documents, which collectively fulfill the requirements of Section 9.00 (Remedial Action Work Plan) of the Department's Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations), amended November 9, 2011:

1. Remedial Action Work Plan, 170 Allens Avenue, Providence, Rhode Island, received by the Department on December 3, 2012, and prepared by GZA GeoEnvironmental, Inc. (GZA); and

2. Letter Correspondence Re: Remedial Action Work Plan (RAWP), 170 Allens Avenue, Providence, Rhode Island, Plat 46 Lots 128, 325, 481, 489 and 501, RIDEM Case No. 98-042 (including 98-042a & 98-042b), dated May 6, 2013, received by the Department May 7, 2013, prepared by GZA, and including attached revised versions of the individual Environmental Land Usage Restrictions for the three property owners, and a single revised version of the post-construction Soil Management Plan.

These documents describe a plan to remediate existing contamination pursuant to Rhode Island General Laws 23-19.14-1 et seq. and the Department's Remediation Regulations, as amended November 9, 2011, in accordance therewith.

It is the Department's intent that all conditions set forth in this Order of Approval (Order) shall remain in full force and effect unless specifically altered by the Department in writing. Furthermore, this letter continues to place primary responsibility for the construction, operation, maintenance, and monitoring of the approved Remedial Action Work Plan (RAWP) and its associated implementation on National Grid. As a Responsible Party and a Performing Party, National Grid is expected to implement the RAWP in an expeditious and professional manner that prevents non-compliance with this letter and said RAWP, and is protective of human health and the environment.

Upon consideration thereof, the Department of Environmental Management's Office of Waste Management (OWM) approves said plan or means to remediate contamination through this Order provided that:

1. Implementation of the RAWP at the Site shall be initiated within ninety (90) days of execution of this Order.

2. The OWM shall receive written notification forty-eight (48) hours prior to the initiation of any remedial activities.

3. All work must be performed in accordance with all applicable regulations and the Department approved RAWP, inclusive of schedules, and must be consistent with Section 11.00 of the Remediation Regulations.

4. The encapsulation of contaminated soils remediation goal shall be consistent with Rule 8.01 of the Remediation Regulations, achieved by the installation of a site-wide engineered control cap consisting of one (1) foot of clean gravel placed over a high visibility geotextile fabric marker barrier/warning layer, consistent with the Department's requirement to provide a level of protection equivalent to a minimum of two (2) feet of clean soil, with implementation of an Environmental Land Usage Restriction (ELUR) on the entire property, and annual cap inspections and maintenance. The physical containment of non-aqueous phase liquid (NAPL) impacts remediation goal shall be consistent with Rule 8.01 of the Remediation Regulations, achieved by the installation of a partially penetrating wall/stone collection trench along the downgradient site boundary, monthly focused light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL) recovery, periodic long-term groundwater monitoring with monitored natural attenuation, and annual containment wall inspections and maintenance. Specifically, the groundwater remedial objective shall be elimination to the extent practical and control of all Upper Concentration Limit (UCL) exceedances (e.g. NAPL) and on-site containment and control of all Method 1 GB Groundwater Objective exceedances.

5. National Grid, and their consultant, are aware of the points of compliance requirements and Rule 8.08 of the Remediation Regulations for offsite GB groundwater exceedances. Rule 8.08 requires a Responsible Party to meet compliance with the GB Soil Leachability Objectives and GB Groundwater Objectives for all contaminants of concern at the property line.

6. The remedial objectives for groundwater at the Site shall be the Method 1 GB Groundwater Objectives, as specified in the Department's Remediation Regulations at the property line, and elimination to the extent practical and control of all UCL exceedances (e.g. NAPL).

7. Sampling and analysis of all media involved in the Remedial Action shall be conducted in strict accordance with the RAWP, the Remediation Regulations, and the requirements of this Order.

8. LNAPL recovery will be performed at twenty-two (22) wells (GZ-1, GZ-2, GZ-3, MW-11,

MW-12R, MW-233R, MW-240, MW-246R, MW-424S/I, MW-425S/R, MW-427S, MMW-428S/I, MW-435R, MW-436S/I, MW-522, MW-523, MW-530, MW-531, MW-536, MW-537, MW-606S, and one replacement installed well near the former location of RW-2R) on Lots 325, 489, and 501. DNAPL recovery will be performed at thirteen (13) existing wells (MW-11, MW-12R, MW-246R, MW-424S/I, MW-425S/R, MW-426S/I, MW-431I, MW-531, MW-537, MW-603D, MW-604D, MW-604S, and MW-605D) on Lots 325, 489, and 501. LNAPL and DNAPL recovery will also be performed at ten (10) new shallow and deep recovery well pairs installed in the stone collection trench on Lots 325, 489 and 501. NAPL gauging and recovery activities will initially be performed monthly, subject to a reduced frequency upon RIDEM approval.

9. Groundwater samples shall initially be collected from fourteen (14) monitoring wells (MW-201, MW-216, MW-218, MW-219R2, MW-423S, MW-431S, MW-507 and seven compliance monitoring wells to be installed on the downgradient side of the stone collection trench on Lots 325, 489 and 501), on a quarterly basis for a minimum of two (2) years, and then subject to a reduced frequency upon RIDEM approval. All groundwater samples shall be laboratory analyzed for volatile organic compounds (VOCs).

10. The number of monitoring wells subject to NAPL gauging and recovery activities, and/or groundwater sampling and analysis, may be adjusted up or down depending upon gauging trends and sampling results. Monitoring wells that were subject to NAPL gauging and recovery activities, but which no longer have detectable NAPL, shall be subject to groundwater sampling and analysis for a minimum of three (3) consecutive rounds, in accordance with the Department approved groundwater monitoring schedule, to evaluate groundwater quality and determine the necessity of continued groundwater sampling and analysis.

11. Status reports with NAPL gauging and recovery data and current laboratory analytical results, as applicable, will be due monthly at the OWM for review within thirty (30) days of each sampling event.

12. Results of all environmental sampling shall be sent to Joseph T. Martella II, Office of Waste Management, 235 Promenade Street, Providence, RI 02908.

13. National Grid or a future Performing Party may request an alteration of the NAPL gauging and recovery frequency, groundwater compliance sampling frequency, or status report submittal frequency. All requests must be submitted in writing to the Department, and are subject to final Department review and approval.

14. All excavated regulated materials shall be temporarily placed in working stockpiles and staged on a minimum of two (2) layers of 10-mil polyethylene sheeting in a designated soil management area, or stored in lined roll-off type containers. No excavated materials shall be placed directly on the ground surface. At the end of each work day all stockpiles shall be covered with 10-mil polyethylene sheeting to control the generation of wind-blown dusts and potential sediment migration. Stockpile areas shall be equipped with appropriate controls to limit the loss of the cover and protect against storm water erosion, including the

installation of hay bales, silt fencing and any other appropriate measures during the entire duration of the project. Stockpiles shall be inspected daily by site personnel. Should tears or punctures be observed in either the polyethylene sheeting covering or underlying the piles, repairs shall be made immediately. Daily shutdown procedures shall include the covering and securing of all stockpiled material with polyethylene sheeting.

15. All excavated regulated soil, if not encapsulated onsite, shall be disposed of off-site at an appropriately licensed disposal facility in accordance with all local, State, and Federal laws. Copies of the material shipping records and manifests associated with the disposal of the material shall be included along with the Closure Report.

16. The OWM no longer requires the submittal of analytical data prior to clean fill being brought to a Site. It is the sole responsibility of the Performing Party and their consultant to analyze the material, certify that the material meets the Department's Residential Direct Exposure Criteria (RDEC), as defined by the Remediation Regulations, for all constituents, and is suitable for use on the Site. The OWM strongly suggests that enough representative samples of the clean fill are collected prior to moving the material to the Site to satisfy the Performing Party and their consultant that the material meets the RDEC. Please note that the OWM reserves its rights to sample the clean fill, if suspect, to confirm compliance with the RDEC.

17. All regulated soil remaining onsite shall be encapsulated by an engineered control consistent with those described in the Department approved RAWP.

18. Dust suppression techniques (i.e. watering) and/or odor suppression shall be employed as necessary during all soil disturbing/handling activities at the Site in order to minimize the generation of fugitive dust and control odors.

19. The OWM shall be immediately notified of any Site or operation condition that results in non-compliance with this Order.

20. Any interruptions of the remedy shall be reported to the OWM's Joseph T. Martella II by telephone within one (1) working day and in writing within seven (7) days of occurrence.

21. All waste derived from installation and operation of the remedy shall be disposed of in accordance with the RAWP, the Department's Rules and Regulations for Hazardous Waste Management, the Rules and Regulations for Composting Facilities and Solid Waste Management Facilities, and the Regulations for the Rhode Island Pollutant Discharge Elimination System, as well as any other applicable local, State, or Federal regulations and policies. Documentation of proper disposal shall be provided to the OWM.

22. This Order does not remove National Grid's obligation to obtain any other necessary permits from other local, State, or Federal agencies.

23. National Grid shall have this Order recorded in the City of Providence Land Evidence Records for the subject property within thirty (30) days of execution of this Order and prior

to any remedial activities. A copy of the recorded Order (stamped with the book and page number) must be submitted to the Department within fifteen (15) days of recording.

24. Within sixty (60) days of completion of the work described in the Department approved RAWP, a Closure Report detailing the remedial action, current Site status, groundwater gauging and monitoring results, and all disposal documentation shall be submitted to the OWM.

25. Within thirty (30) days of receiving Department approval of the Closure Report, National Grid shall have the Department approved ELUR recorded in the Providence land evidence records for the property, and a stamped, certified copy shall be returned to the Department within fifteen (15) days of recording. Upon receipt of a copy of the recorded (stamped) ELUR, the OWM will issue an Interim Letter of Compliance for the terrestrial upland portion of the Site.

26. Based upon the results of groundwater monitoring, the Department reserves its rights to require additional remedial actions or monitoring at the Property to achieve final compliance at the Site, if warranted.

27. No hazardous waste shall be accepted from any off-site sources for treatment, storage or disposal at the Site.

28. Closure and removal of the remedial system(s) at the conclusion of the remedy will be contingent upon final Department approval.

Please be advised that this Order is limited to the remediation of the terrestrial upland portion of the Site, and does not preclude additional investigation and/or remediation activities related to sediments impacted by historic or ongoing releases of hazardous materials at or from the Site.

This Order shall remain in full force and effect provided said RAWP is implemented in a manner satisfactory to the Department of Environmental Management. Failure to comply with all points outlined in the Department approved RAWP and stipulated in this Order shall result in the revocation of this Order of Approval and may result in the issuance of a Notice of Violation against the Responsible Parties.

