The Lofts on Main

922 Main Street and 921 Diven Street

Peekskill, New York

Remedial Action Work Plan

NYSDEC BCP Number: C360152

Prepared for:

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MAY 2016

CERTIFICATIONS

I, Jolanda Jansen, certify that I am currently a NYS registered professional engineer and that this Remedial Action Work 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).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

068972-1 5/16/2016

NYS Professional Engineer # Date Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

FINAL REMEDIAL ACTION WORK PLAN

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LIST OF ACRONYMS

Acronym	Definition
AST	Aboveground Storage Tank
CAMP	Community Air Monitoring Plan
C&D	Construction & Demolition
CFR	Code of Federal Regulations
CHASP	Construction Health and Safety Plan
CO	Certificate of Occupancy
EC/IC	Engineering Control and Institutional Control
ELAP	Environmental Laboratory Accreditation Program
GPR	Ground Penetrating Radar
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations Emergency Response
IDW	Investigation Derived Waste
NYCRR	New York Codes Rules and Regulations
NYS DEC	New York State Department of Environmental Conservation
NYS DEC DER	New York State Department of Environmental Conservation Division of Environmental Remediation
NYS DEC PBS	New York State Department of Environmental Conservation Petroleum Bulk Storage
NYS DOH	New York State Department of Health
NYS DOT	New York State Department of Transportation
OSHA	United States Occupational Health and Safety Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PE	Professional Engineer
PID	Photo Ionization Detector
PM	Particulate Matter
QEP	Qualified Environmental Professional
RA	Register Architect
RAWP	Remedial Action Work Plan

Acronym	Definition
RCA	Recycled Concrete Aggregate
FER	Final Engineering Report
RD	Restrictive Declaration
RI	Remedial Investigation
SCOs	Soil Cleanup Objectives
SCG	Standards, Criteria and Guidance
SMP	Site Management Plan
SPDES	State Pollutant Discharge Elimination System
SSDS	Sub-Slab Depressurization System
SVOCs	Semi-Volatile Organic Compounds
USCS	Unified Soil Classification System
USGS	United States Geological Survey
UST	Underground Storage Tank
TAL	Target Analyte List
TCL	Target Compound List
TCO	Temporary Certificate of Occupancy
VB	Vapor Barrier
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

Parkview Development & Construction, LLC has established this plan to remediate a 0.57-acre site located at 922 Main Street and 921 Diven Street in the City of Peekskill, Westchester County, New York. A Remedial Investigation (RI) was performed in accordance with a NYSDEC-approved Remedial Investigation Work Plan to compile and evaluate data and information necessary to develop this Remedial Action Work Plan (RAWP). The remedial action described in this document achieves the remedial objectives, complies with applicable environmental standards, criteria and guidance and conforms to applicable laws and regulations.

Site Description/Physical Setting/Site History

The Project Site (922 Main Street and 921 Diven Street in Peekskill, New York) consists of two contiguous parcels (Section 33.29, Block 2, Lots 4 and 5) in a C-2 zone district that encourages projects of mixed-use. Figure 1 shows the Site location and Figure 2 shows the immediate Site location and boundaries (with lot dimensions). Lot 4 (922 Main Street) is 0.38 acres in size and Lot 5 (921 Diven Street) is 0.19 acres in size; both lots are rectangular and collectively provide for approximately 120 linear feet of frontage on Main Street and approximately 115 linear feet of frontage on Diven Street. Both lots are bounded by Main Street (US Route 6) to the south, Diven Street to the north, and established commercial and residential structures to the east and west.

Each lot is currently vacant; former multi-story commercial/residential structures occupied the site in the past but were demolished prior to the start of site investigation.

A Phase I Environmental Site Assessment (Phase I ESA) performed by ESI in December 2014 identified the following areas of potential environmental concern:

- Historical on-site manufacturing activities;
- Closed spill events reported at two adjoining properties, including a registered petroleum bulk storage (PBS) facility; and,
- Presence of metal pipe protruding out of the ground in the west-central portion of the subject property, potentially related to an undocumented oil tank.

ESI subsequently performed a Phase II Environmental Site Assessment and supplemental subsurface investigation to document subsurface conditions. A total of 13 soil samples from 16 test pit locations, and 4 sub-slab soil vapor samples, were collected. No signs of gross soil contamination were noted; however, urban fill and debris were identified throughout the Site. Elevated concentrations of metals (e.g., arsenic, lead, and mercury) and pesticides (e.g., 4,4'-DDE, 4,4'-DDT, and alpha-chlordane) were detected throughout the property, particularly at the southern and central portions of the Site. Elevated concentrations of SVOCs (limited to PAHs) were detected at 2 test pits located at the southern-central and southern portions of the Site. Low-level concentrations of VOCs were detected in each of the soil vapor samples collected at the Site. The results of the Phase II and supplemental subsurface investigations were incorporated into the final RI Report.

Summary of Proposed Redevelopment Plan

Development plans for the Site include the construction of a four-story mixed-use building (Building 1) located along the southern portions of the Site and a four-story residential building (Building 2) located along the northern portions. A breezeway will connect the second level of Building 1 to the first level of Building 2. A landscaped courtyard area consisting of paver stones, planters, and benches will be located at the central portions. Each building will have a footprint of approximately 9,700 square feet. Building 1 will be a slab-on-grade structure. Building 2 will have a finished elevation of approximately 21 feet below street level. The proposed construction will create 70 residential units, 4 commercial units, and an art gallery.

Summary of Environmental Investigation

1. Conducted a Site inspection to identify Areas of Concern and physical obstructions (i.e. structures, buildings, etc.) and performed a geophysical survey to identify underground features;

2. Collected samples from16 test pits and 6 soil borings (3 mechanical and 3 manual), and submitted 23 soil samples (from multiple depths) for chemical analysis to evaluate soil quality;

3. Collected 4 samples from 3 groundwater monitoring wells, and submitted samples for chemical analysis to evaluate groundwater quality. Depth to groundwater measurements were taken at the wells to determine static groundwater elevations and to establish groundwater flow direction;

4. Installed 4 temporary soil vapor probes, and collected 4 soil vapor samples for chemical analysis.

Summary of Environmental Findings

1. Elevation of the property is approximately 463 to 502 feet above mean sea level (msl), based on sidewalk elevations at the southwestern corner of the Site (at Main Street) and the northeastern corner of the Site (at Diven Street), respectively. The Site has an overall upward slope from Main Street toward Diven Street.

2. Groundwater was identified in bedrock at depths ranging from approximately 11 to 13 feet below surface grade (bsg). Groundwater flow, based on static depth to water, has been inferred to generally be toward the south-southwest.

3. Depth to bedrock ranges from approximately 5 to 13.5 feet bsg, based on geotechnical borings, test pits, and soil borings extended at the Site.

4. Soil/fill samples collected during the RI and Phase II investigation were compared to NYSDEC Part 375-6 Unrestricted Use (UU, Track 1) and restricted category Restricted-Residential Use (RRU, Track 2) Soil Cleanup Objectives (SCOs).

   Soil contamination from poor quality urban fill materials, and possibly on-site pesticide use, is present throughout the Site, particularly at the southern and central portions.

   Elevated levels of SVOCs (PAHs) were detected in 2 samples collected during the Phase II investigation, with one sample containing concentrations above RRUSCOs. Peak PAH concentrations were reported in sample TP-04, located at the southern-central portion of the Site, including benzo(a)anthracene (2.67 ppm, RRUSCO 1 ppm), benzo(a)pyrene (1.11 ppm, RRUSCO 1 ppm), and indeno(1,2,3-cd)pyrene (0.709 ppm, RRUSCO 0.5 ppm).

Chrysene and/or benzo(k)fluoranthene were detected above UUSCOs at TP-04 and TP-02 (located at the southern portion of the Site). No other significant SVOC levels were detected in soil samples.

Multiple TAL metals were reported in all 23 samples submitted for analysis. One or more of the following metals were detected at levels above RRUSCOs in 12 samples (peak concentrations shown): arsenic (35 ppm, RRUSCO 16 ppm), barium (504 ppm, RRUSCO 400 ppm), copper (300 ppm, RRUSCO 270 ppm), lead (1,250 ppm, RRUSCO 400), and mercury (2.5 ppm, RRUSCO 0.81 ppm). With the exception of samples SB-01 and SB-03 collected at 0-2 feet bsg, all samples contained at least one metal at levels above UUSCOs but below RRUSCOs.

Pesticides were reported in 11 of 18 samples submitted for analysis. One of more of the following pesticides were detected at levels above UUSCOs in 10 samples (peak concentrations shown): 4,4'-DDD (0.089 ppm, UUSCO 0.0033 ppm), 4,4'-DDE (0.00914 ppm, UUSCO 0.0033 ppm), 4,4-DDT (0.0318 ppm, UUSCO 0.0033 ppm) and alpha-chlordane (0.34 ppm, UUSCO 0.094 ppm). One PCB (Aroclor 1254) was detected above the UUSCO in SB-06 4-6 (0.18 ppm, UUSCO 0.1 ppm) collected at the eastern-central portion of the Site from 4 to 6 feet bsg. No other pesticides or PCBs were reported at any sampling locations.

No significant VOC soil contamination exists at the Site.

5. Groundwater samples collected during the RI were compared to Ambient Water Quality Standards and Guidance Values (AWQS) presented in NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, which are inclusive of groundwater standards specified in NYSDEC 6NYCRR Part 703.5.

   Multiple TAL metals were reported in all 4 groundwater samples. The following metals were detected at levels above AWQS in all samples (peak concentrations shown): iron (1,880 µg/L, AWQS 300 µg/L), total sodium (169,000 µg/L, AWQS 20,000 µg/L) and dissolved sodium (162,000 µg/L, AWQS 20,000 µg/L). Elevated concentrations of magnesium (35,600 µg/L, AWQS 35,000 µg/L) and selenium (13 µg/L, AWQS 10 µg/L) were detected in MW-03 and MW-02, respectively. With the exception of selenium, elevated metals detected in groundwater do not represent a significant environmental concern. Impacts associated with poor-quality fill materials

containing metallic and painted materials are likely sources of groundwater contamination.

Elevated pesticide levels were detected in all 4 groundwater samples. Total chlordane (peak concentration 0.83 µg/L, AWQS 0.05 µg/L) was detected in all samples and an elevated level of alpha-chlordane (AWQS 0.05 µg/L) was detected in MW-01 (0.66 µg/L) and the corresponding duplicate sample Dup-20151229 (0.064 µg/L). The presence of pesticides in the groundwater may be reflective of past usage of these compounds at the Site.

No significant concentrations of VOCs or SVOCs, and no PCBs, were identified in groundwater at the Site.

6. The State of New York does not have any standards, criteria or guidance values for volatile chemicals in subsurface vapors (either soil vapor or sub-slab vapor); relatively high levels of VOCs in subsurface soil vapor; however, were identified in the RI Report in order to facilitate a discussion of investigative findings.

   VOC were detected at trace to low levels at all sampling locations. Petroleum related compounds including total BTEX (27.82 µg/m^3 at SV-03), MTBE (33.9 µg/m^3 at SV-04), heptane (47.1 µg/m^3 at SV-01) and n-hexane (106 µg/m^3 at SV-01), as well as acetone (182 µg/m^3 at SV-04), were detected in all 4 samples. Carbon disulfide (10.7 µg/m^3 at SV-01), 1,3-butadiene (19.3 µg/m^3 at SV-03), and 2-butanone (9.2 µg/m^3 at SV-03) were detected in 3 samples, tetrachloroethylene (PCE, 7.05 µg/m^3 at SV-01) was detected in 2 samples and trichloroethylene (TCE, 1.54 µg/m^3 at SV-02) was detected in 1 sample. Carbon tetrachloride, cis-1,2-dichloroethylene (DCE), and vinyl chloride (VC) were not detected in any soil vapor samples.

   Current sampling data indicate an absence of significant VOC impacted soil vapor at the Site. VOCs detected in soil vapor are consistent with levels typically encountered in urban settings and are likely due to the historical commercial use of this or other nearby sites and/or the presence of fill materials.

Qualitative Human Health Exposure Assessment

The qualitative exposure assessment identified potential completed routes of exposure to construction and remediation workers and trespassers through inhalation, ingestion and dermal contact of organic compounds, pesticides, and metals during excavation activities, and potential dust exposure to off-site receptors and the public adjacent to the site. The Construction Health and Safety Plan (CHASP) and the Community Air Monitoring Plan (CAMP) prepared for the Site identify such exposures and provides instructions for on-site workers and the nearby community to minimize potential on- and off-site exposures during remediation and construction activities.

No potential environmental impacts through groundwater to surface water discharge were identified.

Summary of the Remedy

The proposed remedial action achieves all of the remedial action goals established for the project. The proposed remedial action is effective in both the short-term and long-term and reduces mobility, toxicity and volume of contaminants and uses standard methods that are well established in the industry.

The proposed remedial action will consist of:

1. Performance of all required NYS BCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Perform a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Selection of Track 1 Unrestricted Residential Use SCOs for the protection of public health.
4. Site preparation including setup of Site security, equipment mobilization, utility mark outs and marking/staking excavation areas.
5. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by the disposal facility.

6. Excavation and removal of all soil/fill above the bedrock, resulting in the removal of all soil/fill exceeding Track 1 SCOs. Excavation to bedrock will extend to: approximately 9 to 11 feet bsg at the southern portions of the Site (within the footprint of proposed Building 1); approximately 5 to 9 feet bsg at the northern portions (within the footprint of proposed Building 2); and, approximately 5 feet bsg at the central portion (proposed courtyard). The bedrock at the northern portion of the Site will be excavated to a maximum depth of 22 feet bsg to accommodate the proposed foundation elevation of Building 1. In total, approximately 7,500 cubic yards of regulated waste will be excavated and removed from this Site.

7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID, and appropriate segregation of excavated media on-Site.

8. Management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials.

9. Transportation and off-Site disposal of all soil/fill material at licensed or permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media on-Site.

10. Import of materials to be used for backfill and landscaped areas in compliance with this plan and in accordance with applicable laws and regulations.

11. Installation of a Waterproofing Membrane with a minimum 20 mil thickness under the entire building slabs and behind sub-grade sidewalls. All membrane seams and penetrations will be sealed according to the manufacturer's recommendations and instructions. If the membrane is installed as a means to address contaminated site media (that is, if Track 1 SCOs are not achieved), it will be considered part of the remedy requiring a Site Management Plan (SMP).

12. Performance of all activities required for the remedial action, including acquisition of required permits and attainment of pretreatment requirements, in compliance with applicable laws and regulations.

13. Dewatering in compliance with city, state, and federal laws and regulations, if required. Extracted groundwater will either be containerized for off-site licensed or permitted disposal or will be treated under a permit from the Westchester County Environmental Facilities Corporation to meet pretreatment requirements prior to discharge to the sanitary sewer system.

14. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.

15. Submission of a Final Engineering Report (FER) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, lists any changes from this RAWP, and describes all Engineering and Institutional Controls to be implemented at the Site.

16. In the event that Track 1 SCOs are not achieved, submission of an approved SMP in the FER for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.

17. In the event that Track 1 SCOs are not achieved, recording of an environmental easement that includes a listing of Institutional Controls. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without NYSDEC approval. The environmental easement will include a listing of Engineering Controls and a requirement that management of these controls must be in compliance with an approved SMP.

REMEDIAL ACTION PLAN

1.0 INTRODUCTION

Parkview Development & Construction, LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in November, 2015, to investigate and remediate a 0.57-acre property located at 922 Main Street and 921 Diven Street in the City of Peekskill, Westchester County, New York (the "Site). Residential use is proposed for the Site; when completed, the Site will contain two structures (each four stories in height) that will provide 70 new residential units, four commercial spaces, and an art gallery. Refer to the Brownfield Cleanup Program (BCP) application for additional details.

This Remedial Action Work Plan (RAWP) summarizes the nature and extent of contamination as determined from data gathered during the Remedial Investigation (RI), performed between November 2015 and January 2016 (inclusive of data from earlier Phase II and supplemental subsurface investigations performed between July and August 2015). It provides an evaluation of a BCP Track 1 cleanup, where Unrestricted Use (UU) Soil Cleanup Objectives (SCOs) are met, and a Track 4 cleanup, where Track 1 SCOs are not met and a composite cover system (comprised of a vapor barrier, concrete slab and subbase materials) is installed in areas of remaining contamination. The remedy described in this document is consistent with the procedures defined in DER-10 and complies with all applicable standards, criteria and guidance. The remedy described in this document also complies with all applicable Federal, State and local laws, regulations and requirements. The NYSDEC and New York State Department of Health (NYSDOH) have determined that this Site does not pose a significant threat to human health and the environment. The RI for this Site did not identify fish and wildlife resources.

A formal Remedial Design document will not be prepared.

1.1 SITE LOCATION AND DESCRIPTION

The Site consists of two contiguous parcels totaling 0.57 acres in the City of Peekskill, Westchester County, New York, identified as Section 33.29, Block 2, Lot 4 and Lot 5 on the City of Peekskill Tax Map. Peekskill is a well-developed urban area comprised primarily of multi-family residential and commercial properties. Figure 1 (Appendix A) shows the Site location.

Lot 4 (922 Main Street) is 0.38 acres in size and Lot 5 (921 Diven Street) is 0.19 acres in size; both lots are rectangular and collectively provide for approximately 120 linear feet of frontage on Main Street and approximately 115 linear feet of frontage on Diven Street. Both lots are bounded by Main Street (US Route 6) to the south, Diven Street to the north, and established commercial and residential structures to the east and west.

Figure 2 shows the Site boundaries.

1.2 CONTEMPLATED REDEVELOPMENT PLAN

The Remedial Action to be performed under the RAWP is intended to make the Site protective of human health and the environment consistent with the contemplated end use. The proposed redevelopment plan and end use is described here to provide the basis for this assessment. However, the Remedial Action contemplated under this RAWP may be implemented independent of the proposed redevelopment plan.

Development plans for the Site include the construction of a four-story mixed-use building (Building 1) located along the southern portions of the Site and a four-story residential building (Building 2) located along the northern portions. A breezeway will connect the second level of Building 1 to the first level of Building 2. A landscaped courtyard area consisting of paver stones, planters, and benches will be located at the central portions. Each building will have a footprint of approximately 9,700 square feet. Building 1 will be a slab-on-grade structure. Building 2 will have a finished elevation of approximately 21 feet below street level. The proposed construction will create 70 residential units, 4 commercial units, and an art gallery. The current zoning designation is C-2, for commercial use. The proposed use is consistent with existing zoning for the property. Figure 3 shows a layout of the initial proposed site development and Appendix D provides proposed development plans.

Site development will result in excavation and removal of all soil/fill above the bedrock. Excavation will extend to: approximately 9 to 11 feet bsg at the southern portions of the Site (within the footprint of proposed Building 1); approximately 5 to 9 feet bsg at the northern portions (within the footprint of proposed Building 2); and, approximately 5 feet bsg at the central portion (proposed courtyard). The bedrock at the northern portion of the Site will be excavated to a maximum depth of 22 feet bsg to accommodate the proposed foundation elevation of Building 1. It is anticipated that the excavated material will be comprised of two

waste streams: poor quality urban fill (7,500 cubic yards) and unregulated bedrock (excavated material below 5 to 9 feet bsg at the northern portions of the Site). Figure 6A shows a Soil Excavation Plan.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

The Site is bordered immediately to the north by a residential property (across Diven Street), residential and institutional (religious) buildings immediately to the east, a mixed-use building to the south (across Main Street), and a mixed-use building with associated parking lot to the west. The surrounding neighborhood is a well-developed urban area comprised primarily of multi-family residential and commercial properties. Figure 4 shows the surrounding land usage.

2.0 DESCRIPTION OF REMEDIAL INVESTIGATION FINDINGS

The RI was conducted between October and November 2015. The RI Report, inclusive of data from an earlier Phase II investigation performed between June and October 2014, was submitted to NYSDEC in January 2015.

2.1 SUMMARY OF REMEDIAL INVESTIGATIONS PERFORMED

The following environmental work plans and reports were developed for the Site:

Remedial Investigation Work Plan, November 2015, Ecosystems Strategies, Inc. (ESI)

Remedial Investigation Report, January 2016, ESI

The following work was performed during the RI (inclusive of fieldwork performed during the previous Phase II and supplemental subsurface investigations):

1. Conducted a Site inspection to identify Areas of Concern and physical obstructions (i.e. structures, buildings, etc.) and performed a geophysical survey to identify underground features;

2. Collected samples from 16 test pits and 6 soil borings (3 mechanized and 3 manual) across the entire Site and submitted 23 soil samples (from multiple depths) for chemical analysis to evaluate soil quality;

3. Collected 4 samples from 3 groundwater monitoring wells, and submitted samples for chemical analysis to evaluate groundwater quality. Depth to groundwater measurements were taken at the wells to determine static groundwater elevations and to establish direction of groundwater flow; and,

4. Installed 4 temporary soil vapor probes throughout the Site, and collected 4 soil vapor samples for chemical analysis.

2.2 SIGNIFICANT THREAT

The NYSDEC and NYSDOH have determined that this Site does not pose a significant threat to human health and the environment. Notice of that determination has been provided for public review. A copy of the notice is provided in Appendix H.

2.3 SITE HISTORY

Site history is documented in a Phase I Environmental Site Assessment issued by ESI in December 2014. Both lots were developed as early as 1887. Former on-site buildings have been used for residential, commercial and manufacturing purposes. The identified areas of concern included:

- Historical on-site manufacturing activities;
- Closed spill events reported at two adjoining properties, including a registered petroleum bulk storage (PBS) facility; and,
- Presence of metal pipe protruding out of the ground in the west-central portion of the subject property, potentially related to an undocumented oil tank.

ESI subsequently performed a Phase II Environmental Site Assessment and supplemental subsurface investigation in July-August 2015 to document subsurface conditions at the Site. A total of 13 soil samples from 16 test pit locations and 4 sub-slab soil vapor samples were collected. No signs of gross soil contamination were noted; however, urban fill and debris were identified throughout the Site. Elevated concentrations of metals, pesticides, and SVOCs were detected in soil samples, particularly at the southern and central portions of the Site, and low-level concentrations of VOCs were detected in each of the soil vapor samples collected at the

Site. No VOC or PCB contamination was identified during the Phase II and supplemental subsurface investigations.

All Sanborn Maps available for this Site were reviewed prior to preparation of the RAWP.

2.4 GEOLOGICAL CONDITIONS

Site geological conditions are documented in the *RI Report* prepared by ESI (January 2016), inclusive of *Geotechnical Investigation Reports* (February and September 2015) prepared for the Site by Soil Mechanics. Geological conditions are summarized as follows:

- Sidewalk elevations at the Site boundaries are approximately 492 to 502 feet above msl along Diven Street, and approximately 463 feet above msl along Main Street. The Site has an overall upward slope from Main Street toward Diven Street.
- No saturated soils were observed in any test pits or soil borings extended at the Site. Monitoring well gauging data document groundwater in bedrock at depths ranging from 11.26 to 12.96 feet bsg (as measured from well casings). Groundwater flow, based on static depth to water has been inferred to generally be toward the south-southwest.
- Depth to bedrock is variable throughout the site, ranging from approximately 5 to 13.5 feet bsg, based on geotechnical borings, test pits, and soil borings extended at the Site.
- The stratigraphy of the site, from surface grade down, consists of between 5 to 11 feet of unconsolidated urban fill with brick, concrete, and debris materials (potentially extending to depths as great as approximately 13.5 feet) underlain by a thin layer of native silt located above bedrock.

2.5 CONTAMINATION CONDITIONS

2.5.1 Conceptual Model of Site Contamination

The Site is covered by a layer of unconsolidated urban fill materials, which may have originally been sourced from impacted locations, overlying a thin layer of pre-development silt deposits. Fill materials are known to be of poor quality and contain elevated concentrations of semi-volatile organic compounds (SVOCs), pesticides, and metals. These impacts are likely the result of original fill composition, and possibly on-site pesticide use; however, impacts from historical

commercial/manufacturing use of the Site may be a contributing factor. Contamination in groundwater appears to be generally spatially correlated to the presence of impacted saturated soils. Low-level concentrations of VOCs (including petroleum related compounds) were detected in soil vapor throughout the Site at levels typically encountered in urban settings. Low-levels of PCE and TCE were detected at the southern and southwestern portions of the Site, respectively.

2.5.2 Description of Areas of Concern

Areas of concern include:

1) General impacts to soil and groundwater from poor-quality urban fill and/or historical commercial/manufacturing use of the Site (VOCs in soil vapor, present at low levels typical of urban environments, is not considered an environmentally significant concern at this Site);

2) Elevated concentrations of metals and pesticides were identified in soils throughout the Site and limited areas of SVOC (PAH) and PCB contamination were identified at the southern and portions of the Site, respectively; and,

3) Elevated concentrations of pesticides, total metals and dissolved metals are present in groundwater throughout the Site, likely associated urban fill materials and possibly on-site pesticide use.

Based on an evaluation of the environmental data and historical information, disposal of significant amounts of hazardous waste is not suspected at the Site.

2.5.3 Identification of Standards, Criteria and Guidance

The following standards, criteria and guidance (SCG) were referenced during Site Characterizations and Remedial Investigations:

6 NYCRR Part 175 – Special Licenses and Permits - Definitions and Uniform Procedures

6 NYCRR Part 182 – Endangered & Threatened Species of Fish & Wildlife

6 NYCRR Part 371 – Identification and Listing of Hazardous Wastes

6 NYCRR Part 375 – Environmental Remediation Programs;

6 NYCRR Part 608 – Use and Protection of Waters

6 NYCRR Part 661 – Tidal Wetlands – Land Use Regulations

6 NYCRR Part 663 – Freshwater Wetlands Maps and Classification

6 NYCRR Part 703, New York State Groundwater Quality Standards;

6 NYCRR Parts 700-706 – Water Quality Standards

29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response

NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation;

NYSDEC Ambient Water Quality Standards and Guidance Values – TOGS 1.1.1;

NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (GESVI)

NYSDOH Generic Community Air Monitoring Plan

NYSDEC STARS #1 – Petroleum-Contaminated Soil Guidance Policy

NYSDEC SPOTS #14 – Site Assessments at Bulk Storage Facilities

NYSDEC Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites

2.5.4 Soil Vapor Contamination

The State of New York does not have any standards, criteria or guidance values for volatile chemicals in subsurface vapors (either soil vapor or sub-slab vapor); relatively high levels of VOCs in subsurface soil vapor; however, were identified in the RI Report in order to facilitate a discussion of investigative findings.

VOC were detected at trace to low levels at all sampling locations. Petroleum related compounds including total BTEX (27.82 µg/m^3 at SV-03), MTBE (33.9 µg/m^3 at SV-04), heptane (47.1 µg/m^3 at SV-01) and n-hexane (106 µg/m^3 at SV-01), as well as acetone (182 µg/m^3 at SV-04), were detected in all 4 samples. Carbon disulfide (10.7 µg/m^3 at SV-01), 1,3-butadiene (19.3 µg/m^3 at SV-03), and 2-butanone (9.2 µg/m^3 at SV-03) were detected in 3 samples, tetrachloroethylene (PCE, 7.05 µg/m^3 at SV-01) was detected in 2 samples and trichloroethylene (TCE, 1.54 µg/m^3 at SV-02) was detected in 1 sample. Carbon tetrachloride,

cis-1,2-dichloroethylene (DCE), and vinyl chloride (VC) were not detected in any soil vapor sample.

Current sampling data indicate an absence of significant VOC impacted soil vapor at the Site. VOCs detected in soil vapor are consistent with levels typically encountered in urban settings and are likely due to the historical commercial use of this or other nearby sites and/or the presence of fill materials.

Table 1 (Appendix B) shows soil vapor data collected prior to the remedy.

2.5.5 Soil/Fill Contamination

Soil/fill samples collected during the RI and Phase II investigation were compared to NYSDEC Part 375-6 UUSCOs (Track 1) and restricted category Restricted-Residential Use (RRU, Track 2) SCOs.

Soil contamination from poor quality urban fill materials, and possibly on-site pesticide use, is present throughout the Site, particularly at the southern and central portions.

Elevated levels of SVOCs (PAHs) were detected in 2 samples collected during the Phase II investigation, with one sample containing concentrations above RRUSCOs. Peak PAH concentrations were reported in sample TP-04, located at the southern-central portion of the Site, including benzo(a)anthracene (2.67 ppm, RRUSCO 1 ppm), benzo(a)pyrene (1.11 ppm, RRUSCO 1 ppm), and indeno(1,2,3-cd)pyrene (0.709 ppm, RRUSCO 0.5 ppm).

Chrysene and/or benzo(k)fluoranthene were detected above UUSCOs at TP-04 and TP-02 (located at the southern portion of the Site). No other significant SVOC levels were detected in soil samples.

Multiple TAL metals were reported in all 23 samples submitted for analysis. One or more of the following metals were detected at levels above RRUSCOs in 12 samples (peak concentrations shown): arsenic (35 ppm, RRUSCO 16 ppm), barium (504 ppm, RRUSCO 400 ppm), copper (300 ppm, RRUSCO 270 ppm), lead (1,250 ppm, RRUSCO 400), and mercury (2.5 ppm, RRUSCO 0.81 ppm). With the exception of samples SB-01 and SB-03 collected at 0-2 feet bsg, all samples contained at least one metal at levels above UUSCOs but below RRUSCOs.

Pesticides were reported in 11 of 18 samples submitted for analysis. One of more of the following pesticides were detected at levels above UUSCOs in 10 samples (peak concentrations

shown): 4,4'-DDD (0.089 ppm, UUSCO 0.0033 ppm), 4,4'-DDE (0.00914 ppm, UUSCO 0.0033 ppm), 4,4-DDT (0.0318 ppm, UUSCO 0.0033 ppm) and alpha-chlordane (0.34 ppm, UUSCO 0.094 ppm). One PCB (Aroclor 1254) was detected above the UUSCO in SB-06 4-6 (0.18 ppm, UUSCO 0.1 ppm) collected at the eastern-central portion of the Site from 4 to 6 feet bsg. No other pesticides or PCBs were reported at any sampling locations.

No significant VOC soil contamination exists at the Site.

The total on-site volume of poor quality urban fill is estimated at 7,500 cubic yards, based on the area of the Site and an average thickness of 9 feet at the proposed building footprints and 5 feet at the proposed courtyard area. For all areas, overburden soils (located above bedrock) are considered urban fill with metals, pesticide, and/or SVOC contamination.

Tables 2 through 6 show exceedances of Track 1 UUSCOs and Track 2 RRUSCOs, and detected tentatively identified VOCs and SVOCs, for all soil/fill at the Site. Figures 5B through 5C are spider maps that show the location and summarize exceedances of Track 1 UUSCOs and Track 4 RRUSCOs.

2.5.6 Groundwater Contamination

Groundwater samples collected during the RI were compared to Ambient Water Quality Standards and Guidance Values (AWQS) presented in NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, which are inclusive of groundwater standards specified in NYSDEC 6NYCRR Part 703.5.

Multiple metals were reported in all 4 groundwater samples. The following metals were detected at levels above AWQS in all samples (peak concentrations shown): iron (1,880 µg/L, AWQS 300 µg/L), total sodium (169,000 µg/L, AWQS 20,000 µg/L) and dissolved sodium (162,000 µg/L, AWQS 20,000 µg/L). Elevated concentrations of magnesium (35,600 µg/L, AWQS 35,000 µg/L) and selenium (13 µg/L, AWQS 10 µg/L) were detected in MW-03 and MW-02, respectively. With the exception of selenium, elevated metals detected in groundwater do not represent a significant environmental concern. Impacts associated with poor-quality fill materials containing metallic and painted materials, are likely sources of groundwater contamination.

Elevated pesticide levels were detected in all 4 groundwater samples. Total chlordane (peak concentration 0.83 µg/L, AWQS 0.05 µg/L) was detected in all samples and an elevated level of

alpha-chlordane (AWQS 0.05 µg/L) was detected in MW-01 (0.66 µg/L) and the corresponding duplicate sample Dup-20151229 (0.064 µg/L). The presence of pesticides in the groundwater may be reflective of past usage of these compounds at the Site.

No significant concentrations of VOCs or SVOCs, and no PCBs, were identified at the Site.

Tables 8 through 12 show exceedances of GA groundwater standards, and detected tentatively identified VOCs and SVOCs, in monitor wells prior to the remedy. Figures 5D and 5E are spider maps that show the location and summarize exceedances of GA groundwater standards prior to the remedy.

2.6 ENVIRONMENTAL AND PUBLIC HEALTH ASSESSMENTS

2.6.1 Qualitative Human Health Exposure Assessment

An exposure assessment was conducted to qualitatively assess the potential impacts of known environmental contaminants associated with the Site on human health, with attention to all possible exposure pathways (i.e. ingestion, inhalation and direct contact). Both current (existing conditions) and future use (proposed unrestricted use) scenarios were considered. Contaminants were assessed relative to specific impacted media.

The primary contaminants of concern at the Site are: poor quality urban fill with elevated metals and pesticides at multiple locations; elevated PAH levels at the southern and southern-central portions of the Site; and, pesticides (alpha and total chlordane) in groundwater at the northeastern, southeastern, and southwestern portions of the Site. On-site workers (or trespassers) present during remediation and/or future development activities are the most likely receptor population.

The following section evaluates the elements associated with exposure pathways and describes how each of these elements pertains to the Site. For all media, the implementation of a Construction Health and Safety Plan (CHASP) and the Community Air Monitoring Plan (CAMP) will mitigate possible impacts to on-site, off-site and nearby community receptor populations. Any on-site or off-site development activities that involve disturbance, exposure or contact with contaminated soil, soil vapor or groundwater will require monitoring and mitigation plans to address potential direct contact with media, dust generation and contaminant migration.

Soil

Direct contact, ingestion and/or inhalation (of particulate matter) are the primary exposure pathways for contaminated subsurface soils. People can come into contact if they participate in ground-intrusive work at the Site, or are exposed to dust generated during construction activities that disturb contaminated soil. A CAMP would be implemented at the Site (and, as required to monitor air quality and minimize potential exposures to fugitive dust for both construction works and the public. Within excavation areas, the potential for contact is generally a concern for work conducted at depths near or below the local groundwater elevation. Outside of excavation activities, there are no likely exposures to contaminated soil, either on the Site or at off-site areas.

The potential exists for low-level contamination to remain at on-site areas after remediation and development activities. All potential exposure pathways (direct contact, ingestion or inhalation) will likely be mitigated as contaminated soils would have been remediated and/or access to subsurface soils would be limited by a composite cover layer.

Soil Vapor

Potential exposure pathways include vapor intrusion within any new structures and at off-site properties, and direct contact and/or inhalation of contaminated soil vapor generated during soil excavation or remedial construction. A CAMP would be implemented at the Site (and, as required, at off-site areas) to monitor air quality and minimize potential exposures to vapors for both construction works and the public.

No significant levels of VOCs in soil vapor were identified during the previous Phase II investigation and the potential for on-site exposure to soil vapor is expected to further decrease after subsurface soils have been remediated. Post-remediation sampling results will document contaminant levels in soil vapor and will be used to determine the need for any on-site or off-site vapor intrusion studies, and the need for any modifications to proposed on-site engineering controls or building design features (e.g., sub-slab depressurization system) to mitigate soil vapor intrusion.

Groundwater

Direct contact and/or ingestion are the primary exposure pathways for contaminated groundwater. Impacted groundwater is not being used for drinking water (or any other purposes)

at the Site or at off-site areas, as the area is served by the public water supply. No known private wells exist in the vicinity of the Site. People can come into contact if they participate in ground-intrusive work at the Site. The potential for contact is generally a concern for work conducted at depths near or below the seasonally high local groundwater elevation. Any dissolved contaminants in groundwater downgradient of the Site are anticipated to diminish as a result of Site remediation.

2.6.2 Fish & Wildlife Remedial Impact Analysis

The groundwater chemistry and surface water discharge pathway was evaluated. Based on the long distance to surface water, there are no expected impacts to surface water from contaminants present on the Site or migrating from the site.

2.7 INTERIM REMEDIAL ACTION

No Interim Remedial Measures (IRMs) have been performed at the Site.

2.8 REMEDIAL ACTION OBJECTIVES

Based on the results of the RI, the following Remedial Action Objectives (RAOs) have been identified for this Site:

Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in deleterious impacts to groundwater or surface water.

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection

- Remove the source of groundwater contamination.
- Restore ground water aquifer to pre-disposal/pre-development conditions, to the extent practicable.

Soil Vapor

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

3.0 DESCRIPTION OF REMEDIAL ACTION PLAN

This section includes a description of the remedial alternatives and provides a comparison and evaluation of the alternatives in terms of required threshold and balancing criteria. As required, a Track 1 Unrestricted Use scenario is evaluated for the remedial action. In comparison, a Track 4 scenario is evaluated.

The goal of the remedy selection process is to select a remedy that is protective of human health and the environment taking into consideration the current, intended and reasonably anticipated future use of the property. The remedy selection process begins by establishing RAOs for media in which chemical constituents were found in exceedance of applicable standards, criteria and guidance values (SCGs). Remedial alternatives are then developed and evaluated based on the following nine criteria and sustainability:

Threshold Criteria

- Protection of human health and the environment;

Balancing Criteria

- Compliance with SCGs;
- Short-term effectiveness and impacts;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contaminated material;
- Implementability;
- Cost effectiveness;
- Community acceptance; and
- Land use.

3.1 SUMMARY OF REMEDIAL ALTERNATIVES

3.1.1 Proposed Remedial Alternatives

Alternative 1 is presented in this RAWP as the alternative whereby the Site meets Track 1 SCOs and consists of the following:

- Selection of NYSDEC 6NYCRR Part 375 Unrestricted Use (Track 1) SCOs.
- Removal of all soil/fill exceeding Track 1 Unrestricted Use SCOs throughout the Site and confirmation that Track 1 Unrestricted Use SCOs have been achieved with post-excavation endpoint sampling. Data from both environmental and structural borings suggest that fill material is present on the Site to depths of up to 11 feet bsg (potentially extending to depths as great as approximately 13.5 feet). Underlying this fill material is a thin layer of soils, with physical indications of being native soils, located immediately above bedrock. For the purpose of this alternatives analysis, Alternative 1 (meeting Track 1 SCOs) is defined by the following actions:
    - Excavation and off-site disposition of all on-Site material from surface grade to bedrock, resulting in the removal of an estimated 7,500 cubic yards of urban fill soil.

- No Engineering or Institutional Controls are required for a Track 1 cleanup. A concrete slab underlying the proposed buildings and a water proofing membrane would be installed as part of standard building development. Paver stones, raised stormwater planters, and depressed plant beds will be installed at the proposed courtyard area. Construction/installation of these features are not considered components of the remedy.

Alternative 2 is presented in this RAWP as the alternative whereby the Site meets Track 4 SCOs and consists of the following:

- Removal of the minimum quantity of soil/fill to accommodate the development plan; that is, excavation and off-site disposition of all on-Site material from surface grade to bedrock, except within the footprint of proposed Building 1, which requires a minimum structural excavation of approximately 3 feet bsg and which will result in existing soil/fill remaining beneath the concrete building slab. Current calculations estimate that the minimum excavation quantity necessary for the footprint of the Building 1 will generate approximately 5,300 cubic yards of regulated material (excavation to a depth of 3 feet).
- Installation of a minimum 20 mil thick soil vapor barrier beneath Building 1.
- Importation of certified clean fill material and installation of a concrete building slab (Building #1 only) to overlay the urban fill soils that would remain in the southern portion of the Site;
- Establishment of use restrictions including prohibitions on the use of groundwater from the Site; prohibitions of restricted Site uses, such as farming or vegetable gardening, to prevent future exposure pathways; and prohibition of a higher level of land use without NYSDEC approval;
- Establishment of an approved Site Management Plan (SMP) to ensure long-term management of these Engineering and Institutional Controls including the performance of periodic inspections and certification that the controls are performing as they were intended. The SMP will note that the property owner and property owner's successors and assigns must comply with the approved SMP; and,
- The property would receive an environmental easement registered with the county clerk memorializing engineering and institutional controls and the SMP.

3.1.2 Evaluation of Threshold Criteria

Protection of Public Health and the Environment

This criterion is an evaluation of the remedy's ability to protect public health and the environment, and an assessment of how risks posed through each existing or potential pathway of exposure are eliminated, reduced or controlled through removal, treatment, and implementation of Engineering Controls or Institutional Controls. Protection of public health and the environment must be achieved for all approved remedial actions.

