

DOBBS FERRY WATERFRONT PARK

WESTCHESTER COUNTY

DOBBS FERRY, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number V00628

Prepared for:
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January 2018

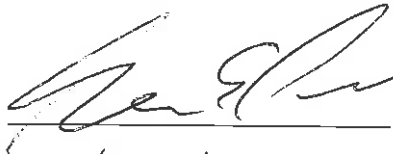
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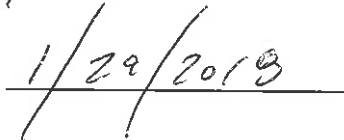
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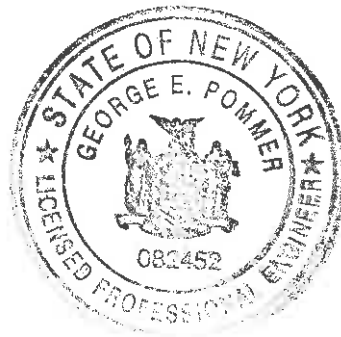
JANUARY 2018

CERTIFICATION STATEMENT

I George E. Pommer P.E., certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

 P.E.

 Date



ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification:	Site No. V00628 Dobbs Ferry Town Park, Dobbs Ferry New York	
Institutional Controls (ICs):	<ol style="list-style-type: none"> 1. Restricts the contemplated use of the Site to Restricted Residential, which allows for active recreational use with the primary purpose of establishing an athletic playing field. 2. Restricts any development that would impact the integrity of the engineered soil cover made of clean fill. 3. Restricts the use of onsite groundwater. 4. Requires operation, management and monitoring of the Site in accordance with the provisions of the SMP approved by the NYSDEC. All ECs must be inspected at a frequency and in a manner defined in the SMP. 5. Access to the Site will be provided to the Department to evaluate the remedy and verify continued maintenance of such controls. 6. The Deed Restriction was filed: <u>3/28/18</u>. 	
Engineering Controls (ECs):	<ol style="list-style-type: none"> 1. Cover system 2. Storm Water Management Systems 3. Site Fencing 	
Inspections:		Frequency
1. Cover inspection		Annually
2. Storm Water Management Systems		Annually
3. Site Fencing		Annually
Monitoring:		
1. Groundwater		Annually
Reporting:		
1. Groundwater and Inspection Report		Annually
2. Periodic Review Report		Periodically

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

**SITE MANAGEMENT PLAN
DOBBS FERRY WATERFRONT PARK
DOBBS FERRY, NEW YORK**

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- 3 Monitoring Well Construction Log
- 4 Deed Notification Confirmation Email

**SITE MANAGEMENT PLAN
DOBBS FERRY WATERFRONT PARK
DOBBS FERRY, NEW YORK**

1.0 INTRODUCTION

This Site Management Plan (SMP) is a required element of the remedial program for the Dobbs Ferry Waterfront Park (the Site) located in the Town of Greenburg, Village of Dobbs Ferry, Westchester County New York (**See Figures 1 - 5**). The Site is currently in the New York State Voluntary Cleanup Program which is administered by the New York State Department of Environmental Conservation (NYSDEC). The SMP is for the management of subsurface materials currently present underneath the soil cover as depicted on the Site plan (Figure 4) consisting of approximately 1.7145 acres of covered land and for the long-term monitoring of groundwater quality conditions at the Site. Throughout this document the term soil cover is often used, it is acknowledged that the term is generic and the cover may also be gravel, asphalt or another material, all of which apply to this SMP. This SMP will also extend to the uncapped land surrounding the covered land for a total area of 1.9879 acres as shown in Figure 4. In addition the groundwater monitoring will be required and will be performed for the original 1.493 acres Site as shown in Figure 4. There is also an area of 0.073 acres, shown as the shaded area in Figure 5, within the 1.9879 acres which was intended to be capped but was not. This area will not be included in the final Assignable Release issued by the NYSDEC, but is subject to the conditions and requirements of this SMP.

After completion of the remedial work, some contamination was left at the Site. Institutional and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to the remaining contamination. The SMP is intended to address the proper management of subsurface materials that may be brought to the surface from beneath the soil cover placed across the open field that was formerly a municipal landfill and establish the procedures for conducting the long-term groundwater quality monitoring program.

This SMP discusses the monitoring, inspection, and operations and maintenance requirements for the engineering control utilized at the Site as required by the institutional controls. A proposed Deed Restriction will be placed on the property and recorded with the Westchester County Clerk which requires compliance with this SMP and all ECS and ICs.

The work conducted by the Village of Dobbs Ferry is in accordance with the Voluntary Cleanup Agreement (VCA) between the Village of Dobbs Ferry and the New York State Department of Environmental Conservation (NYSDEC) dated July 3, 2003, as amended on October 25, 2005 and modified January 12, 2016.

2.0 DESCRIPTION OF INSTITUTIONAL CONTROLS

Institutional controls are required by the NYSDEC if the remedial action proposed includes allowing contaminants to remain at a Site at concentrations exceeding the applicable remediation standards. At the Dobbs Ferry Waterfront Park, soil and groundwater contamination is present at the Site below the recently completed soil cover.

Based on the implemented remedial action (covering), a use restriction is required. A draft Deed Restriction will be prepared for submission to NYSDEC. Upon approval, the Deed Restriction will be recorded for the Site. The purposes of the Deed Restriction are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the above-stated purpose.

The Deed Restriction:

- Restricts the contemplated use of the Site to Restricted Residential, which allows for active recreational use with the primary purpose of establishing an athletic playing field;
- Restricts any development that would impact the integrity of the engineered soil cover made of clean fill;
- Restricts the use of onsite groundwater; and
- Requires operation, management and monitoring of the Site in accordance with the provisions of the SMP approved by the NYSDEC.
- Requires implementation of a SMP that requires appropriate management of any residual contaminated soils that are excavated during future activities; establishes a long term groundwater monitoring plan and an erosion control plan; and affirms the Village's commitment to maintain a cover and eliminate any physical hazards on adjacent uncovered vacant lands also containing urban fill material which are controlled by this SMP.
- Access to the Site will be provided to the Department to evaluate the remedy and verify continued maintenance of such controls.

3.0 DESCRIPTION OF ENGINEERING CONTROLS

The institutional control proposed for the Site requires the use of an engineering control to maintain the protection of the public health and safety and the environment. The engineering control utilized at the Site included the following:

- Placement of a geotextile fabric as a demarcation barrier.
- Placement of a soil cover to include 18 inches of imported fill, 6 inches of top soil and a covering of sod or seeded grass. The cover extends from the eastern fence line to the top of the riverbank and from the northern fence line of the recreational field area to the southern boundary of the parcel. Both the imported fill and the top soil were sampled and met the soil cleanup objectives for restricted residential.
- Installation of an entrance pathway from the parking lot.

