

Former A.C. Dutton Lumber Yard

DUTCHESS COUNTY, NEW YORK

Final Engineering Report

NYSDEC Site Number: C314081

Prepared for:

The O'Neill Group – Dutton, LLC

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DECEMBER 2014

CERTIFICATIONS

I, Michael St. Pierre, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Design Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Design Work Plan. The information and certifications made in the December 2014, Construction Completion Report were relied upon to prepare this report and certify that the remediation requirements for the site have been met.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Design Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor,

pursuant to Section 210.45 of the Penal Law. I, Michael St Pierre, of SESI Consulting Engineers PC, am certifying as Owner's Designated Site Representative for the site.

080271
NYS Professional Engineer #

12/18/2014
Date

Michael St Pierre
Signature

A circular professional seal for Michael St. Pierre, a Licensed Professional Engineer in the State of New York. The seal contains the text "STATE OF NEW YORK", "MICHAEL W. ST. PIERRE", "LICENSED PROFESSIONAL ENGINEER", and "No. 080271". The seal is stamped over the signature line.

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LIST OF ACRONYMS

Acronym	Definition
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BE	Bell Engineering
bsg	below surface grade
CAMP	Community Air Monitoring Plan
CCA	Chromated Copper Arsenate
C/D	Construction and Demolition
COC	Certificate of Completion
CPP	Citizen Participation Plan
DER-10	Division of Environmental Remediation – 10, Technical Guidance for Site Investigation and Remediation
ESI	Ecosystems Strategies, Inc.
E&SCP	Erosion and Sedimentation Control Plan
ECL	Environmental Conservation Law
EE	Environmental Easement
FER	Final Engineering Report
HASP	Health and Safety Plan
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PID	Photoionization Detector
PE	Professional Engineer
QEP	Qualified Environmental Professional
QA/QC	Quality Assurance/Quality Control
RAOs	Remedial Action Objectives
RDWP	Remedial Design Work Plan
RWP	Remedial Work Plan
RI	Remedial Investigation
RR SCOs	Restricted-Residential Soil Cleanup Objectives
SCOs	Soil Cleanup Objectives
SESI	SESI Consulting Engineers, PC

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

The O'Neill Group – Dutton, LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in July 2005, to investigate and remediate an 11.8-acre property located in the City and Town of Poughkeepsie, Dutchess County, New York. The BCA was amended in February 2011 to exclude the State encumbered land which runs along the Hudson River to the West of the site. The original site was approximately 14 acres. The property was remediated to restricted residential use and will be used primarily for residential condominiums use with 13,000 square feet of commercial space development that will be subject to a Site Management Plan and Environmental Easement.

The site is located in the County of Dutchess, New York and is identified as City of Poughkeepsie Tax ID: 6062-59-766443 and Town of Poughkeepsie Tax ID: 6062-02-763508 on the City and Town of Poughkeepsie Tax Maps. The site is situated on an approximately 11.8-acre area bounded by Hudson River Rowing Association Dock (owned by Vassar College) to the north, a former natural gas regulation station (owned by Central Hudson Gas & Electric) to the south, North Water Street to the east, and an approximately 2.45-acre parcel along the Hudson River Bank owned by the State of New York to the west (see Figure 1.1). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

An electronic copy of this FER with all supporting documentation is included as Appendix B.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

2.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

2.1.2 Soil Vapor RAOs

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the site.

2.2 DESCRIPTION OF SELECTED REMEDY

The site was remediated in accordance with the remedy selected by the NYSDEC in the Decision Document dated January 2009 and December 2012 minor modification to the Decision Document.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The remediation activities consisted of two phases, each phase was supervised and certified by two different engineering firms. The first phase consisted of soil and asphalt and concrete paving excavation, tank removals, scarification of floors and demolition of the on-site structures. Phase I activities are reported in the Construction Completion Report (CCR) dated December 2014, prepared by Ecosystems Strategies Inc (ESI) – the former environmental engineer of record for the site. A copy of the CCR is provided in Appendix I. Phase II of the work includes the final cover system of the site and is reported in this FER, which was supervised by SESI Consulting Engineers, PC (SESI) the current environmental engineer of record for the site. The following are the components of the selected remedy:

1. Removal of all CBS tanks, their contents and associated CCA impacted debris from the site.
2. Removal of PBS tanks and any associated petroleum-contaminated soil.
3. Scarification of the floor of the Southern Pressure Treatment Plant Building to a depth of ½” or until there is no visual evidence of staining.
4. Demolition of on-site structures.
5. Excavation of all asphalt/soil/fill/concrete exceeding the site specific guidance

level of 300 mg/kg for arsenic and restricted residential SCO for other COCs.

The guidance level for arsenic was modified by the NYSDEC during remediation and included the stipulation that a barrier layer of clean fill be installed .

6. Construction and maintenance of a soil cover system consisting of four to ten feet of approved soil to prevent human exposure to remaining contaminated soil/fill remaining at the site. The thickness of the cover system varies with the grading requirements of the site. The cover system consist of (from top to bottom): 6 –inches of clean (restricted residential) vegetated soils, 18-inches of clean soil (restricted residential), a demarcation layer and fill with PAH levels that slightly exceed the restricted residential SCO approved by the DEC.
7. The site was dynamically compacted and any proposed buildings will be surcharged for settlement. This combined compaction will minimize the disturbance of the site soils because it will require shallower foundation.
8. Groundwater monitoring; 4 groundwater monitoring wells (MW) were installed on site after the completion of the remediation. The MWs will be sampled semi-annually for the first year. Additional subsequent sampling will be decided based on the first year results.
9. Evaluation of the vapor intrusion risk for any enclosed proposed buildings on site to determine if a sub-slab depressurization system (SSDS) is necessary.
10. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.
11. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
12. Periodic certification of the institutional and engineering controls listed above.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

The remedy for this site was performed as a single project, and no interim remedial measures, operable units or separate construction contracts were performed.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Remedial Design Work Plan (RDWP), dated May 2011. All deviations from the RDWP are noted below and in Section 4.6 of the CCR.

SESI Consulting Engineers, PC (SESI) oversaw the import, sampling, approval and placement of the soil cover (cap). Ecosystems Strategies, Inc. and Bell Engineering (ESI/BE) oversaw all other remedial actions, which were reported and certified in a Construction Completion Report (CCR). The CCR dated June 2014 was submitted separately to the DEC by ESI. A copy of the CCR is provided in Appendix I.

4.1 GOVERNING DOCUMENTS

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP was included as Appendix E of the RDWP approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

4.1.3 Soil/Materials Management Plan (S/MMP)

All soils/materials that were disturbed at the site, including excavation, handling storage, transport and disposal were properly managed in accordance with the RDWP and DER-10. Details of the S/MMP is further discussed in Section 4.1.3 of the CCR, which is provided in Appendix I.

4.1.4 Storm-Water Pollution Prevention Plan (SWPPP)

The erosion and sediment controls for all remedial construction were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control and the site-specific Storm Water Pollution Prevention Plan, the site specific SWPP is included in Appendix D of the CCR, which is attached hereto in Appendix I.

4.1.5 Community Air Monitoring Plan (CAMP)

The NYSDOH Generic CAMP was implemented during the remedial work completed at the site. The CAMP provided measures of monitoring and protection for the downwind community (i.e., offsite receptors including residences and businesses) from potential airborne contaminant as a direct result of remedial activities. The following CAMP documentation is provided in this FER for the cover system installation work:

- Table 4.1 – Summary of CAMP Results;
- Dust monitoring data (Appendix C), and;
- Table D in the CCR – Summary of CAMP Results for the CCR remedial activities;
- Dust monitoring data during for CCR activities (Appendix E of the CCR), and;
- Generic CAMP is provided in Appendix E of the CCR.

The implementation of the CAMP included the monitoring of particulates (dust control) and volatile organic compounds (VOCs). Particulate monitoring is summarized in Table 4.1. During the meeting of October 15, 2013 with the DEC, VOC monitoring was determined not required on the site during the fill import activities because the imported material does not contain VOC.

Table 4.1 CAMP Results Summary

Period	Construction Activity	Dust Monitor Upwind*	Dust Monitor Downwind*	Dust Field Visual Observation	Exceedence of Action level	Action Taken for Dust Control	Action Taken for Odor Control
10/22/2013-12/17/2013	Fill Import and Placement	4503	3502	None	None	Occasional water spraying during trucks delivery	No odors observed
04/01/2014-09/12/2014	Fill Import and Placement	4503	3502	None	None	Water spraying during truck delivery	No odors observed

* The numbers in the table represent the last four digits in the machine serial number

4.1.6 Contractors Site Operations Plans (SOPs)

The Remediation Engineer reviewed all plans and submittals for this remedial project (i.e. those listed above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the RDWP. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.7 Community Participation Plan (CPP)

The CPP was submitted to DEC at the commencement of this Project and a copy was included in the CCR, attached hereto in Appendix I.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

Table 4.2 provides the list of contractors and consultants, who performed the activities related to the import and installation of the fill.