Alternative 1 would be more protective of human health and the environment by removing all soil/fill exceeding Track 1 Unrestricted Use SCOs, thus eliminating potential for direct contact with contaminated soil/fill once construction is complete and eliminating the risk of contaminants leaching into groundwater from the Site.

Alternative 2 would achieve comparable protections of human health and the environment by a similar excavation and removal of all impacted urban fill soils, except within the footprint of Building 1, where soils would be removed down to at least 3 feet bsg. Fill soils would remain beneath Building 1 at depths ranging from approximately 3 feet to 9 feet bsg. Coupling these removal actions with the installation of a cover system (building, soil cover, etc.), will ensure that future residents are protected from remaining contaminated soils. Implementing Institutional Controls including a SMP would ensure that the composite cover system remains intact and protective of public health in the future.

For both Alternatives, potential exposure to contaminated soils or groundwater during construction would be minimized by implementing a CHASP, an approved Soil/Materials Management Plan (SoMP), and CAMP. Potential contact with any contaminated groundwater would be prevented as its use is prohibited by city laws and regulations.

3.1.3 Evaluation of Balancing Criteria

Compliance with Standards, Criteria and Guidance (SCGs)

This evaluation criterion assesses the ability of the alternative for conformance with SCGs that are applicable, relevant and appropriate. Principal SCGs that are applicable, relevant and appropriate for evaluating the alternatives for remediation of this BCP site include the following:

- 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response

- 10 NYCRR Part 67 – Lead
- 6 NYCRR Part 371 – Identification and Listing of Hazardous Wastes (November 1998)
- 6 NYCRR Part 372 – Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998)
- 6 NYCRR Subpart 374-1 – Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998)
- 6 NYCRR Part 375 – 6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1, 375-3 and 375-6 (December 2006)
- 6 NYCRR Part 376 – Land Disposal Restrictions
- 6 NYCRR Part 608 – Use and Protection of Waters
- 6 NYCRR Parts 700-706 – Water Quality Standards (June 1998)
- 6 NYCRR Part 750 through 758 – Implementation of NPDES Program in NYS ("SPDES Regulations")
- 6 NYCRR Part 375-6 Soil Cleanup Objectives
- New York State Groundwater Quality Standards – 6 NYCRR Part 703;
- NYSDEC Ambient Water Quality Standards and Guidance Values – TOGS 1.1.1;
- NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation – May 2010;
- NYSDEC Draft Brownfield Cleanup Program Guide – May 2004;
- New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan
- NYS Waste Transporter Permits – 6 NYCRR Part 364;
- NYS Solid Waste Management Requirements – 6 NYCRR Part 360 and Part 364.
- TAGM 4059 – Making Changes To Selected Remedies (May 1998)
- STARS #1 – Petroleum-Contaminated Soil Guidance Policy

- TAGM 3028 – "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- DER-10, Technical Guidance for Site Investigation and Remediation, May 2010
- DER-23 / Citizen Participation Handbook for Remedial Programs, January 2010
- OSWER Directive 9200.4-17 – Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites (November 1997)

Additional regulations and guidance are applicable, relevant, and appropriate to the remedial alternatives and will be complied in connection with implementation of the remedial program; however, the list above is intended to represent the principal SCGs which should be considered in evaluating the remedial alternatives for the BCP site.

Conformance with the appropriate standards for remediation of contaminated soil is an important criterion in evaluating the remedial alternatives for the BCP site. Presently, in New York State 6 NYCRR Part 375 establishes the primary SCGs associated with remediation of contaminated soil at sites which are in the BCP. If proposing remediation pursuant to a Track other than Track 1 (Unrestricted Use), 6 NYCRR Part 375 requires evaluation of at least one remedial alternative pursuant to Track I (Unrestricted Use) and one other alternative developed by the applicant for the proposed use of the BCP site. The proposed remedial alternatives have been prepared in conformance with this requirement.

Alternative 1 would achieve compliance with the remedial goals, chemical-specific SCGs and RAOs for soil through removal of soil to achieve Track 1 Unrestricted Use SCOs. Alternative 2 would achieve compliance through removal of soil and installation of an Engineering Control to prevent any soil exposures (composite cover system across the entire site). In addition, Alternative 2 would impose Institutional Controls, including an environmental easement prohibiting any higher use of the Site onto the Site. Finally, for Alternative 2, a SMP would ensure that engineering controls remained in place and protective for the long term.

For both Alternatives, compliance with SCGs for soil vapor would be achieved by installing a waterproofing membrane system below the new buildings' basement slabs and continuing the waterproofing membrane outside of subgrade foundation walls, as part of development.

Health and safety measures contained in the CHASP and CAMP will be implemented during Site redevelopment under this RAWP. For both Alternatives, focused attention on means and methods employed during the remedial action would ensure that handling and management of contaminated material would be in compliance with applicable SCGs. These measures will protect on-site workers and the surrounding community from exposure to Site-related contaminants.

Short-Term Effectiveness and Impacts

This evaluation criterion assesses the effects of the alternative during the construction and implementation phase until remedial action objectives are met. Under this criterion, alternatives are evaluated with respect to their short term effects during the remedial action on public health and the environment during implementation of the remedial action, including protection of the community, protection of onsite workers and environmental impacts.

Both Alternatives have similar short-term effectiveness during their implementation, as each requires excavation of historical fill material. Each alternative would result in short-term dust generation impacts associated with excavation, handling, load out of materials, and truck traffic. Short-term impacts could potentially be higher for Alternative 1 since excavation of greater amounts of soil and fill will take place.

An additional short-term adverse impact and risks to the community associated with each remedial alternative is increased truck traffic. Truck traffic would be routed on the most direct course using major thoroughfares where possible and flag persons would be used to protect pedestrians at Site entrances and exits. Alternative 1 anticipates the need for 350 truck trips to remove all regulated material from the Site; Alternative 2 anticipates the need for 250 truck trips. The marginal addition of 100 truck trips is not considered to be a significant factor. However, focused attention to means and methods during a Track 1 removal action, including community air monitoring and appropriate truck routing, would minimize the overall impact of these activities.

The potential adverse impact to the community, workers and the environment for each alternatives would be minimized through implementation of control plans including a CHASP, a CAMP and a SoMP, during all on-Site soil disturbance activities and would minimize the release of contaminants into the environment. Each alternative provides short-term effectiveness in protecting the surrounding community by decreasing the risk of contact with on-Site

contaminants. Construction workers operating under appropriate management procedures and a CHASP would provide protection from on-Site contaminants by using personal protective equipment would be worn consistent with the documented risks within the respective work zones.

Long-Term Effectiveness and Permanence

This evaluation criterion addresses the results of a remedial action in terms of its permanence and quantity/nature of waste or residual contamination remaining at the Site after response objectives have been met, such as permanence of the remedial alternative, magnitude of remaining contamination, adequacy of controls including the adequacy and suitability of Engineering Controls/Institutional Controls (ECs/ICs) that may be used to manage contaminant residuals that remain at the Site and assessment of containment systems and ICs that are designed to eliminate exposures to contaminants, and long-term reliability of ECs.

Alternative 1 would achieve long-term effectiveness and permanence related to on-Site contamination through removal of soil/fill to achieve Track 1 Unrestricted Use SCOs. Alternative 2 would achieve these goals through removal of the majority of soil/fill and the installation of an Engineering Control to prevent both soil exposures (composite cover system at the southern portion of the Site). For Alternative 2, a SMP would ensure that engineering controls remained in place and protective for the long term.

Reduction of Toxicity, Mobility, or Volume of Contaminated Material

This evaluation criterion assesses the remedial alternative's use of remedial technologies that permanently and significantly reduce toxicity, mobility, or volume of contaminants as their principal element. The following is the hierarchy of source removal and control measures that are to be used to remediate a Site, ranked from most preferable to least preferable: removal and/or treatment, containment, elimination of exposure and treatment of source at the point of exposure. It is preferred to use treatment or removal to eliminate contaminants at a Site, reduce the total mass of toxic contaminants, cause irreversible reduction in contaminants mobility, or reduce of total volume of contaminated media.

Alternatives 1 would permanently eliminate the toxicity, mobility, and volume of contaminants from on-Site soil by removing all soil/fill in excess of Track 1 Unrestricted Use SCOs.

Alternative 2 would remove the majority of soil/fill material and all remaining on-Site soil/fill beneath the new building at the southern portion of the Site (Building 1) will be inaccessible beneath a composite cover system.

Implementability

This evaluation criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation, including technical feasibility of construction and operation, reliability of the selected technology, ease of undertaking remedial action, monitoring considerations, administrative feasibility (e.g. obtaining permits for remedial activities), and availability of services and materials.

The techniques, materials and equipment to implement each Alternative are readily available and have been proven to be effective in remediating the contaminants present on the Site. They use standard equipment and technologies that are well established in the industry. The reliability of each remedy is also high.

Alternative 1 has marginally more issues relative to its implementability. The greater volume of trucks exiting the Site and travelling the City streets will create slightly more logistical problems for the project. Excavations to depths of 9 feet adjoining Main Street (a major neighborhood artery) and 22 feet adjoining Diven Street have complications during the installation of needed temporary shoring, including the potential for such shoring to fail causing temporary street closures. These issues are manageable during site remediation.

Alternative 2 will create the same implementability issue associated with excavations adjoining Diven Street; however, shoring installations and its potential for failure would be eliminated or be minimal at the Building 1 excavation area.

Cost Effectiveness

This evaluation criterion addresses the cost of alternatives, including capital costs (such as construction costs, equipment costs, and disposal costs, engineering expenses) and site management costs (costs incurred after remedial construction is complete) necessary to ensure the continued effectiveness of a remedial action.

Alternative 1 has greater upfront costs as a result of the added volume of soil projected for removal.

Long-term costs for Alternative 2 are likely higher than Alternative 1 based on the required implementation of a SMP as part of Alternative 2.

Cost estimates for each Remedial Alternative are included as Appendix G.

Community Acceptance

This evaluation criterion addresses community opinion and support for the remedial action (observations here will be supplemented by public comment received on the RAWP).

There may be marginally greater public support for Alternative 1 given its representation of presumed additional safety (i.e., a "cleaner" property) but public acceptance of either alternative is likely given the City's desire to have this currently vacant parcel developed.

This RAWP will be subject to a public review under the NYS BCP and will provide the opportunity for detailed public input on the remedial alternatives and the selected remedy. This public comment will be considered by NYSDEC prior to approval of this plan. The Citizen Participation Plan for the project is provided in Appendix F. Under all alternatives, the overall goals of the remedial program, to protect public health and the environment and eliminate potential contaminant exposures, have been broadly supported by citizens in NYC communities.

Land Use

This evaluation criterion addresses the proposed use of the property. This evaluation has considered reasonably anticipated future uses of the Site and takes into account: current use and historical and/or recent development patterns; applicable zoning laws and maps; NYS Department of State's Brownfield Opportunity Areas (BOA) pursuant to section 970-r of the general municipal law; applicable land use plans; proximity to real property currently used for residential use, and to commercial, industrial, agricultural, and/or recreational areas; environmental justice impacts, Federal or State land use designations; population growth patterns and projections; accessibility to existing infrastructure; proximity of the site to important cultural resources and natural resources, potential vulnerability of groundwater to contamination that might emanate from the site, proximity to flood plains, geography and geology; and current Institutional Controls applicable to the site.

The current, intended, and reasonably anticipated future land use of the Site and its surroundings are compatible with the selected remedy of soil remediation. The proposed future use of the Site includes the construction of residential structures, consistent with uses in the neighborhood. All proposed Alternatives are protective of public health and the environment for the planned residential use. The proposed use is compliant with the property's zoning and is consistent with recent development patterns. The areas surrounding the site is urban and consists of predominantly multi-family residential and commercial buildings in the central commercial zoning district. The development would remediate a vacant contaminated lot and provide modern residential buildings. The proposed development would clean up the property and make it safer, create new employment opportunities, artist gallery space, living space for city residents and associated societal benefits to the community, and other economic benefits from land revitalization.

Temporary short-term project impacts are being mitigated through site management controls and truck traffic controls during remediation activities.

The Site is not in close proximity to important cultural resources, including federal or state historic or heritage sites or Native American religious sites, natural resources, waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species. The Site is located in an urban area and not in proximity to fish or wildlife and neither alternative would result in any potential exposure pathways of contaminant migration affecting fish or wildlife. The remedial action is also protective of groundwater natural resources. The Site does not lie in a Federal Emergency Management Agency (FEMA)-designated flood plain. Each of the alternatives are equally protective of natural resources and cultural resources. Improvements in the current environmental condition of the property achieved by each alternative considered in this plan are consistent with the City of Peekskill's goals for cleanup of contaminated land.

3.2 SELECTION OF THE PREFERRED REMEDY

The preferred remedy for the site is Alternative 1. Data generated during the site investigation support the conclusion that Alternative 1 is achievable with marginal additional initial costs which will be offset, in part, by the absence of any future costs associated with the implementation of the SMP.

The following land use factor evaluation examines whether the selected alternative is acceptable based on the following criteria (below) as required by Article 27, Title 14 of the Environmental Conservation Law 27-1415.

Zoning

The current zoning designation is C-2, for commercial and residential use. The implementation of Alternative 1 and the proposed final use are consistent with existing zoning for the property.

Applicable Community Master Plans or Land Use Plans

Implementation of Alternative 1 is consistent with: current use, and historical and recent development patterns; applicable zoning laws and maps; applicable land use plans; and proximity to real property currently used for residential use, and to commercial, industrial, and recreational areas. The current, intended, and reasonably anticipated future land use of the Site and its surroundings are compatible with Alternative 1. The proposed future use of the Site includes the construction of four-story residential structures (with limited commercial use on the ground floor), consistent with existing uses in the neighborhood.

Surrounding Property Uses

The Site is located in an urban area comprised primarily of multi-family residential and commercial properties; the final use and the proposed remedial action are consistent with these surrounding property uses. There are no sensitive receptors within 500 feet of the Site and any impacts to adjoining/nearby properties during implementation of either Alternative will be minimized through strict adherence to local regulations governing construction activities, and implementation of site-specific plans (see Section 4.1, Governing Documents), including Health and Safety and Community Air Monitoring Plans.

Citizen Participation

This RAWP will be subject to a public review under the NYSDEC BCP and will provide the opportunity for detailed public input on the remedial alternatives and the selected remedy. This public comment will be considered by NYSDEC prior to approval of this plan. The Citizen Participation Plan for the project is provided in Appendix F. Observations here will be supplemented by public comment received on the RAWP. Under Alternative 1, the overall goals of the remedial program, to protect public health and the environment and eliminate potential

contaminant exposures, have been broadly supported by citizens in New York State communities.

Environmental Justice Concerns

Implementation of Alternative 1 would clean up the property and make it safer, create new employment opportunities, artist gallery space, living space for future City of Peekskill residents and associated societal benefits to the community, and other economic benefits from land revitalization.

Land Use Designations

The areas surrounding the site are comprised primarily of multi-family residential and commercial properties. The proposed use resulting from the implementation of Alternative 1 is consistent with these land uses.

Population growth patterns

Implementation of Alternative 1 and the proposed use is compliant with the property's zoning and is consistent with recent development patterns.

Accessibility to Existing Infrastructure

The site has ready access to City of Peekskill infrastructure including roads, public parks and public utilities. Implementation of Alternative 1 is compatible with current and future access and utilization of existing infrastructure.

Proximity to Cultural Resources

The Site is not in close proximity to important cultural resources, including federal or state historic or heritage sites or Native American religious sites. Implementation of Alternative 1 would not negatively impact any important cultural resources.

Proximity to Natural Resources

The Site is located in an urban area and is not in proximity to significant natural resources. Implementation of Alternative 1 would not result in any potential exposure pathways of contaminant migration affecting fish or wildlife.

Off-Site Groundwater Impacts

Alternative 1 is protective of groundwater natural resources. There are no known uses of groundwater in the vicinity of the Site.

Proximity to Floodplains

The Site does not lie in a Federal Emergency Management Agency (FEMA)-designated flood plain. Implementation of Alternative 1 would not introduce a receptor sensitive to flooding into an area susceptible to flooding.

Geography and Geology of the Site

Poor quality urban fill is present across the site (the depth of this fill material ranges from 5 to 11 feet bsg, but may extend to as great as 13.5 feet bsg). Fill material is underlain by a thin layer of native soils located immediately above bedrock. Hard bedrock has been identified at depths ranging from approximately 5 to 13.5 feet bsg. Implementation of Alternative 1 is consistent with these Site conditions.

Current Institutional Controls

No institutional controls currently exist on the Site and none will be imposed so long as Track 1 SCOs are attained as planned.

3.3 SUMMARY OF SELECTED REMEDIAL ACTIONS

The proposed plan achieves all of the remedial action goals established for the project. The proposed remedial action is effective in both the short-term and long-term and reduces mobility, toxicity and volume of contaminants and uses standard methods that are well established in the industry.

The proposed remedial action will consist of:

1. Performance of all required NYS BCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Implementation of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Selection of Track 1, Unrestricted Use, SCOs.

4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.

5. Completion of a Waste Characterization Study prior to or concurrent with excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility(s).

6. Excavation and removal of all regulated material on the Site. Approximately 7,500 cubic yards of soil/fill will be excavated for development purposes. All urban-fill soils removed from the Site will be properly disposed at an appropriately licensed or permitted facility.

7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID and appropriate segregation of excavated media on-Site.

8. Management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials. All stockpiled materials will be properly managed and covered to prevent erosion and fugitive releases.

9. Transportation and off-Site disposal of all soil/fill material at licensed or permitted facilities in accordance with applicable laws and regulations. Sampling and analysis of excavated media as required by disposal facilities and appropriate segregation of excavated media on-Site.

10. Import of certified clean materials (meeting Unrestricted Use SCOs) to be used for backfill (if required) in compliance with this plan and in accordance with applicable laws and regulations. To achieve proposed site grades, certified clean materials will be used to provide soil cover at landscaped areas along Diven Street and in the courtyard.

11. Performance of a soil vapor investigation and soil vapor intrusion assessment prior to the construction of new buildings and, if necessary, installation of a minimum 20 mil vapor barrier under all buildings, with the penetrations and joints/seams properly sealed in accordance with manufacturers specifications.

12. Performance of all activities required for the remedial action, including acquisition of required permits and attainment of pretreatment requirements, in compliance with applicable laws and regulations.

13. Dewatering (if required) in compliance with city, state, and federal laws and regulations. Note: Given the absence of groundwater in on-site soils, dewatering is only likely to be required during non-remedial removal of bedrock beneath Building 2, required for Site development (see Section 5.4.7 below).

14. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.

15. Submission of a Final Engineering Report (FER) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, lists any changes from this RAWP, and describes all Engineering and Institutional Controls to be implemented at the Site.

16. In the event that Track 1 objectives are not met, submission of an approved SMP in the FER for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering (if implemented) and Institutional Controls and reporting at a specified frequency.

17. In the event that Track 1 objectives are not met, recording of an environmental easement that includes a listing of Engineering Controls and Institutional Controls and a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without NYSDEC approval.

Remedial activities will be performed at the Site in accordance with this NYSDEC-approved RAWP and the Department-issued Decision Document. All deviations from the RAWP and/or Decision Document will be promptly reported to NYSDEC for approval and fully explained in the FER.

4.0 REMEDIAL ACTION PROGRAM

4.1 GOVERNING DOCUMENTS

All remedial work performed under this plan will be in full compliance with the governing documents described in this section of the RAWP.

4.1.1 Construction Health & Safety Plan (CHASP)

All remedial work performed under this plan will be in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Volunteer and associated parties preparing the remedial documents submitted to the State and those performing the construction work, are completely responsible for the preparation of an appropriate Health and Safety Plan and for the appropriate performance of work according to that plan and applicable laws.

The CHASP and requirements defined in this Remedial Action Work Plan pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion. A copy of the CHASP is provided as Appendix C.

The site-specific CHASP will be reviewed with Site personnel and appropriate sub-contractors prior to the initiation of fieldwork. All proposed work will be performed in "Level D" personal protective equipment unless field condition warrant additional protection.

The Site Safety Coordinator will be Paul H. Ciminello unless otherwise specified (and approved by) the NYSDEC. A resume will be provided to NYSDEC prior to the start of remedial construction.

Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses. Potential confined spaces on this project include utility trenches and other excavation areas.

4.1.2 Quality Assurance Project Plan (QAPP)

A QAPP, detailing procedures necessary to generate data of sufficient quality and quantity to represent successful performance of the Remedial Action at the Site, is provided as Appendix K. The QAPP includes a Sampling and Analysis Plan (SAP), detailing sampling and analysis of all

media (endpoint samples, waste characterization samples, fill and soil cover samples, etc.), and which identifies methods for sample collection and handling.

4.1.3 Soil/Materials Management Plan (SoMP)

All soil removal will follow the SoMP plan as specified in Section 5.4, below. The SoMP includes detailed plans for managing all soils/materials that are disturbed at the Site, including excavation, handling, storage, transport and disposal, and includes all controls that will be applied to these efforts to assure effective, nuisance-free performance in compliance with all applicable Federal, State and local laws and regulations.

All contaminant source removal areas will be surveyed at the completion of excavation. This information will be provided on maps in the FER.

4.1.4 Storm-Water Pollution Prevention Plan (SWPPP)

The Volunteer is responsible for ensuring that a storm water pollution prevention plan (SWPPP) will be prepared for the Site prior to demolition and soil removal activities. The plan will address requirements of New York State Storm-Water Management Regulations including physical methods to control and/or divert surface water flows and to limit the potential for erosion and migration of Site soils, via wind or water, and will accommodate the construction sequencing and staging areas. The erosion and sediment controls will be in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control.

4.1.5 Community Air Monitoring Plan (CAMP)

The NYSDOH Generic CAMP (provided in Appendix L) will be initiated during all ground intrusive activities, and during any other fieldwork that is reasonably likely to generate significant dust or vapors from known or suspected contaminated soils. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, and the installation of soil borings or monitoring wells. The implementation of the CAMP will document the presence or absence of VOCs and dust in the air surrounding the work zone, which may migrate off-site due to fieldwork activities. This plan provides guidance on the need for implementing more stringent dust and emission controls based on air quality data.

Mitigation measures may include reducing the surface area of contaminated soil being disturbed at one time, watering exposed soils to reduce fugitive dust and odors, or stopping excavation activities. Dust suppression activities will be conducted during construction activities that will disturb on-site soils and may include misting, reduction in soil movement, or cessation of excavation.

Real-time air monitoring for VOCs and particulate levels at the perimeter of the exclusion zone or work area will be performed. Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. Periodic monitoring during sample collection, for instance, will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence. Exceedances of action levels observed during performance of the CAMP will be reported to the NYSDEC Project Manager and included in the Daily Report.

VOC Monitoring, Response Levels, and Actions

VOCs will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis during invasive work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.

If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shut down.

All 15-minute readings must be recorded and be available for NYSDEC personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and will be available for NYSDEC personnel to review.

4.1.6 Contractors Site Operations Plan (SOP)

The Remedial Engineer has reviewed all plans and submittals for this remedial project (including those listed above and contractor and sub-contractor document submittals) and confirms that they are in compliance with this RAWP. The Remedial Engineer is responsible to ensure that all later document submittals for this remedial project, including contractor and sub-contractor document submittals, are in compliance with this RAWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.7 Citizen Participation Plan

A Citizen Participation Plan, including an overview of the BCP program, background of the Site, a summary of the investigative findings for the Site, and citizen participation activities is provided in Appendix F.

A certification of mailing will be sent by the Volunteer to the NYSDEC project manager following the distribution of all Fact Sheets and notices that includes: (1) certification that the Fact Sheets were mailed, (2) the date they were mailed; (3) a copy of the Fact Sheet, (4) a list of recipients (contact list); and (5) a statement that the repository was inspected on (specific date) and that it contained all of applicable project documents.

No changes will be made to approved Fact Sheets authorized for release by NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, will be included with the Fact Sheet mailing.

Document repositories have been established at the following locations and contain all applicable project documents:

Peekskill Public Library
Field Library
4 Nelson Avenue
Peekskill, NY 10566
(914) 737-1212

NYSDEC, Region 3 Office
21 South Putt Corners Road
New Paltz, NY 12561
Call in advance: (845) 256-3000

4.2 GENERAL REMEDIAL CONSTRUCTION INFORMATION

4.2.1 Project Organization

Principal personnel who will participate in the remedial action include the Professional Engineer (PE), Jolanda Jansen and the Qualified Environmental Professional (QEP), Paul H. Ciminello. NYSDEC will be notified of any change to principal personnel.

Resumes of key personnel involved in the Remedial Action are provided in Appendix I.

4.2.2 Remedial Engineer and Qualified Environmental Professional

Remedial Engineer

The Remedial Engineer for this project will be Jolanda Jansen. The Remedial Engineer is a registered professional engineer licensed by the State of New York. The Remedial Engineer will have primary direct responsibility for implementation of the remedial program for the 922 Main Street/921 Diven Street Site (NYSDEC Site No. C360152). The Remedial Engineer will certify in the FER that the remedial activities were observed by qualified environmental professionals under her supervision and that the remediation requirements set forth in the Remedial Action Work Plan and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan. Other Remedial Engineer certification requirements are listed later in this RAWP.

The Remedial Engineer will coordinate the work of other contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal and disposal, air monitoring, emergency spill response services, import

of back fill material, and management of waste transport and disposal. The Remedial Engineer will be responsible for all appropriate communication with NYSDEC and NYSDOH.

The Remedial Engineer will review all pre-remedial plans submitted by contractors for compliance with this Remedial Action Work Plan and will certify compliance in the FER.

The Remedial Engineer will provide the certifications listed in Section 11.2 in the FER.

Qualified Environmental Professional

The Qualified Environmental Professional (QEP) for this project will be Paul H. Ciminello. The QEP will oversee environmental remedial activities on the Site, document the proper removal of contaminated soils, collect waste characterization as well as site integrity samples, inspect and certify the proper importation of approval fill soils, and assist the Remedial Engineer in the preparation of documents including the FER, the SMP, and periodic status reports.

4.2.3 Remedial Action Construction Schedule

A schedule for performance of the remedial work is provided in Section 12.

4.2.4 Work Hours

The anticipated hours for operation of remedial construction will be from 7 a.m. to 5 p.m. Hours of operation will conform to all City of Peekskill requirements, including any site-specific variances issued by the City (NYSDEC will be notified by the Volunteer of any variances). No remedial work will be conducted on the weekend (Saturday or Sunday) unless expressly permitted by NYSDEC. NYSDEC reserves the right to deny alternate remedial construction hours.

4.2.5 Site Security

The Site will be secured at a minimum with a six foot fence and locking gates to protect the public during all construction activities.

4.2.6 Traffic Control

Traffic control will be provided by the contractor during equipment entrance and egress from the Site. Trucks will follow the approved truck route in Section 5.4.4. Drivers of trucks leaving the

Site with soil/fill will be instructed to proceed without stopping in the vicinity of the site to prevent neighborhood impacts. The planned route on local roads for trucks leaving the site is to drive west along Main Street and proceed to US Route 9.

4.2.7 Contingency Plan

If unknown conditions are encountered on-site during sub-grade removal (e.g., discovery of a previously unidentified UST), the Contingency Plan (provided in Section 5.5) and all applicable NYSDEC guidelines will be followed to address the condition(s).

4.2.8 Worker Training and Monitoring

The Volunteer is responsible for insuring that all Site contractors provide their workers with applicable training (i.e. HAZWOPER, site safety training and medical monitoring, as necessary).

4.2.9 Agency Approvals

The Volunteer has addressed all SEQRA requirements for this Site. All permits or government approvals required for remedial construction have been, or will be, obtained prior to the start of remedial construction. Acceptance of this RAWP by NYSDEC does not constitute satisfaction of these requirements and will not be a substitute for any required permit.

The planned end use for the Site is in conformance with the current zoning for the property as determined by City of Peekskill Planning and Development Department. A Certificate of Completion will not be issued for the project unless conformance with zoning designation is demonstrated.

4.2.10 NYSDEC BCP Signage

A project sign will be erected at the main entrance to the Site prior to the start of any remedial activities. The sign will indicate that the project is being performed under the New York State Brownfield Cleanup Program. The sign will meet the detailed specifications provided by the NYSDEC Project Manager (see Appendix J).

4.2.11 Pre-Construction Meeting with NYSDEC

A pre-construction meeting among NYSDEC, the Volunteer, the RE and QEP, and the General Contractor will take place prior to the start of remedial construction activities.

4.2.12 Emergency Contact Information

An emergency contact list with names and telephone numbers that will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency is provided below.

Table: Emergency Contact Information

Emergency Contact	**Phone Number**
EMERGENCY	**911**
Hospital: New York Presbyterian/Hudson Valley Hospital 1987 Crompond Road Cortland, NY 10567	(914) 737-9000
Police Department	(914) 737-8000 or 911
Fire Department	(914) 737-0330 or 911
Site Health and Safety Officer, Paul Ciminello, ESI	(845) 452-1658
Remedial Engineer, Jolanda Jansen, PE	(845) 505-0324
NYSDEC Project Manager, Douglas MacNeal	(518) 402-9564
NYSDOH Project Manager, Harolyn Hood	(518) 402-7860
Construction Manager	TBD

4.2.13 Remedial Action Costs

The total estimated cost of the Remedial Action is $1,129,150. An itemized and detailed summary of estimated costs for all remedial activity is provided in Appendix G. This will be revised based on actual costs and submitted as an Appendix to the FER.

4.3 SITE PREPARATION

4.3.1 Agency Notification and Mobilization

Notifications

The NYSDEC will be notified in writing at least five (5) business days prior to the initiation of any of the on-site work and during the course of the fieldwork. Changes to fieldwork scheduling will be provided via facsimile transmission and/or email. All applicable local agencies will also be notified prior to the initiation of site work. NYSDEC will have the opportunity to participate in all remediation project status meetings (adequate notice of these meetings will be provided).

Prior to the implementation of any ground intrusive activities, a request for a complete utility mark-out of the subject property will be submitted as required by New York State Department of Labor regulations. Confirmation of underground utility locations will be secured, and a field check of the utility mark-out will be conducted prior to the initiation of work. Any utilities on the Site will be protected (as necessary) by the contractor or Volunteer.

Site Mobilization

Mobilization will be conducted as necessary for each phase of work at the Site. Mobilization includes field personnel orientation, equipment mobilization (including securing all sampling equipment needed for the field investigation), marking/staking sampling locations and utility mark-outs. Each field team member will attend an orientation meeting to become familiar with the general operation of the Site, health and safety requirements, and field procedures. Site mobilization will be conducted in a manner such that erosion and sedimentation control, utility marker and easement layout, and other site preparation tasks are fully instituted before construction begins.

4.3.2 Erosion and Sedimentation Controls

This section describes preventative measures that will be taken to protect the Site from soil erosion and sedimentation during remedial activities. A final ESCP, reflecting final Site development plans and any approved modifications to the scope of remedial work, will be submitted to the NYSDEC for review and approval prior to the start of construction activities.

The final ESCP will include the following elements:

- A location map including the proximity of the Site to relevant off-site features;
- An Existing Conditions Site Plan;
- A grading plan and construction timetable including finished elevations and addressing the sequencing of the project; and,
- The location and type of all erosion and sediment control measures (e.g., silt fence, hay bale checks, stabilized construction entrance, etc.) and sequencing of the measures, if needed.

The Site remediation will occur in such a way as to permit on-site stormwater to remain on the Site.

4.3.3 Stabilized Construction Entrance(s)

Steps will be taken to ensure that trucks departing the site will not track soil, fill or debris off-Site. Such actions may include use of cleaned asphalt or concrete roads or use of stone or other aggregate-based egress paths between the truck inspection station and the property exit. Measures will be taken to ensure that adjacent roadways will be kept clean of project related soils, fill and debris.

4.3.4 Utility Marker and Easements Layout

The Volunteer and its contractors are solely responsible for the identification of utilities that might be affected by work under the RAWP and implementation of all required, appropriate, or necessary health and safety measures during performance of work under this RAWP. The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this RAWP. The Volunteer and its contractors must obtain any local, State or Federal permits or approvals pertinent to such work that may be required to perform work under this RAWP. Approval of this RAWP by NYSDEC does not constitute satisfaction of these requirements.

The presence of utilities and easements on the Site has been investigated by the Remedial Engineer. It has been determined that no risk or impediment to the planned work under this Remedial Action Work Plan is posed by utilities or easements on the Site.

4.3.5 Sheeting and Shoring

Appropriate management of structural stability of on-Site or off-Site structures during on-Site activities include excavation is the sole responsibility of the Volunteer and its contractors. The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The Volunteer and its contractors must obtain any local, State or Federal permits or approvals that may be required to perform work under this Plan. Further, the Volunteer and its contractors are solely responsible for the implementation of all required, appropriate, or necessary health and safety measures during performance of work under the approved Plan.

4.3.6 Equipment and Material Staging

Equipment and materials will be stored and staged in a manner that complies with applicable laws and regulations. Specific Site areas will be designated for the staging of equipment and materials. Staging areas will be located and managed such that: a) non-contaminated materials do not contact or become intermixed with contaminated materials; and, b) the likelihood of worker and/or visitor exposures to contaminated media is minimized.

4.3.7 Decontamination Area

Decontamination of field equipment will be conducted to prevent Site cross-contamination, minimize the potential for off-site contamination and to reduce exposures to contaminated media. All decontamination activities will be documented in field logbooks.

Trucks and other heavy equipment remaining on-site will be brushed to remove easily accessible gross accumulations of soil at the end of each work day, and prior to moving between excavation areas or moving toward the Site exit. A dedicated decontamination area will be provided as part of the erosion and sedimentation control for vehicles exiting the Site, and will be designed such that there is continuity between the equipment wash area and the clean egress path. Heavy equipment will be brushed and sprayed with high-pressure water and/or steam to remove soil adhering to surfaces (including wheels and vehicle undercarriages), prior to exiting the Site.

Any non-disposable sampling equipment or personal protective equipment requiring decontamination will be conducted on a decontamination line setup on plastic sheeting, proceeding from dirty to clean. All items (disassembled as needed) will be washed/brushed

thoroughly in an Alconox (or similar) solution, then rinsed with clean water (and/or nitric acid and methanol, as appropriate) per established USEPA decontamination protocols. All down-hole gauging and pumping equipment will be allowed to run fully submerged in both soapy and clean water. Rinse blanks will be collected as per the requirements of the QAPP.

All decontamination stations will be placed in areas that will subsequently be covered by a barrier layer (likely to consist of both buildings/pavement and/or imported clean soil); no decontamination activities will occur in areas where soil meets RRUSCOs and is not subject to an engineering control. Equipment known or suspected to be impacted by petroleum or solvent contamination, grossly contaminated media or materials subject to conditions specified in the Contingency Plan (Section 5.5), will be decontaminated on an engineered pad designed to capture and contain wash water, which will be containerized and characterized prior to off-site disposal at a permitted facility. Based on known contaminant conditions, decontamination rinse water generated during other decontamination activities will be allowed to infiltrate into on-site soils, either directly to the surface (for minor quantities of water that are not likely to exhibit sheet flow) or to the subsurface via engineered discharge pits.

4.3.8 Site Fencing

Site fencing (6 feet in height minimum with a locking gate) will be installed as part of Site preparation, as necessary.

4.3.9 Demobilization

Demobilization will include:

- As necessary, restoration of temporary access areas and areas that may have been disturbed to accommodate support areas (e.g., staging areas, decontamination areas, storage areas, temporary water management areas, and access area);
- Removal of sediment from erosion control measures and truck wash and disposal of materials in accordance with applicable laws and regulations;
- Equipment decontamination, and;
- General refuse disposal.

Equipment will be decontaminated and demobilized at the completion of all field activities. Investigation equipment and large equipment (e.g., soil excavators) will be washed at the truck inspection station as necessary. In addition, all investigation and remediation derived waste will be appropriately disposed.

4.3.10 Well Decommissioning

Any existing monitoring wells located within construction areas will be properly decommissioned according to technical guidance provided in NYSDEC CP-43: Groundwater Monitoring Well Decommissioning Policy. The monitoring well casing will be exposed to a depth corresponding to the depth of planned excavation in the immediate vicinity of the well, the exposed casing will be cut off at the level of the excavation floor and the remaining subsurface portion of the casing will be grouted in-place, as per CP-43 Section 6.0.

4.4 REPORTING

All daily and monthly Reports will be included in the FER.

4.4.1 Daily Reports

Daily reports will be submitted to NYSDEC and NYSDOH Project Managers by the end of each day following the reporting period and will include:

- An update of progress made during the reporting day;
- Locations of work and quantities of material imported and exported from the Site;
- References to alpha-numeric map for Site activities;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP finding, including excursions;
- An explanation of notable Site conditions.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (accident, spill), requests for changes to the RAWP or other sensitive or time critical information. However, such conditions must also be included in the daily reports. Emergency conditions and changes to the RAWP will be addressed directly to NYSDEC Project Manager via personal communication.

Daily Reports will include a description of daily activities keyed to an alpha-numeric map for the Site that identifies work areas. These reports will include a summary of air sampling results, odor and dust problems and corrective actions, and all complaints received from the public.

Figure 7 shows a predefined alpha-numeric grid for use in identifying locations described in reports submitted to NYSDEC.

The NYSDEC assigned project number will appear on all reports.

4.4.2 Monthly Reports

Monthly reports prepared in accordance with DER-10 Section 5.7(b) will be submitted to NYSDEC and NYSDOH Project Managers within one week following the end of the month of the reporting period and will include, at a minimum:

- Activities relative to the Site during the previous reporting period and those anticipated for the next reporting period, including a quantitative presentation of work performed (i.e. tons of material exported and imported, etc.);
- Description of approved activity modifications, including changes of work scope and/or schedule;
- Sampling results received following internal data review and validation, as applicable; and,
- An update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

4.4.3 Other Reporting

Photographs will be taken of all remedial activities and submitted to NYSDEC in digital (JPEG) format. Photos will illustrate all remedial program elements and will be of acceptable quality. Representative photos of the Site prior to any Remedial Actions will be provided. Representative photos will be provided of each contaminant source, source area and Site structures before, during and after remediation. Photos will be included in the daily reports as needed, and a comprehensive collection of photos will be included in the FER.

Job-site record keeping for all remedial work will be appropriately documented. These records will be maintained on-Site at all times during the project and be available for inspection by NYSDEC and NYSDOH staff.

4.4.4 Complaint Management Plan

All complaints from citizens will be promptly reported to NYSDEC. Complaints will be addressed and outcomes will also be reported to NYSDEC in daily reports. Notices to NYSDEC will include the nature of the complaint, the party providing the complaint, and the actions taken to resolve any problems.

Any complaints from the public regarding nuisances or other Site conditions will be handled as follows:

- Information from the person making the complaint (name, phone number, address, etc.) will be obtained, if possible, so follow-up can be completed.
- The nature of the complaint as well as the date, time, and weather conditions will be noted.
- The complaint will be addressed by on-site personnel.
- The person logging the complaint will be re-contacted (if contact information was provided), so that the resolution of the complaint can be documented.
- In the event that the complaint cannot be resolved, the NYSDEC project manager will be contacted in writing.

4.4.5 Deviations from the Remedial Action Work Plan

All changes to the RAWP will be reported to the NYSDEC Project Manager and will be documented in daily reports and reported in the FER. The process to be followed if there are any deviations from the RAWP will include a request for approval for the change from NYSDEC noting the following:

- Reasons for deviating from the approved RAWP;
- Effect of the deviations on overall remedy; and

- Determination that the remedial action with the deviation(s) is protective of public health and the environment.

Notification will be provided to the NYSDEC by telephone for conditions requiring immediate action (e.g., conditions judged to be a danger to on-site personnel or the surrounding community).

5.0 DETAILS OF PROPOSED REMEDIAL ACTIONS

5.1 SOIL REMOVAL ACTIVITIES

5.1.1 Estimated Volume of Regulated Materials to Be Removed

Figure 6A (Soil Excavation Plan) provides an overview of proposed soil excavation activities. Based on the anticipated stratigraphy of the site (unconsolidated urban fill from approximately 5 to 11 feet bsg, potentially extending to depths as great as approximately 13.5 feet), it is estimated that 7,500 cubic yards of urban-fill soils will be excavated at this Site.