- Installation of a six (6) foot perimeter fence along the northern and eastern edges of the recreational field that will restrict public access to the remainder of the historic landfill Site.

The area of the engineering control (voluntary cleanup area) is depicted in **Appendix 1. Waterfront Park Recreational Field Voluntary Cleanup Area.**

As a requisite of the Deed Restriction, the integrity of the soil cover must be inspected every year and a written statement from a Qualified Environmental Professional (QEP) be provided to NYSDEC on a periodic basis that NYSDEC finds acceptable; and NYSDEC must be notified of disturbances to the soil cover in accordance with the Deed Restriction to be filed for the Site.

Additionally, as a requisite of the Deed Restriction, the Village affirms its commitment to maintain a cover over and eliminate any physical hazards on adjacent uncovered vacant lands resulting from previous landfilling activities (the adjacent land). The adjacent land is depicted in **Figure 2.**

4.0 SITE MANAGEMENT OF ENGINEERING CONTROLS

The engineering controls employed at the Site include a geotextile fabric, soil cover, vegetation, fencing and an access pathway. The soil management plan which includes reporting as mentioned in Section 5 of this document relating to any disturbance to the geotextile, soil cover and the soil under the cover. The engineering controls shall also include a Long-Term Groundwater Monitoring Plan as described in Section 6 of this SMP and the Adjacent Land Inspection and Maintenance Plan as described in Section 7 of this SMP.

4.1 OPERATIONS

The remedial soil cover consists of a geotextile fabric underneath two feet of clean fill overlying the entire remedial area. The open field has been developed into a recreational playing field. No excavations for subsurface utilities or drains were conducted other than the installed sprinkler system which is located within the soil cover material and above the geotextile fabric. The recreational field does not have any bleachers, lights, backstops or other structures that would require excavation of soil to a depth of greater than two feet. The only excavation involved the installation of the additional fence posts around the final Site boundary as determined by the surveyed metes and bounds. The fence post excavations were approximately 10-12 inches in diameter every five feet to a depth of approximately 3 and ½ feet below grade. Nevertheless, any future excavation conducted at the Site will have the potential to penetrate the soil cover. In all cases where the protective soil cover is or may be penetrated, special environmental and health and safety measures are required to be implemented.

In order to complete all required future excavation activities in a controlled manner and minimize environmental impacts and human exposure to contaminants beneath the soil cover, the following protocol has been developed for the performance of future excavations on the Site. In the event an unauthorized or unplanned excavation is observed, all activity shall be immediately stopped and the protocol implemented from the initial step.

All disturbances of the soil cover will be repaired within sixty days of observance of the disturbance.

Preparation

A “Qualified Environmental Professional”, as defined by the current 6 NYCRR Part 375-1.2 (ak), and henceforth referred to as “QEP”, will plan, and oversee any onsite work that involves disturbance of the soil cover. The designated QEP shall review all proposed excavations at the Site prior to initiation of excavation activities. The review must include the following:

- Comparison of the location and vertical and horizontal extents of proposed excavation to the locations of existing engineering controls;
- Purpose of excavation;
- Proposed start date; and
- Duration of work effort.

Excavation

The person responsible for conducting the excavation (Contractor) must request a utility mark-out at least 72-hours prior to the proposed start of any subsurface activities.

Based on the specified location of the excavation, the designated QEP will determine the maximum depth of the excavation. If, based on field measurements, the excavation is within the two-foot remediation soil cover, the Contractor will provide survey control and visual observation of the location to verify that the geotextile fabric is not breached.

Any excavations, planned or otherwise, that extend through the soil cover and fabric will be subject to the Health and Safety requirements stipulated below. Such excavations into the soil cover will also require the requisite notification to NYSDEC in accordance with the requirements of the Deed Restriction as discussed below in Section 5.0. Reporting and repair of the soil cover will be conducted in accordance with Section 4.4 - Maintenance and Repair.

It is to be assumed in all cases that soils beneath the soil cover (henceforth referred to as “Site Soils”) are contaminated. Site Soils excavated from beneath the soil cover will be segregated from the clean soil cover by stockpiling on plastic sheeting. See Appendix (2) for the Excavation Work Plan.

Health and Safety

In all cases where the excavation is anticipated to penetrate or actually penetrates the soil cover and/or subjects workers to exposure to soils beneath the soil cover, the applicant will be required to adopt and adhere to a Site-Specific Health & Safety Plan. This plan shall include, at a minimum, the following:

- Organizational responsibilities (i.e. key personnel and duties)
- Risk or Hazard Analysis
- Employee training requirements in accordance with 29 CFR 1910.120
- Provisions for Personnel Protection
- Provisions for Medical Surveillance
- Provisions for Air surveillance
- Decontamination Procedures

- Contingency Planning (i.e. Emergency Response)
- Excavation Safety

4.2 MONITORING

All subsurface activities will be reviewed and monitored by the designated QEP. The QEP shall review the proposed excavation location on the Site and determine the existing depth of the soil cover, and the potential for penetration of the soil cover.

The QEP shall notify the applicant of the acceptability of the proposed excavation and any restrictions that may apply with respect to survey control, agency notification, health & safety issues, or other conditions.

Any subsurface intrusive activity must follow the generic NYS Department of Health CAMP. See dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf (see appendix 1A).

4.3 INSPECTION

In accordance with the requirements of the Deed Restriction, the soil cover on the Site will be visually inspected annually for signs of erosion, damage and excavation. All soil cover inspection and maintenance activities will be recorded in the logbook. Areas where the geotextile fabric may be visible due to erosion will also be noted.

Access will be granted to the NYSDEC to evaluate the remedy and verify continued maintenance of engineering controls.

4.4 MAINTENANCE AND REPAIR

In general, if the engineering control is observed to be damaged or not functioning properly, the control will be repaired within sixty days of the initial observation. The following subsections detail specific maintenance and repair requirements for each type of engineering control.

Geotextile Fabric Demarcation Layer

The geotextile fabric used at the Site for a demarcation layer consists of “Mirafi #160N, Carthage Mills #FX66, AEF #300W” or approved equal. If the geotextile fabric is breached at any time, the geotextile fabric must be repaired. The area of the breach will be over-excavated to expose the breach in the geotextile fabric, and a piece of geotextile fabric will be placed over the breach, overlapping the area around the breach. The soil cover will then be placed back over the geotextile fabric, imported soil must meet the Residential SCO as noted in Part 375-6.8 for all constituents.

Soil Cover

Upon completion of subsurface work, excavations will be backfilled using the “last out is first in” method in all cases where Site Soils are disturbed. All Site Soils must be backfilled first and must be compacted to a level equal to or deeper than the original bottom of the soil cover. Any excess Site Soils that cannot be replaced beneath the soil cover must be disposed of as non-hazardous or hazardous waste, as applicable. Upon completion of the Site Soil backfilling and Site Management Plan, Site # V00628

compaction, the soil cover must be replaced. If for any reason the original cover soils are unavailable, clean fill from an approved source must be utilized to repair and replace the soil cover.