Table 4.2 Contractors & Consultants for the import of fill and installation of the cap

Contractors/Consultants	Role	Project Contact
O'Neill-Group Dutton, LLC	Site Coordinator	Aaron O'Neill
SESI Consulting Engineers, PC	Environmental Consultant and Engineer of Record	Fuad Dahan Michael St Pierre (Engineer of Record)
Restoration and Conservation LLC	Testing and Sampling of the imported fill	James Cervino
HDR Inc.	Environmental Monitor	Edward Brandt

Table 4.2A Contractors & Consultants for remedial activities reported in the CCR

Contractors/Consultants	Role	Project Contact
Ecosystems Strategies, Inc. Tel: (845) 452-1658	Remediation Consultant	Paul H. Ciminello, QEP Richard Hooker
Bell Engineering PLLC	Certifying Engineer of Record	Phil Bell, PE
O'Neill-Group Dutton, LLC	Site Coordinator	Peadar McMahon
Onekey, LLC	General Contractor	Peadar McMahon
Enviranalytics	Independent Data Reviewer	Michael Fifield
York Analytical Laboratories, Inc. Tel: (203) 325-1371	NYSDOH environmental Laboratory Approval Program (ELAP) certified laboratory	Phillip Murphy
AB Environmental Tel: (631) 484-6088	Contractor for scarification and tank and CCA waste removal	Mark Fashbinder
Envirosafe Services of Ohio Tel: (419) 698-3500	Contractor for CCA contaminated soil disposal	Not Applicable
Pro-Teck, LLC Tel: (203) 624-9461	Contractor for various Hazardous waste disposal	Not Applicable
Paradise Heating Oil, Ossining, NY and AB Environmental	Contractor for Non-hazardous liquid waste disposal	Not Applicable

4.2.2 Site Preparation

A pre-construction meeting for the fill import was held with NYSDEC and all contractors on October 15, 2013.

Documentation of agency approvals for the imported clean fill material required by the RDWP is included in Appendix D. The approvals were in form of emails from the agency to SESI.

A NYSDEC-approved project sign was erected at the project entrance. The sign was removed in early June upon the DEC request because of vandalism.

The following Site preparation services were performed prior to the initiation of remedial activities as reported in the CCR at the Site in accordance with the RDWP:

- a) *Pre-construction meeting*: A pre-construction meeting was held with NYSDEC and all contractors on August 29, 2011.
- b) *Mobilization*: Prior to the initiation of the remedial work, Site mobilization (including Site clearing) was conducted in a manner such that erosion and sedimentation control, utility marker and easement layout, and other applicable Site preparation tasks were fully instituted before the commencement of construction activities, as needed.
- c) *SWPPP/E&SCP*: A site-specific SWPPP/E&SCP was prepared by Maser Consulting PA (Appendix D) prior to the implementation of remedial activities. The Site's General Contractor executed all the elements of the SWPPP/E&SCP.
- d) *Utility Markouts*: Dig Safely New York was notified prior to ground intrusive activities and streets were properly marked to indicate subsurface infrastructure. In addition, private utility markouts were requested prior to the initiation of ground intrusive activities, as appropriate.
- e) *Truck wash area*: A dry decontamination/truck wash area was set up prior to the excavation activities to clean the tires of trucks and other equipment prior to exiting the Site. The dry decontamination/truck wash area was maintained as required during the truck loading activities.
- f) *Acquisition of agency approvals*: The following approvals were secured in conjunction with remedial activities:

Approval of the RDWP - June 27, 2011.

Documentation of agency approvals, required by the RDWP or otherwise indicated by NYSDEC, is included in Appendix D.

4.2.3 General Site Controls

General site controls were established at the Site to ensure the safety of on-site workers, remedial personnel, nearby residents, and potential trespassers; and to minimize off-site and on-site impacts of remedial activities. The general site controls established at the Site are detailed in Section 4.2.3 of the CCR provided in Appendix I.

4.2.4 Nuisance Controls

The following monitoring and controls were performed on the site during the fill import and placement:

- Truck wash and egress housekeeping: a tracking/wash pad was constructed at the site exit to clean the tires of the fill delivery trucks before exiting the site. The majority of the clean fill material was delivered with barges. Some of the fill was delivered with trucks and occasionally soils were dragged out on the road outside the site with the truck tires despite the track pad. Subsequently, the road was swept.
- Dust control: The site was regularly sprayed with water to minimize dust generation particularly during fill off load from the trucks. See also FER sections 4.1.5 and 4.2.5.

The following measures and controls were implemented to address nuisances at the Site during remedial activities as reported in CCR::

1. Truck wash and egress housekeeping: In order to prevent off-site migration of the on-site contaminated soil, a tracking pad or plastic sheeting was laid and the trucks hauling the contaminated material were brushed to remove contaminated material adhering to the tires and vehicle surfaces. Trucks hauling the contaminated material were covered in order to control the generation of fugitive dust and/or any escaping of soil from the trucks during transport.
2. Dust control: See Section 4.2.5 below.
3. Truck routing: Trucks utilized appropriate pre-designated routes that limited transport through residential areas, prohibited off-site queuing of trucks entering the Site, and limited the total distance to major highways.

4.2.5 CAMP Results

Two dust monitors were installed at two locations up- and downwind at the edges of the site. The monitor locations were changed in accordance with the wind direction, Dust levels that exceeded the CAMP action levels were reported for brief durations. The site was regularly sprayed with water to minimize dust generation particularly during fill off load from the trucks.

Copies of all field data sheets relating to the CAMP are provided in electronic format in Appendix C.

During the remedial activities of the CCR occasional and temporary exceedances of dust levels were noted during remedial activities at the perimeter of the excavation areas. These exceedances registered mainly during the loading of contaminated soil into the trucks. Spraying of soils and roads with water was consistently conducted, particularly prior and during truck loads out. A summary of the CAMP results are provided in Table D of CCR, which is included in Appendix I. Copies of all field data sheets relating to the CAMP are provided in electronic format in Appendix E of the CCR.

4.2.6 Reporting

The reporting of the fill phase was done through emails between SESI and the NYDEC. Electronic copy of the emails is included in Appendix E.

The digital photo log required by the RDWP is included in electronic format in Appendix F.

During the remedial activities reported in the CCR Periodic reports were prepared by ESI and submitted to the NYSDEC and NYSDOH describing remedial activities at the site. All periodic reports are included in electronic format in Appendix G of the CCR provided in Appendix I. The digital photo log for CCR activities is included in electronic format in Appendix H of the CCR.

4.3 CONTAMINATED MATERIALS REMOVAL

Remedial Activities at the site were initiated on October 10, 2011. Contaminated material from the areas specified in the RDWP was removed to meet restricted residential SCOs and the site specific guidance level of 300 mg/kg for arsenic and 180 mg/kg for chromium. Details on the removal of contaminated materials is provided in Section 4.3

of the CCR, provided in Appendix I. Table C of the CCR provides summary of waste characterization samples.

4.4 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

4.4.1 Soils

Post excavation samples were collected in accordance with the RDWP and DER-10. All laboratory results for post excavation samples were analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals. Details on the remedial performance and documentation sampling are provided in Section 4.4 of the CCR in Appendix I.

4.4.2 Groundwater

Four (4) ground water monitoring wells were installed and sampled on November 7, 2014 for VOCs, SVOCs, PCBs, Pesticides and TAL metals. It is anticipated that the monitoring events of the wells will be limited because the contaminant sources, which are the impacted soils, have been excavated.

Figure 4.4 shows the locations of the four (4) post-remediation wells (PR-MW1 through -4). The wells were placed based on the groundwater investigation that was reported Remedial Investigation Report (RIR) (Fuss and O'Neill April 2006). The four wells locations were selected as follows:

- PR-MW1: is located up-gradient of the site activities to act as baseline of the groundwater quality flowing into the site.
- PR-MW2: is located in the vicinity of the RIR monitoring well, MW-E8, which exceeded the SVOC groundwater standards.
- PR-MW3: is located down-gradient of the RIR piezometer, I4.5, which exceeded the groundwater standards for Arsenic.
- PR-MW4: is located down-gradient of the RIR monitoring well, MWU8, which exceeded the groundwater standards for Arsenic.

As shown in Figure 4.4, the wells are located outside the proposed building footprint and outside the construction area to protect them during the proposed development activities. The wells have 3-foot stick-ups painted in bright color (e.g. orange) to increase their visibility.

PVC monitoring wells were installed utilizing, hollow stem auger drilling techniques. An oversized borehole, about 4 inches larger than the casing, was advanced

to the target depths. Target depths were determined based on the well depth of the 2006 RIR. All the wells were constructed utilizing a 20 (0.020 inches) slot PVC screen and a solid PVC riser. The PVC screen was surrounded by #2 filter sand. The filter sand extends at least about 1 foot above the screen. Bentonite about 1 foot thick was then placed on top of the filter sand and the remaining annular space around the PVC riser was grouted with cement/bentonite mix. The wells were subsequently completed with protective steel stickups casings. Well construction logs are provided in Appendix K.