5.1.2 Soil Clean-up Objectives

The proposed remedy for this Site is Track 1 with attainment of Unrestricted Use SCOs

Soil and materials management will be conducted in accordance with the Soil Management Plan as described below.

Tables 2 through 6 show exceedances of Track 1 Unrestricted SCOs and Track 2 Restricted Residential SCOs, and detected tentatively identified VOCs and SVOCs, for all soil/fill at the Site. Figures 5B through 5C are spider maps that show the location and summarize exceedances of Track 4 RRUSCOs.

5.2 REMEDIAL PERFORMANCE EVALUATION

The following post-excavation endpoint sampling procedures will be followed at the Site. All resulting data will be compared to the Track 4 SCOs presented in Section 5.2.1 below.

5.2.1 Excavation End-Point Sampling Frequency

At a minimum, one discreet soil sample will be collected from each 30 feet of wall (minimum of one sample per wall, from soils located one foot above bedrock). In the event that excavations are terminated above the bedrock, one discreet sample will be collected from every 900 square feet of floor (minimum of one sample per floor). Excavations will be extended to bedrock throughout the Site and exposed bedrock will not be sampled. Based on excavation plans for attainment of Track 1 SCOs, it is anticipated that 0 post-excavation base samples and 22 wall samples will be collected and analyzed. The actual number of endpoint samples will depend on the ultimate dimensions of soil removal effort and a determination will be made in consultation with the NYSDEC Project Manager. All samples will be analyzed for full list parameters (TCL VOCs, TCL SVOCs, pesticides/PCBs and TAL metals).

5.2.2 Methodology

Underlying and surrounding soils will be visually inspected and screened with the PID after the removal of all soils necessary for construction.

Soil samples will be collected using dedicated, disposable plastic trowels and latex gloves. Samples will be place in pre-cleaned jars provided by the laboratory. After sample collection, the sample containers will be placed in a cooler and then transported to a NYSDOH-certified laboratory within 48 hours of collection for analysis. Appropriate chain of custody procedures will be followed.

5.2.3 Reporting of Results

All data will be provided to the NYSDEC within 72 hours of receipt. Any recommendations for additional testing will be reviewed with the NYSDEC prior to commencing this fieldwork.

5.2.4 QA/QC

Quality Assurance / Quality Control protocols are fully specified in the QAPP (Appendix K). QA/QC methodology includes the following:

- One duplicate sample for every 20 samples collected will be submitted to the approved laboratory for analysis of the same parameters.

- Collected endpoint samples will be appropriately packaged, placed in coolers and transferred under proper Chain of Custody to the analytical laboratory. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or "cold-packs" to maintain a temperature of 4^{o} C.
- Dedicated disposable sampling materials will be used for the collection endpoint samples, eliminating the need to prepare field equipment (rinsate) blanks. However, if non-disposable equipment is used, (stainless steel scoop, etc.) field rinsate blanks will be prepared at the rate of 1 for every eight samples collected.

5.2.5 DUSR

Complete laboratory data packages will provided to an independent, third-party data validator. A summary of the findings in the Data Usability Summary Reports (DUSRs) will be provided in the FER.

5.2.6 Reporting of End-Point Data in FER

Chemical analysis of end-point and contingency samples will be conducted by a NYSDOH ELAP certified laboratory. The FER will provide all end-point sample results and exceedances of SCOs.

5.3 ESTIMATED MATERIAL REMOVAL QUANTITIES

The estimated quantity of soil/fill to be removed from the Site is 7,500 cubic yards. This volume is comprised of urban fill soils to be managed as regulated, non-hazardous waste.

5.4 SOIL/MATERIALS MANAGEMENT PLAN

5.4.1 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed by a qualified environmental professional or experienced field geologist under the direction of the Remedial Engineer during all remedial and development excavations into known or potentially contaminated material. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during the remedy and during

development phase, such as excavations for foundations and utility work, prior to issuance of the COC.

Grossly contaminated soil will be identified by the presence of: non-aqueous phase liquids (NAPL); visual indications of staining, discoloration or the presence of other obvious signs of contamination; noticeable odors associated with petroleum, solvents or other chemicals; and/or elevated PID readings compared to background levels.

Soil screening will be used to establish temporary excavation end-points by: 1) establishing the absence of soil exhibiting significant field evidence of contamination (grossly contaminated media) or debris materials likely to be associated with contaminants of concern (e.g., urban fill); and, 2) identifying the presence of non-disturbed native soils. The use of direct-reading hand-held screening devices (e.g., PID) will be employed, as appropriate, to determine likely excavation boundaries; final endpoints, however, will only be established through laboratory analysis of confirmatory samples.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. This information will be provided on maps in the FER.

Screening will be performed by qualified environmental professionals. Resumes will be provided for all personnel responsible for field screening (i.e. those representing the Remedial Engineer) of invasive work for unknown contaminant sources during remediation and development work.

5.4.2 Stockpile Methods

All stockpile activities will be compliant with applicable laws and regulations. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable laws and regulations and will be located in areas not subject to flooding or excessive sheet flow during storm events. Material to be stockpiled will be placed within an area designed and constructed to contain the materials from all sides and prevent runoff and dispersion. Stockpiles of excavated soils and other materials shall be located at least of 50 feet from the property boundaries, where possible.

Contaminated urban fill excavated during construction activities will be stockpiled separately and will be segregated from clean soil and construction materials. Stockpiles will be used only when necessary and will be removed as soon as practicable. Excavated soils will be stockpiled on, at minimum, double layers of 8-mil minimum sheeting. 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 daily. Results of inspections will be recorded in a logbook maintained at the Site and available for inspection by NYSDEC.

Soil stockpiles will be continuously encircled with silt fences. Hay bales (or equivalent) will be used as needed near catch basins, surface waters and other discharge points.

Water will be available on-site at suitable supply and pressure for use in dust control.

5.4.3 Materials Excavation and Load Out

The Remedial Engineer or a qualified environmental professional under his/her supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site has been investigated by the Remedial Engineer. It has been determined that no risk or impediment to the planned work under this Remedial Action Work Plan 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 NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-Site. The Remedial Engineer will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the remedial construction is complete.

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

The Remedial Engineer will be responsible for ensuring that all egress points for truck and equipment transport from the Site will be clean of dirt and other materials derived from the Site during Site remediation and development. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site -derived materials.

The Volunteer and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

The Remedial Engineer will ensure that Site development activities will not interfere with, or otherwise impair or compromise, remedial activities proposed in this Remedial Action Work Plan.

Development-related grading cuts and fills will not be performed without NYSDEC approval and will not interfere with, or otherwise impair or compromise, the performance of remediation required by this plan.

Mechanical processing of historical fill and contaminated soil on-Site is prohibited.

5.4.4 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.

Truck transport routes are as follows: west on Main Street toward US Route 9. All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes.

Figure 9 shows proposed in-bound and out-bound truck routes to the Site. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city 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.

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.

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 capable of producing free liquid, truck liners will be used. All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

5.4.5 Materials Disposal Off-Site

Waste disposal locations, to be established at a later date, will be reported to the NYSDEC Project Manager prior to the start of remedial excavation. A sample Non-Hazardous Soil Disposal manifest is provided in Appendix E. The total quantity of material expected to be disposed off-Site is anticipated to be approximately 7,500 cubic yards of poor quality urban fill. Several separate disposal facilities may be secured (as warranted), based on the expected composition of known contaminated soils. Information from the disposal facilities will be sent to the NYSDEC before the initiation of soil removal at the Site.

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC's Project Manager. Unregulated off-Site management of materials from this Site is prohibited without formal NYSDEC approval.

Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

The following documentation will be obtained and reported by the Remedial Engineer for each disposal location used in this project to fully demonstrate and document that the disposal of material derived from the Site conforms with all applicable laws: (1) a letter from the Remedial Engineer or BCP Volunteer to the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter will state that material to be disposed is contaminated material generated at an environmental remediation Site in New York

State. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported (including Site Characterization data); and (2) a letter from all receiving facilities stating it is in receipt of the correspondence (above) and is approved to accept the material. These documents will be included in the FER.

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

Historical fill and contaminated soils from the Site are prohibited from being disposed at Part 360-16 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Materials Management (DMM) in NYSDEC to be Construction and Demolition (C/D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C/D processing facility without permit modifications only upon prior notification of NYSDEC Region 3 DMM. This material is prohibited from being sent or redirected to a Part 360-16 Registration Facility. In this case, as dictated by DMM, special procedures will include, at a minimum, a letter to the C/D facility that provides a detailed explanation that the material is derived from a DER remediation Site, that the soil material is contaminated and that it must not be redirected to on-Site or off-Site Soil Recycling Facilities. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported.

The FER will include an accounting of the destination of all material removed from the Site during this Remedial Action, including excavated soil, contaminated soil, historic fill, solid waste, and hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. This information will also be presented in a tabular form in the FER.

Bill of Lading system or equivalent will be used for off-Site movement of non-hazardous wastes and contaminated soils. This information will be reported in the FER.

Hazardous wastes derived from on-Site will be stored, transported, and disposed of in full compliance with applicable local, State, and Federal regulations.

Appropriately licensed haulers will be used for material removed from this Site and will be in full compliance with all applicable local, State and Federal regulations.

Waste characterization will be performed for off-Site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the FER. All data available for soil/material to be disposed at a given facility must be submitted to the disposal facility with suitable explanation prior to shipment and receipt.

5.4.6 Materials Reuse On-Site

"Reuse on-Site" means material that is excavated during the remedy or development, does not leave the property, and is relocated within the same property and on comparable soil/fill material. Re-use of excavated soil/fill at the Site is not anticipated; however, the Remedial Engineer will ensure that the following procedures are performed at the Site if reuse of such materials to meet contingency conditions is approved by NYSDEC.

Concrete crushing or processing on-Site is prohibited.

Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site is prohibited for reuse on-Site.

Contaminated material, including historic fill and contaminated soil, remaining on-site will not be located within any required cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

5.4.7 Fluids Management

Groundwater is not present within soil/fill slated for excavation and off-site disposal and it is anticipated that groundwater (containing low-level pesticide contamination) requiring management will be generated only during non-remedial excavation of bedrock at Building 2, and potentially in limited areas (e.g., footing excavations) at Building 1. Any dewatering on the Site will be completed consistent with applicable NYCDEP rules and regulations. Management of groundwater generated during excavation activities will be performed in consultation with the NYSDEC project manager and documented in the FER.

If any additional laboratory analysis of groundwater documents significant groundwater contamination (as determined in consultation with NYSDEC), or if fieldwork observations of encountered groundwater document any overt signs of contamination (e.g., strong odors, presence of free product, etc.), then dewatered fluids will not be recharged back to the land surface or subsurface of the Site and all dewatering fluids will be managed off-Site.

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Any liquids discharged into the Westchester County (Peekskill Sewer District) sewer system will be addressed through approval by the local Department of Public Works.

Discharge of water generated during remedial construction to surface waters (i.e. a local pond, stream or river) is prohibited without a SPDES permit. No such discharge is anticipated for this project.

5.4.8 Demarcation of Any Residual Contaminated Materials

All contaminated soil/fill above bedrock is anticipated to be removed during implementation of the selected remedy. If contingency conditions result in contaminated materials remaining on the Site after the completion of excavation activities, the top of the residual soil/fill will be defined prior to backfilling with these three methods: (1) placement of a demarcation layer. The demarcation layer will consist of geosynthetic fencing or equivalent material to be placed on the surface of residual soil/fill to provide an observable reference layer. A description or map of the approximate depth of the demarcation layer will be provided in the FER; and (2) a land survey of the top elevation of residual soil/fill before the placement of cover soils, pavement and associated sub-soils, or other materials or structures; and, (3) all materials beneath the approved cover will be considered impacted and subject to site management after the remedy is complete. A map showing the method of demarcation for the Site and all associated documentation will be presented in the FER. This demarcation will constitute the top of the 'Residuals Management Zone', the zone that requires adherence to special conditions for disturbance of contaminated residual soils defined in the SMP.

5.4.9 Backfill from Off-Site Sources

The foundations of the new structures, underlain by a waterproofing membrane, will cover most of the entire site and imported gravel and subgrade aggregate is anticipated in these areas. In

addition, subgrade or cover material may be imported for the courtyard and landscaped areas along Diven Street. The following protocols for the management and handling of clean soil imported to the site for construction purposes will be implemented.

The imported uncontaminated, clean soil cover will be from an approved source/facility and will be evaluated by the Remedial Engineer/QEP to ensure that:

- A segregated stockpile is properly maintained at the source and will not be comingled with any other material prior to importing and grading the clean soil material at the Site;
- Material does not include any prohibited material (e.g., solid waste, including construction and demolition material);
- Screening for evidence of contamination by visual, olfactory and PID soil screening practices prior to testing at the source as well as upon importing to the Site for grading is completed; and
- A grab sample (for VOCs) and a maximum five-part composite sample will be collected from the segregated stockpile at the source, with sampling frequency and laboratory analyses conforming to the requirements specified in DER-10 5.4(e), including soil analysis for the following parameters:

TCL VOCs by EPA Method 8260C	TCL PCBs by EPA Method 8082A
TCL SVOCs by EPA Method 8270D	TAL Metals by EPA Method 6010C/7471B
TCL Pesticides by EPA Method 8081B	

Upon receipt of the segregated stockpile analytical results collected at the source, a Clean Soil Sampling Report will be submitted to DEC for review/approval prior to importing. The report will include the following:

- Summary of number of samples collected and analyzed, tabulated data and comparison to the selected Site Use SCOs;
- Analytical data sheets and chain of custody documentation;
- Summary of the weight and volume of imported material;
- Photographs from the segregated stockpile at the source with sample point locations identified;

- An affidavit from the source/facility on company letterhead stating that the segregated stockpile of the weight and volume of material to be imported has been properly maintained at the source and complies with the requirements listed above; and
- A copy of source/facility NYSDEC permit;

All imported gravel and similar non-soil subbase materials will be from permitted facilities.

The following documentation will be presented in the FER:

- Copies of purchase invoices;
- Truck transportation slips from the source to the Site;
- Confirmation of the weight and volume of NYSDEC approved clean soil imported;
- Site plan depicting all areas where the NYSDEC approved clean soil cover has been placed.

All materials proposed for import onto the Site will be approved by the Remedial Engineer and will be in compliance with provisions in this RAWP prior to receipt at the Site.

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

The FER will include the following certification by the Remedial Engineer: "I certify that all import of soils from off-Site, including source evaluation, approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan".

All imported soils will meet NYSDEC approved backfill or cover soil quality objectives for this Site. These NYSDEC approved backfill or cover soil quality objectives are the soil cleanup objectives for Unrestricted Use as set forth in Table 375-6.8(a) of 6 NYCRR Part 375 or the lower of the protection of groundwater or the protection of public health soil cleanup objectives for Restricted Residential Use as set forth in Table 375-6.8(b) of 6 NYCRR Part 375. The use of Restricted Residential Soil Cleanup Objectives will only be used if the Track 4 contingency is required. Non-compliant soils will not be imported onto the Site without prior approval by NYSDEC. Nothing in the approved Remedial Action Work Plan or its approval by NYSDEC should be construed as an approval for this purpose.

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. Nothing in this Remedial Action Work Plan should be construed as an approval for this purpose.

Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers.

5.4.10 Stormwater Pollution Prevention

An ESCP that conforms to the requirements of the NYSDEC Division of Water guidelines and NYS regulations will be developed by the Contractor and approved by the RE. This plan will be provided to the NYSDEC prior to any remedial or development construction activities.

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

5.4.11 Community Air Monitoring Plan

A CAMP will be implemented during all ground intrusive activities. Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report.

5.4.12 Odor, Dust and Nuisance Control Plan

Suppression of odors, dust and other nuisance conditions will be conducted during all invasive work performed during construction activities. The FER will include the following certification by the Remedial Engineer: "I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology defined in the Remedial Action Work Plan."

Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off-Site. Specific odor control methods to be used on a routine basis will include minimizing the generation of vapors and/or odors. 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 all other complaints about the project. Implementation of all odor controls, including the halt of work, will be the responsibility of the Volunteer's Remedial Engineer, who is responsible for certifying the FER.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (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.

Where odor nuisances have developed during remedial work and cannot be corrected, or where the release of nuisance odors cannot otherwise be avoided due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering excavation and handling areas under tented containment structures equipped with appropriate air venting/filtering systems.

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 or other equivalent equipment for road wetting capable of spraying water directly onto off-road areas including excavations and stockpiles (water will be available on-site at suitable supply and pressure for use in dust control if a dedicated water truck is not utilized).
- 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 spraying.
- Materials will be hauled in properly tarped containers or vehicles, which will travel at restricted speeds while on-site.

All reasonable attempts will be made to keep visible and/or fugitive dust to a minimum and adhere to particulate emissions limits identified in the CAMP.

Other Nuisances

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 and will conform, at a minimum, to City of Peekskill noise standards for the central commercial zoning district.

5.5 CONTINGENCY PLAN

This contingency plan is developed for the remedial construction to address the discovery of unknown structures or contaminated media during excavation. Identification of unknown contamination source areas during invasive Site work will be promptly communicated to NYSDEC's Project Manager. Petroleum spills will be reported to the NYSDEC Spill Hotline. These findings will be included in the daily report. If previously unidentified contaminant sources are found during on-Site remedial excavation or development-related excavation, sampling will be performed on contaminated source material and surrounding soils and reported to NYSDEC. Chemical analytical testing will be performed for TCL volatiles and semi-volatiles, pesticides/PCBs, and TAL metals, as appropriate.

This section describes actions that must occur upon the discovery of previously unknown contaminated material(s), USTs, demolition debris or other unknown unidentifiable material that requires special handling. On-site personnel should be prepared to respond appropriately if the following previously unknown materials are encountered (if encountered, this material could result in a recommendation from the Remedial Engineer/QEP for an immediate, temporary shutdown of construction activities):

- Previously unknown tanks (including drums) containing a liquid product that is not likely to be water and is likely to present a threat to worker health or safety;
- Previously unknown demolition debris, which could contain significant quantities of asbestos, the disturbance of which is determined, based on field observations, to violate or likely to violate Federal, State, or local asbestos regulations; and,
- Material which cannot be readily identified.

5.5.1 Procedures for Encountered Underground Storage Tanks

Closure of any encountered USTs at the Site will be in accordance with the requirements of DER-10, Section 5.5. Any encountered, previously unknown USTs will be visually inspected to determine if liquids are present in the tank. Significant quantities of liquid remaining in the tanks will be drummed on the Site or removed by a properly licensed disposal company and the particular product (e.g., fuel oil, diesel, etc.) will be identified prior to off-site disposal at a permitted facility. All encountered USTs will be disposed of pursuant to applicable Petroleum Bulk Storage (PBS) and hazardous waste regulations.

5.5.2 Procedures for Encountered Demolition Debris

To the extent practical, all clearly identifiable material suspected of containing asbestos will be removed from the waste stream and handled separately (if encountered). The Remedial Engineer/QEP will recommend that asbestos material visible in the waste stream be separated and analyzed to determine the percent of asbestos present. All applicable Federal, State and local asbestos handling regulations will be followed.

Depending on the amount of asbestos material identified in the waste stream, the Remedial Engineer/QEP may recommend to the Volunteer's Representative that a licensed and accredited asbestos inspector be retained to manage the handling and disposition of asbestos material.

Approval to retain an asbestos inspector will be made by the Volunteer's Representative. Samples will be collected by a properly licensed asbestos inspector and submitted to a NYSDOH ELAP- certified laboratory for analysis, depending on the amount and type of material encountered.

Minor amounts of asbestos may be removed from the waste stream and disposed of in accordance with applicable State and local asbestos remediation requirements. An asbestos abatement firm will be retained to properly handle and remove minor amounts of asbestos.

The presence of significant quantities of asbestos will result in a temporary shutdown of the Site.

5.5.3 Procedures for Encountered Unknown Material

Material which cannot be readily identified but which is considered, based on field observations, to be material that needs further investigation before disposal will be properly stockpiled (as per the SoMP) in an area separate from all other stockpiled material.

5.5.4 Screening and Laboratory Analysis

Unknown material will be screened with a photo-ionization detector (PID) and all recorded levels will be documented. Samples will be collected and analyzed to identify the compounds present and to assist in determining appropriate disposal practices. Until determined by laboratory analysis otherwise, this material will be considered a hazardous substance. Specific materials known to require sampling and analysis prior to final disposition include all building components and debris containing painted surfaces and/or caulk. A plan to describe the handling and disposal of such materials will be submitted to NYSDEC for review and approval.

If previously unknown underground tanks or other previously unidentified contaminant sources are found during on-site remedial excavation or development related construction, sampling will be performed on product, sediment, and surrounding soils, etc. Chemical analytical work will be for full scan parameters (TAL metals, TCL volatiles and semi-volatiles, TCL pesticides, and PCBs). These analyses will not be limited to CP-51 petroleum list parameters where tanks are identified without prior approval by NYSDEC. Analyses will not be otherwise limited without NYSDEC approval.

6.0 CONTINGENCY FOR RESIDUAL CONTAMINATION

The intent of the chosen remedy is to remove all contaminated material to achieve Track 1 Unrestricted Use SCOs. If, subsequent to the implementation of the proposed remedial actions, contaminated materials (i.e. soil with contaminant concentrations above RRUSCOs) remain on the Site, the Track 4 remedy will be implemented and Use Restrictions will be required to protect human health and the environment. The Track 4 remedy will require implementation of ICs and ECs (discussed in detail below) in order to protect public health and the environment by appropriately managing residual contamination.

The FER will report any residual contamination on the Site in tables and maps. The ECs and ICs detailed below, if required, are intended to provide long-term protection from the residual contamination.

6.1 INSTITUTIONAL CONTROLS

ICs for residual contamination are intended to render the overall Site remedy protective of public health and the environment. To ensure continual and proper management of residual contamination in perpetuity a Site-specific Environmental Easement (as defined in Article 71 Title 36 of the Environmental Conservation Law) approved by NYSDEC would be filed and recorded with Westchester County to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all ICs placed on this Site by this NYSDEC-approved remedy. The Environmental Easement is submitted as part of the FER and must be properly recorded before the Certificate of Completion can be issued by NYSDEC.

The Environmental Easement will provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. A SMP would be prepared describing appropriate methods and procedures to ensure compliance with all ICs and ECs that are required by the Environmental Easement. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and grantor's successors and assigns.

The Controlled Property (Site) would also have a series of Institutional Controls in the form of Site restrictions and requirements. The Site restrictions that apply to the Controlled Property are:

- Vegetable gardens and farming on the Controlled Property are prohibited;
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- All future activities on the Controlled Property that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in the SMP;
- The Controlled Property may be used for Restricted Residential use only, provided the long-term Engineering and Institutional Controls included in the SMP are employed;
- The Controlled Property may not be used for a higher level of use, such as Unrestricted Use without an amendment or extinguishment of this Environmental Easement;
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

6.2 ENGINEERING CONTROLS

ECs are any physical barrier or method employed to actively or passively contain, stabilize, or monitor contamination, restrict the movement of contamination to ensure the long-term effectiveness of a remedial program, or eliminate potential exposure pathways to contamination. Engineering controls include, but are not limited to, pavement, caps, covers, subsurface barriers, vapor barriers, and similar systems.

The Controlled Property would have two primary EC systems. These are: (1) a composite cover system consisting of concrete building foundations, and a 20 mil vapor barrier beneath the slab and subgrade walls, and (2) installation of a soil cover of at least 2 feet of certified clean soil that meets Soil Cleanup Objectives for Restricted Residential Use and/or a minimum of 4-inch asphalt or concrete pavement over any contaminated areas not otherwise covered by the footprint of the proposed new buildings. Long-term management of ECs would be executed under a Site specific SMP that will be developed and included in the FER. EC design would be reviewed and approved by NYSDEC prior to implementation.

7.0 FINAL ENGINEERING REPORT

A Final Engineering Report will be submitted to NYSDEC following implementation of the Remedial Action defined in this RAWP.

7.1 FER ELEMENTS

The FER provides the documentation that the remedial work required under this RAWP has been completed and has been performed in compliance with this plan. The FER will provide a comprehensive account of the locations and characteristics of all material removed from the Site including the surveyed map(s) of all sources. The FER will include as-built drawings for all constructed elements, calculation and manufacturer documentation for treatment systems, certifications, manifests, bills of lading as well as a complete Site Management Plan (formerly the Operation and Maintenance Plan) if the Track 4 remedy is implemented. The FER will provide a description of the changes in the Remedial Action from the elements provided in the RAWP and associated design documents. The FER will provide a tabular summary of all performance evaluation sampling results and all material characterization results and other sampling and chemical analysis performed as part of the Remedial Action. The FER will provide test results demonstrating that any required mitigation and remedial systems are functioning properly. The FER will be prepared in conformance with DER-10.

Where determined to be necessary by NYSDEC, a Financial Assurance Plan will be required to ensure the sufficiency of revenue to perform long-term operations, maintenance and monitoring tasks defined in the SMP and Environmental Easement. This determination will be made by NYSDEC in the context of the FER review.

The FER will include written and photographic documentation of all remedial work performed under this remedy.

The FER will include an itemized tabular description of actual costs incurred during all aspects of the Remedial Action.

The FER will provide a thorough summary of any residual contamination left on the Site after the remedy is complete. Residual contamination includes all contamination that exceeds the Track 1 Unrestricted Use SCO in 6NYCRR Part 375-6. A table that shows exceedances from Track 1 Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action and a map that shows the location and summarizes exceedances from Track 1 Unrestricted SCOs for any soil/fill remaining at the Site after the Remedial Action will be included in the FER.

The FER will provide a thorough summary of any residual contamination that exceeds the SCOs defined for the Site in the RAWP and must provide an explanation for why the material was not removed as part of the Remedial Action. A table that shows residual contamination in excess of Site SCOs and a map that shows residual contamination in excess of Site SCOs will be included in the FER.

The FER will include an accounting of the destination of all material removed from the Site, including excavated contaminated soil, historic fill, solid waste, hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. It will provide an accounting of the origin and chemical quality of all material imported onto the Site.

Before approval of a FER and issuance of a Certificate of Completion, all project reports must be submitted in digital form on electronic media (PDF).

7.2 SITE MANAGEMENT PLAN

Because a Track 1 remedy is proposed, a SMP is not anticipated. If Track 1 is not achieved (and Track 4 is used), SMP implementation will be the last phase of remediation, beginning with the approval of the FER and issuance of the Certificate of Completion (COC) for the Remedial Action. The SMP is submitted as part of the FER but will be written in a manner that allows its removal and use as a complete and independent document. Site Management continues in perpetuity or until released in writing by NYSDEC. The property owner is responsible to ensure

that all Site Management responsibilities defined in the Environmental Easement and the SMP are performed.

The SMP is intended to provide a detailed description of the procedures required to manage residual contamination left in place at the Site following completion of the Remedial Action in accordance with the BCA with the NYSDEC. This includes: (1) development, implementation, and management of all Engineering and Institutional Controls; (2) development and implementation of monitoring systems and a Monitoring Plan; (3) development of a plan to operate and maintain any treatment, collection, containment, or recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual); (4) submittal of Site Management Reports, performance of inspections and certification of results, and demonstration of proper communication of Site information to NYSDEC; and (5) defining criteria for termination of treatment system operation.

To address these needs, this SMP will include three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs which include an excavation work plan; (2) a Monitoring Plan for implementation of Site Monitoring; and, (3) a Site Management Reporting Plan for submittal of data, information, recommendations, and certifications to NYSDEC. The SMP will be prepared in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation and the guidelines provided by NYSDEC.

Site management activities, reporting, and EC/IC certification will be scheduled on a certification period basis. The certification period will be annually for the first three years; modifications to this frequency may be proposed in that third year. The SMP will be based on a calendar year and will be due for submission to NYSDEC by March 1 of the year following the reporting period.

No exclusions for handling of residual contaminated soils will be provided in the SMP. All handling of residual contaminated material will be subject to provisions contained in the SMP.

7.3 CERTIFICATIONS

The following certification will appear in front of the Executive Summary of the FER. The certification will be signed by the Remedial Engineer Jolanda Jansen who is a Professional

Engineer registered in New York State. This certification will be appropriately signed and stamped. The certification will include the following statements:

I, Jolanda Jansen, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for The Lofts on Main Site (NYSDEC Site No. C360152).

I certify that the Site description presented in this FER is identical to the Site descriptions presented in the Environmental Easement, the Site Management Plan, and the Brownfield Cleanup Agreement for The Lofts on Main and related amendments.

I certify that the Remedial Action Work Plan dated May 2016and approved by the NYSDEC were implemented and that all requirements in those documents have been substantively complied with.

I certify that the remedial activities were observed by qualified environmental professionals under my supervision and that the remediation requirements set forth in the Remedial Action Work Plan and any other relevant provisions of ECL 27-1419 have been achieved.

If the remedial program requires ICs or ECs, the certification must include: *I certify that all use restrictions, Institutional Controls, Engineering Controls, and all 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.* **If the remedial program requires applicable SMP, the certification must include:** *A Site Management Plan has been submitted by the Volunteer 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 the NYSDEC.*

I certify that the export of all contaminated soil, fill, water or other material from the property was performed in accordance with the Remedial Action Work Plan, and were taken to facilities licensed to accept this material in full compliance with all Federal, State and local laws.

I certify that all import of soils from off-Site, including source approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan.

I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology and soil screening methodology defined in the Remedial Action Work Plan.

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 130, New York State Education Law.

8.0 SCHEDULE

Currently, a two month soil/bedrock excavation period is anticipated. If the schedule for remediation and development activities changes, it will be updated and submitted to NYSDEC.

The current project schedule is presented below:

Week	**Action**
January 2016	NYSDEC review of RAWP
February 2016	NYSDEC approval of RAWP
February/March	Public comment period; Contractor selection/mobilization
April 2016	Soil Excavation
May 2016	Construction of Proposed Buildings
Summer/Fall 2016	Preparation of FER
December 2016	Secure FER

APPENDIX A

Figures

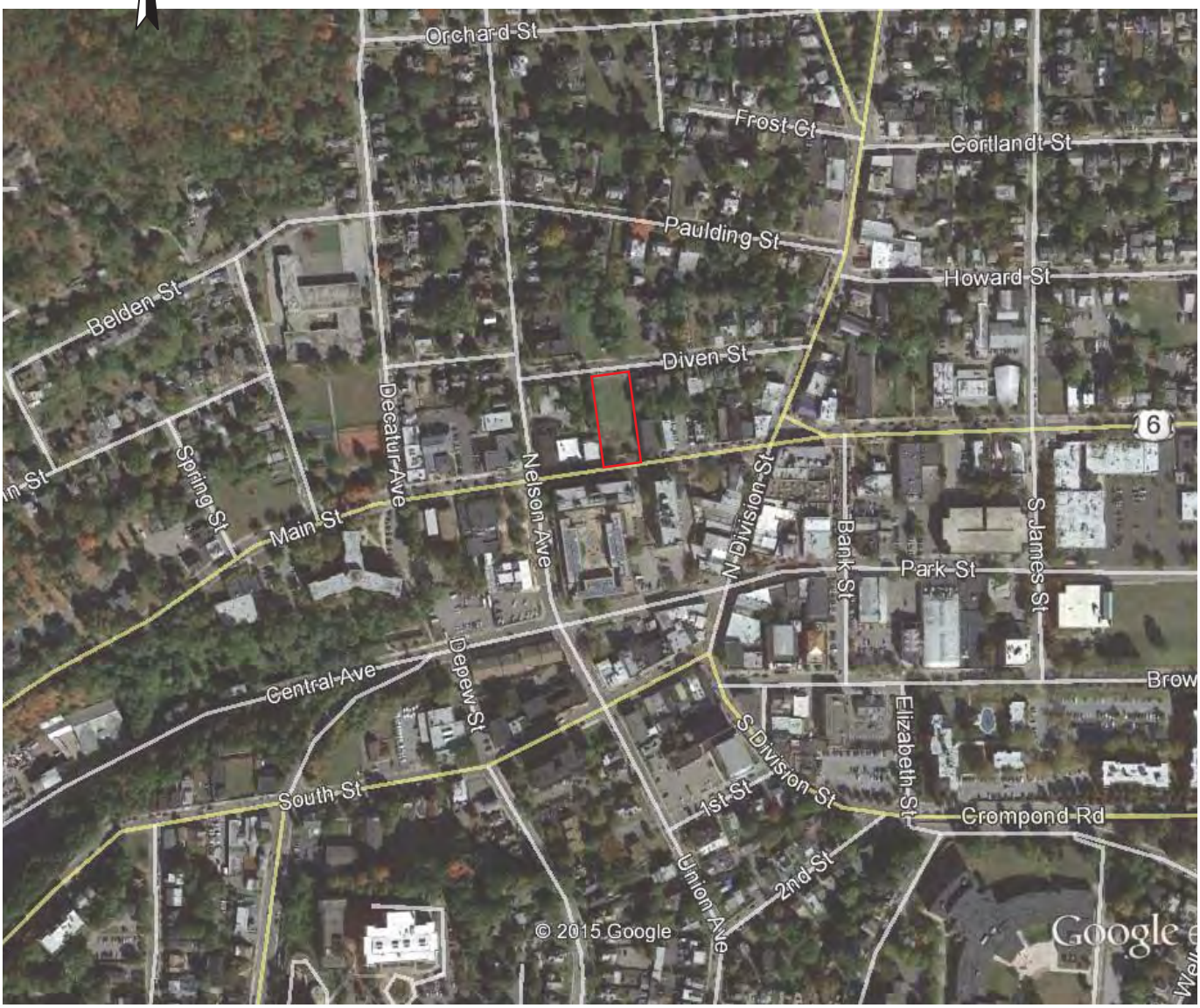


Figure 1: Site Location Map

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

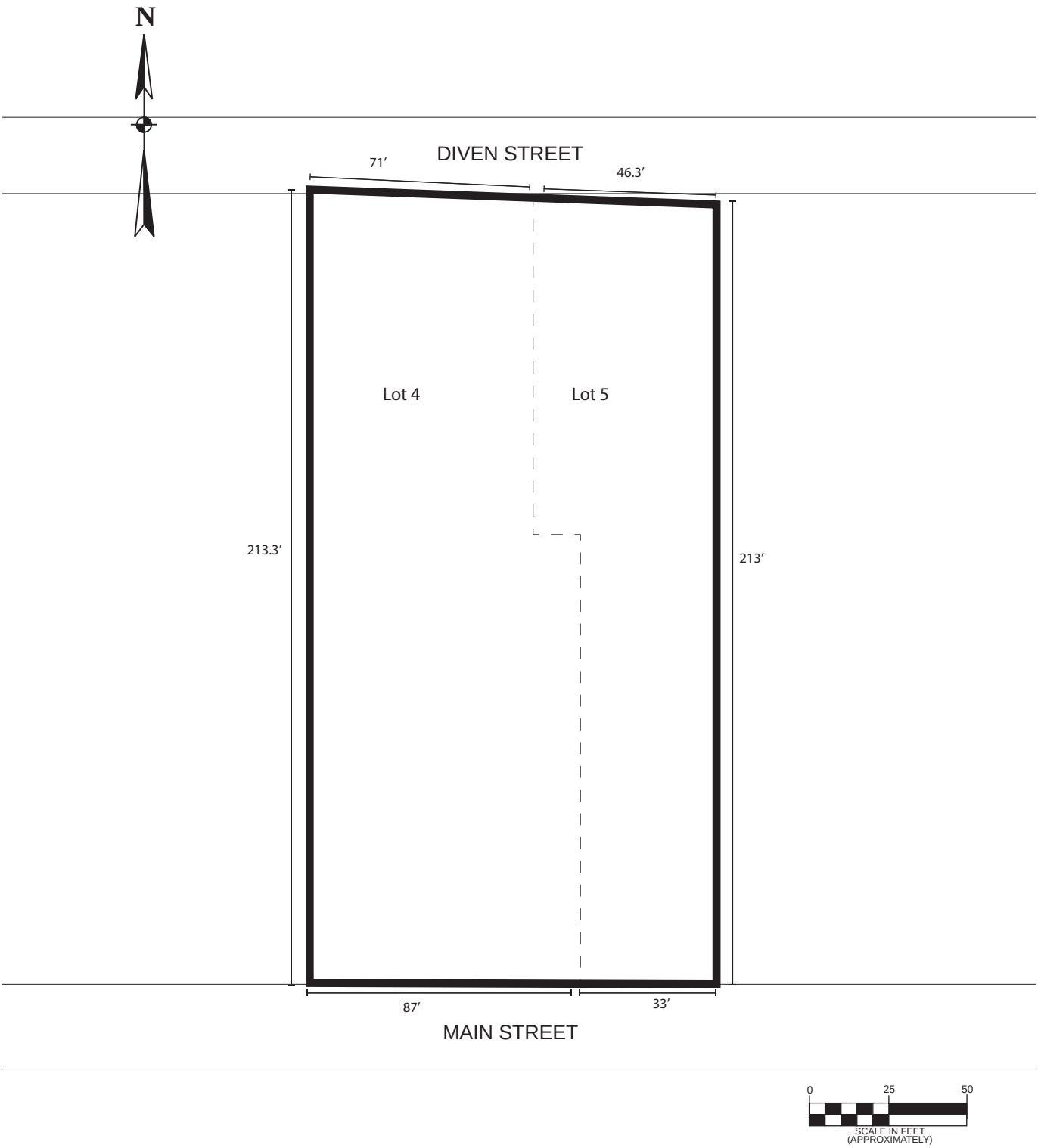
Legend: subject property border

0 250 500
SCALE IN FEET
(APPROXIMATELY)

ESI File: KP14175.50

May 2016

Appendix A



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 2: Site Boundary Map

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:

subject property border

ESI File: KP14175.50

May 2016

Scale as shown

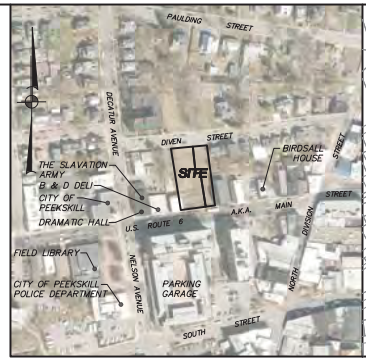
Appendix A

FIGURE 3

Proposed Site Development

PLANT LIST

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT/SPACER
		SHADE AND FLOWERING TREES		
CF	4	Cornus florida / Flowering Dogwood	7' – 8' HT.	B&B
RP	2	Robinia pseudoacacia / Black Locust	2"–2 1/2" CAL.	B&B
		SHRUBS		
CO	24	Chamaecyparis obtusa 'Nana Lutea' / Golden Dwarf Hinoki Cypress	30" – 36" HT.	@5 CONT.
RR	8	Rhododendron var. / Bloom–A–Thon Red Reblooming Azalea	24" – 30" HT.	@5 CONT.
		PERENNIALS/GROUNDCOVERS		
IC	24	Iris cristata / Crested iris	12"–15" HT	@1 CONT. / 18"O.C.
LM	28	Lamium maculatum / Dead Nettle	12"–15" HT	@1 CONT. / 18"O.C.
SH	87	Sarcococca hookeriana var. humilis / Sweetbox	12"–15" HT	@1 CONT. / 24"O.C.
VM	30	Vinca Minor / Periwinkle	12"–18" SPR.	4" POT / 18"O.C.