This Order shall be subject to modification or revocation in accordance with law.

Entered as the Order of the Department of Environmental Management this 9TH day of May, 2013.

By:

Matthew D. Destefano
Deputy Chief, Office of Waste Management
Department of Environmental Management

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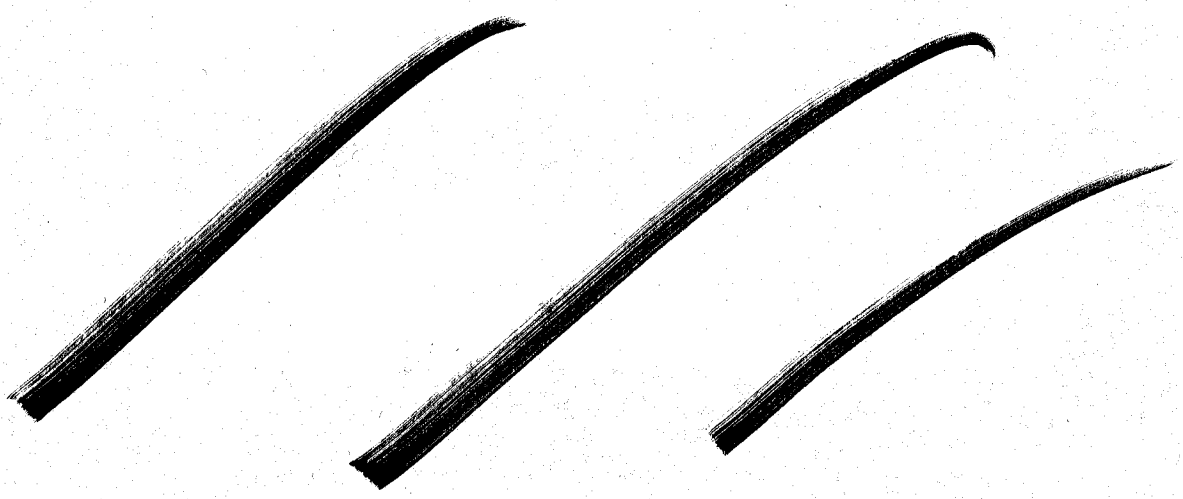
EXHIBIT C



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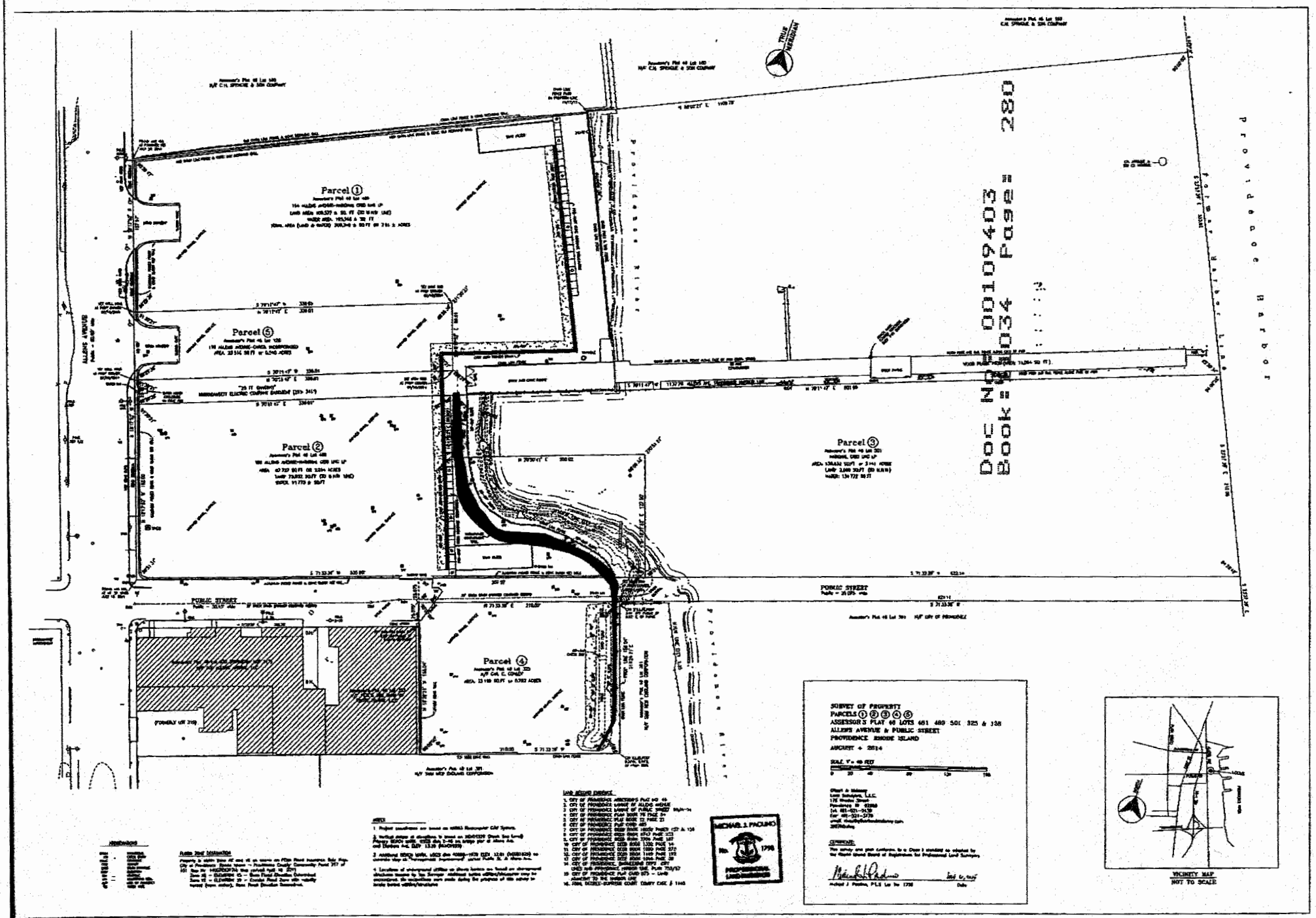

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EXHIBIT D

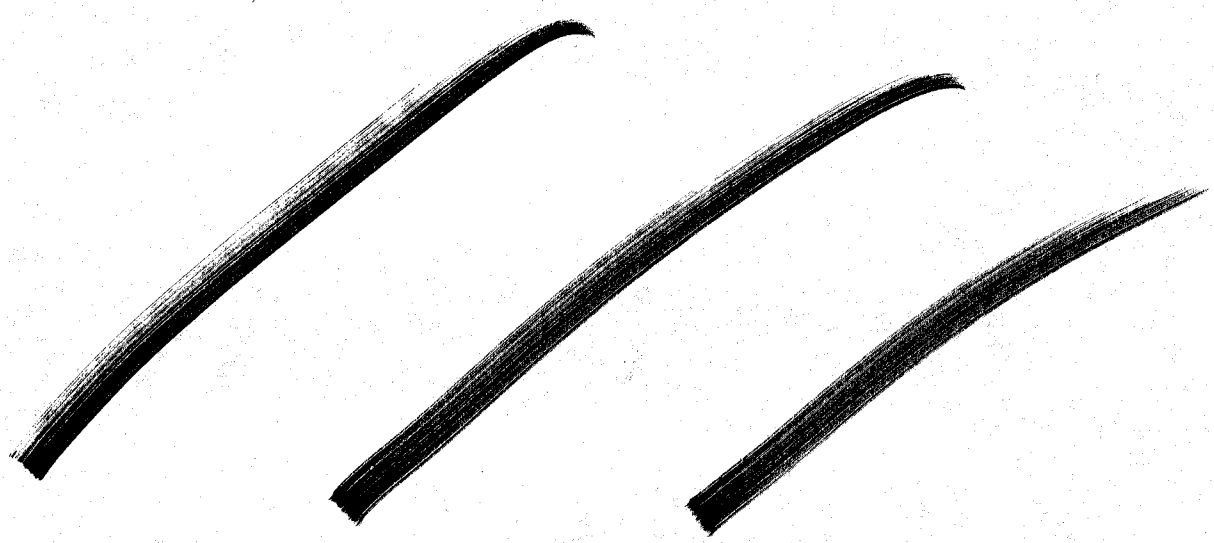


EXHIBIT D
SOIL MANAGEMENT PLAN

170 Allens Avenue (Lots 128, 325, 481, 489, and 501)
Providence, Rhode Island

This *Soil Management Plan (SMP)* has been prepared to establish procedures to be followed during future construction and/or maintenance activities that require management of impacted soils and/or groundwater at the 170 Allens Avenue properties which include Plat 46, Lots 128, 325, 481, 489, and 501 (referred to herein as the "Property"). This plan serves to supplement the Rhode Island Department of Environmental Management (RIDEM) approved Environmental Land Usage Restriction (ELUR) for these properties.

The restrictions established for these properties are described in Section A of the ELUR for each lot. As described in Section A. iii. of the ELUR, neither the engineered control nor the underlying impacted soils at the Property shall be disturbed in any manner without prior written permission of RIDEM's Office of Waste Management. This requirement does not apply to Emergencies as described in Section C of the ELUR and activities limited to disturbance of the "engineered control" which is defined as the approximately 12-inches of clean materials placed above a geosynthetic barrier. Examples of such activities include inspections and surface cap, maintenance and repair. The engineered control cap encompasses the land based portions of each of the 170 Allens Avenue Lots.. This *SMP* is organized as follows:

- Section 1.0 describes notification and reporting required by RIDEM;
- Section 2.0 describes the Property and provides relevant background information;
- Section 3.0 presents a summary of the Property hydrogeologic features;
- Section 4.0 summarizes soil and groundwater quality data;
- Section 5.0 presents soil and groundwater management guidelines; and
- Section 6.0 presents health and safety guidelines.

1.0 NOTIFICATION

In the event of an activity involving disturbance of impacted soil and/or groundwater beneath the engineered control, the Property owner shall provide a written description to RIDEM of the anticipated activity (referred to herein as the "Notification"). The Notification must be submitted to RIDEM no later than **60 days** prior to the proposed initiation of activities. At a minimum the Notification shall include: a description of the activity; an estimate of the areal extent and depth of disturbance; the estimated volume of soil to be excavated/disturbed; a list of the known and anticipated contaminants of concern; a drawing clearly identifying the proposed areas and depths to be excavated/disturbed; impacted soil and groundwater (if applicable) management/handling/disposal procedures; restoration procedures (including engineered cap replacement/repair); and the anticipated duration of the project.