The soil cover will be replaced and/or rebuilt only with certified clean fill from a virgin source or other tested and approved fill source, and in accordance with Detail 1: Typical Grading Section of Drawing No. S-2: Additional Notes and Details, Revision #1 March 27, 2007.

In the event the remediation soil cover is found to be eroding, erosion control measures will be instituted to either contain or redirect storm waters to prevent additional erosion of the soil cover. The nature of the appropriate erosion control measure will be determined by the designated Site Engineer.

5.0 NOTIFICATIONS

5.1 DISTURBANCE OF THE SOIL COVER

Non-Emergencies

In accordance with the requirements of the Deed Restriction, no alterations, improvements, or disturbances (collectively referred to as “disturbances” henceforth) to the soil cover are permitted without proper NYSDEC notification. The NYSDEC must be notified of the breach or suspected breach of any of the terms of the Deed Restriction within 15 days, and the measures that will be taken to cure the breach. The breach must be cured within ninety (90) days from the date of receipt of the notice. At the expiration of such period of time, the NYSDEC shall be notified that the breach was corrected or of any failure to adequately cure the breach or suspected breach. In the event that the breach was not fixed, the Village of Dobbs Ferry will present a plan to the NYSDEC for approval to complete the remedy within a reasonable amount of time. At the expiration of said second period, the NYSDEC may commence any proceedings and take other appropriate action reasonably necessary to remedy any breach of the Deed Restriction in accordance with applicable laws to require compliance with the terms of the Deed Restriction. The following procedures should be taken to notify NYSDEC of a breach.

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the VCA and/or Environmental Conservation Law.
- Notify the NYSDEC at the start of the disturbance. Proper notice to NYSDEC will be given at least 15 days prior scheduled activities;
- Complete restoration of the engineering controls to pre-disturbance conditions within a reasonable time period of the initiation of the disturbance as requested by NYSDEC;
- Ensure all applicable health and safety procedures are followed during the disturbance and restoration;
- Ensure that exposure to contamination in excess of the applicable remediation standard does not occur;

- Submit a written report describing the disturbance to NYSDEC within 45 days after the end of the disturbance. The report will include the dates and duration of the disturbance, the names and affiliations of those conducting the disturbance, a description of the notice given to those persons prior to the disturbance, the amounts of soil generated for disposal (if any) and that soil's final disposition, and any precautions taken to prevent exposure.

When notice to the NYSDEC is required (other than annual certifications) or approval from the NYSDEC is required, the Village of Dobbs Ferry shall provide notice or seek approval by referencing the County tax map number or Liber and Page or computerized system tracking/identification number and address correspondence to:

Project Manager – Dobbs Ferry Waterfront Park, Site No. V00628
(currently Mr. David Crosby)
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway
Albany, New York 12233-7014
(e-mail david.crosby@dec.ny.gov)

Regional Hazardous Waste Remedial Engineer
(currently Edward Moore)
New York State Department of Environmental Conservation Region 3
21 South Putt Corners Road
New Paltz, NY 12561-1696
(e-mail edward.moore@dec.ny.gov)

Emergencies

In the event that an emergency presents or may present an unacceptable risk to public health and safety or to the environment, an engineering control may be temporarily breached provided:

- The NYSDEC is notified within 48 hours;
- The disturbance is limited in duration and extent to the minimum reasonably necessary to respond to the emergency;
- All measures necessary to limit the actual or potential risk of exposure to humans or the environment are implemented;
- The NYSDEC is notified when the emergency has ended;
- The engineering controls are restored to pre-emergency conditions as soon as possible; and
- A report is submitted to NYSDEC within 45-days of time of completion of the restoration. The report will include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures, including, at a minimum: the nature and likely cause of the emergency, the potential discharges or exposures to

contaminants, the measures taken to mitigate the effects on human health and the environment, the measures utilized to restore the engineering control, and changes to the engineering control or Site operation to prevent reoccurrence of such conditions in the future. The report will be submitted to the NYSDEC contacts listed above.

5.2 PERIODIC REPORT AND CERTIFICATION

Those responsible for maintaining and evaluating the engineering and institutional controls will prepare and submit to NYSDEC a periodic certification report.

The report will include the following information:

- Name, address, and telephone number of the person maintaining the engineering and institutional controls;
- County tax map number or Liber and Page or computerized system tracking/identification number for the Site
- Description of the physical characteristics of the Site and current Site operations;
- Description of the remedial actions that included the Deed Restriction;
- Copies of the detailed logs (for the previous 12 months) of how each control was monitored, maintained, and evaluated;
- Dates and results of inspections and maintenance, including all test and sampling results, for each engineering control;
- Description of any additional action taken to ensure the protectiveness of the remedial actions; and
- Conclusions as to whether the remedial action remains protective of the public health and safety and of the environment.

The persons responsible for monitoring the protectiveness of the remedial actions will provide a certification to the NYSDEC that:

The institutional controls and/or engineering controls employed at such Site are:

- Unchanged from the date the control was put in place, unless otherwise approved by the Department;
- In place and effective;
- Performing as designed;
- Nothing has occurred that would impair the ability of the controls to protect the public health and environment; and
- Nothing has occurred that constitutes a violation or failure to comply with any operation and maintenance plan for such controls

The periodic report and certification will be performed by a Qualified Environmental Professional (QEP) and shall be submitted to the following:

Project Manager – Dobbs Ferry Waterfront Park, Site No. V00628
(currently Mr. David Crosby)
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
Project Manager – Dobbs Ferry Waterfront Park, Site No. V00628

625 Broadway
Albany, New York 12233-7014
(e-mail david.crosby@dec.ny.gov)

The following appropriate certification will be included on the title page of all submissions of the periodic report: “ I_____certify that I am currently a [NYS registered professional engineer or Qualified Environmental Professional as defined in 6 NYCRR Part 375] and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.”

6.0 LONG-TERM GROUNDWATER MONITORING PLAN

6.1 BACKGROUND

Three groundwater samples were obtained from temporary well points in March 2005. The analytical results were presented to NYSDEC in the Supplemental Site Investigation Report. The results were compared to the NYSDEC Groundwater Standards (GS). The results for all semi-volatile compounds, PCB's and cyanide were either reported as Not-Detected or at concentrations below the GS. The sample W1-W had concentrations that exceeded the GS for benzene, chlorobenzene, and toluene. The sample W2-W had concentrations that exceeded the GS for xylenes, 4,4'-DDD, and 4,4'-DDE. The sample W3-W had concentrations that exceeded the GS for benzene, chlorobenzene, and xylene. Based upon these results the NYSDEC indicated that groundwater use at the Site should be prohibited. Additionally, the approved Remedial Action Work Plan contained a provision for long-term groundwater quality monitoring. This portion of the Site Management Plan stipulates procedures and methods that will be conducted to comply with the groundwater monitoring provision.