The monitoring wells were developed until the purge water being pumped was free of sediment, or the well no longer had groundwater present, whichever was encountered first. Monitoring wells were gauged for depth to groundwater table and presence of free-phase product at the surface (LNAPL) or at the bottom (DNAPL) of the well. Field observation reported the presence of a sheen, if present. Groundwater samples were then collected in accordance with USEPA low flow sampling procedures, after allowing the newly installed wells to stabilize. At least three (3) well volumes were purged and the purge water was piped to a “flow cell,” where groundwater geochemical parameters such as pH, redox potential, specific conductance, dissolved oxygen, salinity and turbidity were measured at three (3) minute intervals. Groundwater samples were collected once the geochemical parameters stabilized for three consecutive readings. Water for VOC samples was collected in vial allowing a meniscus form before placing the cap to prevent the formation of headspace. The field reports for groundwater sampling are included in Appendix L.

The GW samples from all wells resulted in non-detect (ND) for all constituents except for metals. The analytical data is included in Appendix M. Table 4.3 presents a summary of results for arsenic and chromium, which are the metals resulting from the site historic operations.

Table 4.3: Groundwater sampling data summary

Metal	NY TOGS Water Effluent TAGM	PR-MW1	PR-MW2	PR-MW3	PR-MW4	PR-MW4 Duplicate
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Arsenic	50	850	ND	ND	100	85
Chromium	25	360	50	6.9	390	320

A data usability study report (DUSR) was conducted on the groundwater results and it is included in Appendix M.

4.5 IMPORTED BACKFILL

Table 4.4 lists all the sources, the corresponding quantities and characteristics of the fill that was imported to the site to construct the cap.

Table 4.4 List of backfill material sources

Fill Source	Approval Type Below or Above Demarcation Layer	Analysis	Import Method	Quantity (CY)
Inwood Material Terminal	Below	Slight PAH Exceedances	Barge	59,150
Tappan Zee Bridge	Above	No Exceedances	Barge and Truck	3,120
Delaware Aqueduct (Yonkers)	Above	No Exceedances	Trucks	8,582
Wappinger	Above	No Exceedances	Trucks	12,075
NY Recycle	Below	Slight PAH Exceedances	Trucks	8,970
Pebble Lane	Below	Slight PAH Exceedances	Trucks	3,932
Tilcon Quarry	Above	No Exceedances	Trucks	25,120
Norie Estate	Above	No Exceedances	Trucks	4,500

Tables summarizing chemical analytical results for backfill, in comparison to allowable levels, are provided in Appendix G. A figure showing the site locations where backfill was used at the site is shown in Figure 4.1.

4.6 CONTAMINATION REMAINING AT THE SITE

There is residual contamination at the Site despite the Phase I soil remediation efforts. A detailed description of the post excavation sampling and the contamination higher than the unrestricted SCO is included in the CCR Section 4.4.1. Figures 4.5 A-C present the locations of the post-excavation samples and Appendix J include the post-excavation data tables.

Groundwater contamination remaining on the Site are summarized in table 4.3 and Figure 4.4 shows the monitoring wells locations.

Since contaminated soil and groundwater remain beneath the site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

4.7 SOIL COVER SYSTEM

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. This soil cover system is comprised from top to bottom of the following:

- 6-inch layer of vegetated soil,
- 18-inch layer of certified clean fill, and
- A demarcation layer consisting of orange geotextile or snow fence.

In addition to this approved cover system, an additional layer of approved fill was placed under the clean soil cover system as follows, which serves to further prevent exposure to the remaining contamination at the Site:

- 2-8 foot thick layer of fill that meets the restricted residential SCOs with limited PAH exceedances approved by the NYSDEC. The thickness of this layer is dependent on the required grade.

The plan for the site is to eventually develop residential (condominiums) and commercial buildings and paved parking lots. The planned construction will be conducted in accordance the SMP. The planned impervious layer (paving and buildings pads) will be part of the final cover system. The requirements for soil management and excavation during construction activities is included in the Site Management Plan. The Excavation Work Plan, which outlines the procedures required in the event the current final cover system and/or underlying residual contamination are disturbed, is provided in Appendix A of the SMP.

Figures 4.1 and 4.2 show the as-built cross sections for the remedial cover type used on the site. The current site remedial activities include construction of one cover type (soil cover) across the entire site.

Placement of the demarcation layer and of the fill below it was completed on December 22, 2014. The as-built drawing in Figure 4.1 shows that there is a narrow gap, where the demarcation layer does not overlap with the site west boundary line, just south of the creek. This gap widens from about 300 ft south of the creek to Hoffman Street boundary. This gap is the result of the site topography. At the western side of the property there is a steep drop in elevation that forms a topography as vertical as a straight wall. The property line is located at the elevated side of the property. The demarcation layer does not overlap the property line because of this topography. The southern part, where the gap is wider, is formed of an area that was not impacted by the historic site activities. This area, which includes rock formation, was excavated during construction and some of the excavated rocks were crushed and used for the site construction.

The demarcation layer was installed and surveyed as shown in Figure 4.1. An orange demarcation layer was initially installed in some areas of the site prior to the dynamic compaction. This demarcation layer has been destroyed and no longer acts as a demarcation. Figure 4.3 shows the approximate locations where the old orange layer was installed and its approximate elevation. Reporting the presence of this layer is for the record only.

4.8 OTHER ENGINEERING CONTROLS

The remedy for the site did not require the construction of any other engineering control systems. However, four (4) ground water monitoring wells were installed on the site to monitor the impact and quality of groundwater. It is anticipated that the monitoring events of the wells will be limited because the contaminant sources, which are the impacted soils, have been excavated. As per the SMP, the wells will be monitored semi-annually for the first year. The subsequent monitoring of the wells will be determined based on the first year results and discussions with the DEC.

Vapor intrusion must be evaluated for any future enclosed structure development on the Site. If required, a sub-slab depressurization system (SSDS) will be evaluated and submitted to the DEC for review.

4.9 INSTITUTIONAL CONTROLS

The site remedy requires that an environmental easement be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface

contamination; and, (3) limit the use and development of the site to restricted residential uses only.

The environmental easement for the site was executed by the Department on June 20, 2014, and filed with the Dutchess County Clerk on November 14, 2014. The County Recording Identifier number for this filing is 02 2014 7048. A copy of the easement and proof of filing is provided in Appendix H.

4.10 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN

The NYSDEC allowed fill with poly-aromatic hydrocarbons (PAHs) that slightly exceeded the restricted residential SCO to be placed below the demarcation layer. Every fill source was sampled in accordance with table in Section 3.4.3 of the RDWP. The sample results were submitted to the NYSDEC for approval before import.

The RAWP specified a site specific SCO for arsenic of 32 mg/kg and a restricted residential SCO of 180 mg/Kg for chromium. A petition was submitted to the NYSDEC, dated November 20, 2012, to increase the site specific SCO to 300 mg/Kg and chromium to 500 mg/Kg. The rationale for this request was based on a factor that had not been considered during the preparation of the RAWP, namely that site designs called for 4 feet of clean cover to be installed across the site rather than 2 feet as specified in the RAWP. This change to the arsenic SCO, but not to the chromium SCO, was approved by NYSDEC. The site has been remediated to an arsenic SCO of 300 mg/Kg and a chromium SCO of 180 mg/Kg. This modification to the RAWP substantially reduced the volume of arsenic and chromium contaminated material that required removal from the site.

FIGURES

REFERENCE

1. SITE INFORMATION ARE TAKEN FROM "CONCEPT PLAN FOR THE ONELL GROUP" PREPARED BY MASER CONSULTING P.A. DATED 3/20/13.

[illegible]

dwg by: yy
chk by: FD
scale: 1" = 60'
date: 12/19/14

SESI
CONSULTING
ENGINEERS, PC

SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

MM MR

MICHAEL W. ST. PIERRE, P.E.
PROFESSIONAL ENGINEER
N.Y. LIC. NO. 080271

THE O'NELL GROUP - DUTTON LLC
CITY/TOWN OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