Following written Notification, RIDEM will determine the post closure reporting requirements. Significant disturbances of impacted soil and/or groundwater will likely require submission of a *Closure Report* for RIDEM's review and approval documenting that the activities were performed in accordance with this *Soil Management Plan* and the RIDEM-approved ELUR. Following written Notification, minor disturbances of impacted soil may be documented through the annual certification submitted in accordance with Section H (Inspection & Non-Compliance) of the RIDEM approved ELUR. RIDEM will also make a determination regarding whether the Property owner will be required to provide Public Notice to abutting property owners/tenants concerning the proposed activities upon receipt of the Notification. Work associated with the Notification shall not commence until written RIDEM approval has been issued. Once RIDEM approval has been issued, RIDEM shall be notified a minimum of two (2) days prior to the start of activities at the Property. If significant alterations to the RIDEM-approved plan are necessary, a written description of the proposed deviation shall be submitted to RIDEM for review and approval prior to initiation of work.

2.0 PROPERTY DESCRIPTION/BACKGROUND

The following provides a brief description and history of the Property and a summary of relevant past operations by Lot. For more detailed information, please refer to the September 2010 *Supplemental Site Investigation Data Report* prepared by GZA GeoEnvironmental, Inc. (GZA) and submitted to RIDEM.

The Property consists of approximately 5.6 acres across five separate lots (Lots 128, 325, 481, 489, and 501). The locations of the Lots are depicted on attached Figure 1.

Prior to 1875, the Property was beneath the Providence River. Sometime between 1875 and 1882, Lot 489 was created by the progressive filling of the riverfront and portions of a manufactured gas plant (MGP) were constructed and operated on Lot 489 between 1875 and 1916. During the operation of the MGP, additional portions of the Property were created by the filling of the riverfront. On-Site MGP operations were discontinued in approximately 1916. From approximately the 1920s to 2000, with the exception of Lot 128, the predominant use of the Properties was as a bulk petroleum storage and distribution terminal. The primary aboveground storage tanks (ASTs) associated with these operations were located in the central and eastern portions of Lot 481, the eastern portion of Lot 489, and the southern portion of Lot 325. Subsequently, the Property was predominantly vacant and certain portions were used for parking. Other current Site features include the following:

- A steel bulkhead wall located between the land portion of Lot 481 and the Providence River.
- A cove area located to the east of Lot 489. The shoreline of the cove consists of a stone rip-rapped slope.
- A below grade containment wall located along the eastern edge of Lots 325 and 489. The approximate lateral limits of this containment wall are shown on attached Figure 1.
- A groundwater monitoring and recovery well network. The attached Figure 1 depicts the existing well locations.

- Stormwater management systems located in the eastern portion of Lots 481 and 489 consisting of a narrow strip of rip-rap and a continuous trench drain system. The trench drain collects stormwater run-off and discharges surface water to two 180 foot long, 6 foot wide concrete forebay structures. The forebays subsequently discharge to 80 foot long, 25 foot wide sand filters prior to discharge to the Providence River. The attached Figure 1 depicts the layout of these stormwater management systems.
- A stormwater management system located in the eastern portion of Lot 325 consisting of a grassed swale followed by a sand filter. A narrow strip of rip-rap is located directly adjacent (west) of the swale and sand filter. The layout of this stormwater management system is depicted on Figure 1.

The following provides further details associated with each Lot.

- Plat 46, Lot 128 consists of an approximately 0.5 acre parcel. Lot 128 abuts Lot 481 to the north and east, Allens Avenue to the west, and a 25-foot wide Narragansett Electric Company easement to the south. The lot is separated from the Providence River by Lot 481.

  Plat 46, Lot 325 (southeast portion of the Property) consists of an approximately 0.8 acre parcel of land. Lot 325 is bordered by Public Street to the north, a commercial building to the west, and Assessor's map Plat 46 Lot 361 to the south and east. The lot is separated from the Providence River by Lot 361 Assessor's map Plat 46.
- Plat 46, Lot 481 consists of approximately 2.5 acres of land, approximately 4.5 acres of water area, and an approximately 11,064 square-foot pier area. A wooden plank pier is located at the southeastern corner of the lot and extends approximately 600 feet into the Providence River. Lot 481 abuts Assessor's map Plat 46 Lot 160 to the north, Allens Avenue to the west, Lots 128 and 489 to the south, and the Providence River to the east. A steel bulkhead wall is present between the land based portion of the lot and the water portion. The bulkhead extends the entire length of the eastern edge of the lot.

- Plat 46, Lot 489 consists of approximately 1.8 acres of land and approximately 0.3 acres of water area. The "cove area" is located to the east of the lot. The shoreline of the cove abutting the lot consists of a stone rip-rapped slope. Lot 489 abuts a 25-foot wide Narragansett Electric Company easement to the north, Allens Avenue to the west, Public Street to the south, and the Providence River to the east.

3.0 HYDROGEOLOGIC CONDITIONS

The stratigraphy across the Property generally consists of fill materials, underlain by a discontinuous layer of sorted sand *i.e.,* outwash deposits (identified as the Upper Sand Layer), underlain by marine silt (identified as the Upper Silt Layer), underlain by stratified fine to coarse sands with interbeded silt layers (identified as the Lower Sand Layer), underlain by a second silt layer (identified as the Lower Silt Layer). The following describes each of these primary geologic units.

- The thickness of the fill materials were observed to be highly variable ranging from approximately 2 to 28 feet. Consistent with the development history, the western portion of the Property generally exhibits the least significant fill thickness (approximately 2 to 17 feet) and the more significant fill thicknesses were observed on the eastern portions adjacent to the river and cove area (approximately 15 to 28 feet). In general, the fill material consisted of sandy materials with a heterogeneous mixture of inert materials such as ash, slag, coal, shells, brick, concrete, and wood.

- The Upper Sand Layer generally consists of relatively permeable sorted sands that vary in thickness, but were observed in localized areas up to approximately 20 feet in thickness. The Upper Sand Layer is not continuous and was predominantly observed across Lot 481 and the western side of Lot 489.

- The Upper Silt Layer appears to be continuous and ranges in thickness from approximately 2.5 feet on the northwestern corner of Lot 481 to 30 feet on Lot 325. The top of the Upper Silt Layer dips to the east and continues beneath the river.

- The Lower Sand Unit generally consists of stratified fine to coarse sands interbeded with silt layers and was observed to range in thickness from approximately 13 to 36 feet. This unit is considered relatively permeable with an estimated hydraulic conductivity of 1.2 to 1.3 feet per day. The Lower Sand Unit is confined (identified as the lower aquifer herein) between two units of lower conductive materials (the Upper and Lower Silt Layers).

- The Lower Silt Unit predominantly consists of silt with varying amounts of sand and is considered relatively impermeable. This Lower Silt Unit is encountered approximately 28 feet below the Upper Silt Unit in the vicinity of the Providence River and cove area. The thickness of the lower silt layer is not known; however in the western portion of Lot 489, the Upper Silt Unit is at least approximately 19 to 20 feet thick.

Groundwater is encountered at depths of approximately 4 to 9 feet below ground surface across the Property and is inferred to flow to the east toward the Providence River. Groundwater is tidally influenced and is predominantly encountered within the fill materials.

4.0 SUMMARY OF ENVIRONMENTAL IMPACTS

Based on the type of chemical constituents present at the Property, the potential routes of exposure to excavation and/or utility repair workers include inhalation, dermal contact or accidental ingestion of impacted soil and/or groundwater, and the possible introduction of contaminants through broken skin. Utilization of the appropriate personal protective equipment and the general safety guidelines provided herein will serve to minimize the potential for worker exposure to impacted media while performing work within the areas covered by the ELUR.

The following sections present a summary of soil and groundwater quality at the Properties. This summary information was obtained from previous environmental studies of these Properties. For further detail, please refer to the following:

- January 1995 *Site Investigation Report* (SIR) prepared by Metcalf and Eddy, Inc. (M&E);
- August 2000 *Site Investigation Data Report* (SIDR) prepared by GZA and M&E;
- October 2007 *Revised Supplemental Site Investigation Work Plan* prepared by Arcadis BBL (Arcadis);
- September 2010 *Supplemental Site Investigation Data Report* (SSIDR) prepared by GZA;
- December 2010 *Remedial Alternative Evaluation Report* (RAER) prepared by GZA; and,
- December 2012 *Remedial Action Workplan* (RAWP) prepared by GZA

In planning activities that may include disturbance of impacted materials, a qualified Environmental Professional shall review this environmental data and develop appropriate procedures for impacted soil and groundwater disturbance/management/disposal and worker health and safety consistent with this *SMP*.

CONSTITUENTS OF CONCERN

Based on the results of the previous investigations described in the above reports, certain constituents of concern (COCs) were detected in soil and groundwater associated with former operations. A list of detected COCs and their concentration ranges are provided in the following tables. These tables are organized by lot. For comparative purposes, these tables also include RIDEM Method 1 Industrial/Commercial Direct Exposure Criteria, GB Leachability Criteria, Upper Concentration Limit (UCL) and the GB Groundwater Objective. Please note, the groundwater data presented below are from sampling events conducted in December 2009 and June 2010.