6.2 SCOPE OF WORK

Three groundwater monitoring wells shall be conducted as noted in the Executive Summary. The groundwater monitoring wells are presently installed in the shallow aquifer at the locations shown on **Figure 2**.

Monitoring Well Locations. The wells shall have 10-foot-long screens installed at a depth from three feet above the water table to seven feet below the water table. The samples shall be collected on a semiannual basis following the procedures and guidelines detailed in the following sections. In order to minimize disruption to the activities at the Site, sampling shall be conducted in September and March. Details regarding their construction are shown in Appendix 3.

Table II – Monitoring Well Locations

Monitoring Well ID	Well Location	Coordinates (longitude/latitude)	Well Diameter (inches)	Elevation (above mean sea level)			
				Casing	Surface	Screen Top	Screen Bottom
MW-1	Waterfront Park Rec Field	41°00'57.95"N 73°52'43.97"W	2	PVC	21.75'	11.75'	-3.25'
MW-2	Waterfront Park Rec Field	41°00'59.26"N 73°52'46.69"W	2	PVC	21.25'	11.25'	-3.75'
MW-3	Waterfront Park Rec Field	41°00'57.53"N 73°52'46.65"W	2	PVC	20.5'	10.5'	-3.5'

The NYSDEC will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC.

6.3 SAMPLE COLLECTION

All sampling must be conducted in accordance with all applicable NYSDEC guidelines and regulations in effect at the time of sampling. Groundwater samples shall be collected from each well utilizing low-flow methodologies and/or from dedicated bailers.

6.4 DESIGNATED ANALYTICAL LABORATORY

All sample analyses conducted as part of this investigation shall be done by a New York State DOH certified laboratory using the most current NYSDEC Analytical Services Protocol (ASP).

6.5 SAMPLE CONTAINERS AND CHAIN OF CUSTODY PROCEDURES

Clean sample containers shall be supplied by the laboratory for all sampling events. The appropriate sample preservatives will be added to the sample bottles by the laboratory prior to shipment. Chain of custody procedures will be initiated by the person responsible for cleaning the sample containers. The chain of custody will accompany the bottles during transportation from the laboratory to the field, sample collection, transportation back to the laboratory, analysis and final disposal of the sample. Samples will be stored on ice at 4°C in a secure area until they are relinquished to a courier for delivery to the laboratory.

6.6 SAMPLE HANDLING

The sample containers shall be labeled with sample number, date, time of collection, analytical parameters and Site name. The sample holding time will begin at the time of sample collection.

6.7 FIELD INSTRUMENTATION

A PID shall be utilized to record well head space concentrations immediately after removing the well cover. The PID must be maintained in accordance with the manufacturer's recommended guidance.

The PID shall be calibrated at the beginning of each day of field use by comparing the response with a test atmosphere referenced to a primary calibration standard of known concentration. The calibration gas used for the PID is 100 ppm isobutylene in air.

6.8 RECORD KEEPING

Field measurements and observations shall be recorded in a bound field log book, including: documentation of all sampling locations, number of samples, sample depths, sample collection time, analytical parameters and documentation of all sample location landmarks, including the location of sample points on a map. Upon collection of samples for analysis, additional documentation will be completed on the chain of custody form.

6.9 ANALYTICAL METHODS/QA SUMMARY TABLE

Quality Assurance (QA) sampling shall be conducted to provide control over the collection of samples and subsequent review, interpretation and validation of analytical data. All samples shall be analyzed using standard USEPA SW-846 methodologies.

The following table presents a summary of the matrix type, number of samples, number of field and trip blanks, analytical parameters, and analytical methods.

# of Samples	Matrix	Parameter	EPA Method	Sample Duplicates	Field Blank/Trip Blank
3	Aqueous	TCL VOC	624	1	1
3	Aqueous	TCL SVOC	625	1	1
3	Aqueous	TCL Pesticide/ PCB	608	1	1
3	Aqueous	Cyanide	335.2	1	1
3	Aqueous	Phenols	420.1	1	1
3	Aqueous	TAL Metals	6010	1	1

6.10 FIELD/TRIP BLANKS AND DUPLICATES

Field/trip blanks and duplicate samples shall be taken with the frequency and methodology in the most recent NYSDEC guidance, regulations and protocols.

6.11 RELIABILITY OF DATA

The laboratory data will be reviewed for accuracy and usability in accordance with the guidelines set forth in Appendix B of the NYSDEC's Voluntary Cleanup Guide dated May 2002.

6.12 DELIVERABLES

The sample analysis reporting level shall be the NYSDEC Analytical Services Protocol (ASP) Category B deliverables and shall be submitted in an EQUIS format.

6.13 REPORTING

The results of the groundwater sampling events shall be reported to the NYSDEC annually along with the results of the Site inspection in the Annual Report. The annual report shall include at minimum: sample summary tables, analytical results tables, monitoring well location plan, groundwater contour map and a detailed evaluation of the results and a comparison to previously obtained results. The remedial party may petition the NYSDEC to suspend the long-term groundwater monitoring when contaminant concentrations fall below the NYSDEC Groundwater Standards for two consecutive sampling events or when a consistent downward trend in contaminant concentrations is observed over a minimum of four sampling events. In addition, the NYSDEC may be petitioned for reduced analytical parameters after two sampling events.

7.0 SITE WIDE INSPECTION OF ADJACENT LANDS, INSPECTION AND MAINTENANCE PLAN

A Site wide inspection will be conducted as noted in the Executive Summary. In the approved 2007 Remedial Action Work Plan, the Village committed itself to inspecting and maintaining the vacant, uncovered, adjacent lands delineated on **Figure 2** Limits of the Installed Soil Cover and Adjacent Uncovered Vacant Lands.

7.1 VEGETATIVE COVER MAINTENANCE

The Village shall inspect the adjacent lands at least twice a year in order to determine the condition of all existing turf on the uncovered adjacent lands shown on **Figure 2**. The lawn areas shall be limed, fertilized, re-seeded (with Loft's Tri-Plex Bluegrass or approved equal), watered and mowed, as needed, in order to maintain or re-establish a healthy vegetative cover.

7.2 INSPECTION FOR AND REMOVAL OF PHYSICAL HAZARDS

The Village shall also inspect the adjacent, uncovered lands to ascertain the presence of physical hazards. Any hazards shall be excavated, soil removed from its surfaces, and such soils shall be disposed of offsite in accordance with appropriate federal, state and local laws and regulations.

7.3 INSPECTIONS FOR EMERGENCIES

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a Qualified Environmental Professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

7.4 CORRECTIVE MEASURES WORK PLAN

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Work Plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC.