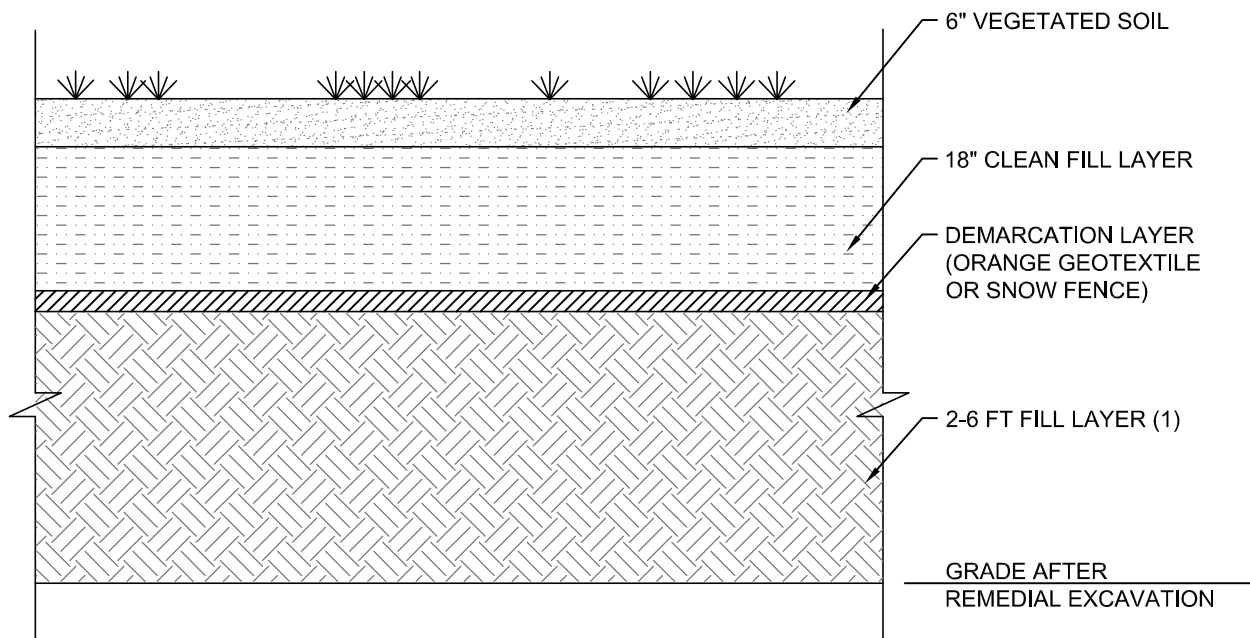
project:

drawing title:

FILL PLACEMENT & LAYER

7-4-G-11

job no. 8604



(1) REFER TO FIGURE 4.1 FOR THE AS-BUILT ELEVATION AND DEPTH
OF THE FILL LAYER AT A SPECIFIC LOCATION

FIGURE 4.2

THE O'NELL GROUP - DUTTON LLC
CITY/TOWN OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

FILL AREA CROSS SECTION

SESI
CONSULTING
ENGINEERS, P.C.

12A MAPLE AVE, PINE BROOK, N.J. 07058 PH: 973-808-9050

SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

DRAWN BY: yy

CHECKED BY: FD

SCALE: N.T.S.

DATE: 9/10/14

JOB NO.: 8604

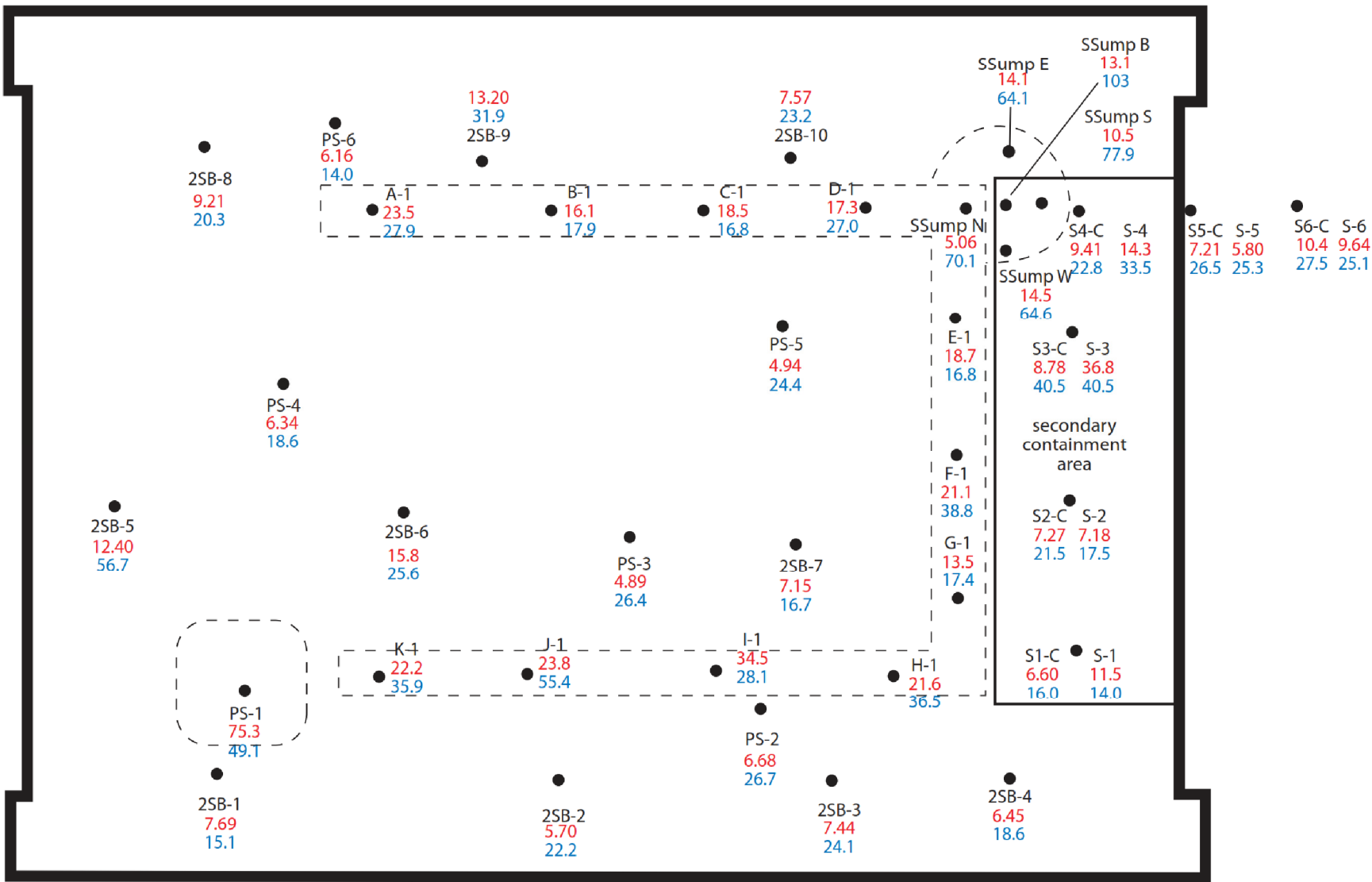
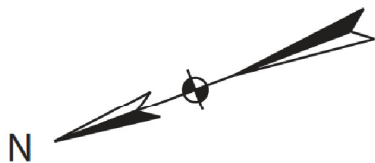


Appendix A

dwg by: LH
chk by: FD
scale: NTS
date: 12/16/14

FIG. 4.5A

© SESI CONSULTING ENGINEERS, PC 2014
This drawing and all information contained hereon is proprietary information of SESI CONSULTING ENGINEERS, PC and may not be copied or reproduced, either in whole or in part, by any method, without written permission of SESI CONSULTING ENGINEERS, PC.



2SB = subslab soil sample 9/24/2012
PS = post scarification concrete sample 9/04/2012
B and B-# = post excavation end point soil sample 10/11/2012 and 10/17/2012
S#-C = secondary containment concrete sample 11/19/2012
S-# secondary containment subconcrete soil sample 11/19/2012
SSump# = sump endpoint sample 11/19/2012