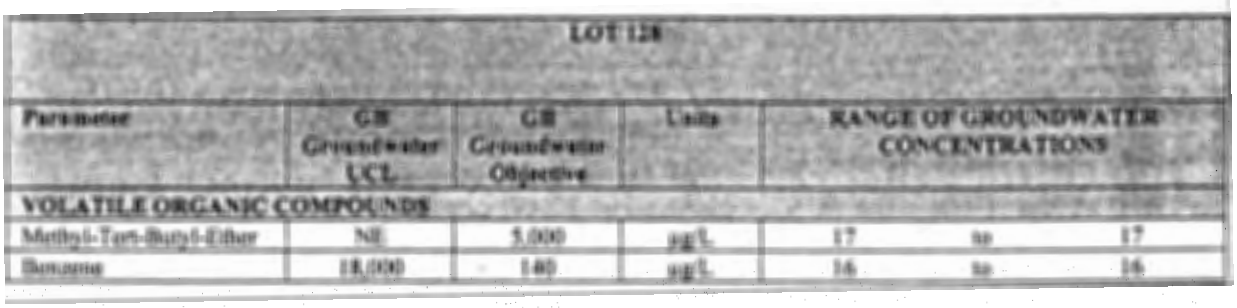
Lot 128							
	GB Leachability Criteria	I/C DEC	UCL	Units	Range of Soil Concentrations Detected		
TOTAL PETROLEUM HYDROCARBON							
Hydrocarbon Content	2,500	2,500	30,000	mg/kg	75.6	to	49,200
PRIORITY POLLUTANT METALS							
Beryllium	-	1.3	10,000	mg/kg	0.31	to	4.65
Silver	-	10,000	10,000	mg/kg	0.25	to	23.458
Arsenic	-	7	10,000	mg/kg	2.2	to	221.95
Cadmium	-	1,000	10,000	mg/kg	0.25	to	2.298
Chromium	-	10,000	10,000	mg/kg	5.6	to	92.73
Copper	-	10,000	10,000	mg/kg	14.8	to	1,110.30
Mercury	-	610	10,000	mg/kg	0.05	to	4.8347
Nickel	-	10,000	10,000	mg/kg	8.84	to	226.98
Lead	-	500	10,000	mg/kg	40	to	996.58

Antimony	-	820	10,000	mg/kg	0.71	to	18.68
Selenium	-	10,000	10,000	mg/kg	0.33	to	0.982
Thallium	-	140	10,000	mg/kg	0.5	to	0.5
Zinc	-	10,000	10,000	mg/kg	37.1	to	4,138.88

LOT 128							
	GB Leachability Criteria	I/C DEC	UCL	Units	Range of Soil Concentrations Detected		
PAHS BY GCMS							
Naphthalene	-	10,000,000	10,000,000	µg/kg	39.7	to	660,000
2-Methylnaphthalene	-	10,000,000	10,000,000	µg/kg		to	26,700
Acenaphthylene	-	10,000,000	10,000,000	µg/kg	54.5	to	61,200
Acenaphthene	-	10,000,000	10,000,000	µg/kg	96.9	to	273,000
Fluorene	-	10,000,000	10,000,000	µg/kg	99.4	to	148,000
Phenanthrene	-	10,000,000	10,000,000	µg/kg	353	to	468,000
Anthracene	-	10,000,000	10,000,000	µg/kg	123	to	151,000
Fluoranthene	-	10,000,000	10,000,000	µg/kg	690	to	198,000
Pyrene	-	10,000,000	10,000,000	µg/kg	600	to	246,000
Benzo [a] Anthracene	-	7,800	10,000,000	µg/kg	350	to	108,000
Chrysene	-	780,000	10,000,000	µg/kg	756	to	113,000
Benzo [b] Fluoranthene	-	7,800	10,000,000	µg/kg	450	to	96,700
Benzo [k] Fluoranthene	-	78,000	10,000,000	µg/kg	541	to	92,700
Benzo [a] Pyrene	-	800	10,000,000	µg/kg	584	to	107,000
Indeno [1,2,3-cd] Pyrene	-	7,800	10,000,000	µg/kg	534	to	89,800
Dibenzo [a,h] Anthracene	-	800	10,000,000	µg/kg	118	to	16,700
Benzo [g,h,i] Perylene	-	10,000,000	10,000,000	µg/kg	459	to	73,800
Dibenzofuran	-	-	10,000,000	µg/kg	38.1	to	22,400
Biphenyl	-	10,000,000	10,000,000	µg/kg	11	to	45,700
Phys. Available Cyanide	-	-	10,000	mg/kg	2.5	to	20.61
Total Cyanide	-	10,000	10,000	mg/kg	0.27	to	163.58
VOLATILE OGRANIC COMPOUNDS							
Benzene	4,300	200,000	10,000,000	µg/kg	20.5	to	6,040
Toluene	54,000	10,000,000	10,000,000	µg/kg	4.96	to	2,780

Ethylbenzene	62,000	10,000,000	10,000,000	µg/kg	5.92	to	46,000
m-Xylene	NE	10,000,000	10,000,000	µg/kg	15.9	to	46,300
o-Xylene	NE	10,000,000	10,000,000	µg/kg	10.8	to	60,000
p-Xylene	NE	10,000,000	10,000,000	µg/kg	7.63	to	13,300
Total Xylenes	NE	10,000,000	10,000,000	µg/kg	35.8	to	120,000
Isopropylbenzene	NE	10,000,000	10,000,000	µg/kg		to	8,920
n-Propylbenzene	NE	NE	10,000,000	µg/kg		to	1,410
1,3,5-Trimethylbenzene	NE	NE	10,000,000	µg/kg		to	450
tert-Butylbenzene	NE	NE	10,000,000	µg/kg		to	230
LOT 128							
	GB Leachability Criteria	**I/C DEC**	**UCL**	**Units**	**Range of Soil Concentrations Detected**		
1,2,4-Trimethylbenzene	NE	NE	10,000,000	µg/kg	11.9	to	82,500
sec-Butylbenzene	NE	NE	10,000,000	µg/kg		to	2,910
n-Butylbenzene	NE	NE	10,000,000	µg/kg		to	3,605
Naphthalene	NE	10,000,000	10,000,000	µg/kg	150	to	6,000

LOT 128						
Parameter	**GB Groundwater UCL**	**GB Groundwater Objective**	**Units**	**Range of Groundwater Concentrations**		
TOTAL PETROLEUM HYDROCARBON						
Hydrocarbon Content	NE	NE	µg/L	200	to	200
PRIORITY POLLUTANT METALS						
Arsenic	NE	NE	mg/L	0.014	to	0.014
Nickel	NE	NE	mg/L	0.018	to	0.018
Zinc	NE	NE	mg/L	0.013	to	0.017
POLYCYCLIC AROMATIC HYDROCARBONS						
Naphthalene	NE	2,670	µg/L	41	to	41
Acenaphthene	NE	NE	µg/L	6.1	to	6.1
Fluorene	NE	NE	µg/L	5.6	to	5.6
Phenanthrene	NE	NE	µg/L	7.9	to	7.9
Anthracene	NE	NE	µg/L	2.2	to	2.2
Total Cyanide	NE	NE	mg/L	0.02	to	0.03



Isopropylbenzene	NE	NE	µg/L	1.2	to	2.6
Naphthalene	NE	2,6702	µg/L	2.4	to	9.7

LOT 325							
	GB Leachability Criteria	I/C DEC	UCL	Units	Range of Soil Concentrations Detected		
TOTAL PETROLEUM HYDROCARBON							
Hydrocarbon Content	2,500	2,500	30,000	mg/kg	81	to	57,500
PRIORITY POLLUTANT METALS							
Beryllium	-	1.3	10,000	mg/kg	0.32	to	0.95
Silver	-	10,000	10,000	mg/kg	0.253	to	4
Arsenic	-	7	10,000	mg/kg	1	to	41
Cadmium	-	1,000	10,000	mg/kg	0.388	to	5.4
Chromium	-	10,000	10,000	mg/kg	3	to	99
Copper	-	10,000	10,000	mg/kg	22	to	200
Mercury	-	610	10,000	mg/kg	0.02	to	1.5
Nickel	-	10,000	10,000	mg/kg	3	to	40
Lead	-	500	10,000	mg/kg	19	to	2480
Antimony	-	820	10,000	mg/kg	3.07	to	35.5
Selenium	-	10,000	10,000	mg/kg	0.266	to	3.9
Zinc	-	10,000	10,000	mg/kg	59	to	681
PAHS BY GCMS							
Naphthalene	-	10,000,000	10,000,000	µg/kg	360	to	616,000
2-Methylnaphthalene	-	10,000,000	10,000,000	µg/kg	360	to	280,000
Acenaphthylene	-	10,000,000	10,000,000	µg/kg	315	to	370,000
Acenaphthene	-	10,000,000	10,000,000	µg/kg	83.1	to	313,000
Fluorene	-	10,000,000	10,000,000	µg/kg	151	to	238,000
Phenanthrene	-	10,000,000	10,000,000	µg/kg	1,800	to	855,000
Anthracene	-	10,000,000	10,000,000	µg/kg	420	to	610,000
Fluoranthene	-	10,000,000	10,000,000	µg/kg	3,380	to	700,000

LOT 325							
	GB Leachability Criteria	I/C DEC	UCL	Units	Range of Soil Concentrations Detected		
Pyrene	-	10,000,000	10,000,000	µg/kg	340	to	610,000
Benzo [a] Anthracene	-	7,800	10,000,000	µg/kg	520	to	750,000
Chrysene	-	780,000	10,000,000	µg/kg	2,100	to	640,000
Benzo [b] Fluoranthene	-	7,800	10,000,000	µg/kg	380	to	760,000
Benzo [k] Fluoranthene	-	78,000	10,000,000	µg/kg	730	to	220,000
Benzo [a] Pyrene	-	800	10,000,000	µg/kg	1,200	to	610,000
Indeno [1,2,3-cd] Pyrene	-	7,800	10,000,000	µg/kg	1,200	to	380,000
Dibenzo [a,h] Anthracene	-	800	10,000,000	µg/kg	345	to	89,000
Benzo [g,h,i] Perylene	-	10,000,000	10,000,000	µg/kg	1,120	to	290,000
Dibenzofuran	-	-	10,000,000	µg/kg	575	to	101,000
Biphenyl	-	10,000,000	10,000,000	µg/kg	244	to	98,400
Phys. Available Cyanide	-	-	10,000	mg/kg	0.67	to	310
Total Cyanide	-	10,000	10,000	mg/kg	10	to	3,800
VOLATILE ORGANIC COMPOUNDS							
Benzene	4,300	200,000	10,000,000	µg/kg	19.4	to	113,085
Toluene	54,000	10,000,000	10,000,000	µg/kg	54.7	to	15,720
Ethylbenzene	62,000	10,000,000	10,000,000	µg/kg	14.2	to	471,920
m&p-Xylene	NE	10,000,000	10,000,000	µg/kg	160	to	197,300
m-Xylene	NE	10,000,000	10,000,000	µg/kg		to	82,500
o-Xylene	NE	10,000,000	10,000,000	µg/kg	12.4	to	156,890
p-Xylene	NE	10,000,000	10,000,000	µg/kg	15.1	to	44,800
Total Xylenes	NE	10,000,000	10,000,000	µg/kg	72.6	to	190,000
Styrene	64,000	190,000	10,000,000	µg/kg	79	to	79
Isopropylbenzene	NE	10,000,000	10,000,000	µg/kg	8.08	to	87,530
n-Propylbenzene	NE	NE	10,000,000	µg/kg		to	93,230
1,3,5-Trimethylbenzene	NE	NE	10,000,000	µg/kg	110	to	152,000
tert-Butylbenzene	NE	NE	10,000,000	µg/kg		to	1,990
1,2,4-Trimethylbenzene	NE	NE	10,000,000	µg/kg	19.2	to	629,600
sec-Butylbenzene	NE	NE	10,000,000	µg/kg		to	31,520
p-Isopropyltoluene	NE	NE	10,000,000	µg/kg		to	28,090
n-Butylbenzene	NE	NE	10,000,000	µg/kg		to	76,550
Naphthalene	NE	10,000,000	10,000,000	µg/kg	120	to	6,054,560