7.5 SOIL VAPOR INTRUSION

If any occupied structures are constructed on the Site a soil vapor intrusion investigation will be performed to assess the need for soil vapor mitigation. A work plan will be prepared which will require approval from the NYSDEC.

8.0 REFERENCES

6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – “Technical Guidance for Site Investigation and Remediation”.

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

FIGURE 1



c:\arcviewproj\dobbsferry\proj2.apr\layout1

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	PROJECT #	SHEET #
May 2004	MDS	KEP	AS SHOWN	454	1 OF 1



POTOMAC-HUDSON ENVIRONMENTAL, INC.

166 John Street
PO Box 7
South Amboy, NJ 08879

23 Chapel Avenue
Jersey City, NJ 07305

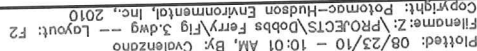
136 W. 16th Street
Suite 3E, POB 1206
New York, NY 10011

Project Location
Dobbs Ferry Waterfront Park
Dobbs Ferry, New York

SOURCE: Nyack, NY USGS Quadrangle

FIGURE #
1

FIGURE 2



Score	Frequency
0	120
30	120
60	120
120	120



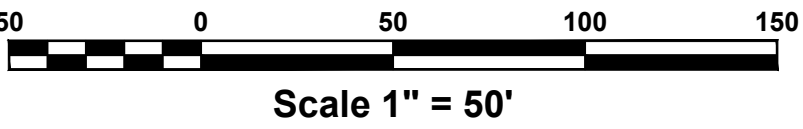
DATE:	08/23/10	DRAWN BY:	CJV	REVIEWED BY:	EP	SCALE:	AS SHOWN	PROJECT #	454	SHEET #	1 OF 1
 POTOMAC-HUDSON ENVIRONMENTAL, INC.											
207 S. Steves Avenue PO Box 7 Jersey City, NJ 07305											
136 W. 16th Street Suite 3E, POB 1206 New York, NY 10011											
16-4 Chapel Avenue Jersey City, NJ 07305											
SOURCE ACAD_2000 WF-6 1-3--06.dwg PAUL J. PETRETTI (12/31/07)											
FIGURE # 2											

FIGURE 3

FIGURE 4

H:\Dobbs Ferry\10801 L Dobbs Ferry Waterfront Drawings - 10801\10801.dwg, Nov 20, 2017 - 10:56am

LINE DESCRIPTION FOR TOTAL SUBJECT AREA						
LINE / ARC	BEARING	DISTANCE	DEGREE OF CURVATURE	RADIUS	ARC LENGTH	RADIAL BEARING AT ARC BEGINNING
(A)	S 09°00'58" W	39.85'				
(B)	N 78°07'47" W	145.95'				
(C)	N 04°12'06" E	161.83'				
(D)	N 18°52'55" E	156.14'				
(E)	N 07°49'20" E	34.72'				
(F)	N 05°8'41" E	63.53'				
(G)	S 82°10'40" E	204.97'				
(H)	S 07°05'30" W	343.87'				
(I)			56°52'19"	41.36'	41.05'	S 41°28'03" W
(J)			35°13'07"	45.00'	27.66'	
(K)			36°01'33"	21.61'	13.59'	
(L)	S 03°13'16" W	6.73'				
(M)			81°36'00"	2.00'	2.85'	
(N)	S 84°47'44" W	15.55'				



NOTES

- Voluntary cleanup areas surveyed by Paul J. Petretti, PE. Coordinates and bearings are in the North American Datum 1983 (NAD 83), New York State Plane Coordinates East Zone.
- Bearings and distances of Village of Dobbs Ferry parcel lines are as noted on recorded deeds and filed maps in the Office of the Clerk of Westchester County unless noted otherwise.
- The horizontal projection of the Village of Dobbs Ferry parcels is approximate and is based on Village of Dobbs Ferry tax maps.
- Uncapped vacant land is as generally shown on a plan prepared by Potomac-Hudson Environmental, Inc., entitled "Limits of the Installed Soil Cap and Adjacent Uncapped Vacant Lands", dated August 23, 2010.

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW. THIS PLAN IS NULL AND VOID FOR CONSTRUCTION PURPOSES WITHOUT THE SIGNATURE AND SEAL OF THE DESIGN ENGINEER.		REV.		DATE	TITLE	
					PROJECT	
					VILLAGE OF DOBBS FERRY, WESTCHESTER COUNTY, NEW YORK	
					VILLAGE OF DOBBS FERRY, WESTCHESTER COUNTY, NEW YORK	
JAMES J. HAHN ENGINEERING, P.C.		11/7/17		P.O.B.	DATE	
		10/2/17		SUBJECT AREA DESC.	8/21/13	
		10/6/15		MISC.	SHEET NO.	
		9/13/13		PARCEL 2 REVISION	1 OF 1	
Putnam Business Park 1689 Route 22 Brewster, New York 10509 Tel: (845) 279-2220		SCALE 1" = 50'				