AREA MAP SCALE: 1" = 200'±

LOCATION MAP SCALE: 1" = 400'±

OWNER/APPLICANT:

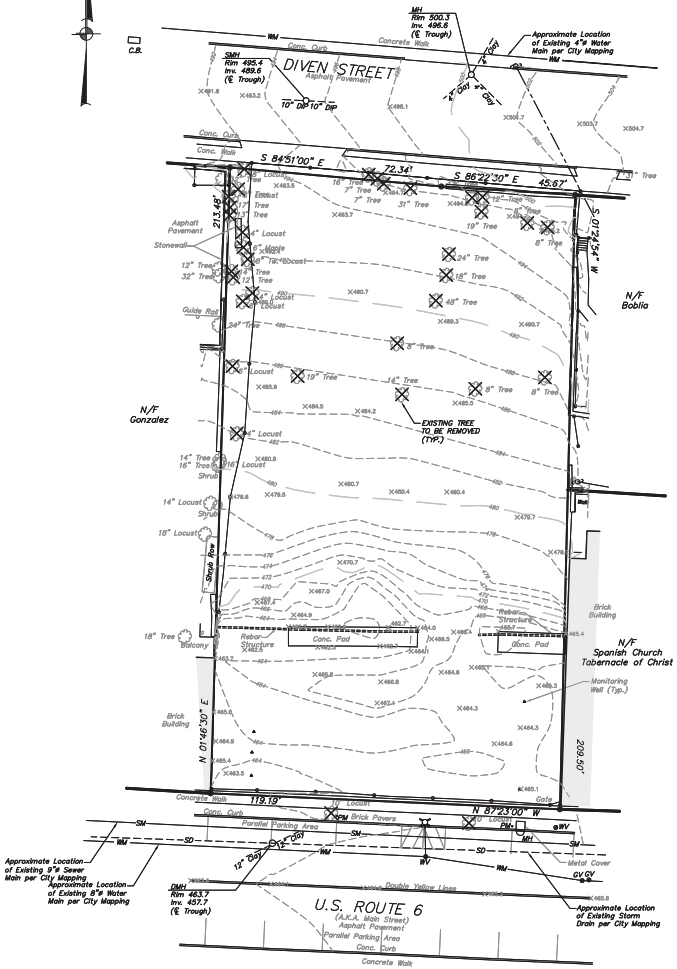
The Kearney Realty and Development Group, Inc.
1777 Route 6
Carmel, NY 10512

SITE DATA:

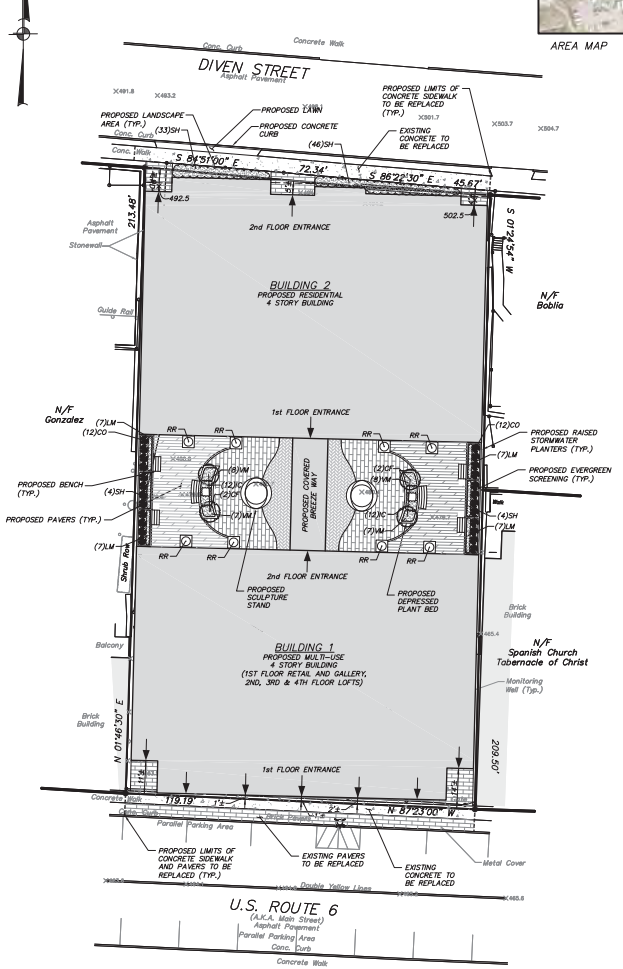
Zone: C–2
Total Acreage 0.57 AC
Tax Map No.: 33.29–2–4
33.29–2–5

GENERAL NOTES:

1. Existing boundary information taken from survey prepared by Matthew A. Novello, P.C., Consulting Engineers & Land Surveyors dated July 10, 2003.
2. Topography shown hereon is based upon actual fieldwork performed by Insite Engineering, Surveying & Landscape Architecture, P.C. and completed June 5, 2015. Elevations shown hereon are referenced to an arbitrary datum. The contour interval is 2'.
3. Existing sewer main, water main and storm drain locations shown hereon are approximate and were obtained from mapping provided by the City of Peekskill.



EXISTING CONDITIONS SITE PLAN
SCALE: 1" = 20'



LAYOUT & LANDSCAPE PLAN
SCALE: 1" = 20'

LEGEND

- Existing Property Line
- Existing 10' Contour
- Existing 2' Contour
- Existing Tree to Remain
- Existing Tree to be Removed
- Existing Curb
- Existing Stonewall
- Existing Chainlink Fence
- Existing Utility Pole with Overhead Wires
- Existing Hydrant
- Existing Water Valve
- Existing Manhole
- Existing Gate Valve
- Existing Catch Basin
- Existing Water Main
- Existing Sewer Main
- Existing Storm Drain
- Existing Parking Meter
- Proposed Door
- Proposed Bench
- Proposed Raised Stormwater Planters
- Proposed Pavers

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225–9690
(845) 225–9717 fax
www.insite–eng.com

PROJECT:
THE LOFTS ON MAIN
921 DIVEN STREET & 922 MAIN STREET,
CITY OF PEEKSKILL, COUNTY OF WESTCHESTER, NEW YORK

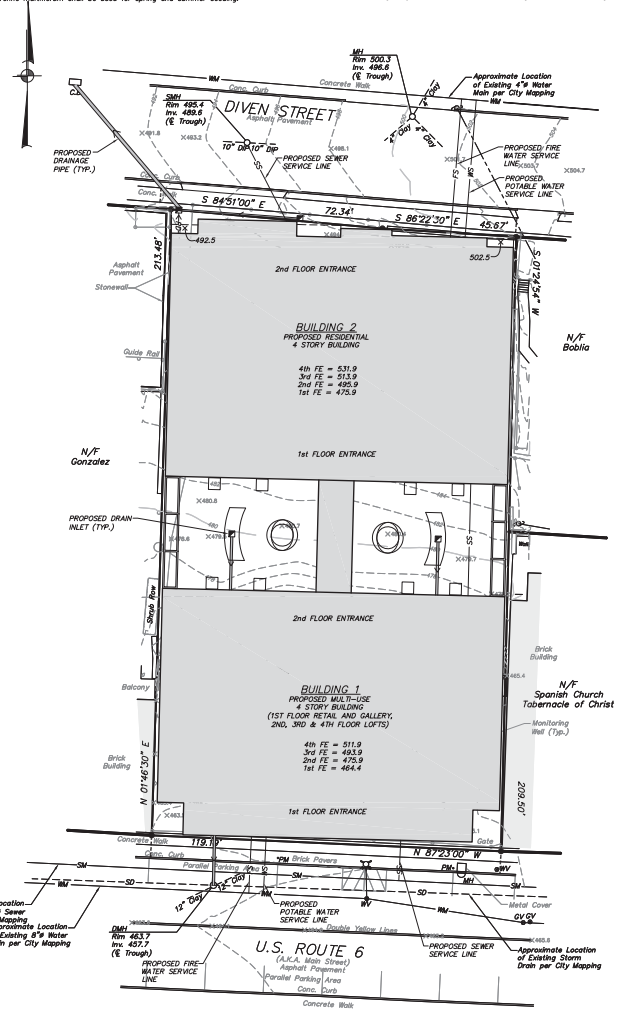
DRAWING:
SITE PLAN

PROJECT NUMBER	14165.100	PROJECT MANAGER	J.J.C.
DATE	6–11–15	DRAWN BY	M.E.U.
SCALE	1" = 20'	CHECKED BY	J.L.K.

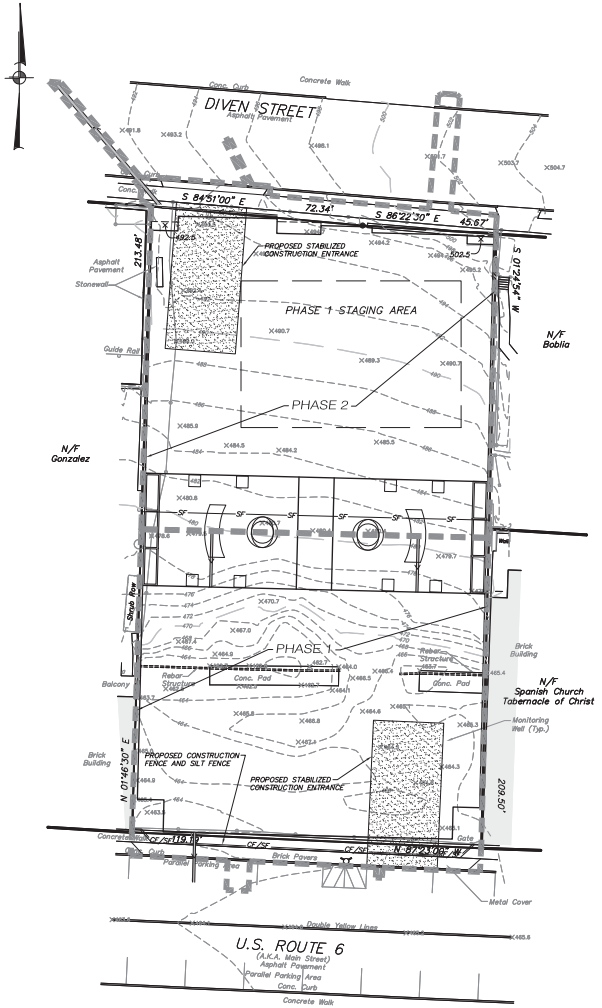
DRAWING NO. SP–1
SHEET 1 / 3

Erosion & Sediment Control Notes:

1. The Erosion and Sediment Control Plan is only to be referred to for the installation of erosion and sediment control measures. For all other construction related activities, including, but not limited to, grading and utilities, refer to the appropriate drawings.
2. The Contractor shall be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
3. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
4. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction.
5. When land is exposed during development, the exposure shall be kept to the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized in the areas required to perform construction.
6. The stabilized construction entrances, silt fence, and temporary chain link fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork. Refer to General Note 13 on Drawing EX-1.
7. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded with Lolium perenne aristatum or Lolium perenne multiflorum for temporary stabilization. Lolium perenne aristatum shall be used for winter seeding and Lolium perenne multiflorum shall be used for spring and summer seeding.
8. Any graded areas not subject to further disturbance or construction traffic shall, within 7 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
   - Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative at a rate of 100 pounds per acre in the following proportions:
     Kentucky Bluegrass 20%
     Creeping Red Fescue 40%
     Perennial Ryegrass 20%
     Annual Ryegrass 20%
   - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
9. Grass seed mix may be applied by either mechanical or hydroseeding methods. Hydroseeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1".
10. Paved roadways shall be kept clean at all times.
11. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
12. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
13. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
14. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the NYSDEC trained individual to insure that pipes are clear of debris and that all silt fence is intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the NYSDEC trained individual and/or site engineer.
15. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the NYSDEC trained individual.
16. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
17. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
18. The NYSDEC trained individual shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
19. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and the City Engineer shall be installed by the contractor.
20. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.
21. After completion of the site improvements, the owner will assume responsibility for maintenance of the parking lots, drainage systems and stormwater facilities (Refer to General Note 9). Each spring the paved areas shall be cleaned to remove the winter accumulation of traction sand. After this is completed the drain inlet, drain inlet sumps and hydrodynamic separator should be cleaned. All pipes should be checked for debris and blockage and cleaned as required. During the cleaning process, the drain inlet and pipes should be inspected for structural integrity and overall condition. Repairs and/or replacements should be made as required.
22. Refer to the Stormwater Management Report for additional details regarding long-term maintenance of the storm drainage facilities.



GRADING, UTILITIES, PLAN
SCALE: 1" = 20'



EROSION & SEDIMENT CONTROL PLAN
SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

LEGEND

- Existing Property Line
- 490 Existing 10' Contour
- 492 Existing 2' Contour
- Existing Curb
- Existing Stonewall
- Existing Chainlink Fence
- Existing Utility Pole with Overhead Wires
- Existing Hydrant
- WV Existing Water Valve
- MH Existing Manhole
- GV Existing Gate Valve
- C.B. Existing Catch Basin
- WM Existing Water Main
- SM Existing Sewer Main
- SD Existing Storm Drain
- PM Existing Parking Meter
- FS Proposed Fire Water Service Line
- WS Proposed Water Service Line
- SS Proposed Sewer Service Line
- Proposed Drainage Pipe
- RD Proposed Roof Drain
- Proposed Drain Inlet
- Proposed Raised Stormwater Planters

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

	MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
ROAD & PAVEMENT	–	Inspect	Inspect	Clean	Clean

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized.

Note: The party responsible for implementation of the maintenance schedule during and after construction is:

The Kearney Realty and Development Group, Inc.
1777 Route 6
Carmel, NY 10512

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
THE LOFTS ON MAIN
921 DIVEN STREET & 922 MAIN STREET,
CITY OF PEEKSKILL, COUNTY OF WESTCHESTER, NEW YORK

DRAWING:
GRADING, UTILITIES & EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER	14165.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	6-11-15	DRAWN BY	M.E.U.	SP-2	2 / 3
SCALE	1" = 20'	CHECKED BY	J.L.K.		

LEGEND:

- Agricultural Uses - Farms, Stables, Nurseries
- Single Family Residential
- Two, Three Family and Multi-Structure Properties
- Condominiums, Apartments, Multi-Family Residential Use
- Common Land Homeowner Assoc.
- Vacant Properties
- Commercial and Retail
- Manufacturing, Industrial and Warehouse
- Office and Research
- Mixed Use
- Institutional and Public Assembly
- Transportation, Communications and Utilities
- Cemeteries
- Public Parks and Parkway Lands
- Private Recreation
- Nature Preserve
- Water Supply Lands
- Interior Water Bodies

Source: http://giswww.westchestergov.com

Figure 4: Surrounding Land Use Map

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:

subject property border

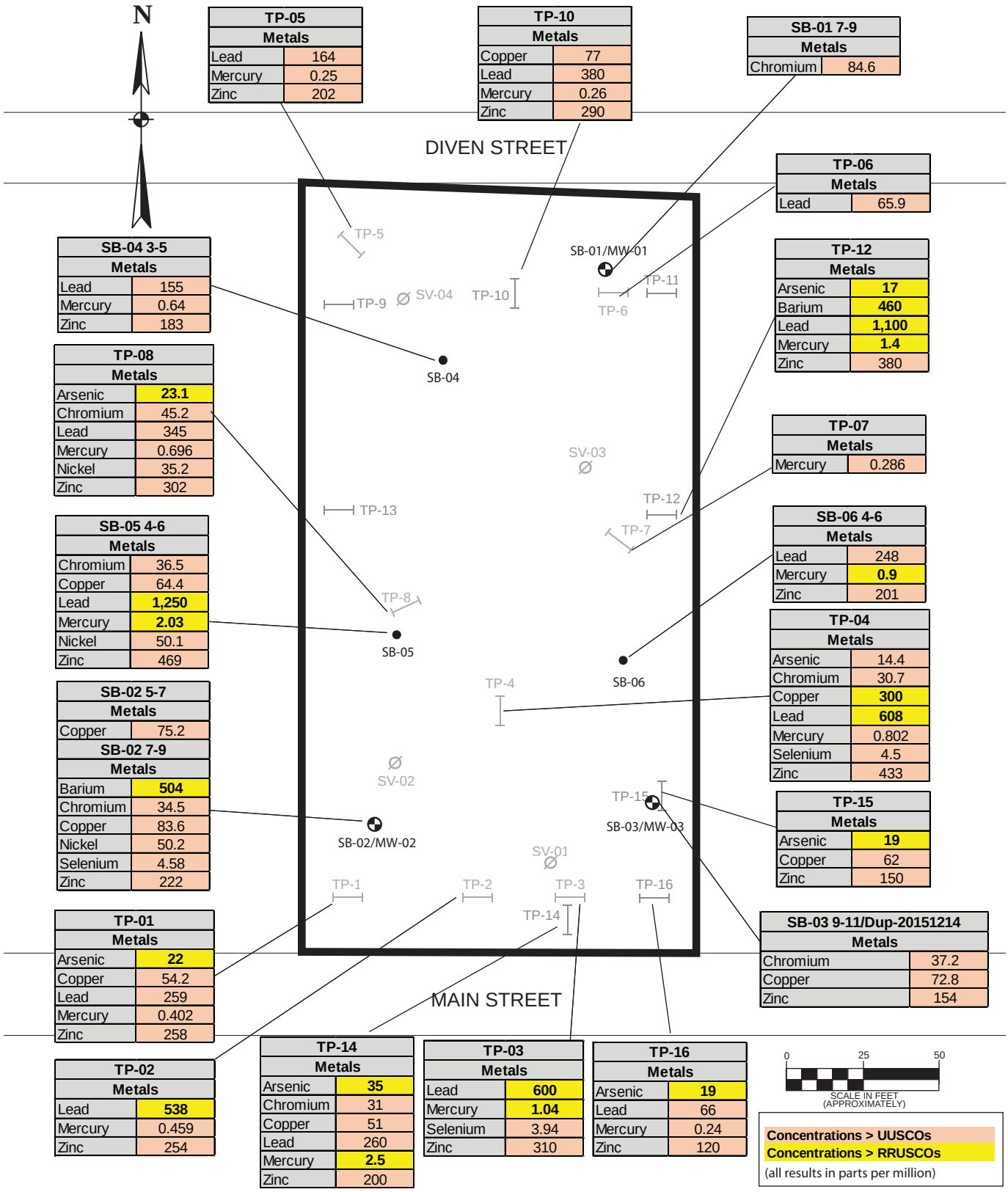
0 300 600
SCALE IN FEET
(APPROXIMATELY)

ESI File: KP14175.50

January 2016

Appendix A

Ecosystems Strategies, Inc.



TP-05	
Metals	
Lead	164
Mercury	0.25
Zinc	202

TP-10	
Metals	
Copper	77
Lead	380
Mercury	0.26
Zinc	290

SB-01 7-9	
Metals	
Chromium	84.6

TP-06	
Metals	
Lead	65.9

SB-04 3-5	
Metals	
Lead	155
Mercury	0.64
Zinc	183

TP-12	
Metals	
Arsenic	**17**
Barium	**460**
Lead	**1,100**
Mercury	**1.4**
Zinc	380

TP-08	
Metals	
Arsenic	**23.1**
Chromium	45.2
Lead	345
Mercury	0.696
Nickel	35.2
Zinc	302

TP-07	
Metals	
Mercury	0.286

SB-05 4-6	
Metals	
Chromium	36.5
Copper	64.4
Lead	**1,250**
Mercury	**2.03**
Nickel	50.1
Zinc	469

SB-06 4-6	
Metals	
Lead	248
Mercury	**0.9**
Zinc	201

TP-04	
Metals	
Arsenic	14.4
Chromium	30.7
Copper	**300**
Lead	**608**
Mercury	0.802
Selenium	4.5
Zinc	433

SB-02 5-7	
Metals	
Copper	75.2

SB-02 7-9	
Metals	
Barium	**504**
Chromium	34.5
Copper	83.6
Nickel	50.2
Selenium	4.58
Zinc	222

TP-15	
Metals	
Arsenic	**19**
Copper	62
Zinc	150

TP-01	
Metals	
Arsenic	**22**
Copper	54.2
Lead	259
Mercury	0.402
Zinc	258

SB-03 9-11/Dup-20151214	
Metals	
Chromium	37.2
Copper	72.8
Zinc	154

TP-02	
Metals	
Lead	**538**
Mercury	0.459
Zinc	254

TP-14	
Metals	
Arsenic	**35**
Chromium	31
Copper	51
Lead	260
Mercury	**2.5**
Zinc	200

TP-03	
Metals	
Lead	**600**
Mercury	**1.04**
Selenium	3.94
Zinc	310

TP-16	
Metals	
Arsenic	**19**
Lead	66
Mercury	0.24
Zinc	120

Concentrations > UUSCOs
Concentrations > RRUSCOs
(all results in parts per million)

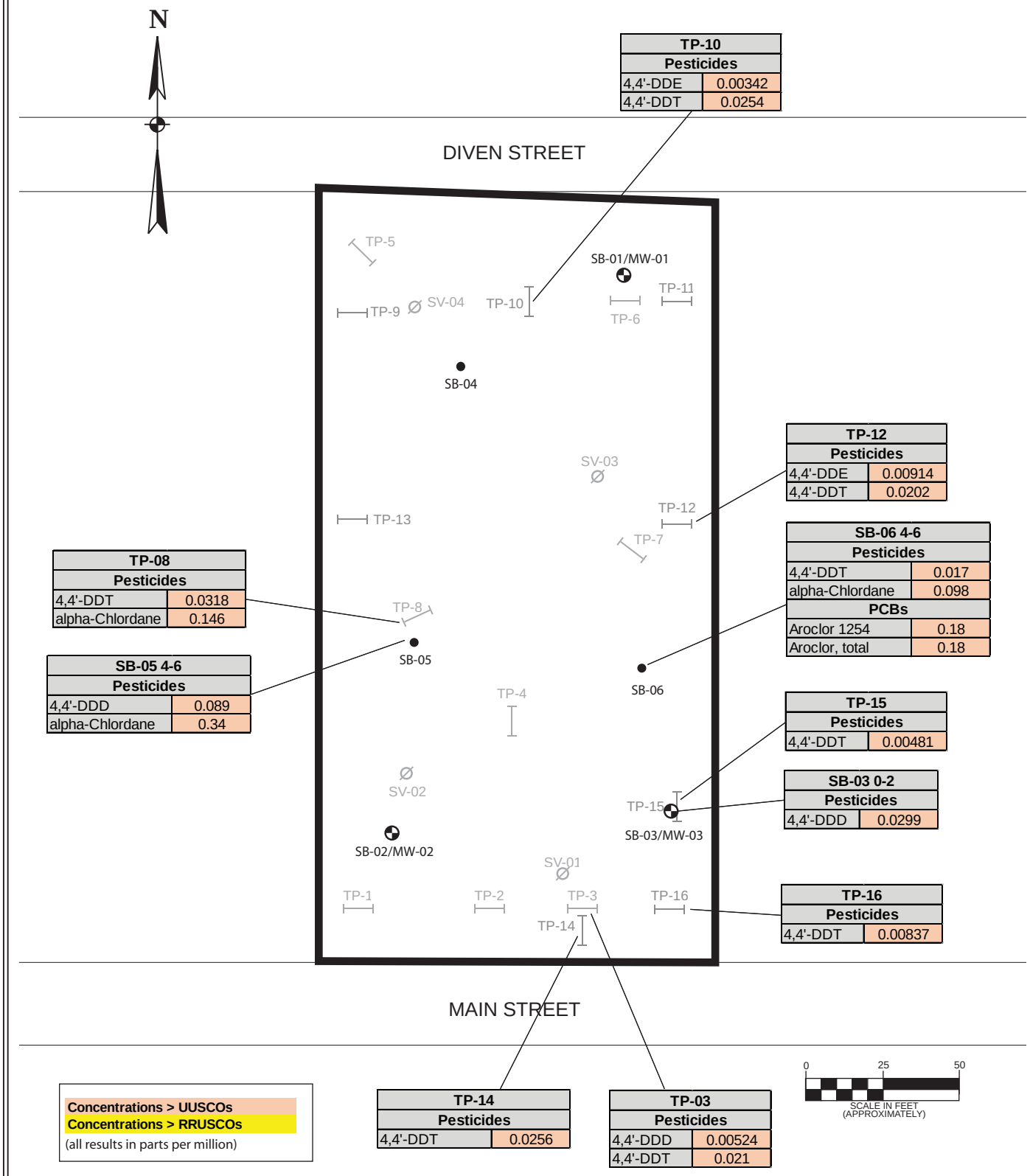
All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 5A: TAL Metals Above UUSCOs in Soil

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:
- subject property border
- previous soil vapor location
- previous test pit location
- soil boring location
- monitoring well/soil boring location

ESI File: KP14175.50
May 2016
Scale as shown
Appendix A



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.

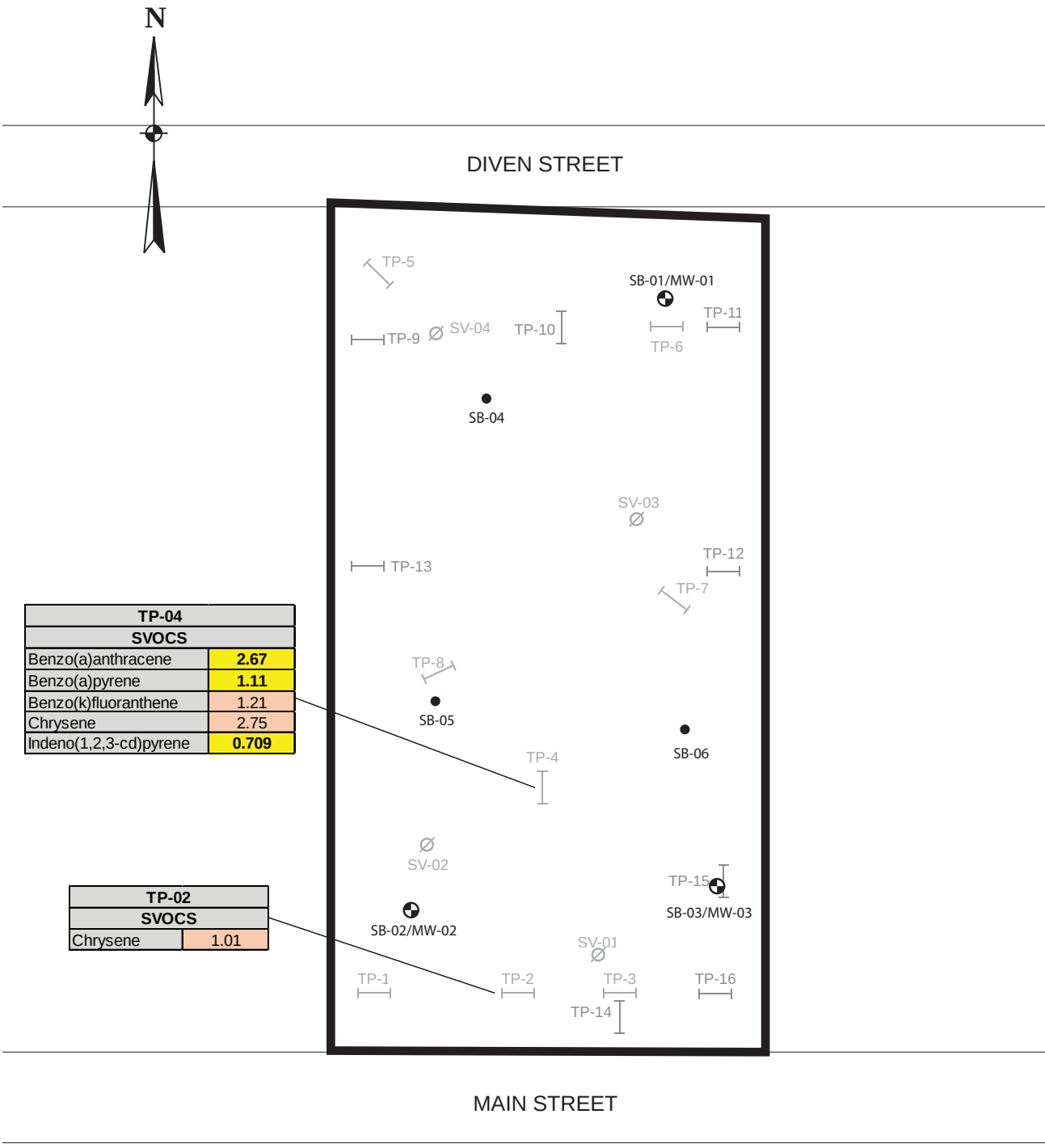
Figure 5B: Pesticides and PCBs Above UUSCOs in Soil

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:
- subject property border
- previous soil vapor location
- previous test pit location
- soil boring location
- monitoring well/soil boring location

ESI File: KP14175.50
May 2016
Scale as shown
Appendix A

Ecosystems Strategies, Inc.



TP-04	
SVOCS	
Benzo(a)anthracene	**2.67**
Benzo(a)pyrene	**1.11**
Benzo(k)fluoranthene	1.21
Chrysene	2.75
Indeno(1,2,3-cd)pyrene	**0.709**

TP-02	
SVOCS	
Chrysene	1.01

0 25 50
SCALE IN FEET
(APPROXIMATELY)

Concentrations > UUSCOs
Concentrations > RRUSCOs
(all results in parts per million)

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.

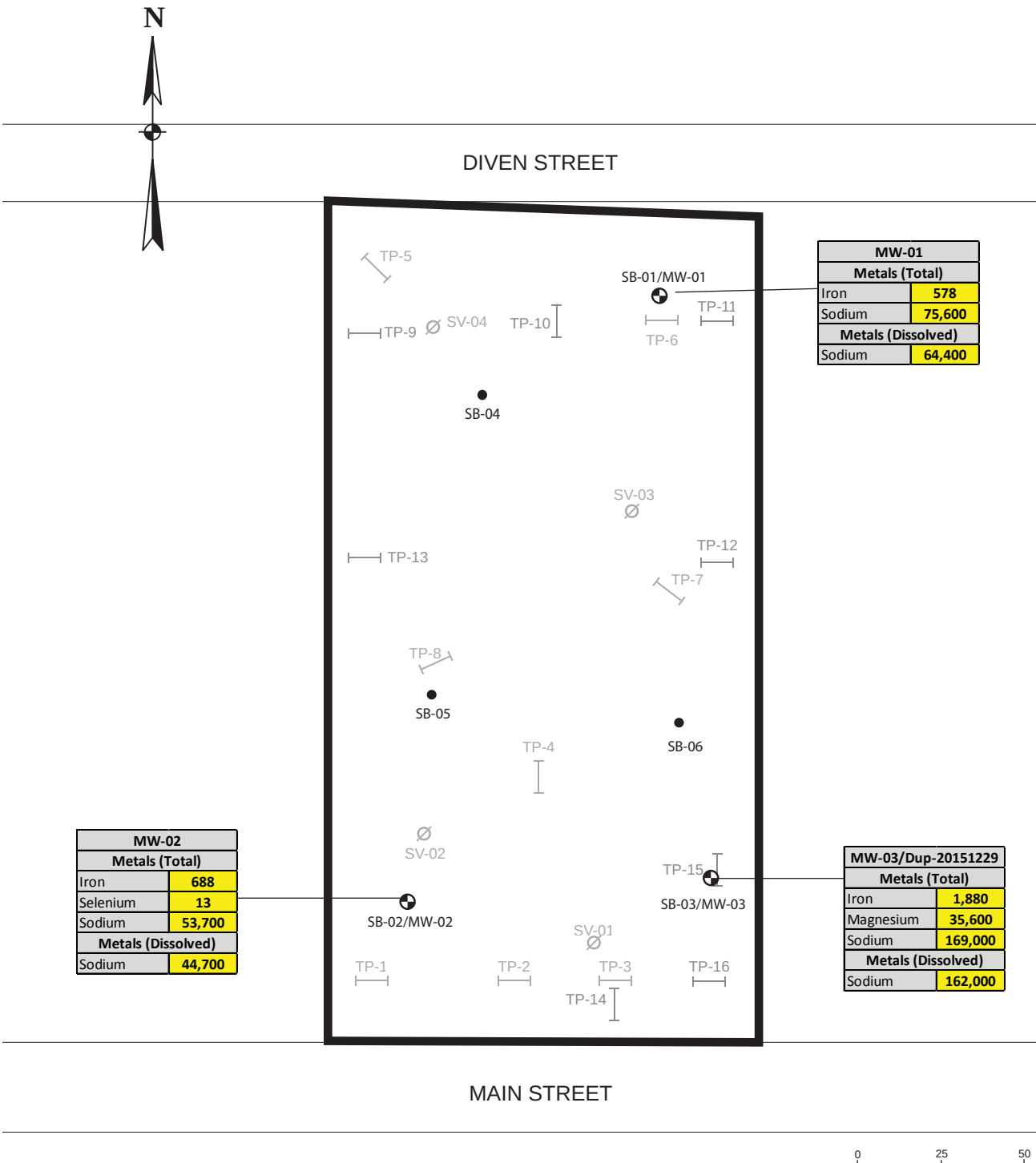
Figure 5C: SVOCs Above UUSCOs in Soil

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:
- subject property border
- previous soil vapor location
- previous test pit location
- soil boring location
- monitoring well/soil boring location

ESI File: KP14175.50
May 2016
Scale as shown
Appendix A

Ecosystems Strategies, Inc.



MW-01	
Metals (Total)	
Iron	578
Sodium	75,600
Metals (Dissolved)	
Sodium	64,400

MW-02	
Metals (Total)	
Iron	688
Selenium	13
Sodium	53,700
Metals (Dissolved)	
Sodium	44,700

MW-03/Dup-20151229	
Metals (Total)	
Iron	1,880
Magnesium	35,600
Sodium	169,000
Metals (Dissolved)	
Sodium	162,000

0 25 50
SCALE IN FEET (APPROXIMATELY)

Concentrations Above AWQS

All data in µg/L

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 5D: Metals Above AWQS in Groundwater

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:
- subject property border
- previous soil vapor location
- previous test pit location
- soil boring location
- monitoring well/soil boring location

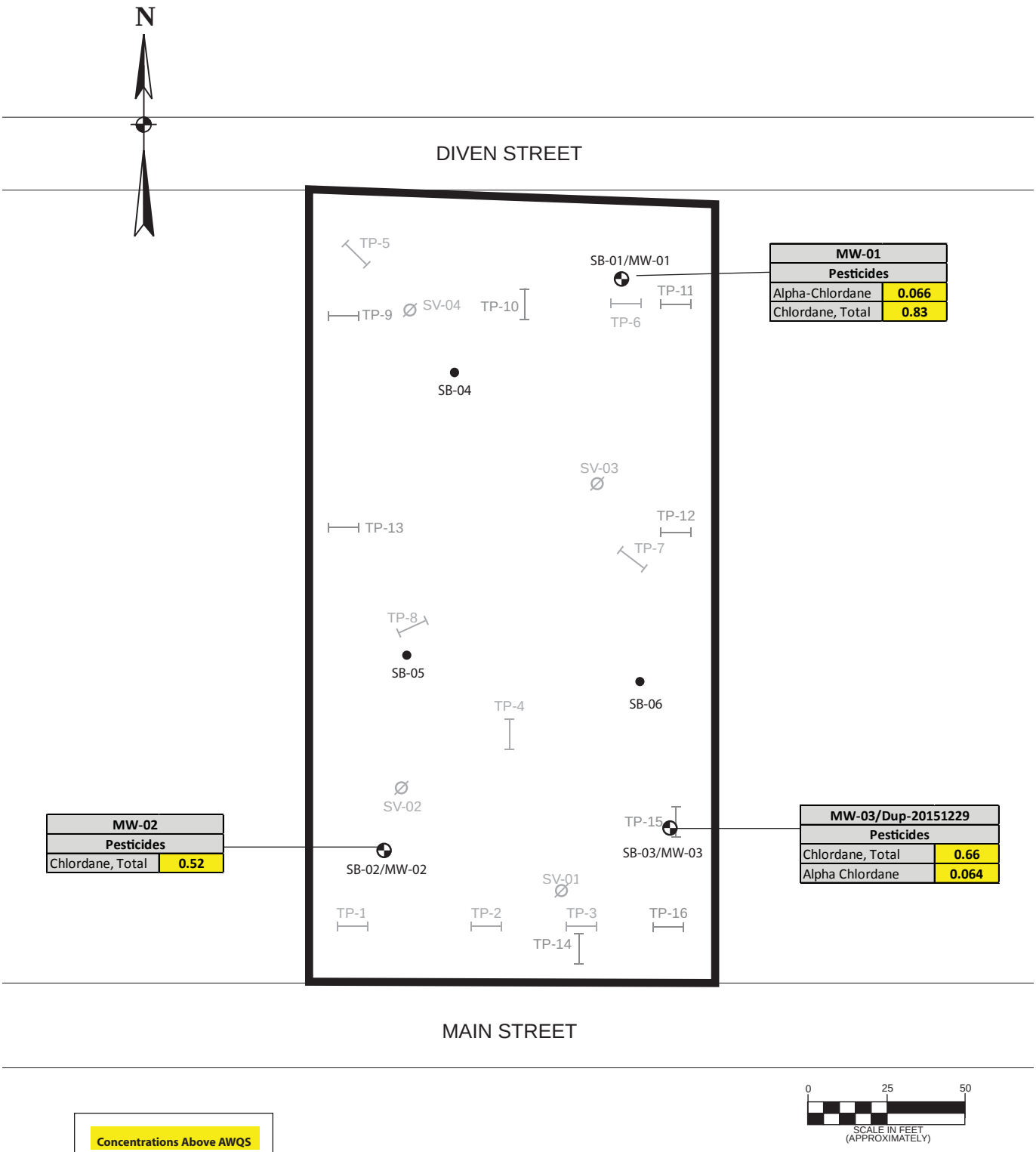
ESI File: KP14175.50

May 2016

Scale as shown

Appendix A

Ecosystems Strategies, Inc.



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 5E: Pesticides Above AWQS in Groundwater

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:
- subject property border
- previous soil vapor location
- previous test pit location
- soil boring location
- monitoring well/soil boring location

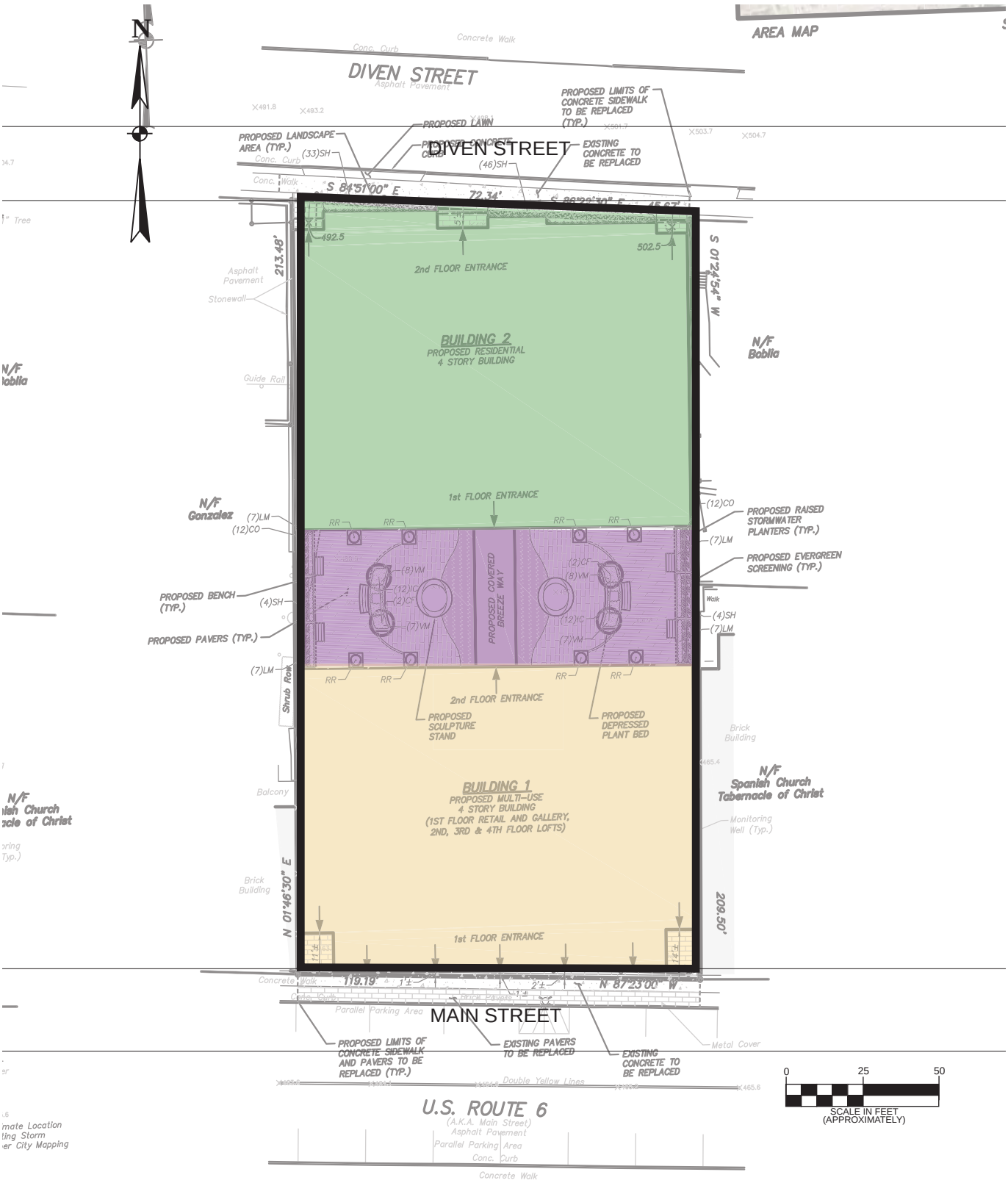
ESI File: KP14175.50

May 2016

Scale as shown

Appendix A

Ecosystems Strategies, Inc.