LOT 325						
Parameter	GB Groundwater UCL	GB Groundwater Objective	Units	Range of Groundwater Concentrations		
TOTAL PETROLEUM HYDROCARBON						
Hydrocarbon Content	NE	NE	µg/L	1,100	to	7,500
PRIORITY POLLUTANT METALS						
Arsenic	NE	NE	mg/L	0.013	to	0.013
Copper	NE	NE	mg/L	0.02	to	0.02
Lead	NE	NE	mg/L	0.012	to	0.012
Zinc	NE	NE	mg/L	0.012	to	0.2
POLYCYCLIC AROMATIC HYDROCARBONS						
Naphthalene	NE	2,670	µg/L	2.5	to	1,600
2-Methylnaphthalene	NE	NE	µg/L	200	to	200
Acenaphthylene	NE	NE	µg/L	2.1	to	2.3
Acenaphthene	NE	NE	µg/L	4.3	to	110
Fluorene	NE	NE	µg/L	2.3	to	38
Phenanthrene	NE	NE	µg/L	8	to	43
Anthracene	NE	NE	µg/L	2	to	45
Fluoranthene	NE	NE	µg/L	2.3	to	5.7
Pyrene	NE	NE	µg/L	2.6	to	5.6
Total Cyanide	NE	NE	mg/L	0.09	to	8.1
VOLATILE ORGANIC COMPOUNDS						
Methyl-Tert-Butyl-Ether	NE	5,000	µg/L	11	to	12
Benzene	18,000	140	µg/L	1.2	to	440
Toluene	21,000	1,700	µg/L	1.2	to	71
Ethylbenzene	16,000	1,600	µg/L	2.2	to	1,000
m&p-Xylene	NE	NE	µg/L	14	to	270
o-Xylene	NE	NE	µg/L	2.9	to	290
Isopropylbenzene	NE	NE	µg/L	5.2	to	95
N-Propylbenzene	NE	NE	µg/L	3.1	to	53
1,3,5-Trimethylbenzene	NE	NE	µg/L	3.3	to	98
1,2,4-Trimethylbenzene	NE	NE	µg/L	2.8	to	420
sec-Butylbenzene	NE	NE	µg/L	2.4	to	23
p-Isopropyltoluene	NE	NE	µg/L	4	to	6.1
n-Butylbenzene	NE	NE	µg/L	2.6	to	31
Naphthalene	NE	2,6702	µg/L	3.3	to	4,400

	LOT 481						
	GB Leachability Criteria	I/C DEC	UCL	Units	Range of Soil Concentrations Detected		
TOTAL PETROLEUM HYDROCARBON							
Hydrocarbon Content	2,500	2,500	30,000	mg/kg	14	to	65,000
PRIORITY POLLUTANT METALS							
Beryllium	-	1.3	10,000	mg/kg	0.28	to	2.6
Silver	-	10,000	10,000	mg/kg	1.2	to	80
Arsenic	-	7	10,000	mg/kg	0.74	to	40
Cadmium	-	1,000	10,000	mg/kg	0.37	to	2.7
Chromium	-	10,000	10,000	mg/kg	3.5	to	110
Copper	-	10,000	10,000	mg/kg	4.8	to	23000
Mercury	-	610	10,000	mg/kg	0.02	to	2
Nickel	-	10,000	10,000	mg/kg	1.3	to	1400
Lead	-	500	10,000	mg/kg	4.2	to	1800
Antimony	-	820	10,000	mg/kg	2.3	to	4.8
Selenium	-	10,000	10,000	mg/kg		to	3.7
Zinc	-	10,000	10,000	mg/kg	20	to	3500
PAHS BY GCMS							
Naphthalene	-	10,000,000	10,000,000	µg/kg	790	to	207,000
2-Methylnaphthalene	-	10,000,000	10,000,000	µg/kg	1600	to	29,000
Acenaphthylene	-	10,000,000	10,000,000	µg/kg	940	to	40,300
Acenaphthene	-	10,000,000	10,000,000	µg/kg	2300	to	94,500
Fluorene	-	10,000,000	10,000,000	µg/kg	2600	to	93,100
Phenanthrene	-	10,000,000	10,000,000	µg/kg	460	to	600,000
Anthracene	-	10,000,000	10,000,000	µg/kg	780	to	206,000
Fluoranthene	-	10,000,000	10,000,000	µg/kg	1000	to	654,000
Pyrene	-	10,000,000	10,000,000	µg/kg	990	to	612,000
Benzo [a] Anthracene	-	7,800	10,000,000	µg/kg	880	to	244,000
Chrysene	-	780,000	10,000,000	µg/kg	750	to	281,000
Benzo [b] Fluoranthene	-	7,800	10,000,000	µg/kg	950	to	222,000
Benzo [k] Fluoranthene	-	78,000	10,000,000	µg/kg	380	to	213,000
Benzo [a] Pyrene	-	800	10,000,000	µg/kg	770	to	254,000

LOT 481							
	GB Leachability Criteria	I/C DEC	UCL	Units	Range of Soil Concentrations Detected		
Indeno [1,2,3-cd] Pyrene	-	7,800	10,000,000	µg/kg	480	to	210,000
Dibenzo [a,h] Anthracene	-	800	10,000,000	µg/kg	800	to	44,900
Benzo [g,h,i] Perylene	-	10,000,000	10,000,000	µg/kg	540	to	204,000
Dibenzofuran	-	-	10,000,000	µg/kg		to	68,600
Biphenyl	-	10,000,000	10,000,000	µg/kg		to	11,100
Phys. Available Cyanide	-	-	10,000	mg/kg	8	to	60
Total Cyanide	-	10,000	10,000	mg/kg	26	to	300
VOLATILE ORGANIC COMPOUNDS							
Benzene	4,300	200,000	10,000,000	µg/kg	4.75	to	1,220
Toluene	54,000	10,000,000	10,000,000	µg/kg	2.73	to	660
Ethylbenzene	62,000	10,000,000	10,000,000	µg/kg	0.221	to	1,210
m&p-Xylene	NE	10,000,000	10,000,000	µg/kg	180	to	2,100
m-Xylene	NE	10,000,000	10,000,000	µg/kg	0.666	to	121
o-Xylene	NE	10,000,000	10,000,000	µg/kg	0.331	to	1,180
p-Xylene	NE	10,000,000	10,000,000	µg/kg	0.382	to	687
Total Xylenes	NE	10,000,000	10,000,000	µg/kg	1.38	to	2,380
Isopropylbenzene	NE	10,000,000	10,000,000	µg/kg	0.034	to	3,100
n-Propylbenzene	NE	NE	10,000,000	µg/kg	90	to	6,400
1,3,5-Trimethylbenzene	NE	NE	10,000,000	µg/kg		to	230
tert-Butylbenzene	NE	NE	10,000,000	µg/kg		to	330
1,2,4-Trimethylbenzene	NE	NE	10,000,000	µg/kg	0.321	to	6,550
sec-Butylbenzene	NE	NE	10,000,000	µg/kg	90	to	5,500
p-Isopropyltoluene	NE	NE	10,000,000	µg/kg	90	to	420
n-Butylbenzene	NE	NE	10,000,000	µg/kg	90	to	7,100
Naphthalene	NE	10,000,000	10,000,000	µg/kg	140	to	7,600

LOT 481						
Parameter	**GB Groundwater UCL**	**GB Groundwater Objective**	**Units**	**Range of Groundwater Concentrations**		
TOTAL PETROLEUM HYDROCARBON						
Hydrocarbon Content	NE	NE	µg/L	3,000	to	3000
PRIORITY POLLUTANT METALS						
Arsenic	NE	NE	mg/L	0.011	to	0.017
Cadmium	NE	NE	mg/L	0.0055	to	0.0057
Copper	NE	NE	mg/L	0.02	to	0.02
Nickel	NE	NE	mg/L	0.16	to	0.16
Zinc	NE	NE	mg/L	0.011	to	0.22
POLYCYCLIC AROMATIC HYDROCARBONS						
Naphthalene	NE	2,670	µg/L	2.6	to	72
2-Methylnaphthalene	NE	NE	µg/L	3.2	to	9.9
Acenaphthene	NE	NE	µg/L	2.1	to	28
Fluorene	NE	NE	µg/L	2.1	to	12
Phenanthrene	NE	NE	µg/L	2.2	to	11
Anthracene	NE	NE	µg/L	2.2	to	2.6
Total Cyanide	NE	NE	mg/L	0.02	to	3.8
VOLATILE ORGANIC COMPOUNDS						
Benzene	18,000	140	µg/L	3.9	to	11
Toluene	21,000	1,700	µg/L	2.6	to	2.7
Ethylbenzene	16,000	1,600	µg/L	54	to	62
m&p-Xylene	NE	NE	µg/L	18	to	20
o-Xylene	NE	NE	µg/L	16	to	16
Isopropylbenzene	NE	NE	µg/L	1.4	to	12
N-Propylbenzene	NE	NE	µg/L	3.1	to	4.6
1,3,5-Trimethylbenzene	NE	NE	µg/L	3.8	to	4
1,2,4-Trimethylbenzene	NE	NE	µg/L	23	to	23
sec-Butylbenzene	NE	NE	µg/L	1.1	to	1.3
p-Isopropyltoluene	NE	NE	µg/L	1	to	1
n-Butylbenzene	NE	NE	µg/L	1.1	to	1.4
Naphthalene	NE	2,6702	µg/L	2.7	to	220