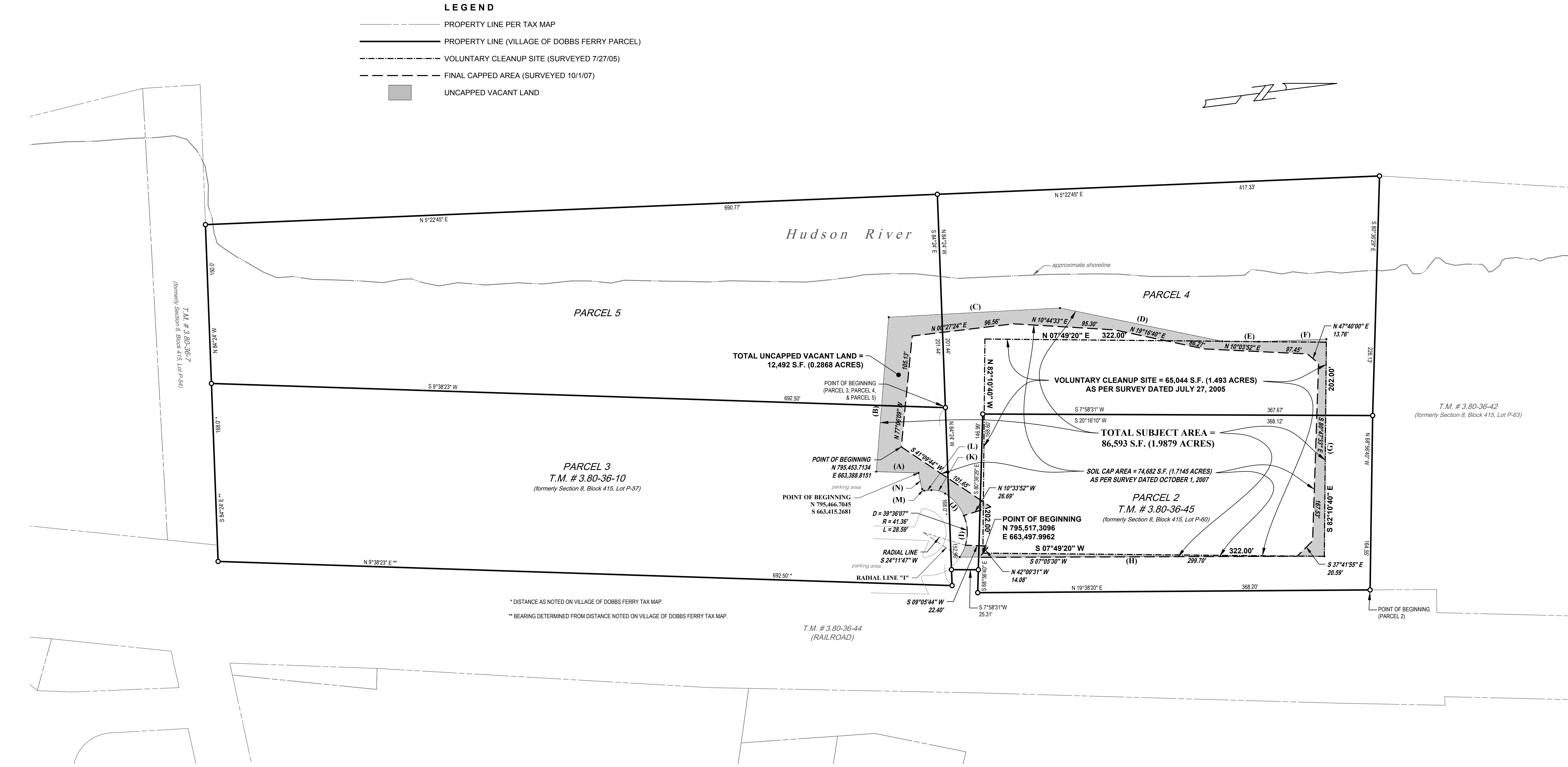
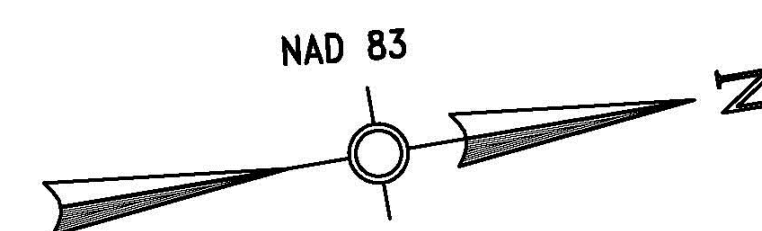
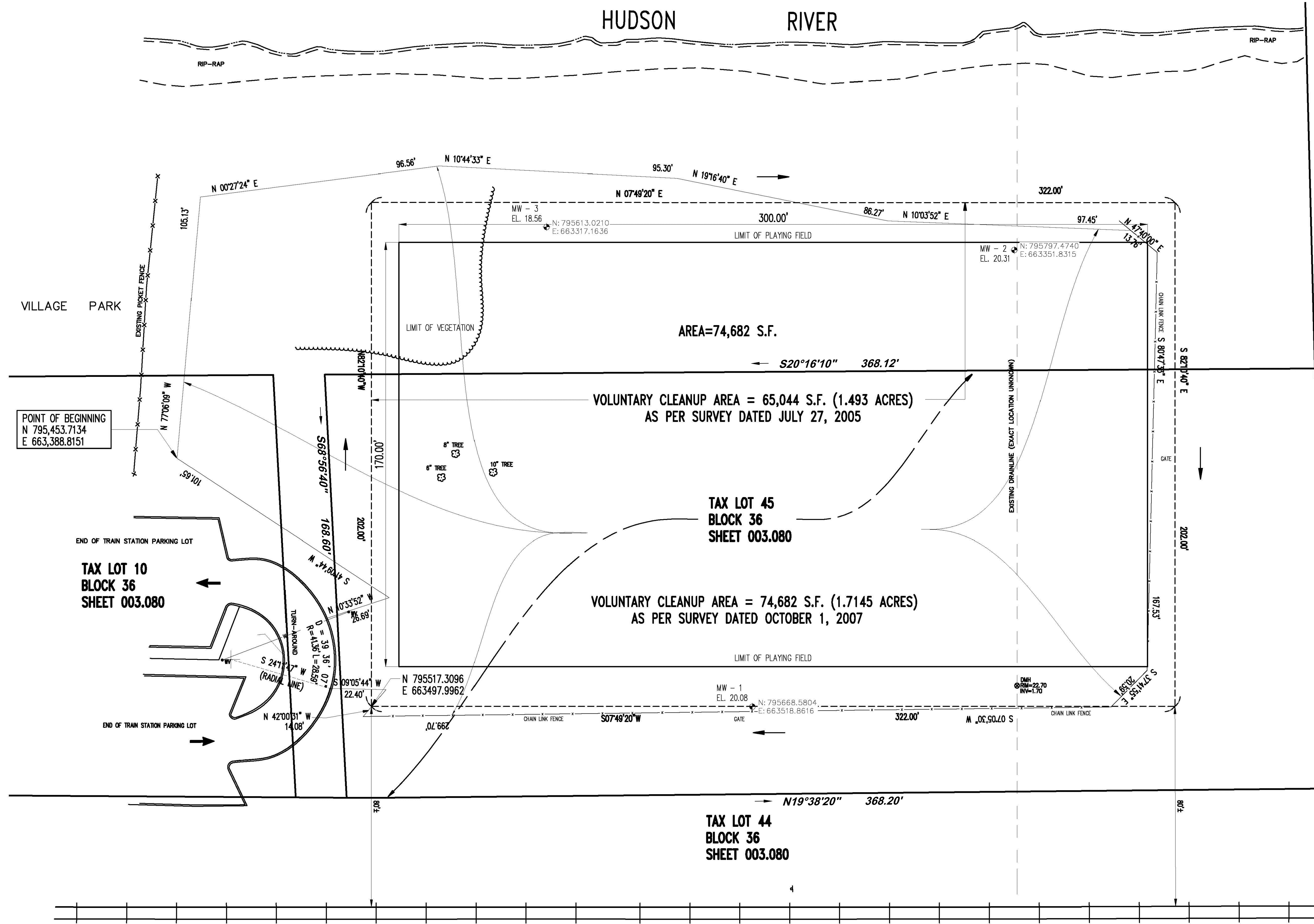