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 6A: Soil Excavation Plan

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:

- subject property border
- 9' excavation area
- 5' excavation area
- 22' excavation area

ESI File: KP14175.50

May 2016

Scale as shown

Appendix A

Ecosystems Strategies, Inc.

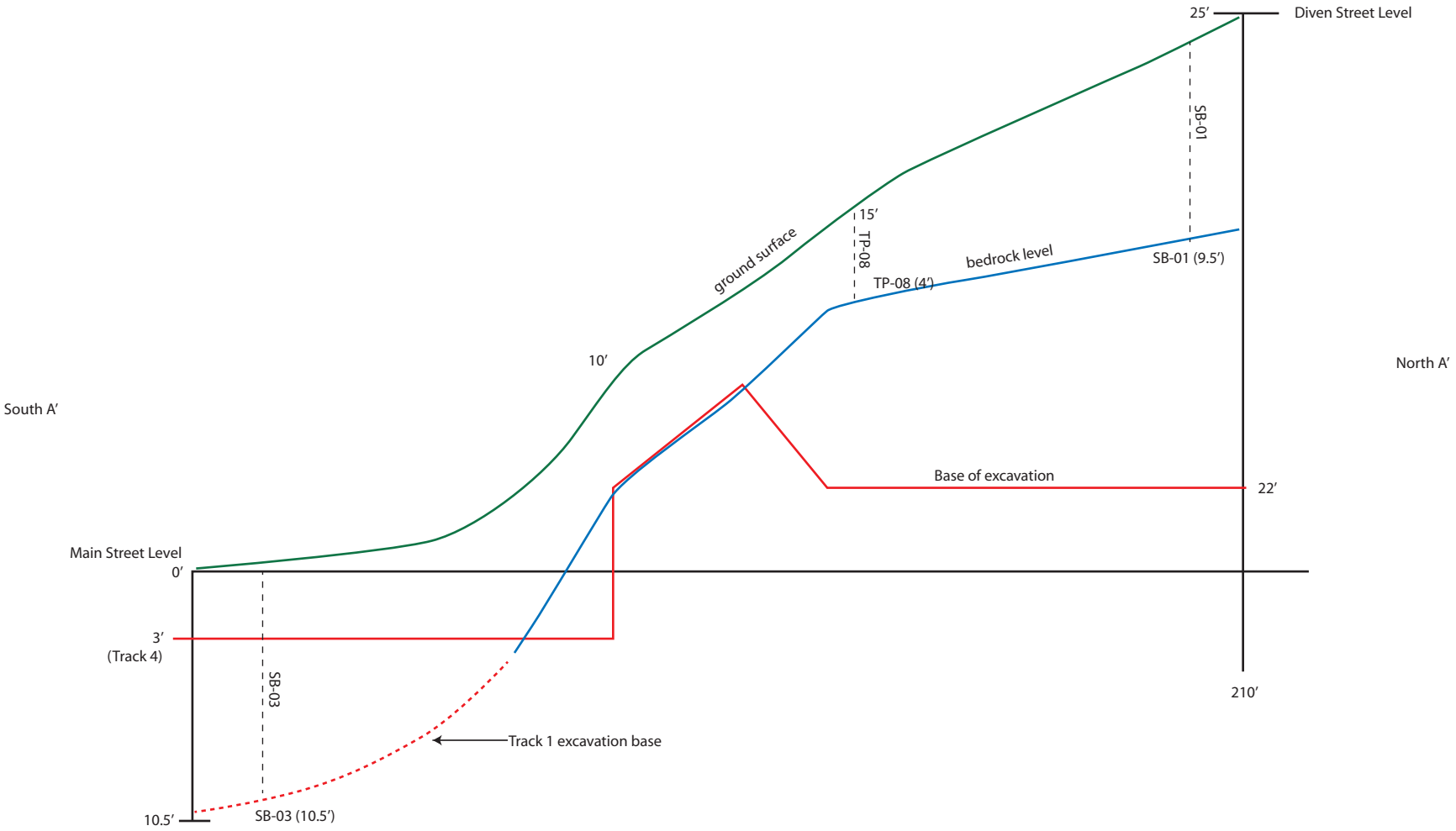
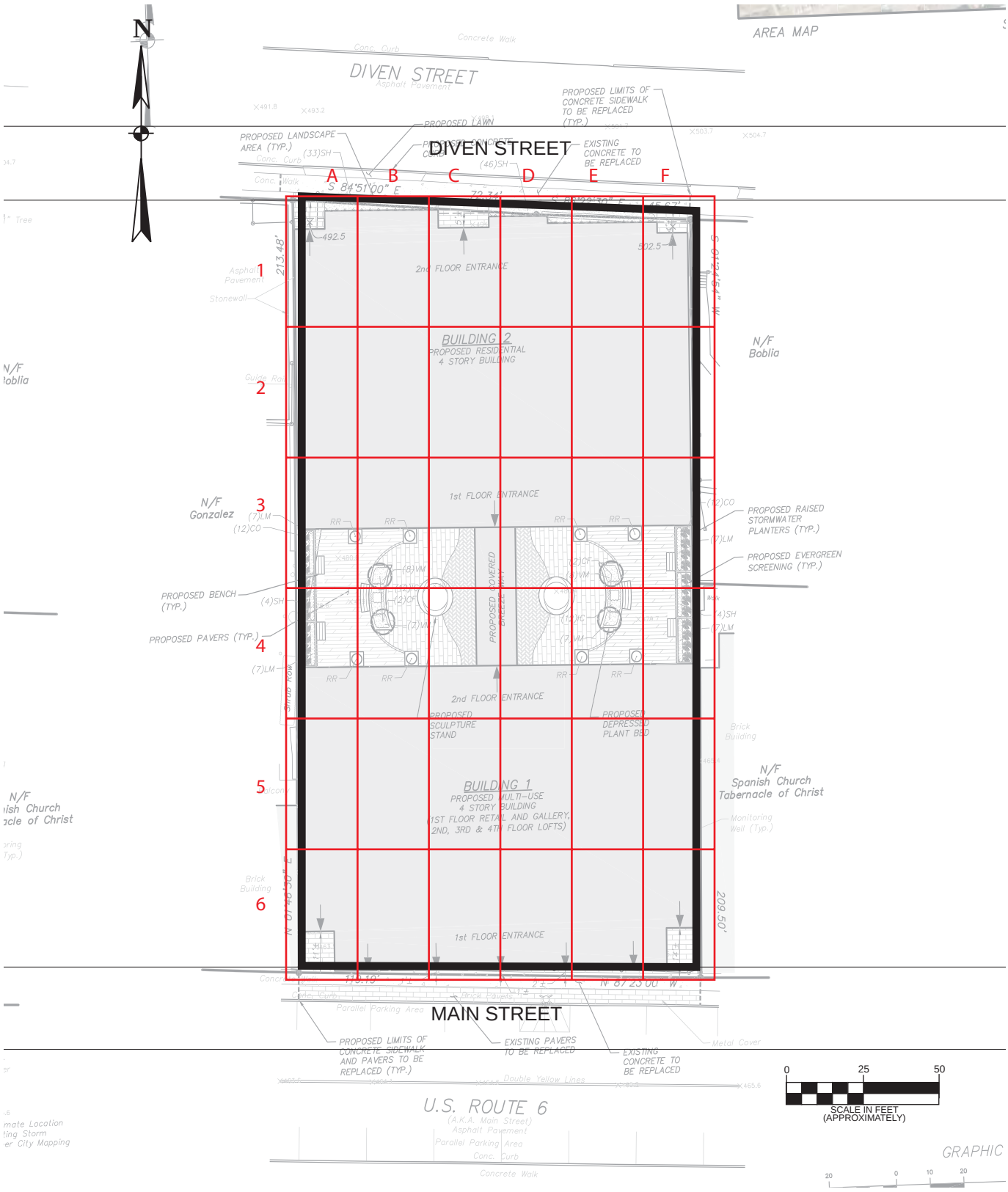


Figure 6B: Generalized Excavation Cross Section

922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

ESI File: KP14175.50
May 2016
Scale as shown
Appendix A



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.

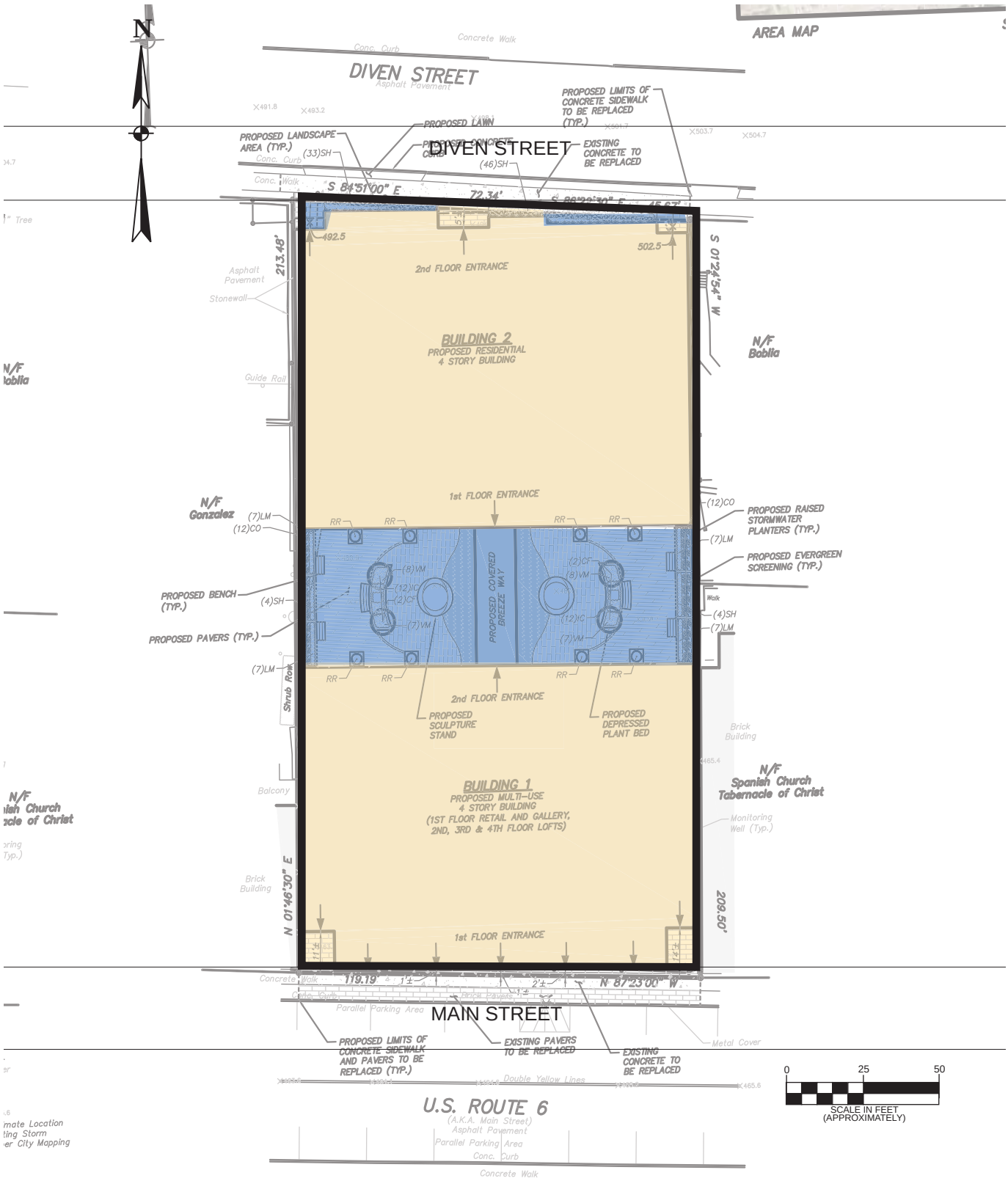
Figure 7: Alpha Numeric Grid Map

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:

subject property border

ESI File: KP14175.50
May 2016
Scale as shown
Appendix A



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 8: Proposed Engineering Controls Map
The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:
- subject property border
- area covered with 20 mil vapor barrier
- area covered with paver stones and/or certified clean soil cover

ESI File: KP14175.50
May 2016
Scale as shown
Appendix A

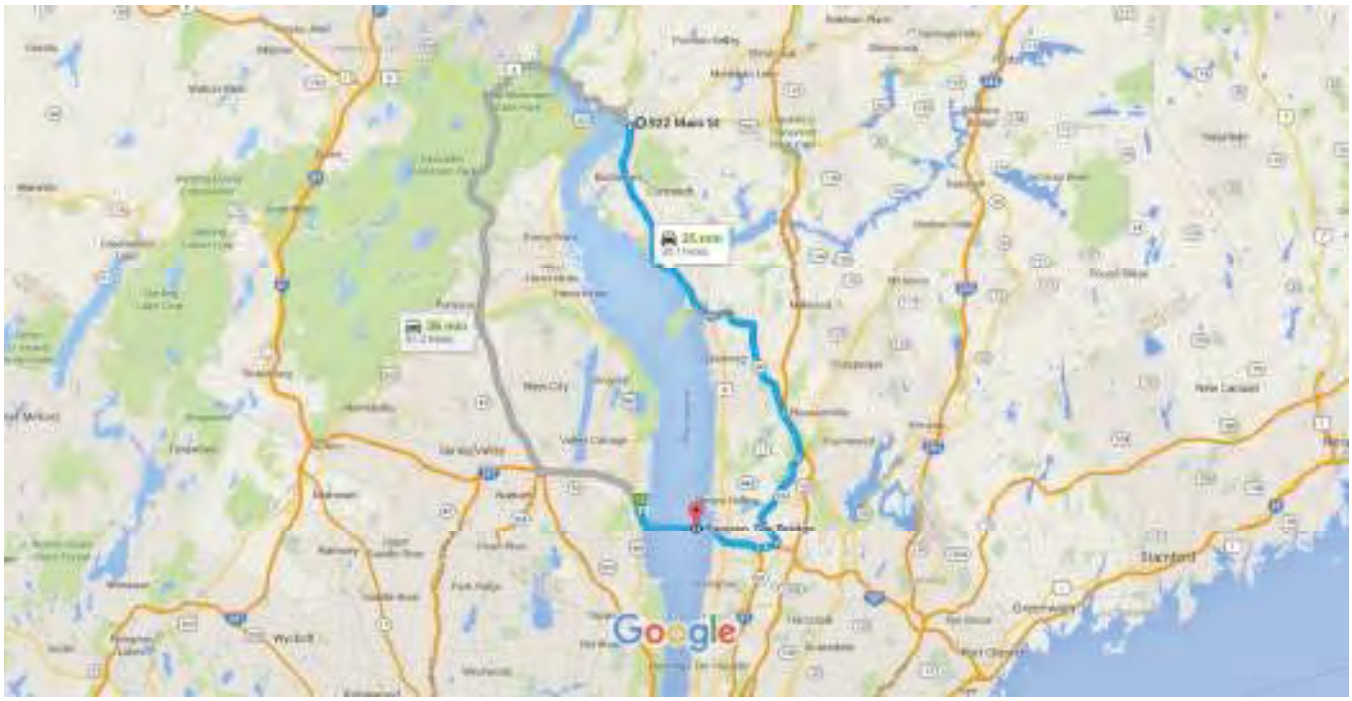
FIGURE 9

Truck Route Map

Google Maps

922 Main St, Peekskill, NY 10566 to Tappan Zee Bridge

Drive 30.1 miles, 35 min



Map data ©2016 Google 2 mi

922 Main St

Peekskill, NY 10566

Get on U.S. 9 S

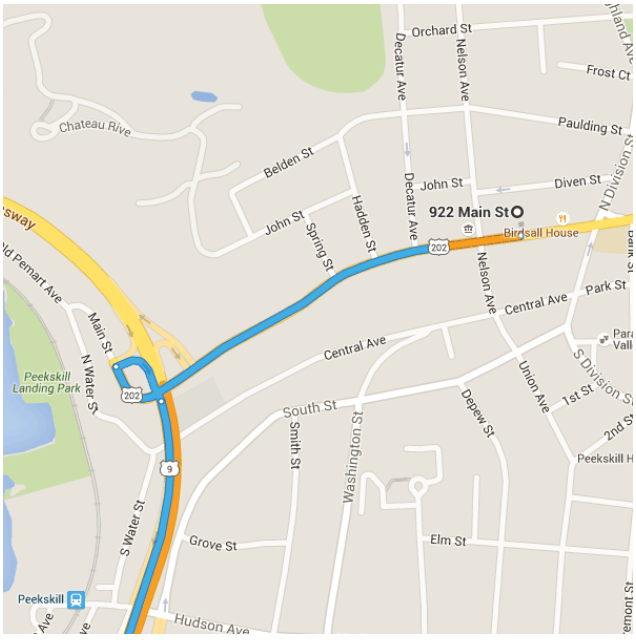
2 min (0.6 mi)

1. Head west on US-202 W/US-6 W/Main St toward Nelson Ave

0.5 mi

2. Turn right to merge onto U.S. 9 S

400 ft



Follow U.S. 9 S to NY-9A S in Ossining. Take the New York 9A exit from U.S. 9 S

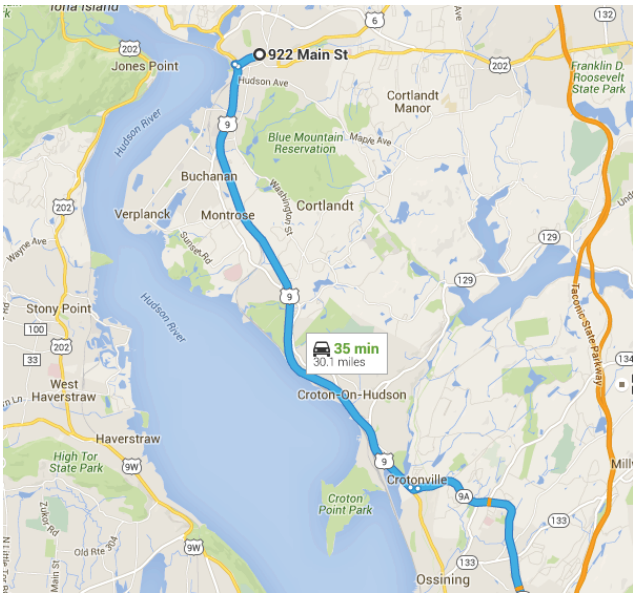
9 min (8.6 mi)

3. Merge onto U.S. 9 S

8.4 mi

4. Use the left 2 lanes to take the New York 9A exit toward Briarcliff Manor

0.1 mi



Get on I-287 W in Greenburgh from NY-9A S and Saw Mill River Pkwy S

15 min (12.2 mi)

5. Continue onto NY-9A S

5.5 mi

6. Keep left to continue on NY-100 S/NY-9A S

1.8 mi

7. Use the right lane to take the Saw Mill Parkway ramp

0.1 mi

8. Merge onto Saw Mill River Pkwy S

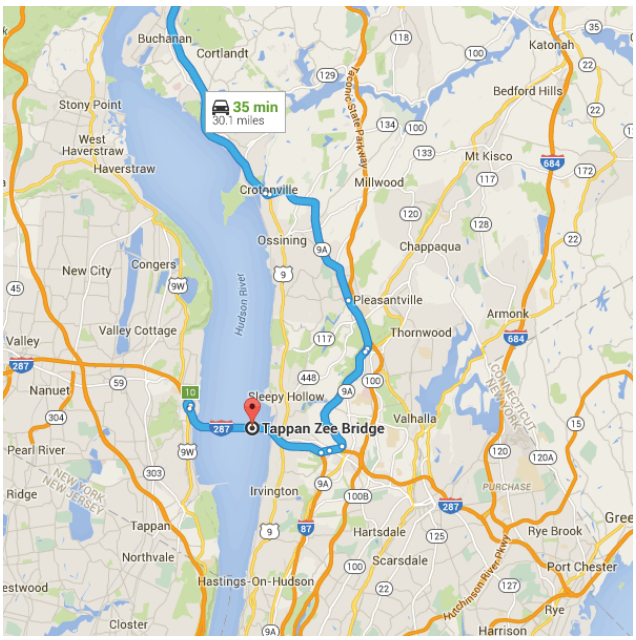
4.0 mi

9. Use the right lane to take the I-87 W/I-287 W ramp to Albany/New York City

0.5 mi

10. Keep right at the fork, follow signs for I-87 N/I-287 W/Albany/Tappan Zee Bridge and merge onto I-287 W

0.3 mi

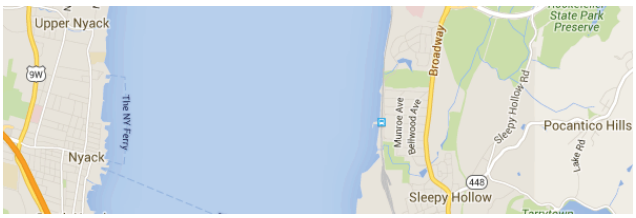


Drive to I-287 E/I-87 S

11 min (8.8 mi)

11. Merge onto I-287 W

5.1 mi



12. Take exit 10 to merge onto US-9W N

0.7 mi

13. Use the left 2 lanes to take the Interstate 87 S/New York Thruway S ramp to Interstate 287 E/NY City

Partial toll road

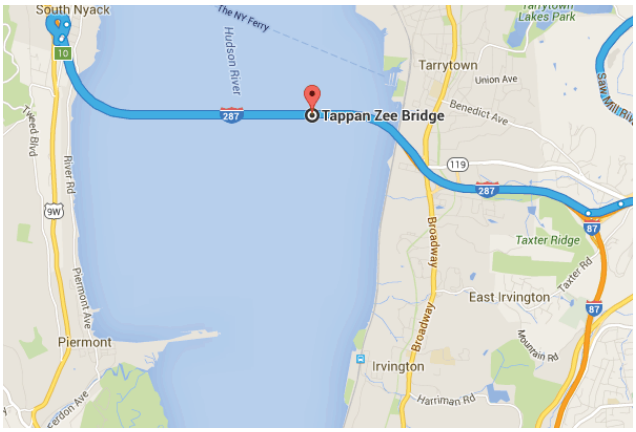
0.4 mi

14. Merge onto I-287 E/I-87 S

Toll road

Destination will be on the left

2.5 mi



Tappan Zee Bridge

Interstate 287, Tarrytown, NY 1059

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

APPENDIX B

Tables

Table 1: VOCs in Soil Vapor
NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175.20

All data in µg/m³	**Sample ID**	**SV-01**		**SV-02**		**SV-03**		**SV-04**	
U= Not Detected at or above indicated value	Sample Date	(2015-03-03)		(2015-03-03)		(2015-03-03)		(2015-03-03)	
Data above AGVs shown in **Bold**	Dilution Factor	1		1		1		1	
VOCs, TO-15	**NYSDOH AGV**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1-Trichloroethane	NA	1.09	*U*	1.09	*U*	1.09	*U*	1.09	*U*
1,1,2,2-Tetrachloroethane	NA	1.37	*U*	1.37	*U*	1.37	*U*	1.37	*U*
1,1,2-Trichloroethane	NA	1.09	*U*	1.09	*U*	1.09	*U*	1.09	*U*
1,1-Dichloroethane	NA	0.809	*U*	0.809	*U*	0.809	*U*	0.809	*U*
1,1-Dichloroethene	NA	0.793	*U*	0.793	*U*	0.793	*U*	0.793	*U*
1,2,4-Trichlorobenzene	NA	1.48	*U*	1.48	*U*	1.48	*U*	1.48	*U*
1,2,4-Trimethylbenzene	NA	1.8		1.76		1.81		1.91	
1,2-Dibromoethane	NA	1.54	*U*	1.54	*U*	1.54	*U*	1.54	*U*
1,2-Dichlorobenzene	NA	1.2	*U*	1.2	*U*	1.2	*U*	1.2	*U*
1,2-Dichloroethane	NA	0.809	*U*	0.809	*U*	0.809	*U*	0.809	*U*
1,2-Dichloropropane	NA	0.924	*U*	0.924	*U*	0.924	*U*	0.924	*U*
1,3,5-Trimethylbenzene	NA	0.983	*U*	0.983	*U*	0.983	*U*	0.983	*U*
1,3-Butadiene	NA	9.2		0.442	*U*	19.3		6.75	
1,3-Dichlorobenzene	NA	1.2	*U*	1.2	*U*	1.2	*U*	1.2	*U*
1,4-Dichlorobenzene	NA	3.66		1.2	*U*	1.2	*U*	1.2	*U*
1,4-Dioxane	NA	0.721	*U*	0.721	*U*	0.721	*U*	0.721	*U*
2,2,4-Trimethylpentane	NA	0.934	*U*	0.934	*U*	0.934	*U*	0.934	*U*
2-Butanone	NA	4.28		1.47	*U*	9.2		7.05	
2-Hexanone	NA	0.82	*U*	0.82	*U*	0.82	*U*	0.82	*U*
3-Chloropropene	NA	0.626	*U*	0.626	*U*	0.626	*U*	0.626	*U*
4-Ethyltoluene	NA	0.983	*U*	0.983	*U*	0.983	*U*	0.983	*U*
4-Methyl-2-pentanone	NA	2.05	*U*	2.05	*U*	2.05	*U*	2.05	*U*
Acetone	NA	58.4		53.7		136		182	
Benzene	NA	4.79		0.639	*U*	6.2		8.05	
Benzyl chloride	NA	1.04	*U*	1.04	*U*	1.04	*U*	1.04	*U*
Bromodichloromethane	NA	1.34	*U*	1.34	*U*	1.34	*U*	1.34	*U*
Bromoform	NA	2.07	*U*	2.07	*U*	2.07	*U*	2.07	*U*
Bromomethane	NA	0.777	*U*	0.777	*U*	0.777	*U*	0.777	*U*
Carbon disulfide	NA	10.7		0.623	*U*	1.87		1.08	
Carbon tetrachloride	NA	1.26	*U*	1.26	*U*	1.26	*U*	1.26	*U*
Chlorobenzene	NA	0.921	*U*	0.921	*U*	0.921	*U*	0.921	*U*
Chloroethane	NA	0.528	*U*	0.528	*U*	0.528	*U*	0.528	*U*
Chloroform	NA	0.977	*U*	0.977	*U*	1.73		0.977	*U*
Chloromethane	NA	0.413	*U*	0.413	*U*	0.413	*U*	0.413	*U*
cis-1,2-Dichloroethene	NA	0.793	*U*	0.793	*U*	0.793	*U*	0.793	*U*
cis-1,3-Dichloropropene	NA	0.908	*U*	0.908	*U*	0.908	*U*	0.908	*U*
Cyclohexane	NA	3.27		0.688	*U*	0.688	*U*	0.733	
Dibromochloromethane	NA	1.7	*U*	1.7	*U*	1.7	*U*	1.7	*U*
Dichlorodifluoromethane	NA	1.06		1.49		1.45		1.27	
Ethanol	NA	5.65		4.71	*U*	4.71	*U*	4.71	*U*
Ethyl Acetate	NA	1.8	*U*	1.8	*U*	1.8	*U*	1.8	*U*
Ethylbenzene	NA	1.28		0.869	*U*	2.59		1.13	
Freon-113	NA	1.53	*U*	1.53	*U*	1.53	*U*	1.53	*U*
Freon-114	NA	1.4	*U*	1.4	*U*	1.4	*U*	1.4	*U*
Heptane	NA	47.1		1.06		2.65		1.23	
Hexachlorobutadiene	NA	2.13	*U*	2.13	*U*	2.13	*U*	2.13	*U*
Isopropanol	NA	1.23	*U*	1.23	*U*	1.23	*U*	1.23	*U*
Methyl tert butyl ether	NA	0.721	*U*	0.721	*U*	0.721	*U*	33.9	
Methylene chloride	60	1.74	*U*	1.74	*U*	1.74	*U*	1.74	*U*
n-Hexane	NA	106		1.11		5.53		2.85	
o-Xylene	NA	1.11		0.869	*U*	1.67		1.08	
p/m-Xylene	NA	2.61		1.74	*U*	4.86		2.39	
Styrene	NA	0.852	*U*	0.852	*U*	0.852	*U*	0.852	*U*
Tertiary butyl Alcohol	NA	1.52	*U*	1.52	*U*	1.52	*U*	1.52	*U*
Tetrachloroethene	30	7.05		1.73		1.36	*U*	1.36	*U*
Tetrahydrofuran	NA	1.47	*U*	1.47	*U*	1.47	*U*	1.47	*U*
Toluene	NA	5.43		0.874		12.5		5.46	
trans-1,2-Dichloroethene	NA	0.793	*U*	0.793	*U*	0.793	*U*	0.793	*U*
trans-1,3-Dichloropropene	NA	0.908	*U*	0.908	*U*	0.908	*U*	0.908	*U*
Trichloroethene	5	1.07	*U*	1.54		1.07	*U*	1.07	*U*
Trichlorofluoromethane	NA	1.8		1.37		1.13		1.41	
Vinyl bromide	NA	0.874	*U*	0.874	*U*	0.874	*U*	0.874	*U*
Vinyl chloride	NA	0.511	*U*	0.511	*U*	0.511	*U*	0.511	*U*

Detected concentrations

Concentrations ≥ AGVs and/or relatively elevated
(highlighted to facilitate data review)

Notes: AGVs based on NYSDOH Guidance for Evaluating Soil Vapor Intrusion NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank

Table 2: VOCs in Soils
NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-01 0-2**		**SB-01 7-9**		**SB-02 5-7**		**SB-02 7-9**		**SB-03 0-2**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-22)		(2015-12-22)		(2015-12-14)		(2015-12-14)		(2015-12-14)	
Data above SCOs shown in **Bold**		Dilution Factor	1		1		1		1		1	
VOCs, 8260	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1,2-Tetrachloroethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,1,1-Trichloroethane	0.68	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,1,2,2-Tetrachloroethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,1,2-Trichloroethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,1-Dichloroethane	0.27	26	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,1-Dichloroethylene (1,1-DCE)	0.33	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2,3-Trichlorobenzene	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2,3-Trichloropropane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2,4-Trichlorobenzene	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2,4-Trimethylbenzene	3.6	52	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2-Dibromo-3-chloropropane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2-Dibromoethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2-Dichlorobenzene	1.1	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2-Dichloroethane	0.2	31	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,2-Dichloropropane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,3,5-Trimethylbenzene	8.4	52	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,3-Dichlorobenzene	2.4	49	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,4-Dichlorobenzene	1.8	13	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
1,4-Dioxane	0.1	13	0.054	*U*	0.044	*U*	0.046	*U*	0.043	*U*	0.046	*U*
2-Butanone (MEK)	0.12	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
2-Hexanone	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
4-Methyl-2-pentanone	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Acetone	0.05	100	0.0069	*J*	0.0044	*U*	0.0046	*U*	0.0043	*U*	0.0046	*U*
Acrolein	NA	NA	0.0054	*U*	0.0044	*U*	0.0046	*U*	0.0043	*U*	0.0046	*U*
Acrylonitrile	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Benzene	0.06	48	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Bromochloromethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Bromodichloromethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Bromoform	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Bromomethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Carbon disulfide	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Carbon tetrachloride	0.76	24	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Chlorobenzene	1.1	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Chloroethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Chloroform	0.37	49	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Chloromethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
cis-1,2-Dichloroethylene (cis-DCE)	0.25	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
cis-1,3-Dichloropropylene	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Cyclohexane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Dibromochloromethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Dibromomethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Dichlorodifluoromethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Ethyl Benzene	1	41	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Hexachlorobutadiene	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Isopropylbenzene	2.3	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Methyl acetate	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Methyl tert-butyl ether (MTBE)	0.93	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Methylcyclohexane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Methylene chloride	0.05	500	0.0054	*U*	0.0049	*J*	0.0046	*U*	0.0043	*U*	0.0046	*U*
n-Butylbenzene	12	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
n-Propylbenzene	3.9	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
o-Xylene	0.26	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
p- & m- Xylenes	0.26	100	0.0054	*U*	0.0044	*U*	0.0046	*U*	0.0043	*U*	0.0046	*U*
p-Isopropyltoluene	10	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
sec-Butylbenzene	11	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Styrene	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
tert-Butyl alcohol (TBA)	NA	NA	0.0054	*U*	0.0044	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
tert-Butylbenzene	5.9	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Tetrachloroethylene (PCE)	1.3	19	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Toluene	0.7	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
trans-1,2-Dichloroethylene (trans-DCE)	0.19	100	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
trans-1,3-Dichloropropylene	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Trichloroethylene (TCE)	0.47	21	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Trichlorofluoromethane	NA	NA	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Vinyl chloride (VC)	0.02	0.9	0.0027	*U*	0.0022	*U*	0.0023	*U*	0.0022	*U*	0.0023	*U*
Xylenes, Total	0.26	100	0.0081	*U*	0.0067	*U*	0.0068	*U*	0.0065	*U*	0.0069	*U*

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 2: VOCs in Soils
NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-03 9-11**		**Dup-20151214**		**SB-04 3-5**		**SB-05 4-6**		**SB-06 4-6**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-14)		(2015-12-14)		(2015-01-08)		(2015-12-29)		(2015-12-29)	
Data above SCOs shown in **Bold**		Dilution Factor	1		1		1		1		1	
VOCs, 8260	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1,2-Tetrachloroethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,1,1-Trichloroethane	0.68	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,1,2,2-Tetrachloroethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,1,2-Trichloroethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,1-Dichloroethane	0.27	26	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,1-Dichloroethylene (1,1-DCE)	0.33	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2,3-Trichlorobenzene	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2,3-Trichloropropane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2,4-Trichlorobenzene	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2,4-Trimethylbenzene	3.6	52	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2-Dibromo-3-chloropropane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2-Dibromoethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2-Dichlorobenzene	1.1	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2-Dichloroethane	0.2	31	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,2-Dichloropropane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,3,5-Trimethylbenzene	8.4	52	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,3-Dichlorobenzene	2.4	49	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,4-Dichlorobenzene	1.8	13	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
1,4-Dioxane	0.1	13	0.044	*U*	0.048	*U*	0.057	*U*	0.055	*U*	0.063	*U*
2-Butanone (MEK)	0.12	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
2-Hexanone	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
4-Methyl-2-pentanone	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Acetone	0.05	100	0.0044	*U*	0.0073	*J*	0.0057	*U*	0.0055	*U*	0.0063	*U*
Acrolein	NA	NA	0.0044	*U*	0.0048	*U*	0.0057	*U*	0.0055	*U*	0.0063	*U*
Acrylonitrile	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Benzene	0.06	48	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Bromochloromethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Bromodichloromethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Bromoform	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Bromomethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Carbon disulfide	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Carbon tetrachloride	0.76	24	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Chlorobenzene	1.1	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Chloroethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Chloroform	0.37	49	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Chloromethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
cis-1,2-Dichloroethylene (cis-DCE)	0.25	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
cis-1,3-Dichloropropylene	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Cyclohexane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Dibromochloromethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Dibromomethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Dichlorodifluoromethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Ethyl Benzene	1	41	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Hexachlorobutadiene	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Isopropylbenzene	2.3	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Methyl acetate	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Methyl tert-butyl ether (MTBE)	0.93	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Methylcyclohexane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Methylene chloride	0.05	500	0.0044	*U*	0.0048	*U*	0.0057	*U*	0.0055	*U*	0.0063	*U*
n-Butylbenzene	12	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
n-Propylbenzene	3.9	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
o-Xylene	0.26	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
p- & m- Xylenes	0.26	100	0.0044	*U*	0.0048	*U*	0.0057	*U*	0.007	*J*	0.0065	*J*
p-Isopropyltoluene	10	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
sec-Butylbenzene	11	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Styrene	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
tert-Butyl alcohol (TBA)	NA	NA	0.0022	*U*	0.0024	*U*	0.0057	*U*	0.0055	*U*	0.0031	*U*
tert-Butylbenzene	5.9	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Tetrachloroethylene (PCE)	1.3	19	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Toluene	0.7	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0089		0.0086	
trans-1,2-Dichloroethylene (trans-DCE)	0.19	100	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
trans-1,3-Dichloropropylene	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Trichloroethylene (TCE)	0.47	21	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Trichlorofluoromethane	NA	NA	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Vinyl chloride (VC)	0.02	0.9	0.0022	*U*	0.0024	*U*	0.0028	*U*	0.0028	*U*	0.0031	*U*
Xylenes, Total	0.26	100	0.0066	*U*	0.0072	*U*	0.0085	*U*	0.0096	*J*	0.0094	*U*

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3: SVOCs in Soils

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-01 0-2**		**SB-01 7-9**		**SB-02 5-7**		**SB-02 7-9**		**SB-03 0-2**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-22)		(2015-12-22)		(2015-12-14)		(2015-12-14)		(2015-12-14)	
Data above SCOs shown in **Bold**		Dilution Factor	2		2		2		2		2	
SVOCs, 8270	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1'-Biphenyl	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
1,2,4,5-Tetrachlorobenzene	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
1,2,4-Trichlorobenzene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
1,2-Dichlorobenzene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
1,2-Diphenylhydrazine (Azobenzene)	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
1,3-Dichlorobenzene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
1,4-Dichlorobenzene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2,3,4,6-Tetrachlorophenol	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
2,4,5-Trichlorophenol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2,4,6-Trichlorophenol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2,4-Dichlorophenol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2,4-Dimethylphenol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2,4-Dinitrophenol	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
2,4-Dinitrotoluene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2,6-Dinitrotoluene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2-Chloronaphthalene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2-Chlorophenol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2-Methylnaphthalene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2-Methylphenol	0.33	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
2-Nitroaniline	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
2-Nitrophenol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
3- & 4-Methylphenols	0.33	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
3,3'-Dichlorobenzidine	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
3-Nitroaniline	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
4,6-Dinitro-2-methylphenol	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
4-Bromophenyl phenyl ether	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
4-Chloro-3-methylphenol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
4-Chloroaniline	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
4-Chlorophenyl phenyl ether	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
4-Nitroaniline	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
4-Nitrophenol	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
Acenaphthene	20	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Acenaphthylene	100	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Acetophenone	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Aniline	NA	NA	0.19	*U*	0.18	*U*	0.18	*U*	0.18	*U*	0.2	*U*
Anthracene	100	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Atrazine	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzaldehyde	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzidine	NA	NA	0.19	*U*	0.18	*U*	0.18	*U*	0.18	*U*	0.2	*U*
Benzo(a)anthracene	1	1	0.1	*D*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzo(a)pyrene	1	1	0.12	*D*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzo(b)fluoranthene	1	1	0.11	*D*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzo(g,h,i)perylene	100	100	0.062	*JD*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzo(k)fluoranthene	0.8	3.9	0.089	*JD*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzoic acid	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzyl alcohol	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Benzyl butyl phthalate	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Bis(2-chloroethoxy)methane	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Bis(2-chloroethyl)ether	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Bis(2-chloroisopropyl)ether	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Bis(2-ethylhexyl)phthalate	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.079	*JD*
Caprolactam	NA	NA	0.096	*U*	0.09	*U*	0.092	*U*	0.089	*U*	0.099	*U*
Carbazole	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Chrysene	1	3.9	0.13	*D*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Dibenzo(a,h)anthracene	0.33	0.33	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Dibenzofuran	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Diethyl phthalate	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Dimethyl phthalate	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Di-n-butyl phthalate	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Di-n-octyl phthalate	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Fluoranthene	100	100	0.19	*D*	0.045	*U*	0.046	*U*	0.081	*JD*	0.11	*D*
Fluorene	30	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Hexachlorobenzene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Hexachlorobutadiene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Hexachlorocyclopentadiene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Hexachloroethane	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.059	*JD*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Isophorone	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Naphthalene	12	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Nitrobenzene	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
N-Nitrosodimethylamine	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
N-nitroso-di-n-propylamine	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
N-Nitrosodiphenylamine	NA	NA	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Pentachlorophenol	0.8	6.7	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Phenanthrene	100	100	0.096	*JD*	0.045	*U*	0.046	*U*	0.11	*D*	0.065	*JD*
Phenol	0.33	100	0.048	*U*	0.045	*U*	0.046	*U*	0.044	*U*	0.049	*U*
Pyrene	100	100	0.17	*D*	0.045	*U*	0.046	*U*	0.077	*JD*	0.083	*JD*