Lot 489/501							
	GB Leachability Criteria	Industrial/ Commercial DEC	UCL	Units	Range of Soil Concentrations Detected		
TOTAL PETROLEUM HYDROCARBON							
Hydrocarbon Content	2,500	2,500	30,000	mg/kg	91	to	61,000
PRIORITY POLLUTANT METALS							
Beryllium	-	1.3	10,000	mg/kg	0.27	to	5.16
Silver	-	10,000	10,000	mg/kg	0.485	to	9.59
Arsenic	-	7	10,000	mg/kg	1	to	43
Cadmium	-	1,000	10,000	mg/kg	0.37	to	2.77
Chromium	-	10,000	10,000	mg/kg	3	to	140
Copper	-	10,000	10,000	mg/kg	13	to	1210
Mercury	-	610	10,000	mg/kg	0.039	to	75.6
Nickel	-	10,000	10,000	mg/kg	3.7	to	1600
Lead	-	500	10,000	mg/kg	48	to	1870
Antimony	-	820	10,000	mg/kg	0.843	to	9.42
Selenium	-	10,000	10,000	mg/kg	0.252	to	4.7
Thallium	-	140	10,000	mg/kg	0.5	to	1.8
Zinc	-	10,000	10,000	mg/kg	60	to	2900
PAHS BY GCMS							
Naphthalene	-	10,000,000	10,000,000	µg/kg	70.1	to	2,900,000
2-Methylnaphthalene	-	10,000,000	10,000,000	µg/kg	390	to	1,100,000
Acenaphthylene	-	10,000,000	10,000,000	µg/kg	43.3	to	220,000
Acenaphthene	-	10,000,000	10,000,000	µg/kg	16.3	to	625,000
Fluorene	-	10,000,000	10,000,000	µg/kg	540	to	490,000
Phenanthrene	-	10,000,000	10,000,000	µg/kg	262	to	1,400,000
Anthracene	-	10,000,000	10,000,000	µg/kg	96	to	1,170,000
Fluoranthene	-	10,000,000	10,000,000	µg/kg	311	to	1,300,000
Pyrene	-	10,000,000	10,000,000	µg/kg	289	to	1,120,000
Benzo [a] Anthracene	-	7,800	10,000,000	µg/kg	177	to	494,000
Chrysene	-	780,000	10,000,000	µg/kg	175	to	483,000
Benzo [b] Fluoranthene	-	7,800	10,000,000	µg/kg	189	to	381,000
Benzo [k] Fluoranthene	-	78,000	10,000,000	µg/kg	147	to	357,000
Benzo [a] Pyrene	-	800	10,000,000	µg/kg	167	to	460,000
Indeno [1,2,3-cd] Pyrene	-	7,800	10,000,000	µg/kg	185	to	301,000
Dibenzo [a,h] Anthracene	-	800	10,000,000	µg/kg	43.1	to	25,000
Benzo [g,h,i] Perylene	-	10,000,000	10,000,000	µg/kg	163	to	283,000
Dibenzofuran	-	-	10,000,000	µg/kg	30	to	120,000
Biphenyl	-	10,000,000	10,000,000	µg/kg	14.6	to	170,000
Phys. Available Cyanide	-	-	10,000	mg/kg	3	to	320
Total Cyanide	-	10,000	10,000	mg/kg	0.24	to	9,000

Lot 489/501							
VOCs	GB Leachability Criteria	Industrial/ Commercial DEC	UCL	Units	Range of Soil Concentrations Detected		
Chloroform	NE	940,000	10,000,000	µg/kg	110	to	110
1,2-Dichloroethane	2,300	63,000	10,000,000	µg/kg		to	2,700
Benzene	4,300	200,000	10,000,000	µg/kg	11.3	to	736,915
Trichloroethene	20,000	520,000	10,000,000	µg/kg		to	5,070
Bromodichloromethane	NE	92,000	10,000,000	µg/kg	84	to	84
cis-1,3-Dichloropropene	NE	NE	10,000,000	µg/kg		to	2,600
Toluene	54,000	10,000,000	10,000,000	µg/kg	50.2	to	267,000
1,1,1,2-Tetrachloroethane	NE	220,000	10,000,000	µg/kg		to	81,100
Ethylbenzene	62,000	10,000,000	10,000,000	µg/kg	9.17	to	4,215,090
m&p-Xylene	NE	10,000,000	10,000,000	µg/kg	210	to	3,683,940
m-Xylene	NE	10,000,000	10,000,000	µg/kg	39.6	to	185,000
o-Xylene	NE	10,000,000	10,000,000	µg/kg	17.2	to	1,862,290
p-Xylene	NE	10,000,000	10,000,000	µg/kg	23.4	to	79,600
Total Xylenes	NE	10,000,000	10,000,000	µg/kg	83.3	to	384,000
Styrene	64,000	190,000	10,000,000	µg/kg	380	to	694,000
Isopropylbenzene	NE	10,000,000	10,000,000	µg/kg	800	to	492,820
1,2,3-Trichloropropane	NE	NE	10,000,000	µg/kg		to	45,300
n-Propylbenzene	NE	NE	10,000,000	µg/kg	160	to	154,245
2-Chlorotoluene	NE	NE	10,000,000	µg/kg		to	211,600
1,3,5-Trimethylbenzene	NE	NE	10,000,000	µg/kg	140	to	1,026,846
tert-Butylbenzene	NE	NE	10,000,000	µg/kg		to	2,001
1,2,4-Trimethylbenzene	NE	NE	10,000,000	µg/kg	10	to	2,783,230
sec-Butylbenzene	NE	NE	10,000,000	µg/kg	1500	to	84,795
p-Isopropyltoluene	NE	NE	10,000,000	µg/kg	83	to	78,115

Lot 489/501						
Parameter	**GB Groundwater UCL**	**GB Groundwater Objective**	**Units**	**Range of Groundwater Concentrations**		
TOTAL PETROLEUM HYDROCARBON						
Hydrocarbon Content	NE	NE	µg/L	340	to	39000
PRIORITY POLLUTANT METALS						
Silver	NE	NE	mg/L	0.007	to	0.007
Arsenic	NE	NE	mg/L	0.033	to	0.27
Cadmium	NE	NE	mg/L	0.0083	to	0.0083
Chromium	NE	NE	mg/L	0.012	to	0.061
Copper	NE	NE	mg/L	0.017	to	0.052
Nickel	NE	NE	mg/L	0.018	to	0.018
Lead	NE	NE	mg/L	0.014	to	0.02
Thallium	NE	NE	mg/L	0.13	to	0.13
Zinc	NE	NE	mg/L	0.01	to	0.73
POLYCYCLIC AROMATIC HYDROCARBONS						
Naphthalene	NE	2,670	µg/L	2.7	to	7,100
2-Methylnaphthalene	NE	NE	µg/L	3	to	690
Acenaphthylene	NE	NE	µg/L	2.5	to	420
Acenaphthene	NE	NE	µg/L	4.2	to	120
Fluorene	NE	NE	µg/L	2.6	to	42
Phenanthrene	NE	NE	µg/L	2	to	62
Anthracene	NE	NE	µg/L	2.3	to	27
Fluoranthene	NE	NE	µg/L	2.4	to	6.1
Pyrene	NE	NE	µg/L	2.4	to	6.6
Benzo [a] Anthracene	NE	NE	µg/L	2.4	to	2.4
Benzo [b] Fluoranthene	NE	NE	µg/L	2	to	2
Benzo [a] Pyrene	NE	NE	µg/L	2	to	2
Total Cyanide	NE	NE	mg/L	0.1	to	1.6

Lot 489						
Parameter	**GB Groundwater UCL**	**GB Groundwater Objective**	**Units**	**Range of Groundwater Concentrations**		
VOLATILE ORGANIC COMPOUNDS						
Acetone	NE	NE	µg/L	14	to	59
Methyl-Tert-Butyl-Ether	NE	5,000	µg/L	2.2	to	14
Benzene	18,000	140	µg/L	2.7	to	34,000
Toluene	21,000	1,700	µg/L	1.1	to	32,000
Ethylbenzene	16,000	1,600	µg/L	1.1	to	7,700
m&p-Xylene	NE	NE	µg/L	2.5	to	6,300
o-Xylene	NE	NE	µg/L	1.2	to	2,600
Styrene	50,000	2,200	µg/L	3	to	8,400
Isopropylbenzene	NE	NE	µg/L	2.8	to	450
N-Propylbenzene	NE	NE	µg/L	1.3	to	720
1,3,5-Trimethylbenzene	NE	NE	µg/L	3.5	to	240
tert-Butylbenzene	NE	NE	µg/L	1	to	1
1,2,4-Trimethylbenzene	NE	NE	µg/L	1.4	to	4,000
sec-Butylbenzene	NE	NE	µg/L	1.4	to	900
p-Isopropyltoluene	NE	NE	µg/L	1.1	to	630
n-Butylbenzene	NE	NE	µg/L	1	to	1,400
1,2-Dichlorobenzene	NE	NE	µg/L	1.8	to	1.8
Naphthalene	NE	2,6702	µg/L	2.7	to	35,000

UCL = Upper Concentration Limit
I/C DEC = Industrial/Commercial Direct Exposure Criteria
"-" = Indicates a criteria has not been established
ND = Not detected reporting limit

As described in the reports listed above, non-aqueous phase liquid (NAPL) impacts have been detected predominantly within Lots 325 and 489. The following table summarizes the ranges of NAPL thicknesses observed from January 2010 through October 2011. Please refer to the historic reports for more detail on observed NAPL distribution and thicknesses.

	RANGE OF THICKNESSES OBSERVED (feet)			
	Lot 481	**Lot 128**	**Lot 489**	**Lot 325**
Light Non-Aqueous Phase Liquids	Trace	Trace	Trace to 3.3'	Trace to 0.70'
Dense Non-Aqueous Phase Liquids	Trace	Not detected	Trace to 11'	Trace to 4.5'

Trace indicates less than 0.01 feet

5.0 SOIL AND GROUNDWATER MANAGEMENT GUIDELINES

The following management guidelines were developed for activities involving excavation/disturbance of impacted soils (and groundwater) located beneath the engineered controls at the Properties. As described in the ELUR and shown on the attached Figure 1, the "engineered control" for these Properties is defined as the approximately one-foot clean soil/gravel cap underlain by a geosynthetic barrier.

The guidelines apply to all "non-emergency[1]" construction and maintenance activities that disturb soils and/or groundwater beneath the engineered control. Soils generated from an excavation conducted at the Property may be placed back into its original excavation. However, so as to maintain known exposure scenarios, every attempt shall be made to backfill the excavation so that the corresponding depth and location of the backfilled soil resembles the depth and location at which the soil originally existed. This requirement includes the reinstallation of the geosynthetic barrier and the re-placement of the engineered control cap. Excess and/or materials deemed unsuitable for use as backfill shall be managed and disposed consistent with this *SMP*.

As described previously, the natural groundwater table is encountered at depths ranging from approximately 4 to 9 feet below grade and has been observed to be tidally influenced. Average depth to groundwater is approximately 6.1 feet below grade and the groundwater table is generally observed within the fill unit. In addition, NAPL has been observed in certain areas of the Property. Projects involving excavation below the water table and/or disturbance of impacted groundwater will require additional controls and Best Management Practices (BMPs) as described below.