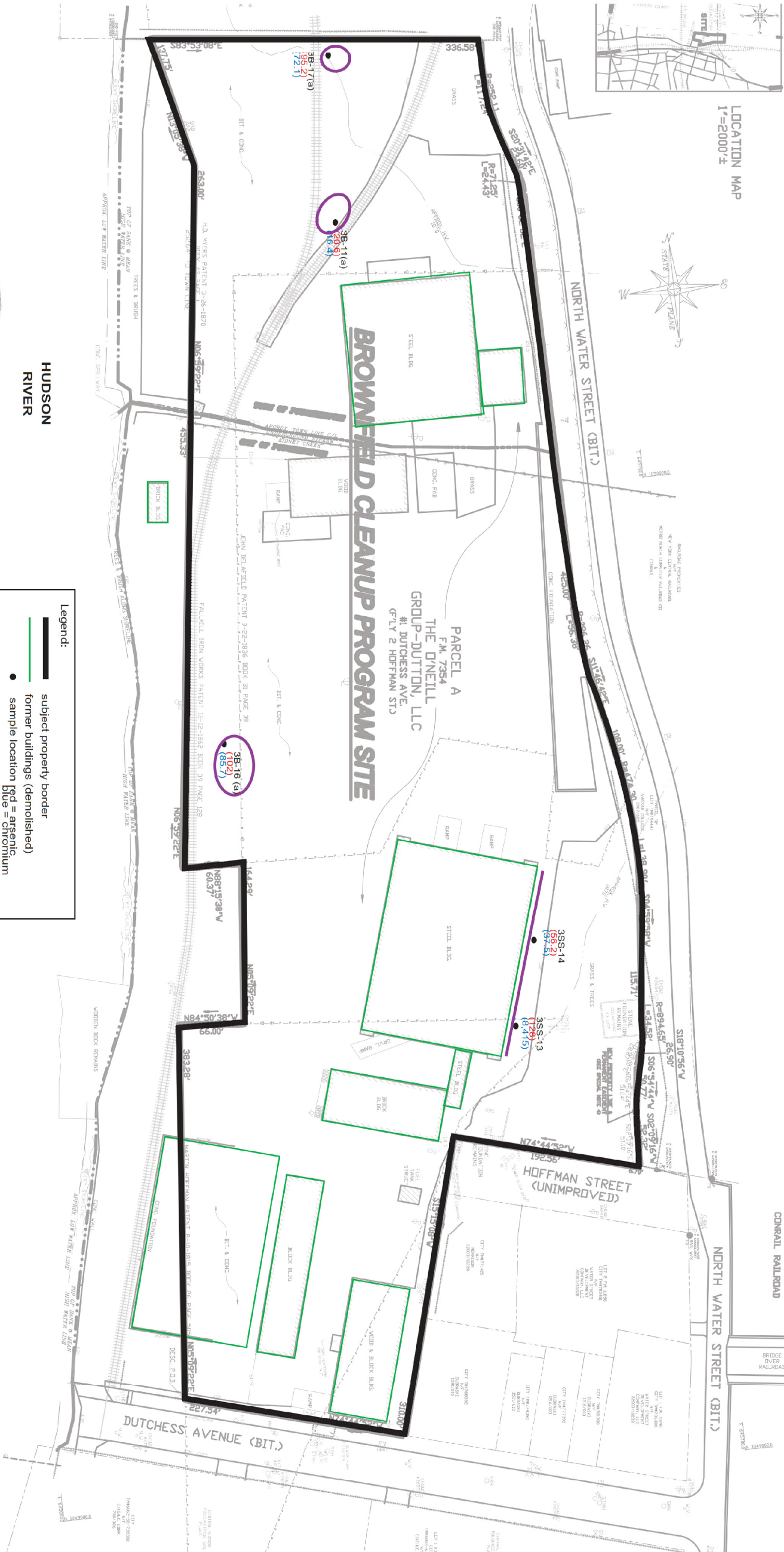
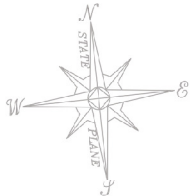
40 feet

All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 5: Southern Treatment Plant Post Remediation End Point Sampling Map Former A.C. Dutton Property 1 Dutchess Avenue and 2 Hoffman Street Poughkeepsie, New York	Legend: — building outline - - - excavation area ● sample location red = arsenic blue = chromium (all results in mg/kg)	ESI File: OP08022.50
		October 2014
		Scale: 1" = 40'
		Appendix A

job no: 8604 drawing no: 8604	project: THE O'NELL GROUP - DUTTON LLC CITY/TOWN OF POUGHKEEPSIE DUTCHESS COUNTY, NY	SESI CONSULTING ENGINEERS, PC 12A MAPLE AVE, PINE BROOK, N.J. 07058 PH: 973-808-9050	SOILS / FOUNDATIONS SITE DESIGN ENVIRONMENTAL	dwg by: LH
	drawing title: POST EXCAVATION SAMPLES & RESULTS			chk by: FD scale: NTS date: 12/16/14

LOCATION MAP
1"=2000'



STERN NOTES
: NEW YORK EAST, NAD 83 ZONE 3001
THIS PROJECT. BEARINGS WERE
JULY 2011.
= PARCEL WAS SURVEYED USING SURVEY
JIPVET. NYS COR. STATION #039
IS USED AS A BASE. THE DATA FOR
N SCALE FACTOR = 0.99991930361
1 FACTOR = 0.9999962625
ABRATON = -103.9863



HUDSON
RIVER

Legend:

- subject property border
- former buildings (demolished)
- sample location
- blue = arsenic
- red = chromium
- (#)
- all data are surface samples
- in parts per million (ppm)
- areas of excavation to 2'

PARCEL AREAS
FORMERLY OWNED BY
CITY OF Poughkeepsie
TOWN OF Poughkeepsie

Figure 6: Exterior Areas - Post Remediation Endpoint Sample Map

Former A.C. Dutton Property
1 Dutchess Avenue
Poughkeepsie, New York

ESI File: OP08022.50

October 2014

Appendix A

project: THE O'NEILL GROUP - DUTTON LLC
CITY/TOWN OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

drawing title: POST EXCAVATION
SAMPLES & RESULTS

job no: 8604
drawing no:

SESI
CONSULTING
ENGINEERS, PC

12A MAPLE AVE, PINE BROOK, N.J. 07058 PH: 973-808-9050

SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

dwg by: LH
chk by: FD
scale: NTS
date: 12/16/14

FIG. 4.5C

APPENDICES

APPENDIX A
SURVEY METES AND BOUNDS

SCHEDULE "A" PROPERTY DESCRIPTION

ALL that certain parcel of land with the buildings and improvements thereon erected, situate, lying and being partially in the City of Poughkeepsie and Town of Poughkeepsie, County of Dutchess and State of New York, being a portion of what is shown as Parcel A on a certain map entitled, "Subdivision of Property, A. C. Dutton Lumber Corporation" and filed as map number 7345 and being more particularly bounded and described as follows.

BEGINNING at a point on the northerly line of Dutchess Avenue in the City of Poughkeepsie at the southwesterly corner of a grant of lands underwater to Martin Hoffman by Letters Patent dated August 10, 1815 and recorded in the New York State Department of State in Book 26 of Patents at page 505; heading from said point of beginning along the easterly and northerly lines of the Hoffman Patent, N 05° 09' 22" E, a distance of 383.28 feet and S 84°50'38" E, a distance of 66.00 feet to a point on the westerly line of a grant of lands under water to John Delafield by Letters Patent dated September 22, 1836 and recorded in Book 31 of Patents at page 39; thence heading northerly along the same, N 05° 09' 22" E for a distance of 164.29 feet to a point on a grant of lands under water to Fallkill Iron Works by Letters Patent dated December 12, 1862 and recorded in Book 39 of Patents at page 128; thence heading westerly and northerly along the same, N 88° 15'38" W, a distance of 60.37 feet and N 06° 59' 22" E, a distance of 455.33 feet to a point on the southerly line of a grant of lands underwater to Henry D. Myers by Letters Patent dated March 26, 1870, recorded in Book 42 of Patents at page 1; thence heading northerly along the same, N 06° 59' 22" E, crossing the centerline of an underground creek known as "Kidney Creek", at 10.36 feet, said creek being the division line between the City of Poughkeepsie and the Town of Poughkeepsie and continuing in the Town of Poughkeepsie for a distance of 252.64 feet for a total distance of 263.00 feet and N 13° 05'38" W, a distance of 137.75 feet to a point at the southwesterly corner of Parcel B, f.m. 7354, land now or formerly of Vassar College (L1967 P625), said point also being the northwesterly corner of the herein described Easement; thence heading southeasterly along the lands of Vassar College, S 83° 53' 08" E, a distance of 336.58 feet to a point at the corner of the main portion of Parcel B and the North Water Street portion of Parcel B, said point also being the northeasterly corner of this described Easement; thence heading southerly along the westerly line of the North Water Street portion of lands of Vassar College, the following 9 courses:

1) A curve to the left having a radius of 252.11 feet, a length of 117.24 feet and a delta angle of 26° 38' 41" to a point;

2) S 20° 31' 42" E, a distance of 23.60 feet to a point;

3) A curve to the right having a radius of 71.25 feet, a length of 24.43 feet and a delta angle of 19° 38' 43" to a point;

4) S 00° 52' 32" E, crossing the centerline of the previously mentioned "Kidney Creek" at 268.41 feet, said creek being the division line between the Town of Poughkeepsie and the City of Poughkeepsie and continuing in the City of Poughkeepsie for a distance of 156.59 feet for a total distance of 425.00 feet to a point;

5) A curve to the left having a radius of 296.26 feet, a length of 56.38 feet and a delta angle of 10° 54' 13" to a point;

6) S 11° 46' 42" E, a distance of 108.00 feet to a point;

7) A curve to the right having a radius of 474.30 feet, a length of 138.90 feet and a delta angle of 16° 46' 46" to a point;

8)S 04° 59' 58" W, a distance of 115.71 feet to a point;

9)A curve to the left having a radius of 894.65 feet, a length of 34.52 feet and a delta angle of 2° 12' 38" to a concrete monument found at the northwesterly corner of a City of Poughkeepsie Highway Taking area (L22009 P4466);

thence heading southerly along the Taking Line, the following 3 courses:

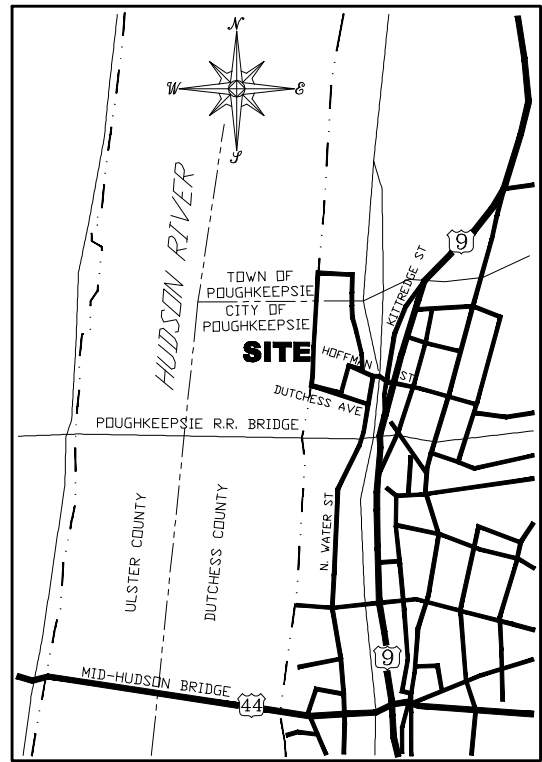
1)S 18° 10' 56" W, a distance of 26.90 feet to a concrete monument;

2)S 06° 54' 44" W, a distance of 50.77 feet to a concrete monument;

3)S 02° 09' 16" W, a distance of 52.32 feet to a concrete monument, said point being on the northerly line of the unimproved section of Hoffman Street;

thence heading northwesterly along Hoffman Street, N 74° 44' 52" W, a distance of 192.56 feet to a point at the northwesterly corner of Hoffman Street; thence heading southwesterly along Hoffman Street and lands now or formerly of Morrison (L22003 P10228) and Dubraski (L1590 P210), S 15° 15' 08" W, a distance of 310.00 feet to a point on the northerly line of the previously mentioned Dutchess Avenue, said point also being the southeasterly corner of the herein described Easement; thence heading northwesterly along the northerly line of Dutchess Avenue, N 74° 44' 52" W, a distance of 227.54 feet to the point and place of beginning.

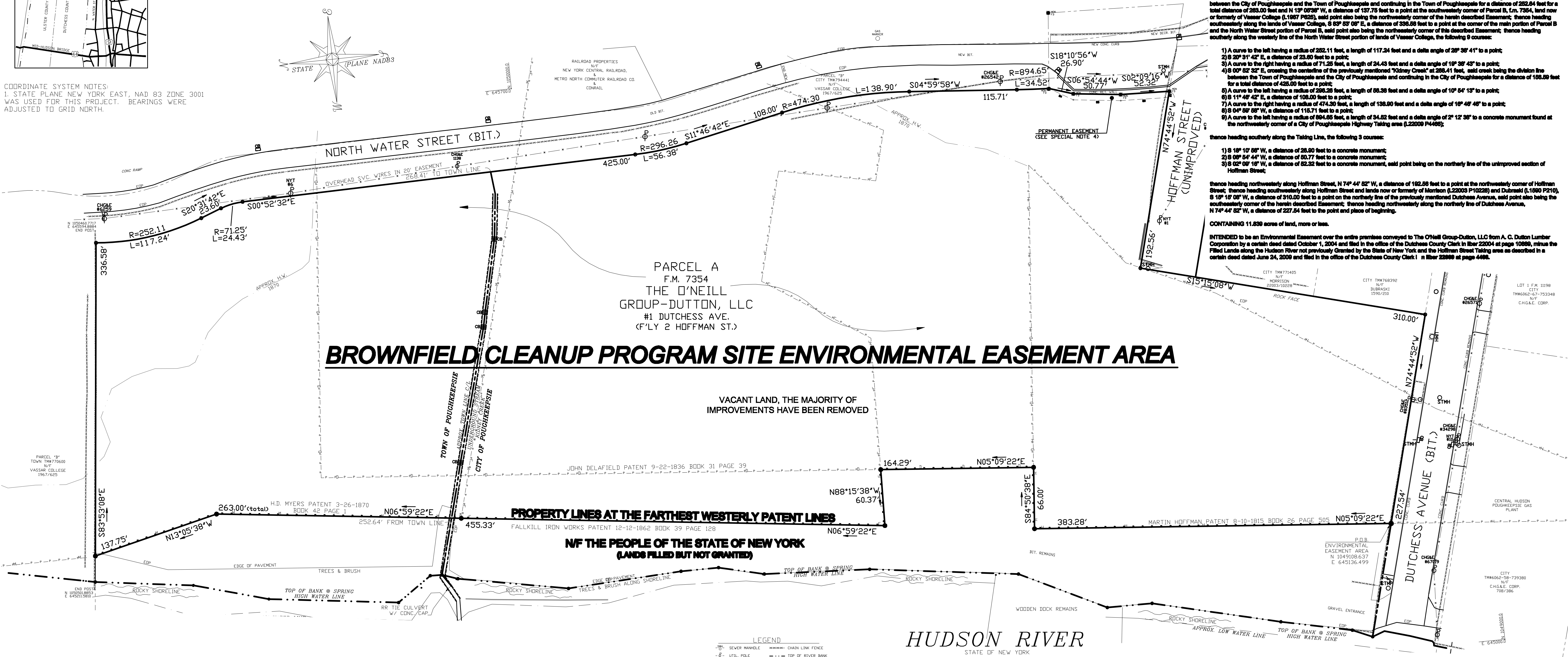
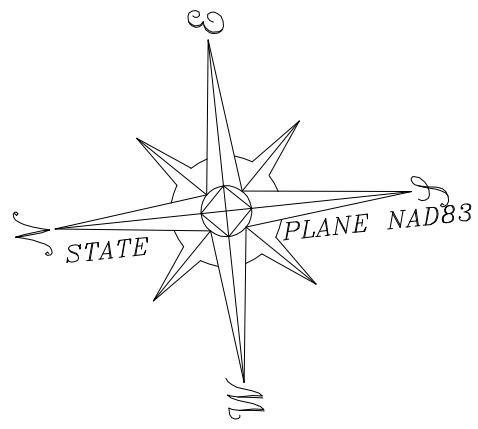
CONTAINING 11.839 acres of land, more or less.



LOCATION MAP
1"=2000'±

CITY EASEMENT LINE TABLE		
LINE	LENGTH	BEARING
E1	6.70	N74°44'52"W
E2	51.10	N02°09'16"E
E3	51.04	N06°54'44"E
E4	28.87	N31°00'00"E

COORDINATE SYSTEM NOTES:
1. STATE PLANE NEW YORK EAST, NAD 83 ZONE 3001
WAS USED FOR THIS PROJECT. BEARINGS WERE
ADJUSTED TO GRID NORTH.



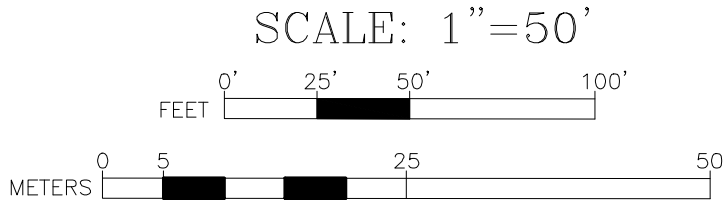
ENVIRONMENTAL EASEMENT AREA ENGINEERING CONTROLS

Self Management Plan Area - The notes and bounds for this engineering control is the same as Schedule A above and impacts the entire BCP Site.

Site-wide Cover System - The notes and bounds for this engineering control is the same as Schedule A above and impacts the entire BCP Site.

LEGEND	
SEWER MANHOLE	CHAIN LINK FENCE
UTIL. POLE	TOP OF RIVER BANK
LIGHT POLE	TOWN LINE
STORM MANHOLE	PROPERTY LINE
HYDRANT	GUIDE RAIL
WATER VALVE	PATENT LINES
GAS VALVE	PATENT LINES (DELFIELD)
SEWER VALVE	PATENT LINES (FALLKILL LW)
CATCH BASIN	PATENT LINES (HOFFMAN)
MONITORING WELL	PATENT LINES (MYERS)
UNKNOWN MANHOLE	RAILROAD TRACKS
PROPERTY CORNER	EASEMENT LINE
1577/142 DEED LIBER/PAGE	LP, IRON PIN
N/F, NOW OR FORMERLY	FD, FOUND
FM, FILED MAP	EDP, EDGE OF PAVEMENT
CONC., CONCRETE	GRVL., GRAVEL
BIT, BITUMINOUS (ASPHALT)	TM, TAX MAP

PARCEL AREAS
TOTAL PARCEL TO PATENT LINES = 11.839 AC.
CITY OF POUGHKEEPSIE = 8.603 AC.
TOWN OF POUGHKEEPSIE = 3.236 AC.