FIGURE 5

APPENDIX 1



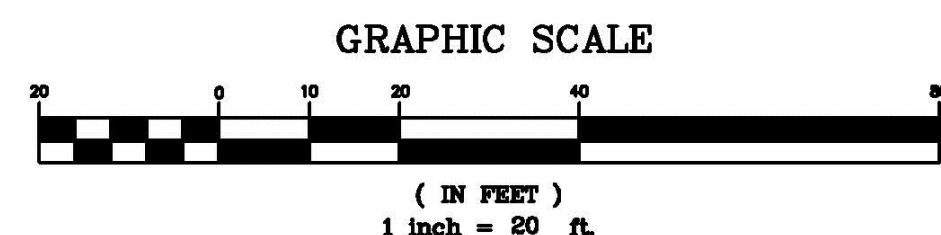
HORIZONTAL DATUM:
NAD 83 - NORTH AMERICAN DATUM 1983
NEW YORK STATE PLANE COORDINATES EAST ZONE

VERTICAL DATUM:
NAVD88 - NORTH AMERICAN VERTICAL DATUM 1988

NOTE:
METES AND BOUNDS OF LOT 45 ADDED
BY HAHN ENGINEERING, 5/3/12.

TAX LOT P/O 42
BLOCK 36
SHEET 003.080

N 68°56'40" E 164.55'



FINAL AS-CONSTRUCTED



REVISIONS		
NO.	DATE	DESCRIPTION
1	05/14/02	NEW NORTH END TOPO
2	01/03/07	NEW "PLAYING FIELD" TOPO
3	08/21/07	PLAYING FIELD MEETS AND BOUNDS
4	10/11/07	FINAL AS-CONSTRUCTED
5	12/31/07	NEW "PLAYING FIELD" TOPO ADDED
6	04/16/11	MONITORING WELLS ADDED

**WATERFRONT PARK RECREATIONAL FIELD
VOLUNTARY CLEANUP AREA**

PREPARED FOR
VILLAGE OF DOBBS FERRY
TOWN OF GREENBURGH
WESTCHESTER COUNTY, NEW YORK

PAUL J. PETRETTI
CIVIL ENGINEER AND LAND SURVEYOR
30 GULL ROAD
DOBBS FERRY, NEW YORK
10327

CIVIL ENGINEERING - LAND SURVEYING & MAPPING
SITE DESIGN AND PLANNING - SANITARY AND GEOTECHNICAL.

Phone Numbers 914-674-9827 (Office) 914-683-2848 (Home)

1
1

APPENDIX II

APPENDIX II – EXCAVATION WORK PLAN (EWP)

II-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the NYSDEC. Table II includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix II.

TABLE II: NOTIFICATIONS*

Central Office NYSDEC Representative: Mr. David Crosby	Address: New York State Department of Environmental Conservation Division of Environmental Remediation Remedial Bureau C, 11 th Floor 625 Broadway Albany, New York 12233-7014 Phone: 518-402-9662 e-mail: David.crosby@dec.ny.gov
Regional Office NYSDEC Representative: Mr. Edward Moore	Address: New York State Department of Environmental Conservation Region 3 21 South Putt Corners Road New Paltz, New York 12561-1696 Phone: 845-256-3022 e-mail: Edward.moore@dec.ny.gov
NYSDEC Site Control Representative: Ms. Kelly Lewandowski	Address: New York State Department of Environmental Conservation Division of Environmental Remediation Remedial Bureau C, 12 th Floor 625 Broadway Albany, New York 12233-7014 Phone: 518-402-9553 e-mail: Kelly.lewandowski@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for Site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;

- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix II of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

II-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a Qualified Environmental Professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Section II of this Appendix.

II-3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by the NYSDEC.

II-4 MATERIALS EXCAVATION AND LOAD-OUT

A Qualified Environmental Professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site will be investigated by the Qualified Environmental Professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and New York State Department of Transportation requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The Qualified Environmental Professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The Qualified Environmental Professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

II-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material coverable of producing free liquid, truck liners will be used.

Truck transport routes are as follows: All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of Village mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; and (g) community input where necessary.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

II-6 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6 NYCRR Part 360) and Federal regulations. If disposal of material from this Site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility.

Site Management Plan, Site # V00628

if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

II-7 MATERIALS REUSE ON-SITE

This section should provide all details for methods to be followed for materials reuse on-site. 'Reuse on-site' means reuse on-site of material that originates at the Site and which does not leave the Site during the excavation. Material reuse on-site will comply with the requirements of NYSDEC DER-10 Section 5.4(e)4. The following topics should be covered:

- Procedure for determining if reuse is appropriate:
- Sampling (methods and analytical)
- Stockpile segregation scheme for on-site reuse
- Size of stockpiles, location

The Qualified Environmental Professional (QEP) will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within lands covering berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-site.

II-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

II-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the Remedial Action Work Plan and the SMP. The existing cover system is comprised of a minimum of 24 inches of clean soil, and/or a standard thickness of asphalt pavement, concrete covered sidewalks and concrete building, etc. The demarcation layer will be replaced to provide a visual reference to the top of the remaining contamination zone, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in an updated SMP.

II-10 BACKFILL FROM OFF-SITE SOURCES

This section should describe all methods to be followed for the import, handling and placement of backfill material from off-site. The requirements for backfill used at the Site should be consistent with the backfill requirements provided in DER-10.

- Source area approval process
 - Sources of backfill material
 - Source area background check
 - DOT Certification
 - Chemical sampling
 - Analytes
 - Frequency
 - Imported Soil Chemical Quality Standards
 - Applicability of protection of groundwater SCOs
 - Applicability of protection of ecological resources SCOs
- Stockpile procedures for imported backfill material
 - Size of stockpiles, cover, etc.

All materials proposed for import onto the Site will be approved by the Qualified Environmental Professional and will be in compliance with provisions in this SMP prior to receipt at the Site. A Request to Import/Reuse Fill or Soil form, which can be found at <http://www.dec.ny.gov/regulations/67386.html>, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table II. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil

objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

II-11 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

II-12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

II-13 COMMUNITY AIR MONITORING PLAN

This section should provide all details of the Community Air Monitoring Plan. Guidance can be obtained in Appendix 1A of DER-10, Generic Community Air Monitoring Plan. At a minimum, this plan must include:

- Details of the perimeter air monitoring program;
- Action levels to be used;
- Methods for air monitoring ;
- Analytes measured and instrumentation to be used;
- A figure of the location(s) of all air monitoring instrumentation. A figure showing specific locations must be presented for monitoring stations based on generally prevailing wind conditions, with a note that the exact locations to be monitored on a given day will be established based on the daily wind direction.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and New York State Department of Health Project Managers.

II-14 ODOR CONTROL PLAN

This odor control plan is coverable of controlling emissions of nuisance odors off Site. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Remediation Engineer or Qualified Environmental Professional, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

II-15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.

- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

II-16 OTHER NUISANCES

The following items may be necessary depending on the type of wastes present, the location of the Site and other site-specific concerns. These plans are generally not required for submission to the NYSDEC.

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

P:\Village of Dobbs Ferry\Waterfront Park\NYSDEC Soil Cap\FINAL REPORT FOR DEC\2017-11-9 Dobbs Ferry_V00628 Site Management Plan.docx

APPENDIX 3



POTOMAC-HUDSON ENVIRONMENTAL, INC.

P.O. Box 7
207 S. Stevens Avenue
South Amboy, New Jersey 08879

Monitoring Well Construction Log

Monitoring Well #: MW-1

Well Permit #:

Project: Waterfront Park

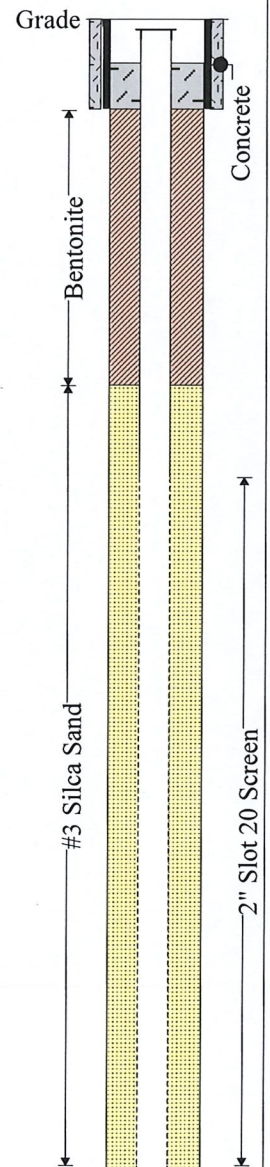
Project No.:

Location: Dobbs Ferry, NY

Client: Village of Dobbs Ferry

Logged By: Chris Viani

SUBSURFACE PROFILE				SPOON			Remarks	Well Construction
Depth	Symbol	Description	Depth	PID (ppm)	Recovery (feet)	Blow Counts		
0		Ground Surface						
0		SAND, fine to medium, brown; little silt (CLEAN FILL).	0.0			cuttings		Grade
2		Silt, sand and gravel; dark brown to dark gray, with trash and construction debris.	2.0					Bentonite
4								
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
			25.0					



Drilled By: Hawk Drilling

Drill Method: HSA

Drill Date: 3/28/11

Well Completion: Flush mount

Well Diameter: 2"

Screen Length: 15'

Well Construction: PVC

Hole Size: 8"

Sheet: 1 of 1



POTOMAC-HUDSON ENVIRONMENTAL, INC.

P.O. Box 7
207 S. Stevens Avenue
South Amboy, New Jersey 08879

Monitoring Well Construction Log

Monitoring Well #: MW-2

Well Permit #:

Location: Dobbs Ferry, NY

Project: Waterfront Park

Client: Village of Dobbs Ferry

Project No.:

Logged By: Chris Viani

SUBSURFACE PROFILE				SPOON			Remarks	Well Construction
Depth	Symbol	Description	Depth	PID (ppm)	Recovery (feet)	Blow Counts		
0		Ground Surface						
0		SAND, fine to medium, brown; little silt (CLEAN FILL).	0.0			cuttings		Grade
2		Silt, sand and gravel; dark brown to dark gray, with trash and construction debris.	2.0					Bentonite
4								Concrete
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
			25.0					

Drilled By: Hawk Drilling

Well Completion: Flush mount

Well Construction: PVC

Drill Method: HSA

Well Diameter: 2"

Hole Size: 8"

Drill Date: 3/28/11

Screen Length: 15'

Sheet: 1 of 1



POTOMAC-HUDSON ENVIRONMENTAL, INC.

P.O. Box 7
207 S. Stevens Avenue
South Amboy, New Jersey 08879

Monitoring Well Construction Log

Monitoring Well #: MW-3

Well Permit #:

Location: Dobbs Ferry, NY

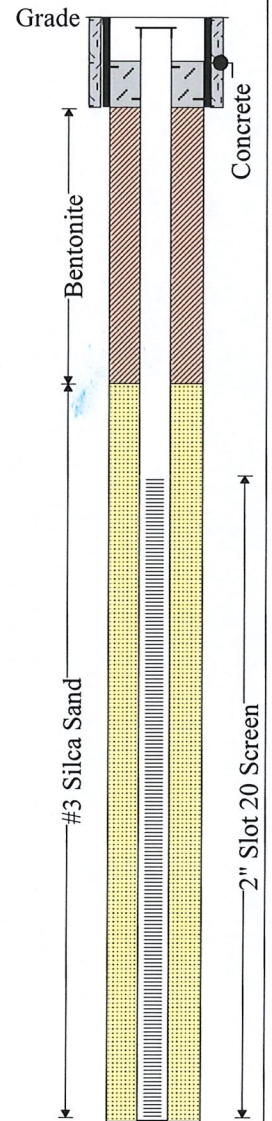
Project: Waterfront Park

Client: Village of Dobbs Ferry

Project No.:

Logged By: Chris Viani

SUBSURFACE PROFILE				SPOON			Remarks	Well Construction
Depth	Symbol	Description	Depth	PID (ppm)	Recovery (feet)	Blow Counts		
0		Ground Surface						
0.0		SAND, fine to medium, brown; little silt (CLEAN FILL).	0.0			cuttings		
2.0		Silt, sand and gravel; dark brown to dark gray, with trash and construction debris. Cobbles at 7'-10'.	2.0					
24.0		End of Boring	24.0					



Drilled By: Hawk Drilling

Well Completion: Flush mount

Well Construction: PVC

Drill Method: HSA

Well Diameter: 2"

Hole Size: 8"

Drill Date: 3/28/11

Screen Length: 15'

Sheet: 1 of 1

APPENDIX 4

From: cclerk@westchestergov.com [[mailto: cclerk@westchestergov.com](mailto:cclerk@westchestergov.com)]
Sent: Wednesday, March 28, 2018 10:18 AM
To: David M. Rothman
Subject: Village of Dobbs Ferry Declaration Recorded in the Office of the Westchester County Clerk

The following package has been recorded in the Office of the Westchester County Clerk:

Reference for Submitter: Village of Dobbs Ferry Declaration
Package: 2018031500156
Document(s) : Declaration (DLR) 580743281
Recording Date: 03/28/2018

All documents will be mailed to the Record & Return address provided.

If you have any questions about this submission, please call the PREP Help Line at (914)995-3111.

The Office of Westchester County Clerk Timothy C. Idoni
110 Dr. Martin Luther King Jr. Blvd., White Plains, NY 10601
(914)995-3111/www.westchesterclerk.com

Statement of Confidentiality

This electronic message may contain privileged or confidential information. If you are not the intended recipient of this e-mail, please delete it from your system and advise the sender.