Preliminary Activities

- Before preparing for any planned activities involving the disturbance of materials beneath the engineered control, this *SMP* shall be reviewed by a qualified Environmental Professional. Plans shall be prepared in consideration of the Property conditions and soil and groundwater impacts described herein and in the ELUR so as to prevent potential human exposures to or migration of hazardous substances.

- Provide 60 days written notice to RIDEM before any mechanical excavation, or within three business days of excavation in response to an Emergency as described in Section C of the ELUR.

- As part of the Notification, the Property owner shall provide a written description of the anticipated activity. At a minimum, this description shall include:

  - A general description of the planned activity;
  - An estimate of the areal extent, depth and volume of disturbance;
  - A list of known and anticipated contaminants of concern;
  - A drawing identifying the proposed areas and depths of excavation;
  - Proposed impacted soil and groundwater handling/management and disposal procedures;
  - Proposed restoration plan, including cap restoration details; and
  - The anticipated duration/schedule.

- Should any project require the need for dewatering and/or disturbance of impacted groundwater in support of excavation/construction, the Notification shall include a

[1] Refer to the "Emergency" provisions of the ELUR. In the event emergency work is necessary, this *SMP* shall be consulted and the provisions described herein will be followed to the extent practical.

description of plans to manage, contain, treat (if necessary) and discharge or dispose of impacted groundwater. In addition, all appropriate regulatory approvals related to the removal, handling, treatment and discharge of impacted groundwater shall be in-place prior to the initiation of the project. Such plans shall, at a minimum, include an evaluation of water quality and the potential presence of Non-Aqueous Phase Liquids (NAPL), the method by which water will be treated, contained and/or discharged/disposed and the necessary regulatory approvals, permits, etc. **Impacted, untreated groundwater shall not be discharged directly to the ground surface, collection utilities or neighboring water bodies.**

- Prior to the initiation of soil excavation, the selected contractor or any other personnel performing subsurface work at the Property shall contact DIGSAFE® and appropriate utility companies to identify and mark the location of below grade utilities.

- Prior to performing the proposed work, the selected contractor and/or responsible party shall obtain all applicable federal, state and local permits. Please note, a portion of the Property is located within the jurisdictional limits of the Coastal Resource Management Council (CRMC). A jurisdictional determination of the requirements of the CRMC shall be made prior to the implementation of proposed construction projects. If applicable, CRMC approval shall be obtained prior to conducting the work.

- As described further herein, prior to conducting any earthwork/construction activities that involves disturbance of materials beneath the engineered controls, a qualified Environmental Professional shall be consulted to determine the appropriate level of health and safety training required by personnel involved with the work, the personal protection equipment required, and general health and safety guidelines. A project specific Health and Safety Plan (HASP) shall be prepared by a qualified Certified Industrial Hygienist (CIH) and adhered to during all phases of the work.

Soil Management Guidelines

- An Environmental Professional shall be on-site during these activities to observe and document the soil conditions, including field screening the soils via a handheld photoionization detector (PID).

- Reuse of excavate from below the engineered cap is allowable. To the extent practical, excavated materials shall be replaced such that the corresponding depth and location of the backfilled soil resembles the depth and location at which the soil originally existed.

- Grossly impacted materials and/or materials deemed unsuitable for use as backfill shall be segregated and stockpiled separately for subsequent management and off-site disposal.

- Stockpiled soils shall be staged and temporarily stored in a designated area of the Property for no more than 90 days. To the extent practical, the storage location shall be selected to limit unauthorized access to the materials (*i.e.,* away from public roadways/walkways).

- To limit the potential for run-off of soils from excavation areas, adequate erosion controls shall be established around the perimeter of the work area(s) and on the down slope side of disturbed areas of susceptible to erosion. Erosion control devices such as staked haybales, silt fencing, and/or straw wattles shall be employed. All erosion controls shall be established and maintained as required by any applicable permits, including CRMC requirements.

- Excavated materials shall be temporarily placed in working stockpiles adjacent to excavations staged on two layers of 10-mil polyethylene sheeting. Depending on the volume of material involved in the project, soils shall be either stockpiled on polyethylene sheeting as described herein, or stored in lined roll-off type containers. No excavated materials shall be placed directly on the ground surface. In selecting the soil storage location, considerations must be made relative to the requirements of the CRMC. At the end of each work day all stockpiles shall be covered with 10-mil polyethylene sheeting to control the generation of wind-blown dusts and potential sediment migration. Stockpile areas shall be equipped with appropriate controls to limit the loss of the cover and protect against storm water erosion. This shall include the installation of hay bales, silt fencing and any other appropriate measures during the entire duration of the project. Stockpiles shall be inspected daily by site personnel. Should tears or punctures be observed in either the polyethylene sheeting covering or underlying the piles, repairs shall be made immediately. Daily shutdown procedures shall include the covering and securing of all stockpiled material area with polyethylene sheeting.

- Best soil management practices shall be employed at all times and impacted soils shall be segregated into separate piles (or cells or containers) as appropriate.

- Soil, construction material and/or debris stockpile areas shall not be located on any coastal feature, within 200-feet of the inland edge of the coastal feature or in coastal waters.

- During earthwork, dust suppression techniques shall be initiated and maintained at all times. All reasonable precautions shall be taken to prevent the excessive generation of dust during soil excavation, stockpiling, loading, and other soil handling activities. At a minimum, the PM_{10} dust concentration, as measured with a real-time dust monitor, shall not exceed 150 ug/m over a 24-hour period. Methods of stabilization consisting of sprinkling, mulching, or similar methods shall be employed as necessary for dust control. Dust controls shall be employed to ensure the work is conducted consistent with all applicable statutes, regulations, and ordinances. If excessive dust generation occurs and cannot be reasonably controlled, the job shall be shut down until dust control is achieved.

- In the event objectionable odors or elevated concentrations of organic vapors are encountered at the property line during the performance of earthwork activities, odor and organic vapor control measures shall be implemented. Acceptable control measures shall include covering soil stockpiles or open excavations with polyethylene sheeting and/or backfilling open excavations. If these measures are ineffective, odor/organic vapor suppression foam shall be applied to the exposed impacted material deemed to be the source of the odor. The foam shall be applied in accordance with manufacturer's recommendations.

- In the event that unexpected observations or situations involving hazardous materials, hazardous wastes or similar conditions of environmental concern arise during work, earthwork activities shall be immediately ceased. Workers shall not attempt to handle the situation themselves, but shall contact a qualified Environmental Professional for further evaluation and direction.

- As shown on the attached Figure 1, a network of groundwater monitoring and recovery wells exist on the Property. When executing work, care shall be exercised to ensure that this well network is protected and maintained. In the event a well is damaged it shall be repaired or replaced. In the event a damaged well requires abandonment, the well abandonment procedures described in Appendix 1 of RIDEM's Rules and Reuglations for Groundwater Quality shall be adhered to. No monitoring or recovery wells shall be abandoned without prior RIDEM approval.

- As shown on the attached Figure 1, a below grade containment wall is present along the eastern edges of Lots 325 and 489. When executing work, care shall be exercised to ensure that this containment wall is protected and maintained. In the event the containment wall is damaged, it shall be repaired or replaced to match its original condition.

Waste Characterization and Disposal

- Soils excavated from the Property shall not be re-used at locations off-Property. All excess soils shall be transported to a facility licensed for recycling or disposal. A qualified Environmental Professional shall collect samples of the excavated soils (either during excavation or from stockpiles) for laboratory testing. Soil must be sampled at a frequency adequate to support the data requirements of the selected disposal facility, but should consider the following testing program.

Analyte/Parameter	Test Method
Petroleum hydrocarbons	EPA Method 8100M
Volatile organic compounds	EPA Method 8260B
Semi-volatile organic compounds	EPA Method 8270
Total RCRA Metals	EPA Method 6010 &

	7471A
Flashpoint	EPA Method 1010M
Corrosivity (pH)	EPA Method 9045C
Reactivity	EPA Methods SW-846 7.3.3.2/9014 and SW-846 7.3.4.2/376.2

- Copies of these records shall be maintained by the Property Owner and summarized in a *Closure Report* or in the *Annual Inspection Report* prepared consistent with the requirements of Section H of the ELUR.

Decontamination Protocols

- At the conclusion of the construction activities or whenever heavy equipment or tools leave the Property, they shall be decontaminated as required by the qualified Environmental Professional within a pre-designated area. This area shall include adequate controls (e.g., decontamination pad or liner) to prevent the potential for impact to the surrounding ground surface. At a minimum, soil shall be brushed from the equipment and re-used as backfill or placed in stockpiles to be managed as described herein. Vehicles are not to leave the Property with visible soil residues on the exterior.

- All non-disposable equipment used during the soil disturbance activities shall be properly decontaminated as appropriate prior to removal from the Property. All disposable equipment used during the soil disturbance activities shall be properly containerized and disposed off Property following completion of the work.

Restoration and Backfill

- Property restoration activities shall, at a minimum, be performed such as to replace, to pre-construction conditions, the existing engineered control cap. This includes replacement of the one foot of clean soil and underlying geosynthetic. All disturbed areas shall be graded to match pre-existing conditions.

- Any clean fill material brought on-site is required to meet the Department's Method 1 Residential Direct Exposure Criteria or be designated by an Environmental Professional as Non-Jurisdictional under the Remediation Regulations. All clean fill, including sub-grade material and loam, imported to the Property must be sampled prior to delivery and placement. Laboratory analytical results shall be reviewed by a qualified Environmental Professional prior to acceptance or delivery to the Property. Clean fill and loam shall be sampled for arsenic, VOCs, Total Metals (RCRA 13), SVOCs and TPH at a minimum frequency of one sample per 500 cubic yards. The *Annual Inspection Report* for the Property, or *Closure Report* if applicable, shall include the analytical sampling results from the imported materials demonstrating compliance. Any fill determined to be non-jurisdictional will also require the submission of a written

certification by an Environmental Professional designating that the fill is not jurisdictional.

- The locations of the existing groundwater monitoring and recovery well network are depicted in the attached Figure 1. Any damage to this monitoring and recovery well network shall be repaired as necessary.