**SCHEDULE A
ENVIRONMENTAL EASEMENT DESCRIPTION**

ALL that certain parcel of land with the buildings and improvements thereon erected, situate, lying and being partially in the City of Poughkeepsie and Town of Poughkeepsie, County of Dutchess and State of New York, being a portion of what is shown as Parcel A on a certain map entitled, "Subdivision of Property, A. C. Dutton Lumber Corporation" and filed as map number 7346 and being more particularly bounded and described as follows:

BEGINNING at a point on the northerly line of Dutchess Avenue in the City of Poughkeepsie at the southwesterly corner of a grant of lands under water to Martin Hoffman by Letters Patent dated August 10, 1815 and recorded in the New York State Department of State in Book 26 of Patents at page 505; heading from said point of beginning along the easterly and northerly lines of the Hoffman Patent, N 00° 09' 22" E, a distance of 383.28 feet and S 84° 50' 32" E, a distance of 66.00 feet to a point on the westerly line of a grant of lands under water to John Delafield by Letters Patent dated September 22, 1836 and recorded in Book 31 of Patents at page 36; thence heading northerly along the same, N 00° 09' 22" E for a distance of 184.29 feet to a point on a grant of lands under water to Fallkill Iron Works by Letters Patent dated December 12, 1862 and recorded in Book 39 of Patents at page 128; thence heading westerly and northerly along the same, N 60° 15' 38" W, a distance of 60.37 feet and N 00° 09' 22" E, a distance of 455.33 feet to a point on the southerly line of a grant of lands under water to Henry D. Myers by Letters Patent dated March 28, 1870, recorded in Book 42 of Patents at page 1; thence heading northerly along the same, N 00° 09' 22" E, crossing the centerline of an underground creek known as "Yodney Creek", at 10.36 feet, said creek being the division line between the City of Poughkeepsie and the Town of Poughkeepsie and continuing in the Town of Poughkeepsie for a distance of 282.84 feet for a total distance of 293.00 feet and N 10° 09' 22" W, a distance of 157.75 feet to a point at the southwesterly corner of Parcel B, Lm. 7354, land now or formerly of Vassar College (L-1987 P283), said point also being the northerly corner of the herein described Easement; thence heading southwesterly along the lands of Vassar College, S 53° 53' 05" E, a distance of 336.58 feet to a point at the corner of the main portion of Parcel B and the North Water Street portion of Parcel B, said point also being the northerly corner of this described Easement; thence heading southerly along the westerly line of the North Water Street portion of lands of Vassar College, the following 9 courses:

- 1) A curve to the left having a radius of 282.11 feet, a length of 117.24 feet and a delta angle of 28° 38' 41" to a point;
- 2) S 20° 31' 42" E, a distance of 23.60 feet to a point;
- 3) A curve to the right having a radius of 71.25 feet, a length of 24.43 feet and a delta angle of 19° 35' 43" to a point;
- 4) S 00° 52' 32" E, crossing the centerline of the previously mentioned "Yodney Creek" at 288.41 feet, said creek being the division line between the Town of Poughkeepsie and the City of Poughkeepsie and continuing in the City of Poughkeepsie for a distance of 158.59 feet for a total distance of 425.00 feet to a point;
- 5) A curve to the left having a radius of 286.28 feet, a length of 88.38 feet and a delta angle of 10° 54' 13" to a point;
- 6) S 11° 48' 42" E, a distance of 106.00 feet to a point;
- 7) A curve to the right having a radius of 474.50 feet, a length of 138.90 feet and a delta angle of 18° 48' 48" to a point;
- 8) S 04° 09' 00" W, a distance of 115.71 feet to a point;
- 9) A curve to the left having a radius of 894.65 feet, a length of 34.52 feet and a delta angle of 2° 12' 38" to a concrete monument found at the northwesterly corner of a City of Poughkeepsie Highway Taking area (L22000 P4466);

thence heading southerly along the Taking Line, the following 3 courses:

- 1) S 18° 10' 58" W, a distance of 28.80 feet to a concrete monument;
- 2) S 08° 54' 44" W, a distance of 60.77 feet to a concrete monument;
- 3) S 02° 09' 18" W, a distance of 82.32 feet to a concrete monument, said point being on the northerly line of the unimproved section of Hoffman Street;

thence heading northwesterly along Hoffman Street, N 74° 44' 52" W, a distance of 182.58 feet to a point at the northwesterly corner of Hoffman Street; thence heading southwesterly along Hoffman Street and lands now or formerly of Mortenson (L22003 P10228) and Dubraski (L1800 P210), S 18° 18' 08" W, a distance of 310.00 feet to a point on the northerly line of the previously mentioned Dutchess Avenue, said point also being the southwesterly corner of the herein described Easement; thence heading northwesterly along the northerly line of Dutchess Avenue, N 74° 44' 52" W, a distance of 227.54 feet to the point and place of beginning.

CONTAINING 11.839 acres of land, more or less.

INTENDED to be an Environmental Easement over the entire premises conveyed to The O'Neill Group-Dutton, LLC from A. C. Dutton Lumber Corporation by a certain deed dated October 1, 2004 and filed in the office of the Dutchess County Clerk in Liber 22004 at page 10889, minus the Filled Lands along the Hudson River not previously Granted by the State of New York and the Hoffman Street Taking area as described in a certain deed dated June 24, 2009 and filed in the office of the Dutchess County Clerk in Liber 22888 at page 4468.

ALTA/DEC EASEMENT TITLE SURVEY

PROPERTY OF
THE O'NEILL GROUP-DUTTON, LLC
BCP SITE# C314081

SITUATE IN
THE CITY & TOWN OF POUGHKEEPSIE
COUNTY OF DUTCHESS
STATE OF NEW YORK
SEPTEMBER 17, 2013
SHEET 1 OF 1

LLL
33-04

THIS SURVEY IS ACCURATE
AND CORRECT BY:
LARRY L. LYNN, L.S.
Larry L. Lynn
WAPPINGERS FALLS, NY
N.Y.S.R.L.S. No. 050531



FOR THIS MAP AND COPIES THERE OF
ONLY IF SAID MAP OR COPIES BEAR THE
IMPRESSION SEAL OF THE SURVEYOR
WHOSE SIGNATURE APPEARS HEREON.

PREPARED BY LARRY L. LYNN, L.S., GERALD L. LYNN, LAND
SURVEYOR, P.C., 1575 RTE. 376 WAPPINGERS FALLS, NY
12590, (845) 463-2732
SITE PLAN COMPLETED BY ME OR UNDER MY DIRECT
SUPERVISION ON SEPTEMBER 17, 2013. BASED ON A FIELD
SURVEY COMPLETED BY ME OR UNDER MY DIRECT
SUPERVISION ON MARCH 13, 2007, UPDATED 3/25/13, 7/31/13
& 8/27/13.
UNAUTHORIZED ALTERATION OR ADDITIONS TO THIS PLOT
PLAN IS A VIOLATION OF SECTION 7209(4) OF THE NEW
YORK STATE EDUCATION LAW.

PROPERTY NOTES:
1) PARCEL IS AS SHOWN ON A CERTAIN MAP ENTITLED, "SUBDIVISION OF PROPERTY,
AC. DUTTON LUMBER CORPORATION" AND FILED AS MAP NO. 7354 PAGE 2.

2) PROPERTY ADDRESS: 1 DUTCHESS AVE., POUGHKEEPSIE, NY 12601
TAX GRID, 131300-6062-59-766443 (CITY PORTION),
TAX GRID, 134689-6062-02-763508 (TOWN PORTION).

3) SUBJECT TO EASEMENTS OF RECORD.

4) EASEMENTS AS PER TITLE REPORT:
UTILITY EASEMENT, LIBER 1259 PAGE 889
WATER LINE EASEMENT, LIBER 1269 PAGE 785
SIDE TRACK EASEMENT WITH COVENANTS, LIBER 1229 PAGE 415
RETAINING WALL EASEMENT, LIBER 2209 PAGE 4003 AND 4466 (SP. NOTE 3)

SPECIAL NOTES:

1) PATENT LINES AND TOWN LINE ARE AS SHOWN ON FILED MAP NO. 7354 PAGE 2 AND DESCRIBED IN FILED
LETTERS OF PATENT.

2) WESTERLY PROPERTY LINES ARE AT PATENT LINES OF RECORD.

3) THE CITY OF POUGHKEEPSIE ACQUIRED A PORTION OF LAND IN THE SOUTHEASTLY CORNER, DOC.
02-2009-4003 & 4466. THIS ACQUISITION INCLUDES A PERMANENT EASEMENT FOR A RETAINING WALL.

4) A 20' WIDE EASEMENT AND PARCEL C ARE SHOWN ON FILED MAP 7354 & OMITTED FROM THIS PLAN DUE TO
UNCERTAINTY OF THEIR EXECUTION.