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3: SVOCs in Soils
NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-03 9-11**		**Dup-20151214**		**SB-04 3-5**		**SB-05 4-6**		**SB-06 4-6**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-14)		(2015-12-14)		(2015-01-08)		(2015-12-29)		(2015-12-29)	
Data above SCOs shown in **Bold**		Dilution Factor	2		2		2		2		2	
SVOCs, 8270	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1'-Biphenyl	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
1,2,4,5-Tetrachlorobenzene	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
1,2,4-Trichlorobenzene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
1,2-Dichlorobenzene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
1,2-Diphenylhydrazine (Azobenzene)	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
1,3-Dichlorobenzene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
1,4-Dichlorobenzene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2,3,4,6-Tetrachlorophenol	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
2,4,5-Trichlorophenol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2,4,6-Trichlorophenol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2,4-Dichlorophenol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2,4-Dimethylphenol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2,4-Dinitrophenol	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
2,4-Dinitrotoluene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2,6-Dinitrotoluene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2-Chloronaphthalene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2-Chlorophenol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2-Methylnaphthalene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2-Methylphenol	0.33	100	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
2-Nitroaniline	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
2-Nitrophenol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
3- & 4-Methylphenols	0.33	100	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
3,3'-Dichlorobenzidine	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
3-Nitroaniline	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
4,6-Dinitro-2-methylphenol	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
4-Bromophenyl phenyl ether	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
4-Chloro-3-methylphenol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
4-Chloroaniline	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
4-Chlorophenyl phenyl ether	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
4-Nitroaniline	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
4-Nitrophenol	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
Acenaphthene	20	100	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.072	*JD*
Acenaphthylene	100	100	0.047	*U*	0.047	*U*	0.072	*U*	0.13	*D*	0.054	*U*
Acetophenone	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Aniline	NA	NA	0.19	*U*	0.19	*U*	0.29	*U*	0.21	*U*	0.21	*U*
Anthracene	100	100	0.047	*U*	0.047	*U*	0.11	*JD*	0.15	*D*	0.21	*D*
Atrazine	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Benzaldehyde	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Benzidine	NA	NA	0.19	*U*	0.19	*U*	0.29	*U*	0.21	*U*	0.21	*U*
Benzo(a)anthracene	1	1	0.047	*U*	0.047	*U*	0.4	*D*	0.79	*D*	0.57	*D*
Benzo(a)pyrene	1	1	0.047	*U*	0.047	*U*	0.3	*D*	0.42	*D*	0.29	*D*
Benzo(b)fluoranthene	1	1	0.047	*U*	0.047	*U*	0.21	*D*	0.47	*D*	0.33	*D*
Benzo(g,h,i)perylene	100	100	0.047	*U*	0.047	*U*	0.14	*JD*	0.12	*D*	0.12	*D*
Benzo(k)fluoranthene	0.8	3.9	0.047	*U*	0.047	*U*	0.25	*D*	0.55	*D*	0.31	*D*
Benzoic acid	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Benzyl alcohol	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Benzyl butyl phthalate	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Bis(2-chloroethoxy)methane	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Bis(2-chloroethyl)ether	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Bis(2-chloroisopropyl)ether	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Bis(2-ethylhexyl)phthalate	NA	NA	0.19	*D*	0.48	*D*	0.072	*U*	0.16	*D*	0.054	*U*
Caprolactam	NA	NA	0.095	*U*	0.093	*U*	0.14	*U*	0.1	*U*	0.11	*U*
Carbazole	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.073	*JD*	0.15	*D*
Chrysene	1	3.9	0.047	*U*	0.047	*U*	0.4	*D*	0.76	*D*	0.52	*D*
Dibenzo(a,h)anthracene	0.33	0.33	0.047	*U*	0.047	*U*	0.072	*U*	0.068	*JD*	0.065	*JD*
Dibenzofuran	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Diethyl phthalate	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Dimethyl phthalate	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Di-n-butyl phthalate	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Di-n-octyl phthalate	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Fluoranthene	100	100	0.047	*U*	0.047	*U*	0.92	*D*	1.55	*D*	1.21	*D*
Fluorene	30	100	0.047	*U*	0.047	*U*	0.072	*U*	0.068	*JD*	0.075	*JD*
Hexachlorobenzene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Hexachlorobutadiene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Hexachlorocyclopentadiene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Hexachloroethane	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.047	*U*	0.047	*U*	0.12	*JD*	0.14	*D*	0.12	*D*
Isophorone	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Naphthalene	12	100	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Nitrobenzene	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
N-Nitrosodimethylamine	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
N-nitroso-di-n-propylamine	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
N-Nitrosodiphenylamine	NA	NA	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Pentachlorophenol	0.8	6.7	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Phenanthrene	100	100	0.047	*U*	0.047	*U*	0.49	*D*	0.88	*D*	0.89	*D*
Phenol	0.33	100	0.047	*U*	0.047	*U*	0.072	*U*	0.052	*U*	0.054	*U*
Pyrene	100	100	0.047	*U*	0.047	*U*	0.68	*D*	1.24	*D*	0.92	*D*

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 4: TAL Metals in Soils

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-01 0-2**		**SB-01 7-9**		**SB-02 5-7**		**SB-02 7-9**		**SB-03 0-2**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-22)		(2015-12-22)		(2015-12-14)		(2015-12-14)		(2015-12-14)	
Data above SCOs shown in **Bold**		Dilution Factor	1		1		1		1		1	
Metals, 6010 and 7473	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	NA	18,500	*B*	22,500	*B*	11,000		57,300		18,200	
Antimony	NA	NA	0.58	*U*	0.54	*U*	0.55	*U*	0.53	*U*	0.59	*U*
Arsenic	13	16	3.61		1.08	*U*	11.2		1.06	*U*	1.47	
Barium	350	400	78.9		52		88.4		**504**		88.7	
Beryllium	7.2	72	0.17		0.11	*U*	0.11	*U*	0.11	*U*	0.12	*U*
Cadmium	2.5	4.3	0.35	*U*	0.33		0.75		1.05		0.35	*U*
Calcium	NA	NA	1,170		2,150		1,580		11,900		1,420	
Chromium	30	180	15.1		84.6		11.7		34.5		16.3	
Cobalt	NA	NA	9.58		21.5		10.2		48.7		9.1	
Copper	50	270	17		12		75.2	*B*	83.6	*B*	19.4	*B*
Iron	NA	NA	23,600		32,800		18,700		88,900	*E*	21,500	
Lead	63	400	38.7		0.33	*U*	9.87		5.64		13.4	
Magnesium	NA	NA	3,590		15,600		5,100		45,200		3,390	
Manganese	1,600	2,000	304		551		375		831		572	
Mercury	0.18	0.81	0.14		0.033	*U*	0.033	*U*	0.032	*U*	0.066	
Nickel	30	310	15.3		19.8		11.3		50.2		12.3	
Potassium	NA	NA	793		9,930		1,870		15,200	*E*	889	
Selenium	3.9	180	2.66		1.08	*U*	1.76		4.58		1.94	
Silver	2	180	0.58	*U*	0.54	*U*	0.55	*U*	0.53	*U*	0.59	*U*
Sodium	NA	NA	38.4		97.9		109		290		64.6	
Thallium	NA	NA	1.16	*U*	1.08	*U*	1.1	*U*	1.06	*U*	1.18	*U*
Vanadium	NA	NA	24.2		54.9		27.2		176		28.4	
Zinc	109	10, 000	56.2		60		78.1		222		53.4	

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 4: TAL Metals in Soils

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-03 9-11**		**Dup-20151214**		**SB-04 3-5**		**SB-05 4-6**		**SB-06 4-6**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-14)		(2015-12-14)		(2015-01-08)		(2015-12-29)		(2015-12-29)	
Data above SCOs shown in **Bold**		Dilution Factor	1		1		1		1		1	
Metals, 6010 and 7473	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	NA	22,700		21,800		11,500		22,600		9,810	
Antimony	NA	NA	0.57	*U*	0.56	*U*	0.57	*U*	0.62	*U*	0.64	*U*
Arsenic	13	16	6.78		6.61		6.35		10.6		6.94	
Barium	350	400	162		167		110		341		165	
Beryllium	7.2	72	0.11	*U*	0.11	*U*	0.11	*U*	0.12	*U*	0.13	*U*
Cadmium	2.5	4.3	0.34	*U*	0.34	*U*	0.46		1.21		0.58	
Calcium	NA	NA	3,430		3,380		8,570		17,400		15,900	
Chromium	30	180	37.2		36.9		15.7		36.5		14.8	
Cobalt	NA	NA	19.9		18.2		7.85		15.4		7.61	
Copper	50	270	72.8	*B*	64.6	*B*	31.6		64.4	*B*	26.9	*B*
Iron	NA	NA	36,900		35,700		17,900		31,200		15,700	
Lead	63	400	6.71		5.92		155		**1,250**	*B*	248	*B*
Magnesium	NA	NA	15,100		14,200		5,290		11,800		4,340	
Manganese	1,600	2,000	566		513		341		674		348	
Mercury	0.18	0.81	0.034	*U*	0.034	*U*	0.64		**2.03**		**0.9**	
Nickel	30	310	15.7		15.2		15		50.1		15.4	
Potassium	NA	NA	4,800		4,600		1,280		2,120		1,720	
Selenium	3.9	180	1.3		1.12	*U*	1.63		2.35		1.28	*U*
Silver	2	180	0.57	*U*	0.56	*U*	0.57	*U*	0.62	*U*	0.64	*U*
Sodium	NA	NA	184		159		110		203		148	
Thallium	NA	NA	1.13	*U*	1.12	*U*	1.14	*U*	1.24	*U*	1.28	*U*
Vanadium	NA	NA	73.2		71.1		22.4		46.6		20.8	
Zinc	109	10, 000	154		115		183		469		201	

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 5: Pesticides and PCBs in Soils

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-01 0-2**		**SB-01 7-9**		**SB-02 5-7**		**SB-02 7-9**		**SB-03 0-2**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-22)		(2015-12-22)		(2015-12-14)		(2015-12-14)		(2015-12-14)	
Data above SCOs shown in **Bold**		Dilution Factor	5		5		5		5		5	
Pesticides, 8081	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
4,4'-DDD	0.0033	13	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.0299	*D*
4,4'-DDE	0.0033	8.9	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
4,4'-DDT	0.0033	7.9	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Aldrin	0.005	0.097	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
alpha-BHC	0.02	0.48	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
alpha-Chlordane	0.094	4.2	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.0695	
beta-BHC	0.036	0.36	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Chlordane (total)	NA	NA	0.11	*U*	0.11	*U*	0.00726	*U*	0.00701	*U*	0.884	
delta-BHC	0.04	100	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Dieldrin	0.005	0.2	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Endosulfan I	2.4	24	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Endosulfan II	2.4	24	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Endosulfan sulfate	2.4	24	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Endrin	0.014	11	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Endrin aldehyde	NA	NA	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Endrin ketone	NA	NA	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
gamma-BHC (Lindane)	0.1	1.3	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
gamma-Chlordane	NA	NA	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.0757	
Heptachlor	0.042	2.1	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Heptachlor Epoxide	NA	NA	0.0029	*U*	0.0027	*U*	0.00181	*U*	0.00175	*U*	0.00195	*U*
Methoxychlor	NA	NA	0.014	*U*	0.013	*U*	0.00907	*U*	0.00876	*U*	0.00974	*U*
Toxaphene	NA	NA	0.15	*U*	0.14	*U*	0.0918	*U*	0.0887	*U*	0.0986	*U*

		Sample ID	**SB-01 0-2**		**SB-01 7-9**		**SB-02 5-7**		**SB-02 7-9**		**SB-03 0-2**	
		Sample Date	(2015-12-22)		(2015-12-22)		(2015-12-14)		(2015-12-14)		(2015-12-14)	
		Dilution Factor	1		1		1		1		1	
PCBs, 8082	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aroclor 1016	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*
Aroclor 1221	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*
Aroclor 1232	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*
Aroclor 1242	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*
Aroclor 1248	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*
Aroclor 1254	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*
Aroclor 1260	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*
Aroclor, Total	0.1	1.00	0.029	*U*	0.027	*U*	0.018	*U*	0.018	*U*	0.02	*U*

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 5: Pesticides and PCBs in Soils

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in mg/Kg (ppm)		**Sample ID**	**SB-03 9-11**		**Dup-20151214**		**SB-04 3-5**		**SB-05 4-6**		**SB-06 4-6**	
U= Not Detected ≥ indicated value		Sample Date	(2015-12-14)		(2015-12-14)		(2015-01-08)		(2015-12-29)		(2015-12-29)	
Data above SCOs shown in **Bold**		Dilution Factor	5		5		5		5		5	
Pesticides, 8081	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
4,4'-DDD	0.0033	13	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.089	*D*	0.0021	*U*
4,4'-DDE	0.0033	8.9	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
4,4'-DDT	0.0033	7.9	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.017	*D*
Aldrin	0.005	0.097	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
alpha-BHC	0.02	0.48	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
alpha-Chlordane	0.094	4.2	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.34	*D*	0.098	*D*
beta-BHC	0.036	0.36	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Chlordane (total)	NA	NA	0.00747	*U*	0.00737	*U*	0.075	*U*	4	*D*	1.32	*D*
delta-BHC	0.04	100	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Dieldrin	0.005	0.2	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Endosulfan I	2.4	24	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Endosulfan II	2.4	24	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Endosulfan sulfate	2.4	24	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Endrin	0.014	11	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Endrin aldehyde	NA	NA	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Endrin ketone	NA	NA	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
gamma-BHC (Lindane)	0.1	1.3	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
gamma-Chlordane	NA	NA	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.33	*D*	0.085	*D*
Heptachlor	0.042	2.1	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.026	*D*	0.0021	*U*
Heptachlor Epoxide	NA	NA	0.00187	*U*	0.00184	*U*	0.0019	*U*	0.002	*U*	0.0021	*U*
Methoxychlor	NA	NA	0.00934	*U*	0.00921	*U*	0.0094	*U*	0.01	*U*	0.011	*U*
Toxaphene	NA	NA	0.0946	*U*	0.0932	*U*	0.095	*U*	0.1	*U*	0.11	*U*

		Sample ID	**SB-03 9-11**		**Dup-20151214**		**SB-04**		**SB-05 4-6**		**SB-06 4-6**	
		Sample Date	(2015-12-14)		(2015-12-14)		(2015-01-08)		(2015-12-29)		(2015-12-29)	
		Dilution Factor	1		1		1		1		1	
PCBs, 8082	**UUSCO**	**RRUSCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aroclor 1016	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.021	*U*
Aroclor 1221	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.021	*U*
Aroclor 1232	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.021	*U*
Aroclor 1242	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.021	*U*
Aroclor 1248	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.021	*U*
Aroclor 1254	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.18	
Aroclor 1260	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.021	*U*
Aroclor, Total	0.1	1.00	0.019	*U*	0.019	*U*	0.019	*U*	0.021	*U*	0.18	

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 6: VOC and SVOC TICs in Soils
NYSDEC BCP Site: C360152
All data in mg/Kg (ppm)

Ecosystems Strategies, Inc.
ESI File: KP14175

Sample ID	SB-01 0-2		SB-01 7-9		SB-02 5-7		SB-02 7-9		SB-03 0-2	
Sample Date	(2015-12-22)		(2015-12-22)		(2015-12-14)		(2015-12-14)		(2015-12-14)	
Dilution Factor	1		1		1		1		1	
VOC TICs, 8260	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
ethanedioic acid isomer	-	-	-	-	-	-	0.0044	*JN*	0.0049	*JN*
pentadecane isomer	-	-	-	-	-	-	-	-	-	-
trimethylsilyloxy phenyl isomer	-	-	-	-	-	-	-	-	-	-
Total VOC TICS	ND		ND		ND		0.0044		0.0049	
SVOC TICs, 8270	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Total SVOC TICS	ND		ND		ND		ND		ND	

Sample ID	SB-03 9-11		Dup-20151214		SB-04 3-5		SB-05 4-6		SB-06 4-6	
Sample Date	(2015-12-14)		(2015-12-14)		(2015-01-08)		(2015-12-29)		(2015-12-29)	
Dilution Factor	1		1		1		1		1	
VOC TICs, 8260	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
dimethyl methylene bicyclo heptane isomer	-	-	-	-	-	-	-	-	6.7	*N*
ethanedioic acid isomer	-	-	-	-	-	-	-	-	-	-
napthalene	-	-	-	-	-	-	14	*N*	-	-
pentadecane isomer	-	-	-	-	0.014	*JN*	-	-	-	-
trimethylsilyloxy phenyl isomer	0.0078	*JN*	-	-	-	-	-	-	-	-
unknown	0.0078	*JN*	-	-	-	-	5.9	N	-	-
Total VOC TICS	0.0078		ND		0.0140		19.9		6.7	
SVOC TICs, 8270	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Total SVOC TICS	ND		ND		ND		ND		ND	

Result Qualifiers: JN = estimated value

Table 7: VOCs in Groundwater

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in µg/L (parts per billion, ppb)	**Sample ID**	**MW-01**		**MW-02**		**MW-03**		**Dup-20151229**	
U= Not Detected at or above indicated value	Sample Date	(2015-12-29)		(2015-12-29)		(2015-12-29)		(2015-12-29)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		1	
VOCs, 8260	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1,2-Tetrachloroethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,1-Trichloroethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,2,2-Tetrachloroethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,2-Trichloroethane	1	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1-Dichloroethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1-Dichloroethylene (1,1-DCE)	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2,3-Trichlorobenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2,3-Trichloropropane	0.04	0.2	*U*	**0.2**	*U*	**0.2**	*U*	**0.2**	*U*
1,2,4-Trichlorobenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2,4-Trimethylbenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2-Dibromo-3-chloropropane	0.04	0.2	*U*	**0.2**	*U*	**0.2**	*U*	**0.2**	*U*
1,2-Dibromoethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2-Dichlorobenzene	3	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2-Dichloroethane	0.6	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2-Dichloropropane	1	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,3,5-Trimethylbenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,3-Dichlorobenzene	3	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,4-Dichlorobenzene	3	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,4-Dioxane	NA	40	*U*	40	*U*	40	*U*	40	*U*
2-Butanone (MEK)	50	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
2-Hexanone	50	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
4-Methyl-2-pentanone	NA	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Acetone	50	1	*U*	1.3	*JB*	1.1	*JB*	1	*U*
Acrolein	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Acrylonitrile	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Benzene	1	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromochloromethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromodichloromethane	50	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromoform	50	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromomethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Carbon disulfide	NA	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Carbon tetrachloride	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Chlorobenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Chloroethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Chloroform	7	0.2	*U*	0.2	*U*	0.51		0.2	*U*
Chloromethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
cis-1,2-Dichloroethylene (cis-DCE)	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
cis-1,3-Dichloropropylene	0.4	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Cyclohexane	NA	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Dibromochloromethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Dibromomethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Dichlorodifluoromethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Ethyl Benzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Hexachlorobutadiene	0.5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Isopropylbenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methyl acetate	NA	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methyl tert-butyl ether (MTBE)	10	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methylcyclohexane	NA	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methylene chloride	5	1	*U*	1	*U*	1	*U*	1	*U*
n-Butylbenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
n-Propylbenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
o-Xylene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
p- & m- Xylenes	5	0.5	*U*	0.5	*U*	0.5	*U*	0.5	*U*
p-Isopropyltoluene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
sec-Butylbenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Styrene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
tert-Butyl alcohol (TBA)	NA	0.51	*J*	0.5	*U*	0.94	*J*	0.5	*U*
tert-Butylbenzene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Tetrachloroethylene (PCE)	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Toluene	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
trans-1,2-Dichloroethylene (trans-DCE)	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
trans-1,3-Dichloropropylene	0.4	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Trichloroethylene (TCE)	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Trichlorofluoromethane	5	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Vinyl chloride (VC)	2	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Xylenes, Total	5	0.6	*U*	0.6	*U*	0.6	*U*	0.6	*U*

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 7: VOCs in Groundwater

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in µg/L (parts per billion, ppb)	**Sample ID**	**TB-20151216**		**TB-20151223**		**TB-20151229**		**TB-20160108**	
U= Not Detected at or above indicated value	Sample Date	(2015-12-16)		(2015-12-23)		(2015-12-29)		(2016-01-08)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		1	
VOCs, 8260	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1,2-Tetrachloroethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,1-Trichloroethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,2,2-Tetrachloroethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1,2-Trichloroethane	1	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1-Dichloroethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,1-Dichloroethylene (1,1-DCE)	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2,3-Trichlorobenzene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2,3-Trichloropropane	0.04	0.0002	*U*	**0.2**	*U*	**0.2**	*U*	**0.2**	*U*
1,2,4-Trichlorobenzene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2,4-Trimethylbenzene	5	0.0002	*U*	1.1		0.2	*U*	0.2	*U*
1,2-Dibromo-3-chloropropane	0.04	0.0002	*U*	**0.2**	*U*	**0.2**	*U*	**0.8**	*U*
1,2-Dibromoethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2-Dichlorobenzene	3	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,2-Dichloroethane	0.6	0.0002	*U*	0.29	*J*	0.2	*U*	0.2	*U*
1,2-Dichloropropane	1	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,3,5-Trimethylbenzene	5	0.0002	*U*	1.1		0.2	*U*	0.2	*U*
1,3-Dichlorobenzene	3	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,4-Dichlorobenzene	3	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
1,4-Dioxane	NA	0.04	*U*	40	*U*	40	*U*	40	*U*
2-Butanone (MEK)	50	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
2-Hexanone	50	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
4-Methyl-2-pentanone	NA	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Acetone	50	0.0037		1	*U*	1	*U*	1	*U*
Acrolein	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Acrylonitrile	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Benzene	1	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromochloromethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromodichloromethane	50	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromoform	50	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Bromomethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.55	*B*
Carbon disulfide	NA	0.0002	*U*	0.2	*U*	0.2	*U*	0.38	*JB*
Carbon tetrachloride	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Chlorobenzene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Chloroethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Chloroform	7	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Chloromethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
cis-1,2-Dichloroethylene (cis-DCE)	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
cis-1,3-Dichloropropylene	0.4	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Cyclohexane	NA	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Dibromochloromethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Dibromomethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Dichlorodifluoromethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Ethyl Benzene	5	0.0002	*U*	0.38	*J*	0.2	*U*	0.2	*U*
Hexachlorobutadiene	0.5	0.0002	*U*	0.2	*U*	0.2	*U*	**0.8**	*U*
Isopropylbenzene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methyl acetate	NA	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methyl tert-butyl ether (MTBE)	10	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methylcyclohexane	NA	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Methylene chloride	5	0.001	*U*	1	*U*	1	*U*	1	*U*
n-Butylbenzene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
n-Propylbenzene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
o-Xylene	5	0.0002	*U*	0.38	*J*	0.2	*U*	0.2	*U*
p- & m- Xylenes	5	0.0005	*U*	1.3		0.5	*U*	0.5	*U*
p-Isopropyltoluene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
sec-Butylbenzene	5	0.0002	*U*	0.95		0.2	*U*	0.2	*U*
Styrene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
tert-Butyl alcohol (TBA)	NA	0.0005	*U*	0.5	*U*	0.5	*U*	0.5	*U*
tert-Butylbenzene	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Tetrachloroethylene (PCE)	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Toluene	5	0.0002	*U*	0.28	*J*	0.2	*U*	0.2	*U*
trans-1,2-Dichloroethylene (trans-DCE)	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
trans-1,3-Dichloropropylene	0.4	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Trichloroethylene (TCE)	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Trichlorofluoromethane	5	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Vinyl chloride (VC)	2	0.0002	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Xylenes, Total	5	0.0006	*U*	1.6		0.6	*U*	0.6	*U*

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 8: SVOCs in Groundwater

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in µg/L (parts per billion, ppb)	**Sample ID**	**MW-01**		**MW-02**		**MW-03**		**Dup-20151229**	
U= Not Detected at or above indicated value	Sample Date	(2015-12-29)		(2015-12-29)		(2015-12-29)		(2015-12-29)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		1	
SVOCs, 8270	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1'-Biphenyl	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
1,2,4,5-Tetrachlorobenzene	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
1,2,4-Trichlorobenzene	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
1,2-Dichlorobenzene	3	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
1,2-Diphenylhydrazine (Azobenzene)	ND	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
1,3-Dichlorobenzene	3	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
1,4-Dichlorobenzene	3	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,3,4,6-Tetrachlorophenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,4,5-Trichlorophenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,4,6-Trichlorophenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,4-Dichlorophenol	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,4-Dimethylphenol	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,4-Dinitrophenol	10	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,4-Dinitrotoluene	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2,6-Dinitrotoluene	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2-Chloronaphthalene	10	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2-Chlorophenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2-Methylnaphthalene	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2-Methylphenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2-Nitroaniline	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
2-Nitrophenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
3- & 4-Methylphenols	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
3,3'-Dichlorobenzidine	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
3-Nitroaniline	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
4,6-Dinitro-2-methylphenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
4-Bromophenyl phenyl ether	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
4-Chloro-3-methylphenol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
4-Chloroaniline	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
4-Chlorophenyl phenyl ether	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
4-Nitroaniline	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
4-Nitrophenol	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Acenaphthene	20	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Acenaphthylene	NA	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Acetophenone	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Aniline	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Anthracene	50	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Atrazine	7.5	0.53	*U*	0.53	*U*	0.53	*U*	0.53	*U*
Benzaldehyde	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Benzidine	5	10.5	*U*	10.5	*U*	10.5	*U*	10.5	*U*
Benzo(a)anthracene	0.002	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Benzo(a)pyrene	ND	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Benzo(b)fluoranthene	0.002	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Benzo(g,h,i)perylene	NA	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Benzo(k)fluoranthene	0.002	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Benzoic acid	NA	26.3	*U*	26.3	*U*	26.3	*U*	26.3	*U*
Benzyl alcohol	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Benzyl butyl phthalate	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Bis(2-chloroethoxy)methane	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Bis(2-chloroethyl)ether	1	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Bis(2-chloroisopropyl)ether	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Bis(2-ethylhexyl)phthalate	5	0.61	*B*	0.53	*U*	0.75	*B*	**19.3**	*B*
Caprolactam	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Carbazole	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Chrysene	0.002	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Dibenzo(a,h)anthracene	NA	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Dibenzofuran	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Diethyl phthalate	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Dimethyl phthalate	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Di-n-butyl phthalate	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Di-n-octyl phthalate	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Fluoranthene	50	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Fluorene	50	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Hexachlorobenzene	0.04	0.021	*U*	0.021	*U*	0.021	*U*	0.021	*U*
Hexachlorobutadiene	0.5	0.53	*U*	0.53	*U*	0.53	*U*	0.53	*U*
Hexachlorocyclopentadiene	5	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Hexachloroethane	5	0.53	*U*	0.53	*U*	0.53	*U*	0.53	*U*
Indeno(1,2,3-cd)pyrene	0.002	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Isophorone	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Naphthalene	10	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Nitrobenzene	0.4	0.26	*U*	0.26	*U*	0.26	*U*	0.26	*U*
N-Nitrosodimethylamine	50	0.53	*U*	0.53	*U*	0.53	*U*	0.53	*U*
N-nitroso-di-n-propylamine	NA	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
N-Nitrosodiphenylamine	50	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Pentachlorophenol	1	0.26	*U*	0.26	*U*	0.26	*U*	0.26	*U*
Phenanthrene	50	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Phenol	1	2.63	*U*	2.63	*U*	2.63	*U*	2.63	*U*
Pyrene	50	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 9: TAL Metals (Total) in Groundwater

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in µg/L (parts per billion, ppb)	**Sample ID**	**MW-01**		**MW-02**		**MW-03**		**Dup-20151229**	
U= Not Detected at or above indicated value	Sample Date	(2015-12-29)		(2015-12-29)		(2015-12-29)		(2015-12-29)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		1	
Metals, 6010 and 7473	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	387		547		1,590		348	
Antimony	3	6	*U*	6	*U*	6	*U*	6	*U*
Arsenic	25	4	*U*	4	*U*	6		6	
Barium	1,000	94		80		116		89	
Beryllium	3	1	*U*	1	*U*	1	*U*	1	*U*
Cadmium	5	3	*U*	3	*U*	3	*U*	3	*U*
Calcium	NA	64,500		70,300		124,000		64,100	
Chromium	50	6	*U*	6	*U*	6	*U*	6	*U*
Cobalt	5	6	*U*	6	*U*	6	*U*	6	*U*
Copper	200	17		22		17		18	
Iron**	300	**578**		**688**		**1,880**		**311**	
Lead	25	3	*U*	17		3	*U*	3	*U*
Magnesium	35,000	27,000		28,000		**35,600**		27,200	
Manganese**	300	37		56		69		31	
Mercury	0.7	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Nickel	100	6	*U*	6	*U*	6	*U*	6	*U*
Potassium	NA	9,250		8,560		10,000		9,220	
Selenium	10	11	*U*	**13**		11	*U*	11	*U*
Silver	50	6	*U*	6	*U*	6	*U*	6	*U*
Sodium	20,000	**75,600**		**53,700**		**169,000**		**75,200**	
Thallium	0.5	6	*U*	6	*U*	6	*U*	6	*U*
Vanadium	14	11	*U*	11	*U*	11	*U*	11	*U*
Zinc	2,000	25		45		29		23	

** combined iron and manganese = 500

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 10: TAL Metals (Dissolved) in Groundwater

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in µg/L (parts per billion, ppb)	**Sample ID**	**MW-01**		**MW-02**		**MW-03**		**Dup-20151229**	
U= Not Detected at or above indicated value	Sample Date	(2015-12-29)		(2015-12-29)		(2015-12-29)		(2015-12-29)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		1	
Metals, 6010 and 7473	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	56	*U*	56	*U*	56	*U*	56	*U*
Antimony	3	6	*U*	6	*U*	6	*U*	6	*U*
Arsenic	25	4	*U*	6		4	*U*	4	*U*
Barium	1,000	87		68		106		88	
Beryllium	3	1	*U*	1	*U*	1	*U*	1	*U*
Cadmium	5	3	*U*	3	*U*	3	*U*	3	*U*
Calcium	NA	57,300		64,200		123,000		59,500	
Chromium	50	6	*U*	6	*U*	6	*U*	6	*U*
Cobalt	5	6	*U*	6	*U*	6	*U*	6	*U*
Copper	200	13		12		10		14	
Iron**	300	24		58		159		38	
Lead	25	3	*U*	3	*U*	3	*U*	3	*U*
Magnesium	35,000	24,400		25,000		33,500		24,800	
Manganese**	300	30		55		40		29	
Mercury	0.7	0.2	*U*	0.2	*U*	0.2	*U*	0.2	*U*
Nickel	100	6	*U*	6	*U*	6	*U*	6	*U*
Potassium	NA	8,350		7,630		9,460		8,460	
Selenium	10	11	*U*	11	*U*	11	*U*	11	*U*
Silver	50	6	*U*	6	*U*	6	*U*	6	*U*
Sodium	20,000	**64,400**		**44,700**		**162,000**		**64,200**	
Thallium	0.5	6	*U*	6	*U*	6	*U*	6	*U*
Vanadium	14	11	*U*	11	*U*	11	*U*	11	*U*
Zinc	2,000	17		17		14		16	

** combined iron and manganese = 500

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 11: Pesticides and PCBs in Groundwater

NYSDEC BCP Site: C360152

Ecosystems Strategies, Inc.

ESI File: KP14175

All data in µg/L (parts per billion, ppb)	**Sample ID**	**MW-01**		**MW-02**		**MW-03**		**Dup-20151229**	
U= Not Detected at or above indicated value	Sample Date	(2015-12-29)		(2015-12-29)		(2015-12-29)		(2015-12-29)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		1	
Pesticides, 8081	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
4,4'-DDD	0.3	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
4,4'-DDE	0.2	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
4,4'-DDT	0.2	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Aldrin	NE	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
alpha-BHC	0.01	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
alpha-Chlordane	0.05	**0.066**		0.04		0.015		**0.064**	
beta-BHC	0.04	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Chlordane, total	0.05	**0.83**		**0.52**		**0.16**		**0.66**	
delta-BHC	0.04	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Dieldrin	0.004	0.0021	*U*	0.0021	*U*	0.0021	*U*	0.0021	*U*
Endosulfan I	NA	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Endosulfan II	NA	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Endosulfan sulfate	NA	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Endrin	NA	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Endrin aldehyde	5	0.011	*U*	0.011	*U*	0.011	*U*	0.011	*U*
Endrin ketone	5	0.011	*U*	0.011	*U*	0.011	*U*	0.011	*U*
gamma-BHC (Lindane)	0.05	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
gamma-Chlordane	0.05	0.041		0.034		0.011	*U*	0.028	
Heptachlor	0.04	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Heptachlor Epoxide	0.03	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Methoxychlor	35	0.0042	*U*	0.0042	*U*	0.0042	*U*	0.0042	*U*
Toxaphene	0.06	0.11	*U*	0.11	*U*	0.11	*U*	0.11	*U*

	Sample ID	**MW-01**		**MW-02**		**MW-03**		**Dup-20151229**	
	Sample Date	(2015-12-29)		(2015-12-29)		(2015-12-29)		(2015-12-29)	
	Dilution Factor	1		1		1		1	
PCBs, 8082	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aroclor 1016	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Aroclor 1221	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Aroclor 1232	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Aroclor 1242	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Aroclor 1248	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Aroclor 1254	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Aroclor 1260	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*
Aroclor, Total	0.09	0.053	*U*	0.053	*U*	0.053	*U*	0.053	*U*

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 12: VOC and SVOC TICs in Groundwater
NYSDEC BCP Site: C360152
All data in µg/L (ppb)

Ecosystems Strategies, Inc.

ESI File: KP14175

Sample ID	MW-01		MW-02		MW-03		Dup-20151229	
Sample Date	(2015-12-29)		(2015-12-29)		(2015-12-29)		(2015-12-29)	
Dilution Factor	1		1		1		1	
VOC TICs, 8260	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Total VOC TICS	ND		ND		ND		0.0044	
SVOC TICs, 8270	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Total SVOC TICS	ND		ND		ND		ND	

Result Qualifiers: JN = estimated value

APPENDIX C

Construction Health and Safety Plan

CONSTRUCTION HEALTH AND SAFETY PLAN

FOR

SITE REMEDIATION

(INCORPORATING COMMUNITY HEALTH AND SAFETY PLAN)

The Lofts on Main

922 Main Street and 921 Diven Street

City of Peekskill, New York

NYSDEC BCP SITE: C360152

May 2016

ESI File: KP14175.50

Prepared By:

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1.0 INTRODUCTION

1.1 Purpose

This Construction Health and Safety Plan for Site Investigation (CCHASP) has been developed to provide the requirements and general procedures to be followed by Ecosystems Strategies, Inc. (ESI) and on-site subcontractors while performing remedial services at The Lofts on Main property (BCP Site: C360152) located at 922 Main Street and 921 Diven Street in Peekskill, New York.

This CHASP incorporates policies, guidelines and procedures that have the objective of protecting the public health of the community during the performance of fieldwork activities, and therefore serves as a Community Health and Safety Plan. The objectives of the CCHASP are met by establishing guidelines to minimize community exposure to hazards during fieldwork, and by planning for and responding to emergencies affecting the public adjacent to the site.

This CHASP describes the responsibilities, training requirements, protective equipment and standard operating procedures to be utilized by all personnel while on the Site. All on-site personnel and visitors shall follow the guidelines, rules, and procedures contained in this safety plan. The Project Manager or Site Health and Safety Officer (SHSO) may impose any other procedures or prohibitions believed to be necessary for safe operations. This CHASP incorporates by reference the applicable Occupational Safety and Health Administration (OSHA) requirements in 29 CFR 1910 and 29 CFR 1926.

The requirements and guidelines in this CHASP are based on a review of available information and evaluation of potential on-site hazards. This CHASP will be discussed with Site personnel and will be available on-site for review while work is underway. On-site personnel will report to the Site Health and Safety Officer (SHSO) in matters of health and safety. The on-site project supervisor(s) are responsible for enforcement and implementation of this CHASP, which is applicable to all field personnel, including contractors and subcontractors.

This CHASP is specifically intended for the conduct of activities within the defined scope of work in specified areas of the Site. Changes in site conditions and future actions that may be conducted at the Site may necessitate the modification of the requirements of the CHASP. Although this CHASP can be made available to interested persons for informational purposes, ESI has no responsibility over the interpretations or activities of any other persons or entities other than employees of ESI or ESI's subcontractors.

1.2 Site Location and Description

The Site as defined in this CHASP is the property located at 922 Main Street and 921 Diven Street, City of Peekskill, Westchester County, New York. A Soil Excavation Plan (illustrating the configuration of the Site as well as the areas of proposed fieldwork activities) is included as an Attachment to this CHASP.

1.3 Work Activities

Environmental remediation activities are detailed in the Remedial Action Work Plan (RAWP), dated May 2016. The specific tasks detailed in the RAWP are wholly incorporated by reference into this CHASP. The RAWP describes the tasks required to remediate documented soil, groundwater and soil vapor contamination at the Site.

Previous environmental investigations documented the presence of urban-fill soils containing elevated concentrations of SVOCs, metals, pesticides and PCBs, groundwater containing elevated concentrations of pesticides and metals, and low-level VOC concentrations in soil-vapor. The proposed remedial action consists of removal of impacted soil/fill materials from the surface to bedrock.

2.0 HEALTH AND SAFETY HAZARDS

2.1 Hazard Overview for On-Site Personnel

The potential exists for the presence of elevated levels of organic compounds and metals in on-site soils and groundwater, and organic compounds in soil gas. The possibility exists for on-site personnel to have contact with contaminated soils, groundwater and/or vapor during site remediation work. Contact with contaminated substances may present a skin contact, inhalation and/or ingestion hazard. These potential hazards are addressed in Sections 3.0 through 11.0, below.

2.2 Potential Hazards to the Public from Fieldwork Activities

The potential exists for the public to be exposed to contaminated soils, groundwater and/or vapor, which may present a skin contact, inhalation and/or ingestion hazard. Additional potential hazards to the public that are associated with fieldwork activities include mechanical/physical hazards, traffic hazards from fieldwork vehicles, and noise impacts associated with operation of mechanical equipment.

Impacts to public health and safety are expected to be limited to hazards that could directly affect on-site visitors and/or trespassers. These effects will be mitigated through site access and control measures (see Section 6.0, below). Specific actions taken to protect the public health (presented in Sections 3.0 through 11, below) are anticipated to minimize any potential off-site impacts from contaminant migration, noise and traffic hazards.

3.0 PERSONAL PROTECTIVE EQUIPMENT

The levels of protection identified for the services specified in the RAWP represent a best estimate of exposure potential and protective equipment needed for that exposure. Determination of levels was based on data provided by previous studies of the Site and information reviewed on current and past Site usage. The SHSO may recommend revisions to these levels based on an assessment of actual exposures and may at any time require Site workers, supervisors and/or visitors to use specific safety equipment.

The level of protective clothing and equipment selected for this project is Level D. Level D PPE provides minimal skin protection and no respiratory protection, and is used when the atmosphere contains no known hazard, oxygen concentrations are not less than 19.5%, and work activities exclude splashes, immersion or the potential for unexpected inhalation or contact with hazardous levels of chemicals. Workers will wear Level D protective clothing including, but not limited to, a hard hat, steel-toed boots,

nitrile gloves (when handling soils and/or groundwater), hearing protection (foam ear plugs or ear muffs, as required), and safety goggles (in areas of exposed groundwater and when decontaminating equipment). Personal protective equipment (PPE) will be worn at all times, as designated by this CHASP.

Disposable gloves will be changed immediately following the handling of contaminated soils, water, or equipment. Tyvek suits will be worn during activities likely to excessively expose work clothing to contaminated dust or soil (chemically-resistant over garments will be required in situations where exposures could lead to penetration of clothing and direct dermal contact by contaminants).

The requirement for the use of PPE by official on-site visitors shall be determined by the SHSO, based on the most restrictive PPE requirement for a particular Work Zones (see Section 6 for Work Zone definitions). All on-site visitors shall, at a minimum, be required to wear an approved hardhat and be provided with appropriate hearing protection as necessary.