6.0 HEALTH AND SAFETY GUIDELINES

The basic health and safety procedures outlined below shall be implemented while performing excavation work that includes disturbance of materials beneath the engineered control cap at the Property. ***Recognize that the procedures are intended as a general guideline only. Contractors and others involved in subsurface excavation work at the Property are responsible for the preparation of their own health and safety procedures and the protection of their own workers. Prior to conducting any earthwork/construction activities that involves disturbance of materials beneath the engineered controls, an Environmental Professional shall be consulted to determine the appropriate level of health and safety training required by personnel involved with the work.***

Personal Protective Equipment (PPE)

In general, the level of protection which shall be used by workers will be determined by the task which the person is performing; however, at a minimum, Level D PPE shall be worn at all times while performing excavation activities within the ELUR area. Level D PPE shall, at a minimum, consist of the following:

- Steel-toe work boots with over-boots as needed;
- Hard hats;
- Safety vest;
- Safety glasses; and
- Rubber or leather gloves.

Site Operating Procedures/Safety Guidelines

Regardless of the level of PPE necessary to complete work, the following general health and safety guidelines shall be followed during the performance of any excavation activities conducted.

- The location of all utilities in the vicinity of the excavation shall be established prior to beginning work;

- During work, precautions shall be taken to restrict access to the work area to only personnel involved in the work activities. Under no circumstances should the general public be allowed access to the area.

- Practice contamination avoidance: never sit or kneel in an excavation; never lay equipment on the ground; avoid obvious sources of contamination; and avoid unnecessary contact with objects in an excavation;

- Be alert to any unusual changes in your physical condition; never ignore warning signs. Notify the responsible employee as to any changed conditions;

- All equipment used in an excavation shall be properly cleaned and maintained in good working order. Equipment shall be inspected for signs of defect and/or contamination before use;

- Eating, drinking, chewing gum, and smoking shall be prohibited in active excavation areas; and

- During working hours, workers who stop to drink or eat should leave the active work area, remove PPE, and wash hands thoroughly with soap and water prior to eating or drinking;

- The discovery of any condition that would suggest the existence of a situation more hazardous than anticipated shall result in the evacuation of personnel from the excavation and the re-evaluation of the hazard and the level of protection.

- At the completion of work, workers shall wash their hands with soap and water before leaving the Property. All workers safety boots are recommended to be brushed with a stiff bristle brush or similar instrument (not by hand) to remove residual soil. Disposable personal protective equipment (PPE) shall be disposed of according to applicable regulations.

Emergency Phone Numbers

Emergency telephone numbers and the directions to the nearest hospital are included below. This information shall also be included in the Health and Safety Plans developed for the activity and shall be periodically reviewed and updated as needed.

Response Agency	Phone Number
Ambulance	911
Police	911
Fire	911
RIDEM/Office of Compliance & Inspection/Emergency response Program	(401) 222-1360 or (401) 222-3070 (non-business hours)
USEPA/Hazardous Materials Spills	(800) 424-8802
Poison Control Center	(800) 562-8236
DigSafe® (Utility Clearance)	1-888-DIGSAFE
Hospital	
Rhode Island Hospital 593 Eddy Street Providence, RI 02903	401-444-4000
Route to Hospital	

1. Turn RIGHT out of the Property onto PUBLIC STREET
2. Turn RIGHT at second turn onto EDDY STREET
3. End at 593 EDDY STREET

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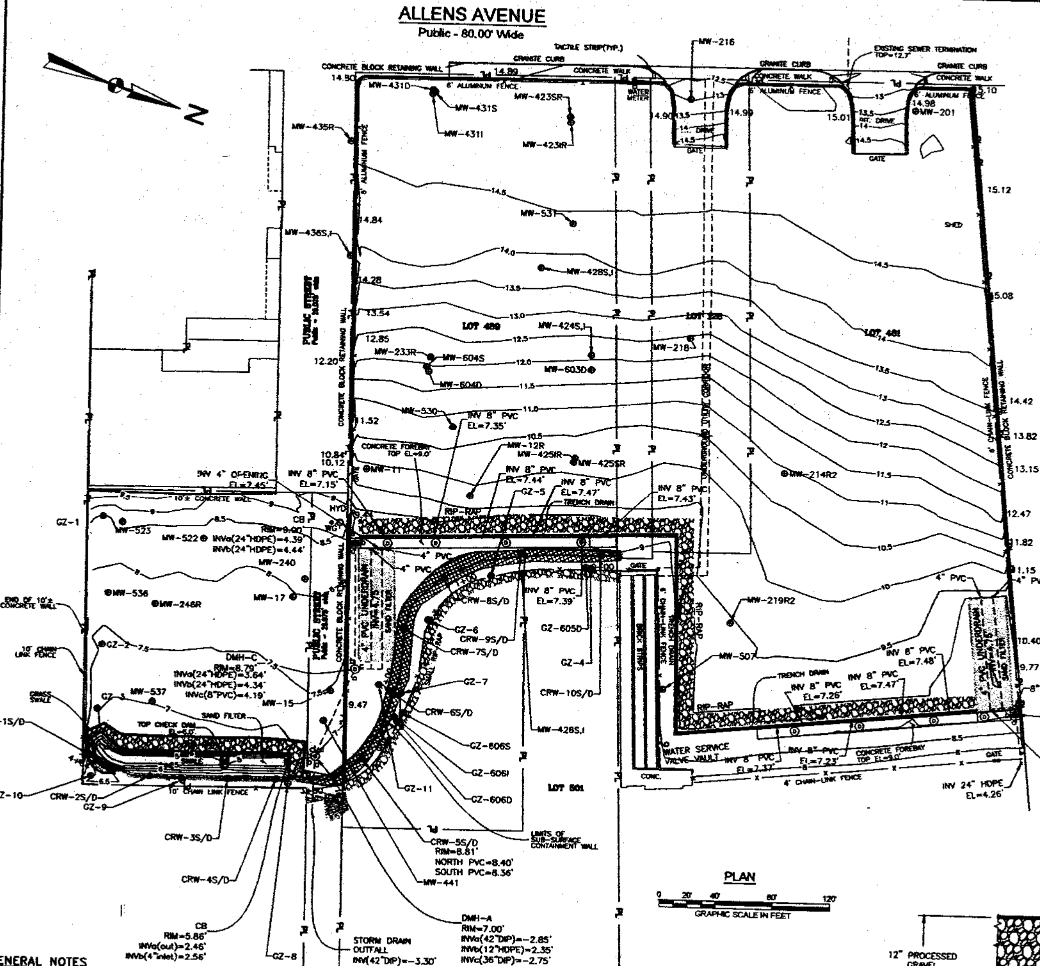
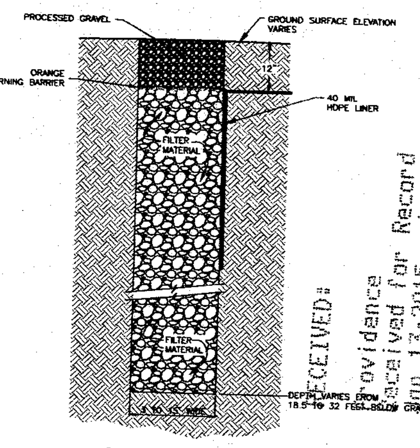




TYPICAL BELOW GRADE CONTAINMENT WALL DETAIL
NOT TO SCALE

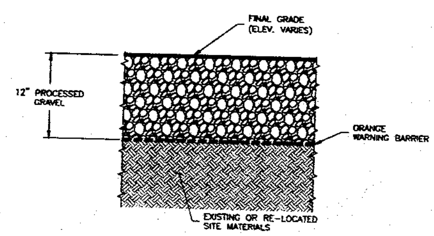
LEGEND:

- FINAL AS-BUILT CONTOUR
- CONTAINMENT WALL RECOVERY WELLS
- MONITORING WELL
- CATCH BASIN
- DRAIN MANHOLE
- WATER MANHOLE
- × 5.00 SPOT GRADE
- PL PROPERTY LINE
- FENCE
- EXISTING BUILDING
- LAYOUT OF CONTAINMENT WALL
- ORANGE WARNING BARRIER
- RIP-RAP

THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY NATIONAL GRID OR THE NATIONAL GRID'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA AND NATIONAL GRID. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA AND NATIONAL GRID, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA AND NATIONAL GRID.

GENERAL NOTES

1. BASE MAP DEVELOPED FROM A DRAWING ENTITLED "ALTA/ACSM LAND TITLE SURVEY, PARCELS 1, 2, 3, ASSESSOR'S PLAT 46 LOTS 481, 489 & 501" PREPARED BY GILBERT & MALONEY AND TRANSMITTED TO GZA ON FEBRUARY 15, 2012.
2. BASE MAP, FINISH GRADE, SUBGRADE GRADE AND DRAINAGE STRUCTURE LAYOUT DEVELOPED FROM A DRAWING ENTITLED 3322_LOT481_489_FINALAB.DWG, 3322_LOT481_489_SUBGRADEAB.DWG, 3322_LOT325_FINALAB.DWG, 3322_LOT325_SUBGRADEAB.DWG" PREPARED BY A-PLUS CONSTRUCTION TRANSMITTED TO GZA 5-29-2014
3. HORIZONTAL DATUM IS IN REFERENCE TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), DERIVED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY, PARCELS 1,2,3, ASSESSOR'S PLAT 46 LOTS 481, 489 & 501" PREPARED BY GILBERT & MALONEY ENGINEERS AND LAND SURVEYORS, 170 RHODES STREET, PROVIDENCE, RI, 02903.
4. VERTICAL DATUM IS IN REFERENCE TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29), DERIVED FROM SAID PLAN. PRIMARY BENCH MARK: USGS DISK T-16 ON BRIDGE PIER AT ALLENS AVE. AND THURBERS AVE. ELEV. 13.29 (NGVD1929). ADDITIONAL BENCH MARK: USGS DISK 40008-1979 ELEV. 12.01 (NGVD1929) ON CONCRETE STEP AT "NARRAGANSETT IMPROVEMENT" CORNER PUBLIC ST. & ALLENS AVE.



ENGINEERED CAP DETAIL
NOT TO SCALE

NO.	ISSUE/DESCRIPTION	BY	DATE

170 ALLENS AVENUE
PROVIDENCE, RHODE ISLAND

AS-BUILT CONDITIONS
LOT 128, 325, 481, 489, & 501

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists, 530 BROADWAY, PROVIDENCE, RHODE ISLAND 02909, (401) 421-4140

PREPARED FOR: NATIONAL GRID

PROJ MGR: DR	REVIEWED BY: JPH	CHECKED BY: JC	FIGURE
DESIGNED BY: DR	DRAWN BY: CRD	SCALE: AS NOTED	1
DATE AUG. 2014	PROJECT NO. 33576.20	REVISION NO. 0	SHEET NO. 1 OF 1