REVISIONS:
1) REVISED NOTES, 9/23/13, LL
2) REVISED DESCRIPTION, 4/24/14, LL
3) REVISED NOTES, 4/28/14, LL

ELECTRONIC APPENDICES

APPENDIX B: ELECTRONIC COPY - FER

APPENDIX C: DUST MONITORING DATA

APPENDIX D: DOCUMENTATION OF THE APPROVAL OF IMPORTED FILL

APPENDIX E: EMAILS COMMUNICATION WITH NYSDEC

APPENDIX F: DIGITAL PHOTO LOG

APPENDIX G: BACKFILL LABORATORY DATA

APPENDIX I: CONSTRUCTION COMPLETION REPORT

APPENDIX J: POST EXCAVATION DATA TABLES (CCR)

APPENDIX K: WELL CONSTRUCTION LOGS

APPENDIX L: GROUNDWATER SAMPLING FIELD REPORT

APPENDIX M: GROUNDWATER SAMPLING RESULTS AND DUSR

APPENDIX H
ENVIRONMENTAL EASEMENT



Dutchess County Clerk Recording Page

Record & Return To :

SNEERINGER MONAHAN PROVOST REDGRAVE
TITLE AGENCY
420 WARREN ST
HUDSON, NY 12534-

Date Recorded : 11/14/2014

Time Recorded : 12:06:00

Document # : 02 2014 7048

Received From : SNEERINGER

Grantor : ONEILL GROUP DUTTON LLC

Grantee : NYS

Recorded In : Deed

Instrument Type : EASE

Tax District : Other

Examined and Charged As Follows :

Recording Charge : \$100.00

Number of Pages : 11

Transfer Tax Amount : \$0.00

Transfer Tax Number : #2110

Red Hook Transfer Tax :

E & A Form: N

TP-584 : Y

*** Do Not Detach This Page

*** This Is Not A Bill

County Clerk By : cni / _____

Receipt # : R57185

Batch Record : D243



0220147048

Bradford Kendall
County Clerk



117
95
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ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 20th day of June, 2014, between
Owner(s) The O'Neill Group-Dutton LLC, having an office at 241 Hudson Street, Hackensack,
County of Bergen, State of New Jersey (the "Grantor"), and The People of the State of New York
(the "Grantee."), acting through their Commissioner of the Department of Environmental
Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with
its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public
interest to encourage the remediation of abandoned and likely contaminated properties ("sites")
that threaten the health and vitality of the communities they burden while at the same time
ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public
interest to establish within the Department a statutory environmental remediation program that
includes the use of Environmental Easements as an enforceable means of ensuring the
performance of operation, maintenance, and/or monitoring requirements and the restriction of
future uses of the land, when an environmental remediation project leaves residual contamination
at levels that have been determined to be safe for a specific use, but not all uses, or which includes
engineered structures that must be maintained or protected against damage to perform properly
and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental
Easement shall mean an interest in real property, created under and subject to the provisions of
Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which
contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with
engineering controls which are intended to ensure the long term effectiveness of a site remedial
program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of One Dutchess
Avenue in the City of and Town of Poughkeepsie, County of Dutchess and State of New York,
known and designated on the tax map of the County Clerk of Dutchess as tax map parcel numbers:
Section City - 6062, Section Town - 6062 Block City - 59, Block Town - 02 Lot City - 766443,
Lot Town - 763508, being the same as that property conveyed to Grantor by deed dated October 1,
2004, and recorded in the Dutchess County Clerk's Office in Liber and Page 02 2004 10889. The
property subject to this Environmental Easement (the "Controlled Property") comprises
approximately 11.839 +/- acres, and is hereinafter more fully described in the Land Title Survey
dated September 17, 2013 and revised on September 23, 2013, April 24, 2014 and April 28, 2014
prepared by Larry L. Lynn, L.S., which will be attached to the Site Management Plan. The
Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the

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protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: W3-1066-05-05 as amended by NYSDEC Letter, dated December 15, 2010, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement 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 restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

**Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii),
Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial
as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Dutchess County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled

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(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to: Site Number: C314081
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to: Site Control Section

Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

The O'Neill Group-Dutton, LLC:

By: 

Print Name: Paul O'Neill

Title: MANAGING
MEMBER

Date: 5/14/14

Grantor's Acknowledgment

STATE OF NEW ~~YORK~~ ^{Jersey})
COUNTY OF ~~Belmont~~ ^{Belgen}) ss:

TERESA DONEGAN
NOTARY PUBLIC OF NEW JERSEY
ID # 2430448
My Commission Expires 2/28/2018

On the 14th day of May, in the year 20 14, before me, the undersigned, personally appeared Paul D'Neill, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Teresa Donegan
Notary Public - State of New York

SCHEDULE "A" PROPERTY DESCRIPTION

ALL that certain parcel of land with the buildings and improvements thereon erected, situate, lying and being partially in the City of Poughkeepsie and Town of Poughkeepsie, County of Dutchess and State of New York, being a portion of what is shown as Parcel A on a certain map entitled, "Subdivision of Property, A. C. Dutton Lumber Corporation" and filed as map number 7345 and being more particularly bounded and described as follows.

BEGINNING at a point on the northerly line of Dutchess Avenue in the City of Poughkeepsie at the southwesterly corner of a grant of lands underwater to Martin Hoffman by Letters Patent dated August 10, 1815 and recorded in the New York State Department of State in Book 26 of Patents at page 505; heading from said point of beginning along the easterly and northerly lines of the Hoffman Patent, N 05° 09' 22" E, a distance of 383.28 feet and S 84° 50' 38" E, a distance of 66.00 feet to a point on the westerly line of a grant of lands under water to John Delafield by Letters Patent dated September 22, 1836 and recorded in Book 31 of Patents at page 39; thence heading northerly along the same, N 05° 09' 22" E for a distance of 164.29 feet to a point on a grant of lands under water to Fallkill Iron Works by Letters Patent dated December 12, 1862 and recorded in Book 39 of Patents at page 128; thence heading westerly and northerly along the same, N 88° 15' 38" W, a distance of 60.37 feet and N 06° 59' 22" E, a distance of 455.33 feet to a point on the southerly line of a grant of lands underwater to Henry D. Myers by Letters Patent dated March 26, 1870, recorded in Book 42 of Patents at page 1; thence heading northerly along the same, N 06° 59' 22" E, crossing the centerline of an underground creek known as "Kidney Creek", at 10.36 feet, said creek being the division line between the City of Poughkeepsie and the Town of Poughkeepsie and continuing in the Town of Poughkeepsie for a distance of 252.64 feet for a total distance of 263.00 feet and N 13° 05' 38" W, a distance of 137.75 feet to a point at the southwesterly corner of Parcel B, f.m. 7354, land now or formerly of Vassar College (L1967 P625), said point also being the northwesterly corner of the herein described Easement; thence heading southeasterly along the lands of Vassar College, S 83° 53' 08" E, a distance of 336.58 feet to a point at the corner of the main portion of Parcel B and the North Water Street portion of Parcel B, said point also being the northeasterly corner of this described Easement; thence heading southerly along the westerly line of the North Water Street portion of lands of Vassar College, the following 9 courses:

- 1) A curve to the left having a radius of 252.11 feet, a length of 117.24 feet and a delta angle of 26° 38' 41" to a point;
- 2) S 20° 31' 42" E, a distance of 23.60 feet to a point;
- 3) A curve to the right having a radius of 71.25 feet, a length of 24.43 feet and a delta angle of 19° 38' 43" to a point;
- 4) S 00° 52' 32" E, crossing the centerline of the previously mentioned "Kidney Creek" at 268.41 feet, said creek being the division line between the Town of Poughkeepsie and the City of Poughkeepsie and continuing in the City of Poughkeepsie for a distance of 156.59 feet for a total distance of 425.00 feet to a point;
- 5) A curve to the left having a radius of 296.26 feet, a length of 56.38 feet and a delta angle of 10° 54' 13" to a point;
- 6) S 11° 46' 42" E, a distance of 108.00 feet to a point;
- 7) A curve to the right having a radius of 474.30 feet, a length of 138.90 feet and a delta angle of 16° 46' 46" to a point;

8)S 04° 59' 58" W, a distance of 115.71 feet to a point;

9)A curve to the left having a radius of 894.65 feet, a length of 34.52 feet and a delta angle of 2° 12' 38" to a concrete monument found at the northwesterly corner of a City of Poughkeepsie Highway Taking area (L22009 P4466);

thence heading southerly along the Taking Line, the following 3 courses:

1)S 18° 10' 56" W, a distance of 26.90 feet to a concrete monument;

2)S 06° 54' 44" W, a distance of 50.77 feet to a concrete monument;

3)S 02° 09' 16" W, a distance of 52.32 feet to a concrete monument, said point being on the northerly line of the unimproved section of Hoffman Street;

thence heading northwesterly along Hoffman Street, N 74° 44' 52" W, a distance of 192.56 feet to a point at the northwesterly corner of Hoffman Street; thence heading southwesterly along Hoffman Street and lands now or formerly of Morrison (L22003 P10228) and Dubraski (L1590 P210), S 15° 15' 08" W, a distance of 310.00 feet to a point on the northerly line of the previously mentioned Dutchess Avenue, said point also being the southeasterly corner of the herein described Easement; thence heading northwesterly along the northerly line of Dutchess Avenue, N 74° 44' 52" W, a distance of 227.54 feet to the point and place of beginning.

CONTAINING 11.839 acres of land, more or less.