The need for an upgrade in PPE will be determined based upon encountered Site conditions, including measurements taken in the breathing zone of the work area using a photo-ionization detector (PID). An upgrade to a higher level of protection (Level C) will begin when specific action levels are reached (see Section 5.0, below), or as otherwise required by the SHSO. Level C PPE includes a full-face or half-mask air-purifying respirator (NIOSH approved for the compound[s] of concern), hooded chemical-resistant clothing, outer and inner chemical-resistant gloves, and (as needed) coveralls, outer boots/boot covers, escape mask, and face shield. Level C PPE may be used only when: oxygen concentrations are not less than 19.5%; contaminant contact will not adversely affect any exposed skin; types of air contaminants have been identified, concentrations measured, and a cartridge or canister is available that can remove the contaminant; atmospheric contaminant concentrations do not exceed immediately dangerous to life or health (IDLH) levels; and job functions do not require self-contained breathing apparatus (SCBAs). The need for Level B or Level A PPE is not anticipated for the planned remedial activities at this Site.

If any equipment fails and/or any employee experiences a failure or other alteration of their protective equipment that may affect its protective ability, that person will immediately leave the work area. The Project Manager and the SHSO will be notified and, after reviewing the situation, determine the effect of the failure on the continuation of on-going operations. If the failure affects the safety of personnel, the work site, or the surrounding environment, personnel will be evacuated until appropriate corrective actions have been taken.

4.0 CONTAMINANT CONTROL

Precautions will be taken during dry weather (e.g., wetting or covering exposed soils) to avoid generating and breathing dust-generated from soils. A PID (or equivalent equipment) will be used to monitor potential contaminant levels. Response to the monitoring will be in accordance with the action levels provided in Section 5.0.

5.0 MONITORING AND ACTION LEVELS

Concentrations of petroleum compounds in the air are expected to be below the OSHA Permissible Exposure Limits (PELs). Air monitoring will be conducted for VOCs and dust according to the NYSDOH Generic Community Air Monitoring Plan (CAMP). Monitoring will be conducted at all times that fieldwork activities which are likely to generate emissions are occurring. PID and dust readings consistently in excess of CAMP limits will be used as an indication of the need to initiate personnel monitoring, increase

worker protective measures, and/or modify or cease on-site operations in order to mitigate off-site community exposure.

PID readings that consistently exceed background in the breathing zone (during any of the proposed tasks) will necessitate moving away from the source or implementing a higher PPE level.

6.0 SITE CONTROL/WORK ZONES

Site control procedures will be established to reduce the possibility of worker/visitor contact with compounds present in the soil, to protect the public in the area surrounding the Site and to limit access to the Site to only those persons required to be in the work zone. Notices will be placed near the Site warning the public not to enter fieldwork areas and directing visitors to report to the Project Manager or SHSO. Measures will be taken to limit the entry of unauthorized personnel into the specific areas of field activity and to safely direct and control all vehicular traffic in and near the Site (e.g., placement of traffic cones and warning tape).

The following Work Zone will be established:

Exclusion Zone ("Hot Zone") - The exclusion zone will be that area immediately surrounding the work being performed for remediation purposes (i.e. the area where contaminated media are being handled). It is anticipated that much of the work will be accomplished with heavy equipment in the exclusion zone. Only individuals with appropriate PPE and training are allowed into this zone. It is the responsibility of the Site Health and Safety Officer to prevent unauthorized personnel from entering the exclusion zone. When necessary, such as in high traffic areas, the exclusion zone will be delineated with barricade tape, cones and/or barricades.

Decontamination Area - A decontamination area for personnel and equipment is not anticipated being required during completion of the RAWP; however, care will be taken to remove gloves, excess soil from boots, and soiled clothing (if necessary) before entering the Intermediate Zone.

Contamination Reduction Zone and Support Zone - Not anticipated being required during the completion of the RAWP.

Intermediate Zone (Decontamination Zone) - The intermediate zone, also known as the decontamination zone, is where patient decontamination should take place, if necessary. A degree of contamination still is found in this zone; thus, some PPE is required, although it is usually of a lesser degree than that required for the hot zone.

Command Zone - The command zone is located outside the decontamination zone. All exposed individuals and equipment from the "hot zone" and decontamination zone should be decontaminated before entering the command zone. Access to all zones must be controlled. Keeping the media and onlookers well away from the Site is critical and will be the responsibility of both the SSHO and the Project Manager, and other Site personnel as appropriate.

7.0 NOISE CONTROL

All fieldwork activities will be conducted in a manner designed to reduce unnecessary noise generation, and to minimize the potential for both on-site and off-site harmful noise levels. The Project Manager and

SHSO will establish noise reduction procedures (as appropriate to the Site and the work) to meet these requirements.

8.0 PERSONNEL TRAINING

Work zones that will accomplish the general objective stated above will be established by the Project Manager and the SHSO. Site access will be monitored by the SHSO, who will maintain a log-in sheet for personnel that will include, at the minimum, personnel on the Site, their arrival and departure times and their destination on the Site. All workers will be properly trained in accordance with OSHA requirements (29 CFR 1910). Personnel exiting the work zone(s) will be decontaminated prior to exiting the Site.

Site-specific training will be provided to each employee. Personnel will be briefed by the SHSO as to the potential hazards to be encountered. Topics will include:

- Availability of this CHASP;
- General site hazards and specific hazards in the work areas, including those attributable to known of suspect on-site contaminants;
- Selection, use, testing, and care of the body, eye, hand, and foot protection being worn, with the limitations of each;
- Decontamination procedures for personnel, their personal protective equipment, and other equipment used on the Site;
- Emergency response procedures and requirements;
- Emergency alarm systems and other forms of notification, and evacuation routes to be followed; and,
- Methods to obtain emergency assistance and medical attention.

9.0 DECONTAMINATION

The SHSO will establish a decontamination system and decontamination procedures (appropriate to the Site and the work) that will prevent potentially hazardous materials from leaving the Site. Trucks will be brushed to remove materials adhering to their surfaces. Sampling equipment will be segregated and, after decontamination, stored separately from splash protection equipment. Decontaminated or clean sampling equipment not in use will be covered with plastic and stored in a designated storage area in the work zone.

10.0 EMERGENCY RESPONSE

10.1 Notification of Site Emergencies

In the event of an emergency, the SHSO will be immediately notified of the nature and extent of the emergency (the names and contact information for key site safety and management personnel, as well as other site safety contact telephone numbers, shall be posted at the Site).

Table 1 in this CHASP contains Emergency Response Telephone Numbers, and immediately following is a map detailing the directions to the nearest hospital emergency room. This information will be maintained at the work Site by the SHSO. The location of the nearest telephone will be determined prior

to the initiation of on-site activities. In addition to any permanent phone lines, a cellular phone will be in the possession of the SHSO, or an authorized designee, at all times.

10.2 Responsibilities

Prior to the initiation of on-site work activities, the SHSO will:

- Notify individuals, authorities and/or health care facilities of the potentially hazardous activities and potential wastes that may develop as a result of the remedial activities.
- Confirm that first aid supplies and a fire extinguisher are available on-site.
- Have a working knowledge of safety equipment available.
- Confirm that a map detailing the most direct route to the hospital is prominently posted with the emergency telephone numbers.

The SHSO will be responsible for directing notification, response and follow-up actions and for contacting outside response personnel (ambulance, fire department, or others). In the case of an evacuation, the SHSO will account for personnel. A log of individuals entering and leaving the Site will be kept so that everyone can be accounted for in an emergency.

Upon notification of an exposure incident, the SHSO will contact the appropriate emergency response personnel for recommended medical diagnosis and, if necessary, treatment. The SHSO will determine whether and at what levels exposure actually occurred, the cause of such exposure, and the means to prevent similar incidents from occurring.

10.3 Accidents and Injuries

In the event of an accident or injury, measures will be taken to assist those who have been injured or exposed and to protect others from hazards. If an individual is transported to a hospital or doctor, a copy of the CHASP will accompany the individual.

The SHSO will be notified and will respond according to the severity of the incident. The SHSO will perform an investigation of the incident and prepare a signed and dated report documenting the investigation. An exposure-incident report will also be completed by the SHSO and the exposed individual. The form will be filed with the employee's medical and safety records to serve as documentation of the incident and the actions taken.

10.4 Communication

No special hand signals will be utilized within the work zone. Field personnel will utilize standard hand signals during the operation of heavy equipment.

10.5 Safe Refuge

Vehicles and on-site structures will serve as the immediate place of refuge in the event of an emergency. If evacuation from the area is necessary, project vehicles will be used to transport on-site personnel to safety.

10.6 Site Security and Control

Site security and control during emergencies, accidents and incidents will be monitored by the SHSO. The SHSO is responsible for limiting access to the Site to authorized personnel and for oversight of reaction activities.

10.7 Emergency Evacuation

In case of an emergency, personnel will evacuate to the safe refuge identified by the SHSO, both for their personal safety and to prevent the hampering of response/rescue efforts.

10.8 Resuming Work

A determination that it is safe to return to work will be made by the SHSO and/or any personnel assisting in the emergency, e.g., fire department, police department, utility company, etc. No personnel will be allowed to return to the work areas until a full determination has been made by the above-identified personnel that all field activities can continue unobstructed. Such a determination will depend upon the nature of the emergency (e.g., downed power lines -- removal of all lines from the property; fire -- extinguished fire; injury -- safe transport of the injured party to a medical facility with either assurance of acceptable medical care present or completion of medical care; etc.). Before on-site work is resumed following an emergency, necessary emergency equipment will be recharged, refilled or replaced. Government agencies will be notified as appropriate. An Incident Report Form will be filed.

10.9 Fire Fighting Procedures

A fire extinguisher will be available in the work zone during on-site activities. This extinguisher is intended for small fires. When a fire cannot be controlled with the extinguisher, the area will be evacuated immediately. The SHSO will be responsible for directing notification, response and follow-up actions and for contacting ambulance and fire department personnel.

10.10 Emergency Decontamination Procedure

The extent of emergency decontamination depends on the severity of the injury or illness and the nature of the contamination. Whenever possible, minimum decontamination will consist of washing, rinsing and/or removal of contaminated outer clothing and equipment. If time does not permit decontamination, the person will be given first aid treatment and then wrapped in plastic or a blanket prior to transport.

10.11 Emergency Equipment

The following on-site equipment for safety and emergency response will be maintained in the on-site vehicle of the SHSO:

- Fire extinguisher;
- First-aid kit; and,
- Extra copy of this Health and Safety Plan.

11.0 SPECIAL PRECAUTIONS AND PROCEDURES

The activities associated with this remediation may involve potential risks of exposure to both chemical and physical hazards. The potential for chemical exposure to hazardous or regulated substances will be significantly reduced through the use of monitoring, personal protective clothing, engineering controls, and implementation of safe work practices.

11.1 Heat/Cold Stress

Training in prevention of heat/cold stress will be provided as part of the site-specific training. The timing of this project is such that heat/cold stress may pose a threat to the health and safety of personnel. Work/rest regimens will be employed, as necessary, so that personnel do not suffer adverse effects from heat/cold stress. Special clothing and appropriate diet and fluid intake regimens will be recommended to personnel to further reduce this temperature-related hazard. Rest periods will be recommended in the event of high/low temperatures and/or humidity to counter the negative effects of heat/cold stress.

11.2 Heavy Equipment

Working in the vicinity of heavy equipment is the primary safety hazard at the Site. Physical hazards in working near heavy construction equipment include the following: overhead hazards, slips/trip/falls, hand and foot injuries, moving part hazards, improper lifting/back injuries and noise. All workers will be properly trained in accordance with OSHA requirements (29 CFR 1910). No workers will be permitted within any excavated areas without proper personal protective equipment (PPE), including, as warranted, any necessary Level C equipment (e.g., respirators and protective suits). Air monitoring in excavation areas will be conducted for VOCs in accordance with Section 5.0.

11.3 Additional Safety Practices

The following are important safety precautions which will be enforced during the remedial activities:

- Medicine and alcohol can aggravate the effect of exposure to certain compounds. Controlled substances and alcoholic beverages will not be consumed during remedial activities. Consumption of prescribed drugs will only be at the discretion of a physician familiar with the person's work.
- Eating, drinking, chewing gum or tobacco, smoking, or other practices that increase the probability of hand-to-mouth transfer and ingestion of material is prohibited except in areas designated by the SHSO.
- Contact with potentially contaminated surfaces will be avoided whenever possible. Workers will not unnecessarily walk through puddles, mud or other discolored surfaces; kneel on the ground; or lean, sit, or place equipment on drums, containers, vehicles, or the ground.
- Personnel and equipment in the work areas will be minimized, consistent with effective site operations.
- Unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.
- Work areas for various operational activities will be established.

11.4 Daily Log Contents

The SHSO will establish a system appropriate to the Site, the work and the work zones that will record, at a minimum, the following information:

- Personnel on the Site, their arrival and departure times and their destination on the Site.
- Incidents and unusual activities that occur on the Site such as, but not limited to, accidents, spills, breaches of security, injuries, equipment failures and weather-related problems.
- Changes to the CHASP.
- Daily information generated such as: changes to work and health and safety plans; work accomplished and the current Site status; and monitoring results.

12.0 TABLE AND FIGURES

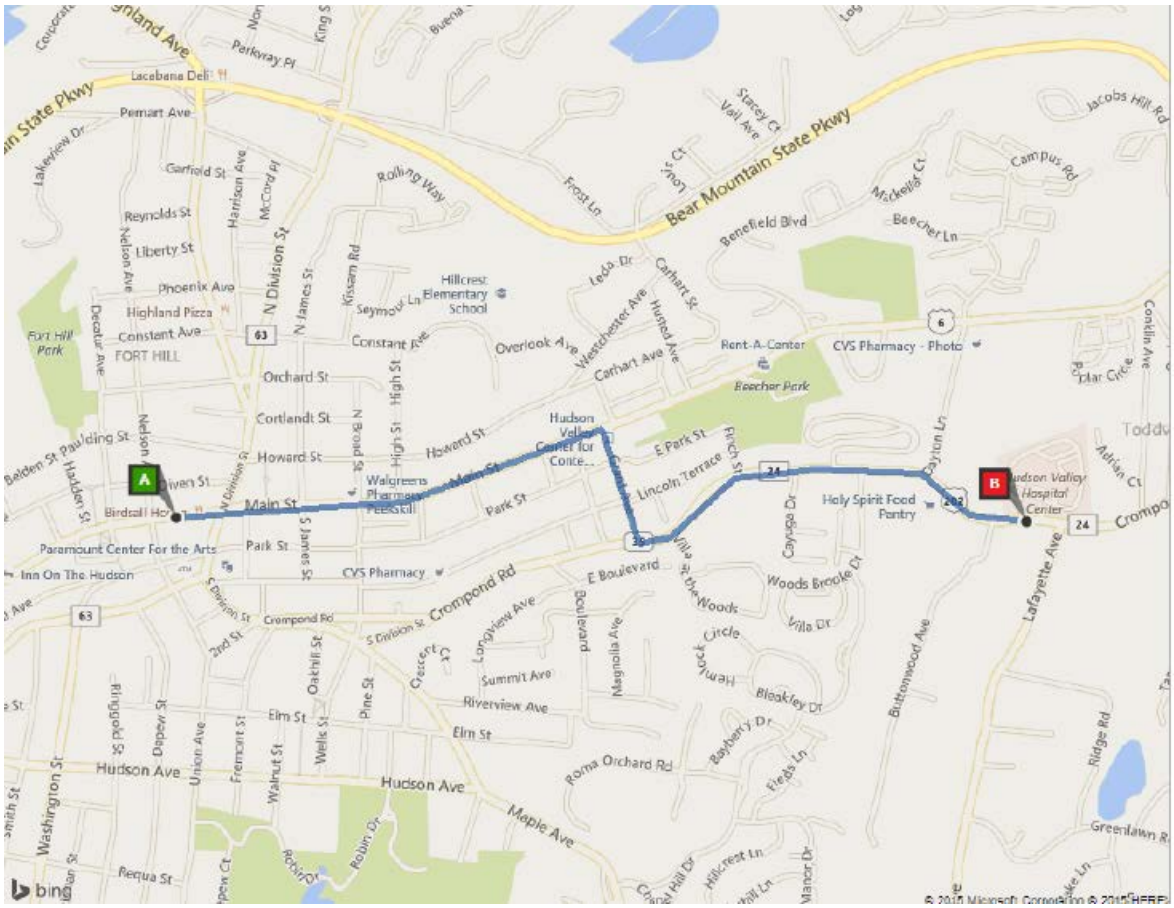
Table 1: Emergency Contact Information

Emergency Agencies	Phone Numbers
EMERGENCY	**911**
New York Presbyterian/Hudson Valley Hospital 1987 Crompond Road Cortland, NY 10567	914-737-9000 or 911
Peekskill Police Department 2 Nelson Ave, City of Peekskill, NY	(914) 737-8000 or 911
Peekskill Fire Department	911
City Hall	(914) 737-3400
Main Water and Sewer	(914) 734-4150
Site Health and Safety Officer, Paul Ciminello, ESI	(845) 452-1658
Jansen Engineering, PLLC	(845) 454-3411
Construction Manager	TBD

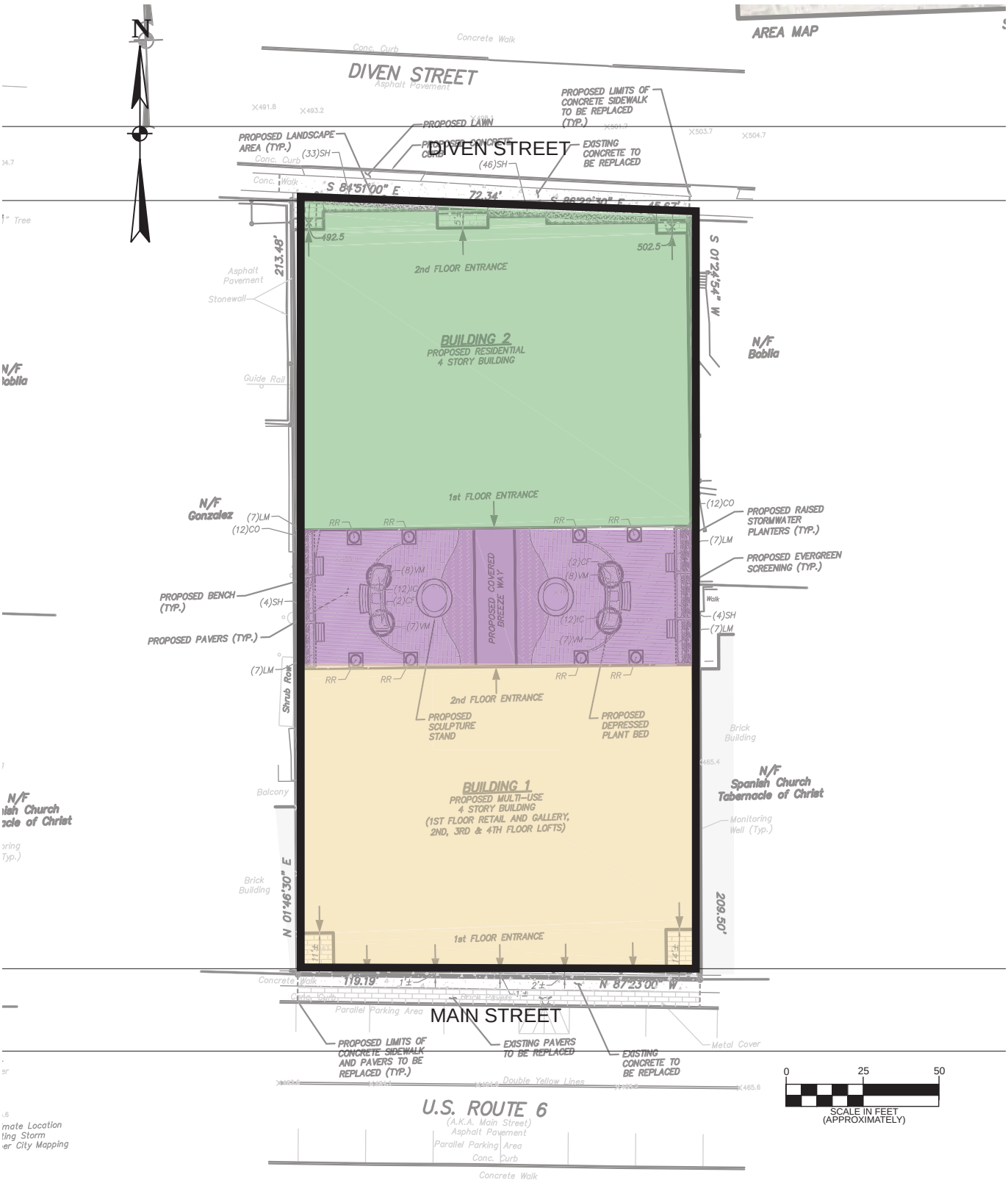
Figure 1: Directions to Hospital

A	**922 Main St, Peekskill, NY 10566**	**A–B: 1.7 mi** 5 min
	1. Depart **US-6 / US-202 / RT-35 / Main St** toward N Division St / CR-63	0.8 mi
↱	2. Turn **right** onto **Grant Ave**	0.2 mi
↰	3. Turn **left** onto **US-202 / RT-35 / Crompond Rd**	0.7 mi
B	4. Arrive at **1987 Crompond Rd, Cortlandt, NY 10567** *The last intersection is Buttonwood Ave* *If you reach Lafayette Ave, you've gone too far*	

Figure 2: Map to Hospital (overview)



Ecosystems Strategies, Inc.



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.

Soil Excavation Plan

The Lofts on Main
NYSDEC BCP Site: C360152
922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend:

- subject property border
- 9' excavation area
- 5' excavation area
- 22' excavation area

ESI File: KP14175.50

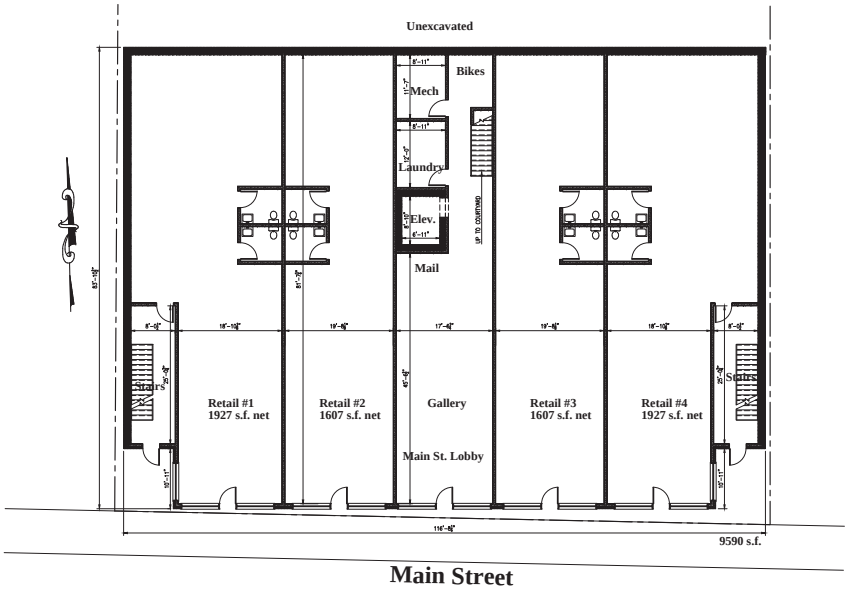
May 2016

Scale as shown

Attachment

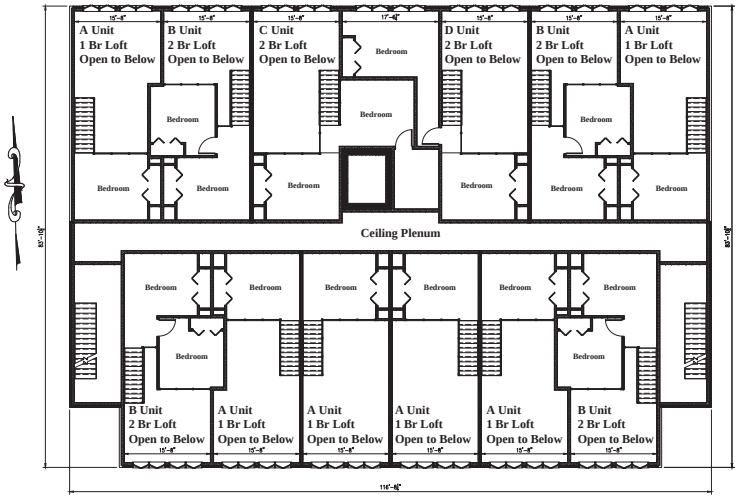
APPENDIX D

Proposed Development Plans



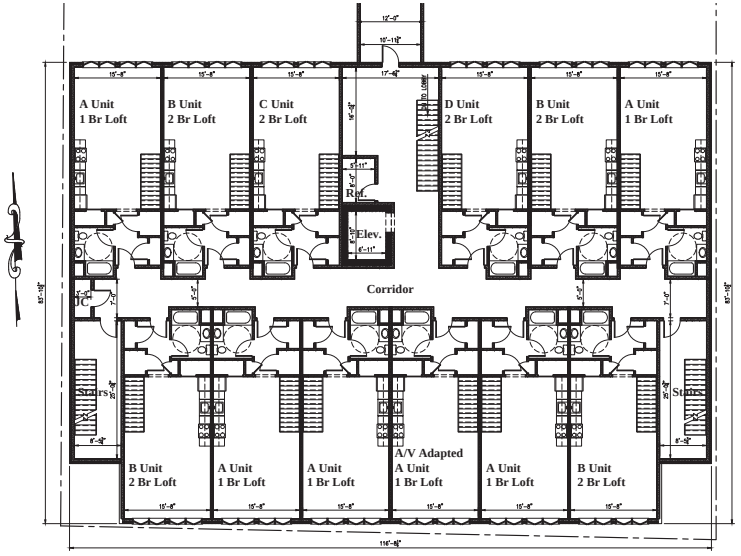
1 / A1 Building 1- Level 1 (Main Street) Floor Plan

Scale: 3/32" = 1'-0"



3 / A1 Building 1- Level 2 Loft Plan

Scale: 3/32" = 1'-0"



2 / A1 Building 1- Level 2 Floor Plan

Scale: 3/32" = 1'-0"

COPPOLA ASSOCIATES

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ajcoppola@coppola-associates.com

License Number: 018849

PROPOSED MULTIFAMILY/MIXED USE BUILDINGS FOR

The Lofts on Main Building #1

922 MAIN STREET, CITY OF PEEKSKILL, NY

BUILDING #1 FLOOR PLANS

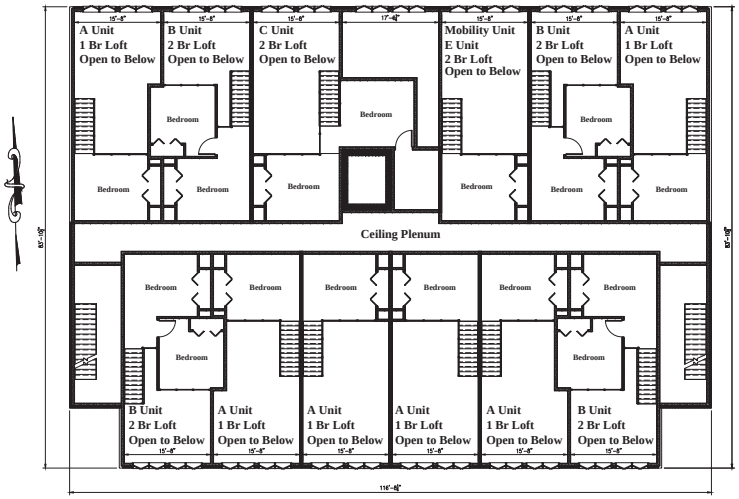
Revisions

Date: 7/10/15

Project Number: 14-20

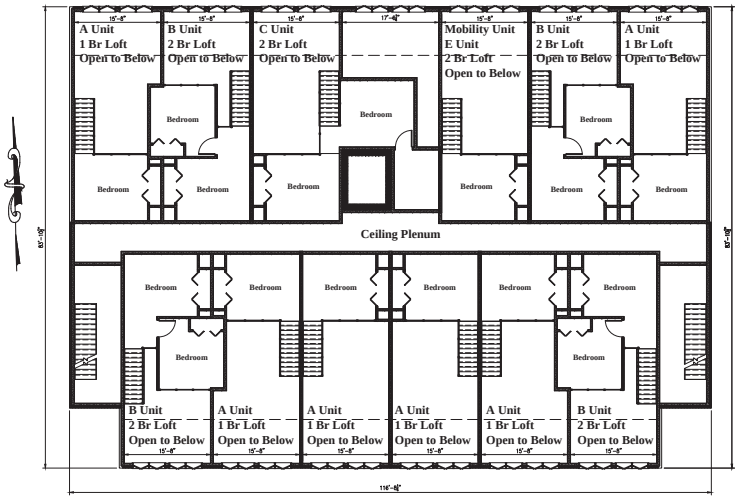
Sheet Number: **A1**

Building #1



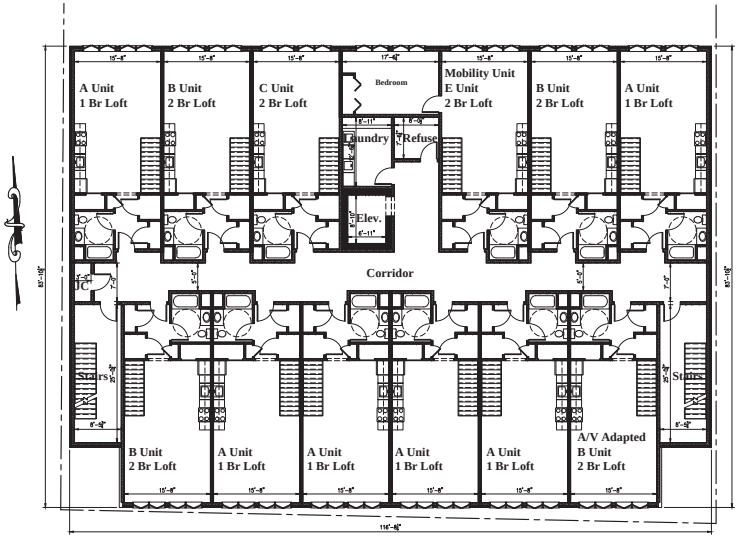
2 A2 Building 1- Level 3 Loft Plan

Scale: 3/32" = 1'-0"



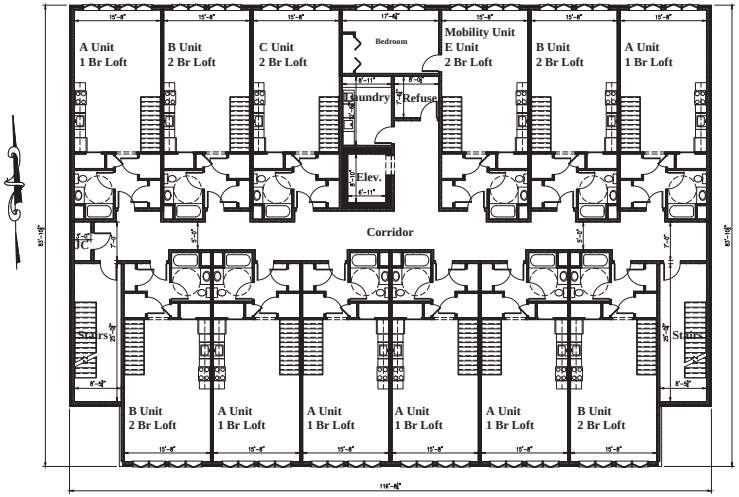
4 A2 Building 1- Level 4 Loft Plan

Scale: 3/32" = 1'-0"



1 A2 Building 1- Level 3 Floor Plan

Scale: 3/32" = 1'-0"



3 A2 Building 1- Level 4 Floor Plan

Scale: 3/32" = 1'-0"

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The Lofts on Main Building #1

922 MAIN STREET, CITY OF PEEKSKILL, NY

BUILDING #1 FLOOR PLANS

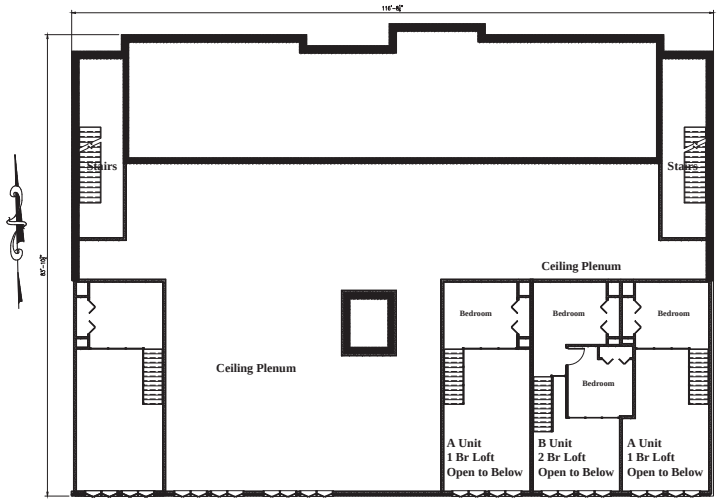
REVISIONS

DATE
7/10/15

PROJECT NUMBER
14-20

SHEET NUMBER
A2

Building #1



2 / A3 Building 2- Level 1 Loft Plan

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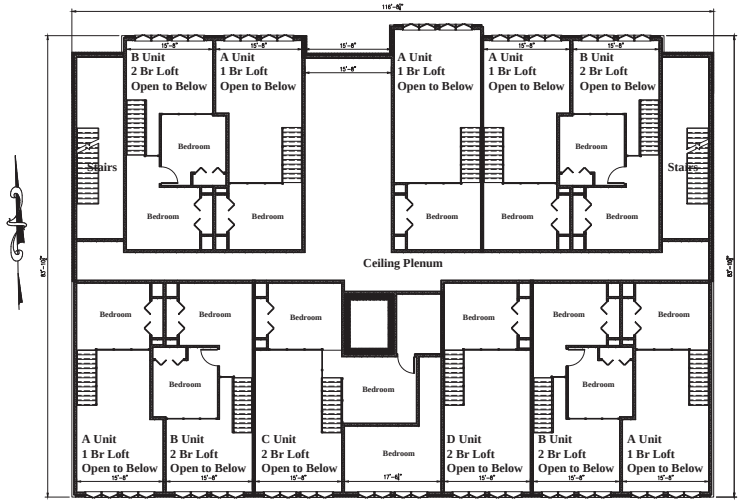
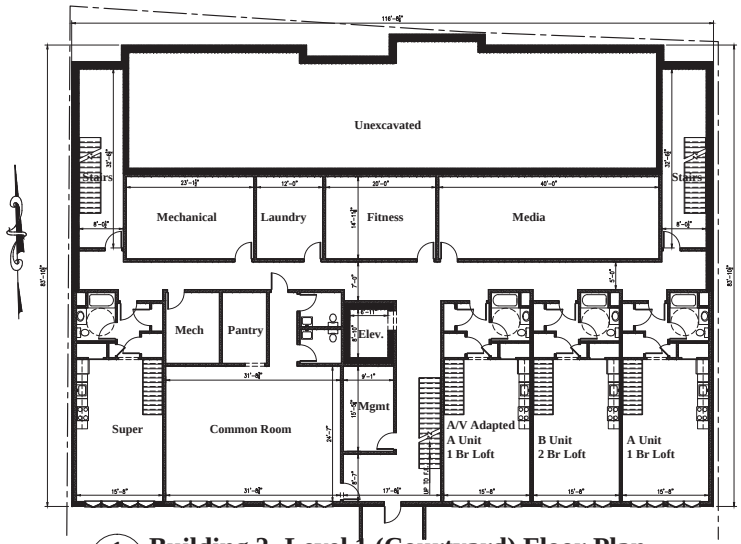


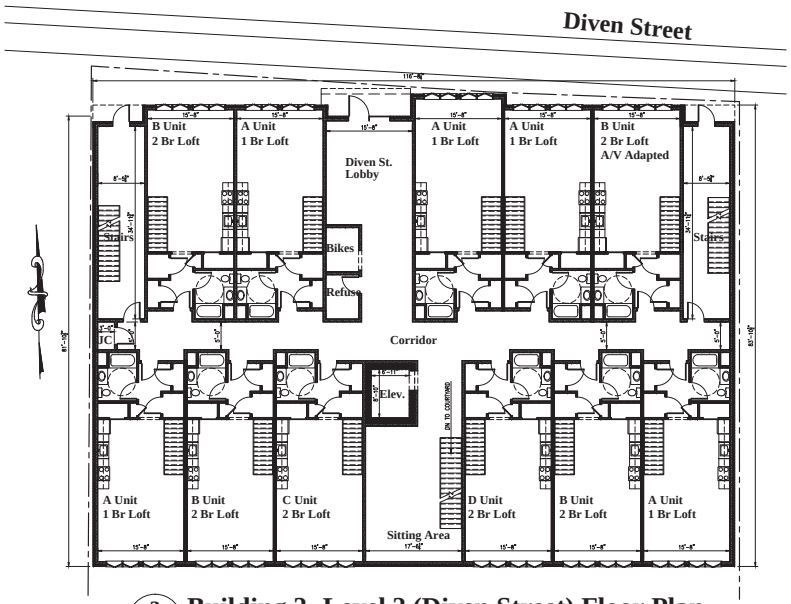
4 / A3 Building 2- Level 2 Loft Plan

Scale: 3/32" = 1'-0"



1 / A3 Building 2- Level 1 (Courtyard) Floor Plan

Scale: 3/32" = 1'-0"



3 / A3 Building 2- Level 2 (Diven Street) Floor Plan

Scale: 3/32" = 1'-0"

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° PROPOSED MULTIFAMILY/MIXED USE BUILDINGS FOR °

The Lofts on Main Building #2

921 DIVEN STREET, CITY OF PEEKSKILL, NY

BUILDING #2 FLOOR PLANS

Revisions

Date

7/10/15

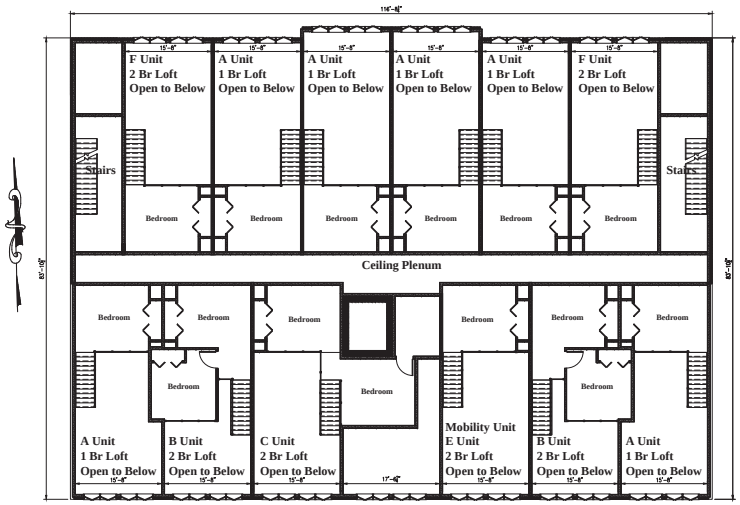
Project Number

14-20

Sheet Number

A3

Building #2



2 / A4 Building 2- Level 3 Loft Plan

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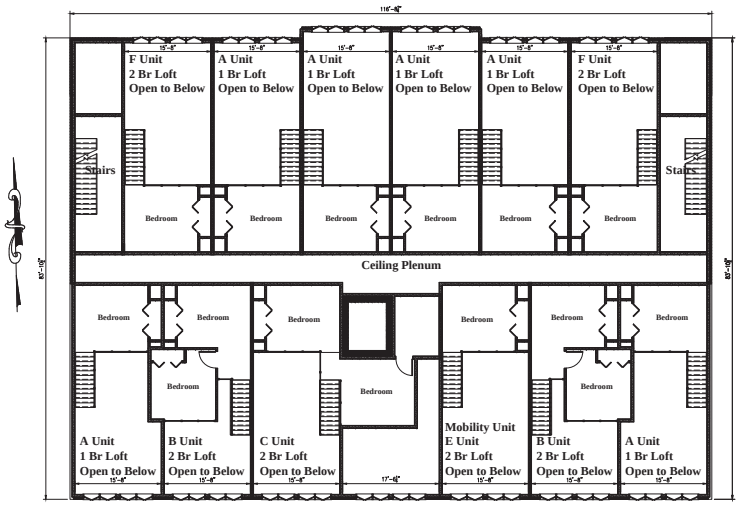

4 / A4 Building 2- Level 4 Loft Plan

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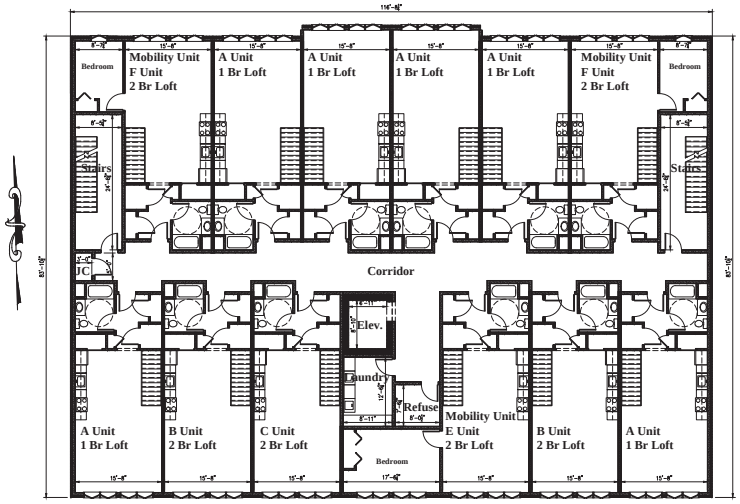

1 / A4 Building 2- Level 3 Floor Plan

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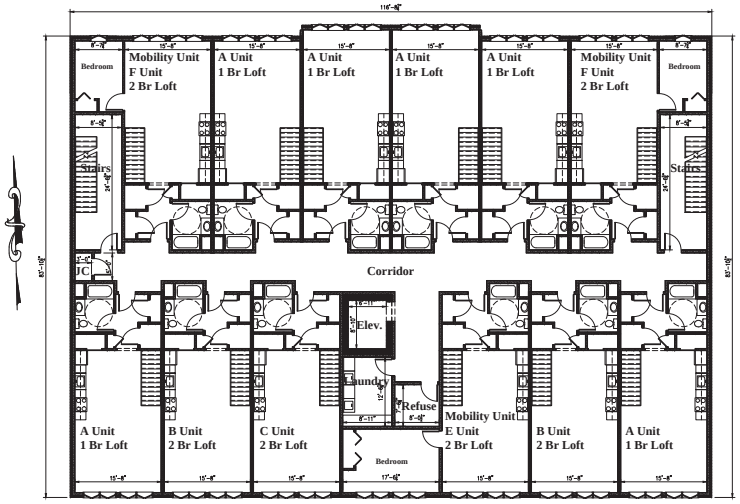

3 / A4 Building 2- Level 4 Floor Plan

Scale: 3/32" = 1'-0"

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° PROPOSED MULTIFAMILY/MIXED USE BUILDINGS FOR °

The Lofts on Main Building #2

921 DIVEN STREET, CITY OF PEEKSKILL, NY

BUILDING #2 FLOOR PLANS

REVISIONS

DATE
7/10/15

PROJECT NUMBER
14-20

SHEET NUMBER
A4

Building #2

Exterior Finishes:
EPDM Roofing
Precast Crown/Cornice
4" Face Brick on Main St.
Fibercement Siding
Fobercement Trims
Aluminum Windows

1 / A5 **Building #1- Courtyard Elevation**
Scale: 1/8" = 1'-0"

2 / A5 **Building #1- Main Street Elevation**
Scale: 1/8" = 1'-0"

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° PROPOSED MULTIFAMILY/MIXED USE BUILDINGS FOR °

The Lofts on Main Building #1

922 MAIN STREET, CITY OF PEEKSKILL, NY

ELEVATION

Revisions

Date
7/10/15

Project Number
14-20

Sheet Number
A5
Building #1

1 / A6 **Building #2- Courtyard Elevation**

Scale: 1/8" = 1'-0"

2 / A6 **Building #2- Diven Street Elevation**

Scale: 1/8" = 1'-0"

Exterior Finishes:
EPDM Roofing
Precast Crown/Cornice
4" Face Brick on Main St.
Fibercement Siding
Fobercement Trims
Aluminum Windows

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° PROPOSED MULTIFAMILY/MIXED USE BUILDINGS FOR °

The Lofts on Main Building #2

922 MAIN STREET, CITY OF PEEKSKILL, NY

ELEVATION

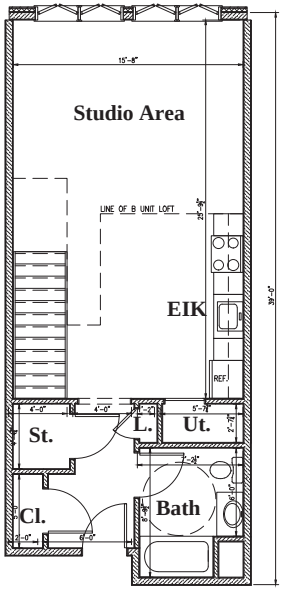
Revisions

Date
7/10/15

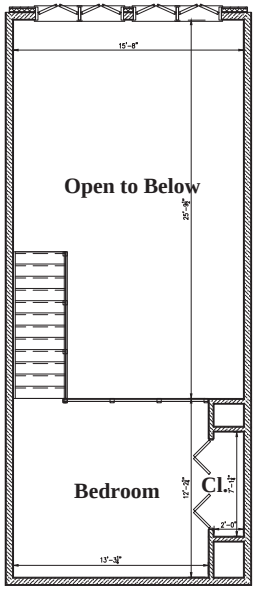
Project Number
14-20

Sheet Number
A6

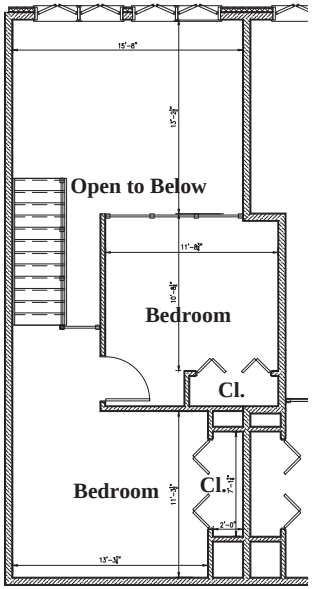
Building #2



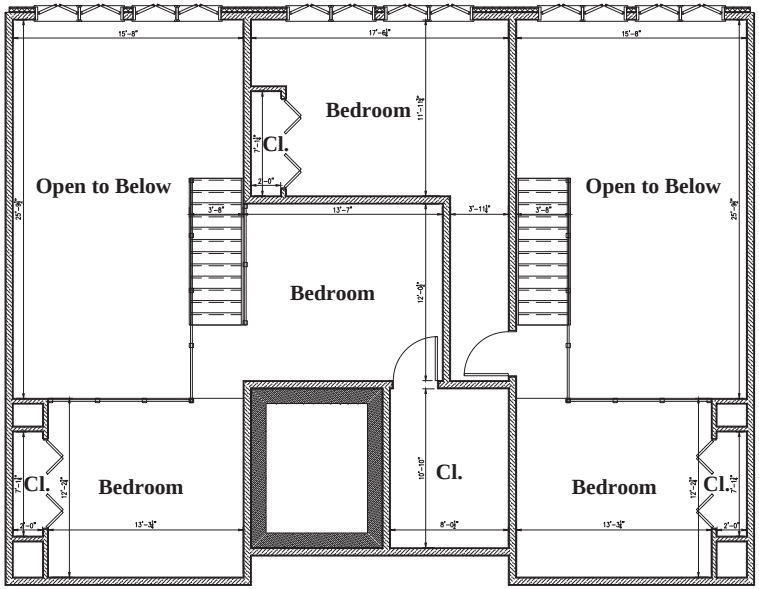
1 A7 **Typical Unit Lower Level**
Scale: 1/4" = 1'-0"



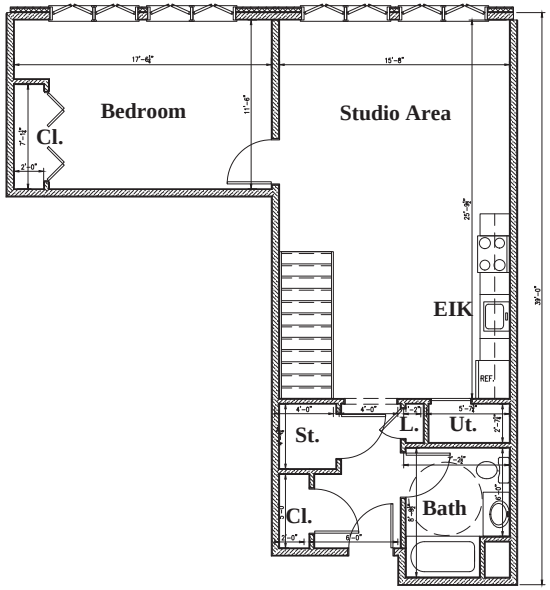
2 A7 **Typical A Unit Loft Level**
Scale: 1/4" = 1'-0"



3 A7 **Typical B Unit Loft Level**
Scale: 1/4" = 1'-0"



4 A7 **Typical C & D Unit Loft Level**
Scale: 1/4" = 1'-0"



5 A7 **Typical E Unit Lower Level**
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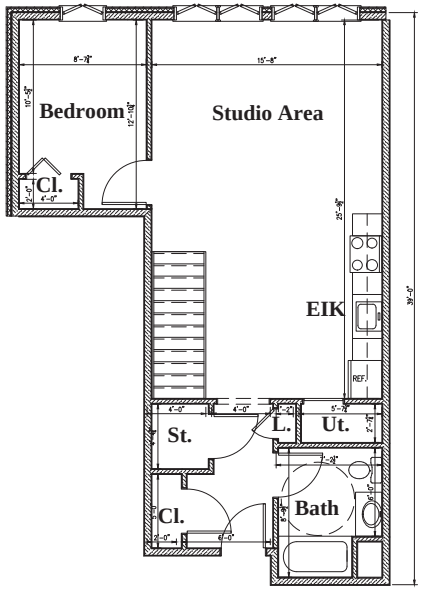

6 A7 **Typical F Unit Lower Level**
Scale: 1/4" = 1'-0"

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LICENSE NUMBER: 018849

° PROPOSED MULTIFAMILY/MIXED USE BUILDINGS FOR °

The Lofts on Main

922 MAIN STREET, CITY OF PEEKSKILL, NY

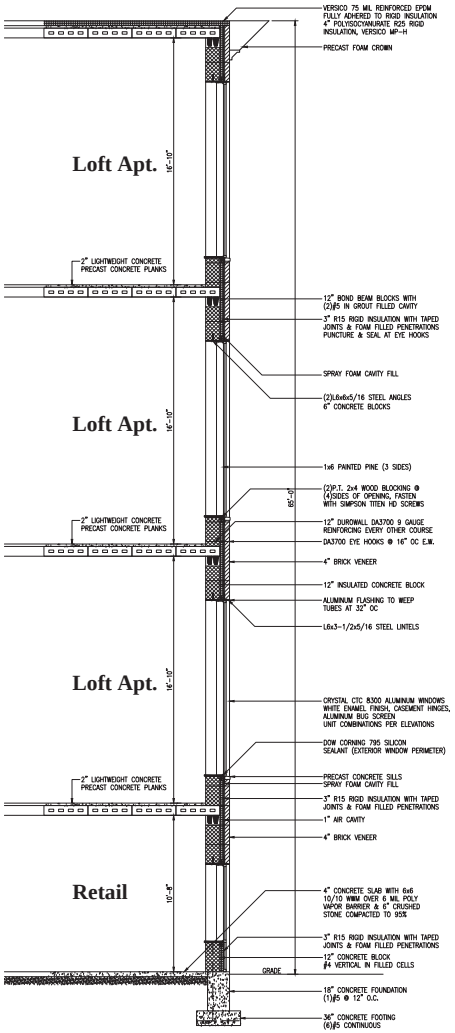
TYPICAL UNIT PLANS

REVISIONS

DATE
7/10/15

PROJECT NUMBER
14-20

SHEET NUMBER
A7



1 / A8 **Typical Wall Section @ Main Street**

Scale: 1/4" = 1'-0"

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ajcoppola@coppola-associates.com

LICENSE NUMBER: 018849

° PROPOSED MULTIFAMILY/MIXED USE BUILDINGS FOR °

The Lofts on Main

922 MAIN STREET, CITY OF PEEKSKILL, NY

TYPICALWALL SECTION

REVISIONS

DATE

7/10/15

PROJECT NUMBER

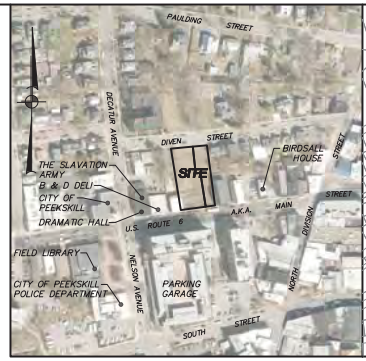
14-20

SHEET NUMBER

A8

PLANT LIST

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT/SPACER
		SHADE AND FLOWERING TREES		
CF	4	Cornus florida / Flowering Dogwood	7' – 8' HT.	B&B
RP	2	Robinia pseudoacacia / Black Locust	2"–2 1/2" CAL.	B&B
		SHRUBS		
CO	24	Chamaecyparis obtusa 'Nana Lutea' / Golden Dwarf Hinoki Cypress	30" – 36" HT.	@5 CONT.
RR	8	Rhododendron var. / Bloom–A–Thon Red Reblooming Azalea	24" – 30" HT.	@5 CONT.
		PERENNIALS/GROUNDCOVERS		
IC	24	Iris cristata / Crested iris	12"–15" HT	@1 CONT. / 18"O.C.
LM	28	Lamium maculatum / Dead Nettle	12"–15" HT	@1 CONT. / 18"O.C.
SH	87	Sarcococca hookeriana var. humilis / Sweetbox	12"–15" HT	@1 CONT. / 24"O.C.
VM	30	Vinca Minor / Periwinkle	12"–18" SPR.	4" POT / 18"O.C.



AREA MAP SCALE: 1" = 200'±

LOCATION MAP SCALE: 1" = 400'±

OWNER/APPLICANT:

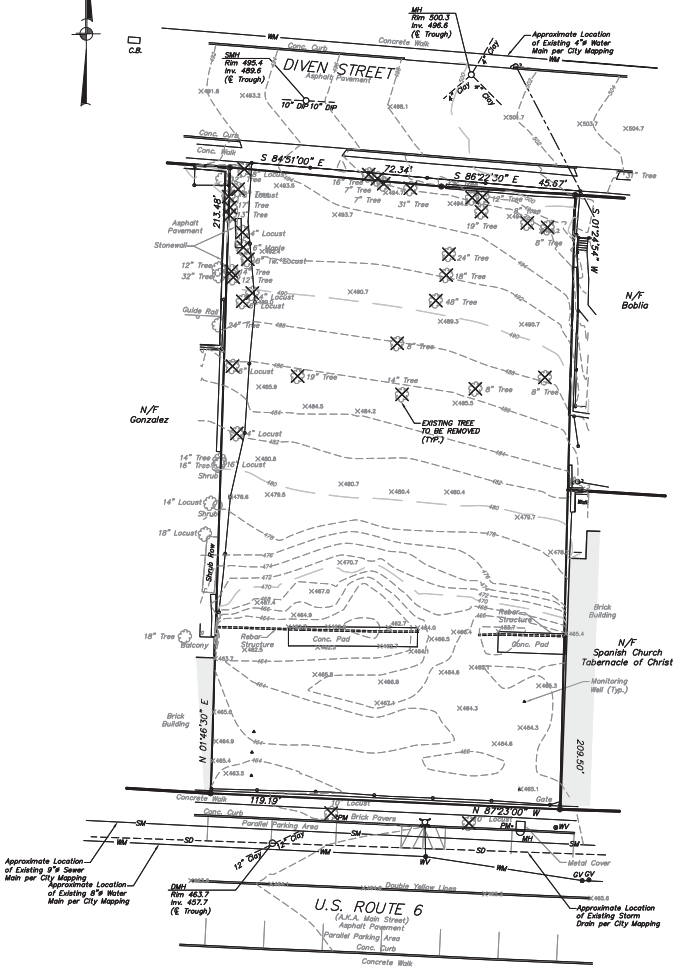
The Kearney Realty and Development Group, Inc.
1777 Route 6
Carmel, NY 10512

SITE DATA:

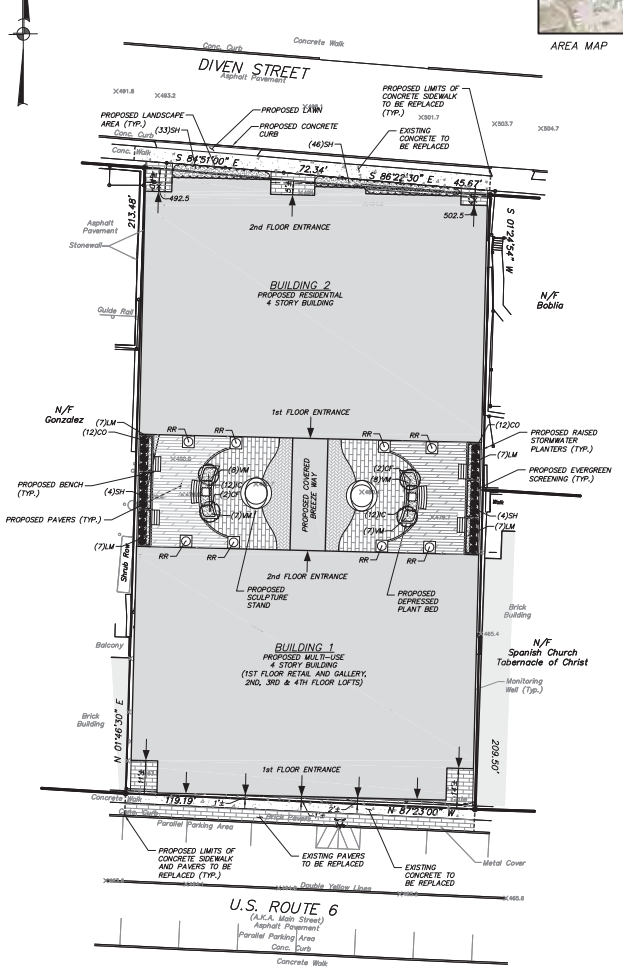
Zone: C–2
Total Acreage 0.57 AC
Tax Map No.: 33.29–2–4
33.29–2–5

GENERAL NOTES:

1. Existing boundary information taken from survey prepared by Matthew A. Novello, P.C., Consulting Engineers & Land Surveyors dated July 10, 2003.
2. Topography shown hereon is based upon actual fieldwork performed by Insite Engineering, Surveying & Landscape Architecture, P.C. and completed June 5, 2015. Elevations shown hereon are referenced to an arbitrary datum. The contour interval is 2'.
3. Existing sewer main, water main and storm drain locations shown hereon are approximate and were obtained from mapping provided by the City of Peekskill.



EXISTING CONDITIONS SITE PLAN
SCALE: 1" = 20'



LAYOUT & LANDSCAPE PLAN
SCALE: 1" = 20'

LEGEND

- Existing Property Line
- Existing 10' Contour
- Existing 2' Contour
- Existing Tree to Remain
- Existing Tree to be Removed
- Existing Curb
- Existing Stonewall
- Existing Chainlink Fence
- Existing Utility Pole with Overhead Wires
- Existing Hydrant
- Existing Water Valve
- Existing Manhole
- Existing Gate Valve
- Existing Catch Basin
- Existing Water Main
- Existing Sewer Main
- Existing Storm Drain
- Existing Parking Meter
- Proposed Door
- Proposed Bench
- Proposed Raised Stormwater Planters
- Proposed Pavers

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225–9690
(845) 225–9717 fax
www.insite–eng.com

PROJECT:
THE LOFTS ON MAIN
921 DIVEN STREET & 922 MAIN STREET,
CITY OF PEEKSKILL, COUNTY OF WESTCHESTER, NEW YORK

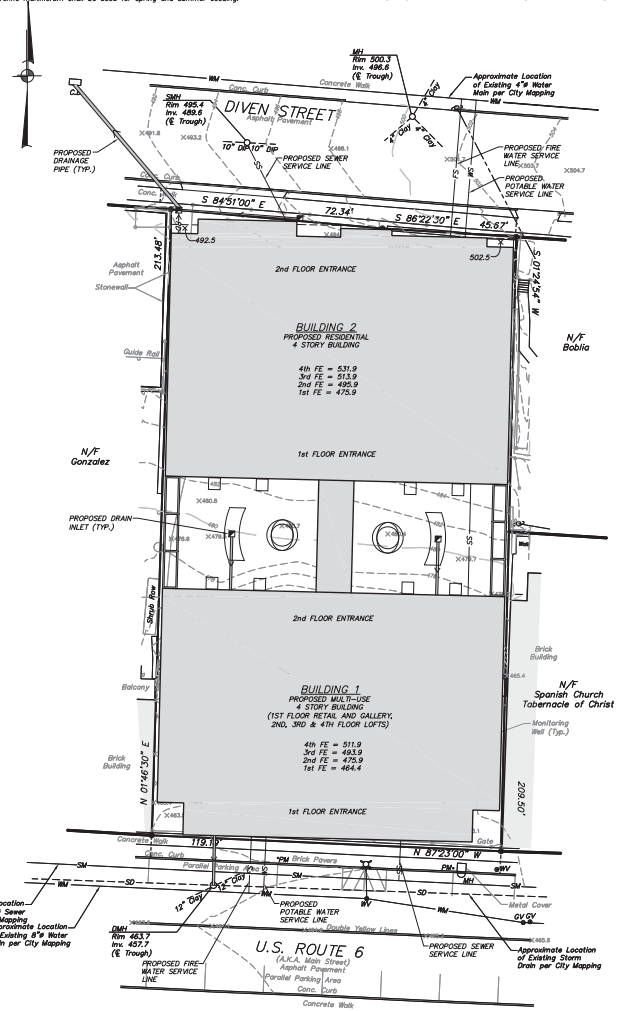
DRAWING:
SITE PLAN

PROJECT NUMBER	14165.100	PROJECT MANAGER	J.J.C.
DATE	6–11–15	DRAWN BY	M.E.U.
SCALE	1" = 20'	CHECKED BY	J.L.K.

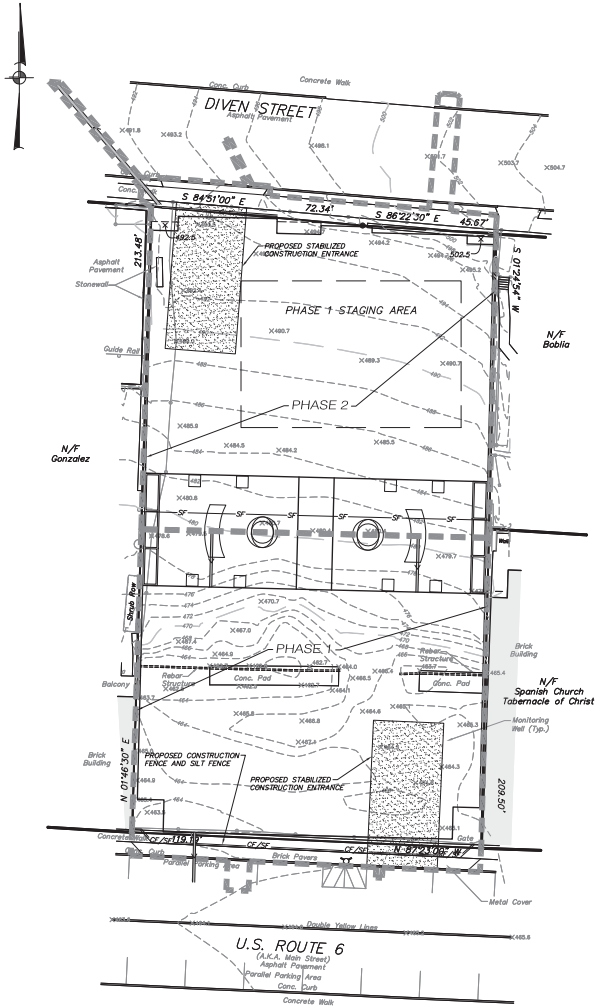
DRAWING NO. SP–1
SHEET 1 / 3

Erosion & Sediment Control Notes:

1. The Erosion and Sediment Control Plan is only to be referred to for the installation of erosion and sediment control measures. For all other construction related activities, including, but not limited to, grading and utilities, refer to the appropriate drawings.
2. The Contractor shall be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
3. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
4. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction.
5. When land is exposed during development, the exposure shall be kept to the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized in the areas required to perform construction.
6. The stabilized construction entrances, silt fence, and temporary chain link fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork. Refer to General Note 13 on Drawing EX-1.
7. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded with Lolium perenne aristatum or Lolium perenne multiflorum for temporary stabilization. Lolium perenne aristatum shall be used for winter seeding and Lolium perenne multiflorum shall be used for spring and summer seeding.
8. Any graded areas not subject to further disturbance or construction traffic shall, within 7 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
   - Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative at a rate of 100 pounds per acre in the following proportions:
     Kentucky Bluegrass 20%
     Creeping Red Fescue 40%
     Perennial Ryegrass 20%
     Annual Ryegrass 20%
   - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
9. Grass seed mix may be applied by either mechanical or hydroseeding methods. Hydroseeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1".
10. Paved roadways shall be kept clean at all times.
11. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
12. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
13. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
14. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the NYSDEC trained individual to insure that pipes are clear of debris and that all silt fence is intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the NYSDEC trained individual and/or site engineer.
15. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the NYSDEC trained individual.
16. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
17. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
18. The NYSDEC trained individual shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
19. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and the City Engineer shall be installed by the contractor.
20. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.
21. After completion of the site improvements, the owner will assume responsibility for maintenance of the parking lots, drainage systems and stormwater facilities (Refer to General Note 9). Each spring the paved areas shall be cleaned to remove the winter accumulation of traction sand. After this is completed the drain inlet, drain inlet sumps and hydrodynamic separator should be cleaned. All pipes should be checked for debris and blockage and cleaned as required. During the cleaning process, the drain inlet and pipes should be inspected for structural integrity and overall condition. Repairs and/or replacements should be made as required.
22. Refer to the Stormwater Management Report for additional details regarding long-term maintenance of the storm drainage facilities.



GRADING, UTILITIES, PLAN
SCALE: 1" = 20'



EROSION & SEDIMENT CONTROL PLAN
SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

LEGEND

- Existing Property Line
- 490 Existing 10' Contour
- 492 Existing 2' Contour
- Existing Curb
- Existing Stonewall
- Existing Chainlink Fence
- Existing Utility Pole with Overhead Wires
- Existing Hydrant
- WV Existing Water Valve
- MH Existing Manhole
- GV Existing Gate Valve
- C.B. Existing Catch Basin
- WM Existing Water Main
- SM Existing Sewer Main
- SD Existing Storm Drain
- PM Existing Parking Meter
- FS Proposed Fire Water Service Line
- WS Proposed Water Service Line
- SS Proposed Sewer Service Line
- Proposed Drainage Pipe
- RD Proposed Roof Drain
- Proposed Drain Inlet
- Proposed Raised Stormwater Planters

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

	MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
ROAD & PAVEMENT	–	Inspect	Inspect	Clean	Clean

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized.

Note: The party responsible for implementation of the maintenance schedule during and after construction is:

The Kearney Realty and Development Group, Inc.
1777 Route 6
Carmel, NY 10512

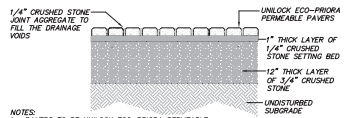
NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
THE LOFTS ON MAIN
921 DIVEN STREET & 922 MAIN STREET,
CITY OF PEEKSKILL, COUNTY OF WESTCHESTER, NEW YORK

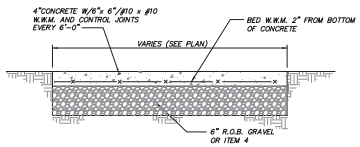
DRAWING:
GRADING, UTILITIES & EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER	14165.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	6-11-15	DRAWN BY	M.E.U.	SP-2	2 / 3
SCALE	1" = 20'	CHECKED BY	J.L.K.		

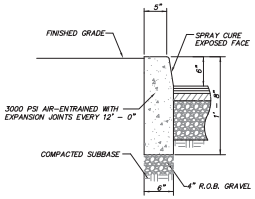


NOTES:
1. PAVERS TO BE UNILOCK ECO-PRIORA PERMEABLE PAVERS, 5"X10"X3 1/8" SET IN HERRINGBONE PATTERN.
2. PAVER FINISH TO BE IL CAMPO. PAVER COLOR TO BE AS APPROVED BY OWNER.
3. JOINT AGGREGATE COLOR TO BE COORDINATED WITH PAVER COLOR.

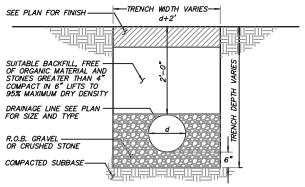
PAVERS DETAIL
(N.T.S.)



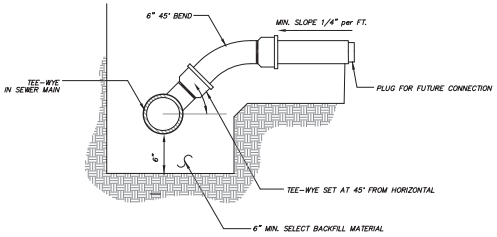
CONCRETE SIDEWALK DETAIL
(N.T.S.)



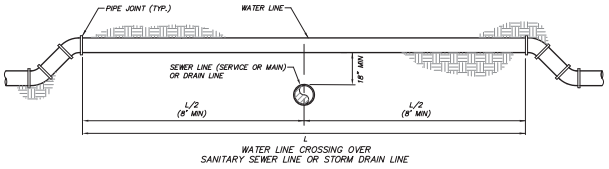
CONCRETE CURB DETAIL
(N.T.S.)



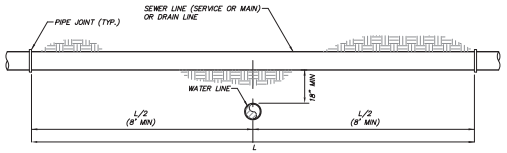
DRAINAGE LINE TRENCH DETAIL
(N.T.S.)



SEWER SERVICE CONNECTION DETAIL
(N.T.S.)



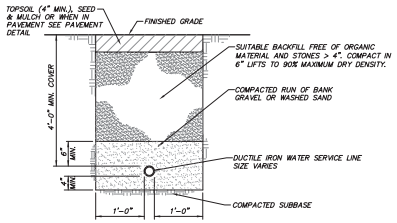
WATER LINE CROSSING OVER
SANITARY SEWER LINE OR STORM DRAIN LINE



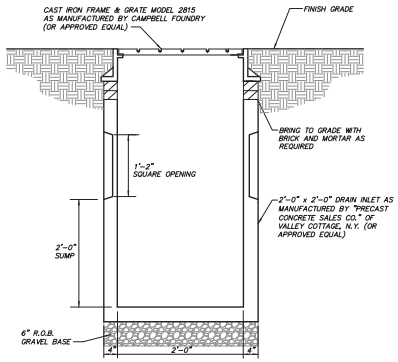
WATER LINE CROSSING UNDER
SANITARY SEWER LINE OR STORM DRAIN LINE

NOTES:
1. WHEN 18" SEPARATION CANNOT BE MAINTAINED, THE WATER LINE SHALL BE ENCASED IN CONCRETE (SEE DETAIL) ONLY WITH PRIOR APPROVAL OF THE DESIGN ENGINEER AND DEPARTMENT OF HEALTH.
2. PROVIDE PIPE AND FITTING RESTRAINT AS REQUIRED.
3. THE 18" SEPARATION APPLIES TO WATER MAINS AND WATER SERVICE CONNECTIONS.

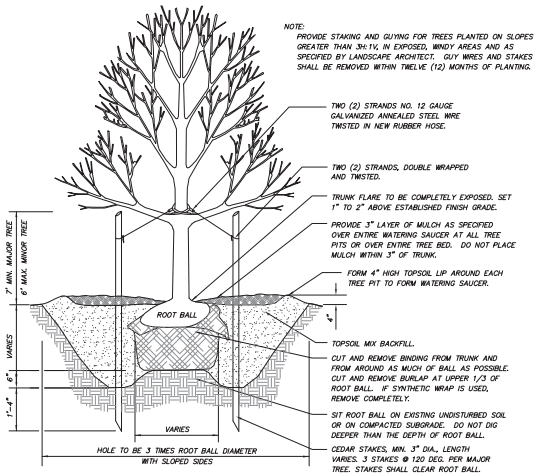
WATER LINE CROSSING DETAIL
(N.T.S.)



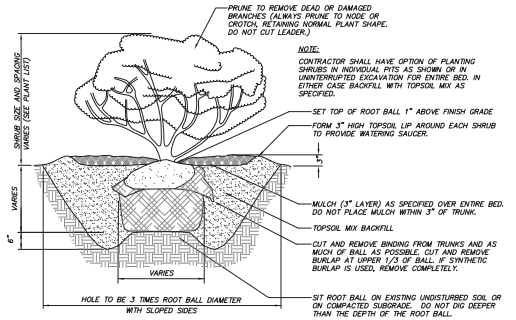
WATER SERVICE LINE TRENCH DETAIL
(N.T.S.)



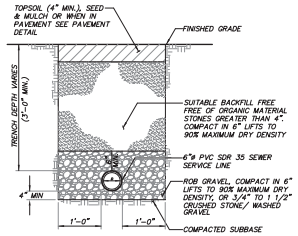
DRAIN INLET DETAIL (TO BE DESIGNED FOR H-20 LOADING)
(N.T.S.)



TREE PLANTING DETAIL
(N.T.S.)



SHRUB PLANTING DETAIL
(N.T.S.)



SEWER SERVICE LINE TRENCH DETAIL
(N.T.S.)

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
THE LOFTS ON MAIN
921 DIVEN STREET & 922 MAIN STREET,
CITY OF PEEKSKILL, COUNTY OF WESTCHESTER, NEW YORK

DRAWING:
DETAILS

PROJECT NUMBER	14165.100	PROJECT MANAGER	J.J.C.
DATE	6-11-15	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	J.L.K.

DRAWING NO. D-1
SHEET 3 / 3

APPENDIX E

Sample of Non-Hazardous Soil Disposal Manifest(s)

SOIL SAFE, INC.

Log Number

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name _____ Shipping Location _____

Address _____ Address _____

_____ _____

Phone No. _____ Phone No. _____

Approval Number

Description of Material

GROSS

TARE

NET

TONNAGE

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

_____

Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Transporter Name _____ Driver Name (Print) _____

Address _____ Vehicle License No./State _____

_____ Truck Number _____

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

_____ _____

Driver Signature Shipment Date Driver Signature Delivery Date

DESTINATION

Site Name _____ Phone No._____

Address _____

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

_____

Name of Authorized Agent Signature Receipt Date

White - Facility Green - Facility Yellow - Generator Pink - Broker Goldenrod - Contractor Blue - Trucking Co.

APPENDIX F

Citizens Participation Plan

New York State Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan

for

Parkview Development

The Lofts on Main
922 Main Street and 921 Diven Street
Peekskill, New York 10566

November 2015

Contents

* * * * *

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the site's investigation and cleanup process.

Applicant: **Parkview Development (Applicant)**
Site Address: **922 Main Street and 921 Diven Street ("site")**
Site County: **Westchester**
Site Number: **C360152**

1. What is New York's Brownfield Cleanup Program?

New York's Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and developed. These uses include recreation, housing, and business.

A *brownfield* is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Applicants that conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by NYSDEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at: http://www.dec.ny.gov/chemical/8450.html .

2. Citizen Participation Activities

Why NYSDEC Involves the Public and Why It Is Important

NYSDEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social wellbeing. NYSDEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions.

Involving citizens affected and interest in site investigation and cleanup programs is important for many reasons. These include:

- Promoting the development of timely, effective site investigation and cleanup programs that protect public health and the environment;

- Improving public access to, and understanding of, issues and information related to a particular site and that site's investigation and cleanup process;

- Providing citizens with early and continuing opportunities to participate in NYSDEC's site investigation and cleanup process;

- Ensuring that NYSDEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community; and

- Encouraging dialogue to promote the exchange of information among the affected/interested public, State agencies, and other interested parties that strengthens trust among the parties, increases understanding of site and community issues and concerns, and improves decision making.

This Citizen Participation (CP) Plan provides information about how NYSDEC will inform and involve the public during the investigation and cleanup of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies NYSDEC project contact(s) to whom the public should address questions or request information about the site's investigation and cleanup program. The public's suggestions about this CP Plan and the CP program for the site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

Locations of Reports and Information

The locations of the reports and information related to the site's investigation and cleanup program also are identified in Appendix A. These locations provide convenient access to important project documents for public review and comment. Some documents may be placed on the NYSDEC web site. If this occurs, NYSDEC will inform the public in fact sheets distributed about the site and by other means, as appropriate.

Site Contact List

Appendix B contains the site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and cleanup process. The site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods. The site contact list includes, at a minimum:

- Chief executive officer and planning board chairperson of each county, city, town and village in which the site is located;
- Residents, owners, and occupants of the site and properties adjacent to the site;
- The public water supplier which services the area in which the site is located;
- Any person who has requested to be placed on the site contact list;
- The administrator of any school or day care facility located on or near the site for purposes of posting and/or dissemination of information at the facility;
- Location(s) of reports and information.

The site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix A. Other additions to the site contact list may be made at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the site's investigation and cleanup program. The flowchart in Appendix D shows how these CP activities integrate with the site investigation and cleanup process. The public is informed about these CP activities through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.

- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a site's investigation and cleanup.

The public is encouraged to contact project staff at any time during the site's investigation and cleanup process with questions, comments, or requests for information.
This CP Plan may be revised due to changes in major issues of public concern identified in Section 3 or in the nature and scope of investigation and cleanup activities. Modifications may include additions to the site contact list and changes in planned citizen participation activities.

Technical Assistance Grant

NYSDEC must determine if the site poses a significant threat to public health or the environment. This determination generally is made using information developed during the investigation of the site, as described in Section 5.

If the site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the site.

For more information about TAGs, go online at http://www.dec.ny.gov/regulations/2590.html

Note: The table identifying the citizen participation activities related to the site's investigation and cleanup program follows on the next page:

Citizen Participation Requirements (Activities)	Timing of CP Activity(ies)
Application Process:	
• Prepare site contact list • Establish document repositories	At time of preparation of application to participate in the BCP.
• Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period • Publish above ENB content in local newspaper • Mail above ENB content to site contact list • Conduct 30-day public comment period	When NYSDEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement:	
• Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation
Before NYSDEC Approves Remedial Investigation (RI) Work Plan:	
• Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan • Conduct 30-day public comment period	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.
After Applicant Completes Remedial Investigation:	
• Distribute fact sheet to site contact list that describes RI results	Before NYSDEC approves RI Report
Before NYSDEC Approves Remedial Work Plan (RWP):	
• Distribute fact sheet to site contact list about proposed RWP and announcing 45-day public comment period • Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager) • Conduct 45-day public comment period	Before NYSDEC approves RWP. Forty-five day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day public comment period.
Before Applicant Starts Cleanup Action:	
• Distribute fact sheet to site contact list that describes upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
• Distribute fact sheet to site contact list that announces that cleanup action has been completed and that summarizes the Final Engineering Report • Distribute fact sheet to site contact list announcing issuance of Certificate of Completion (COC)	At the time NYSDEC approves Final Engineering Report. These two fact sheets are combined if possible if there is not a delay in issuing the COC.

3. Major Issues of Public Concern

This section of the CP Plan identifies major issues of public concern that relate to the site. Additional major issues of public concern may be identified during the course of the site's investigation and cleanup process.

The site is located in a potential Environmental Justice Area. Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice efforts focus on improving the environment in communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities.

The site is located in an area with a sizable Hispanic-American population nearby. Therefore, all future fact sheets will be translated into Spanish.

This section of the CP Plan identifies major issues of public concern, if any, that relate to the site. Additional major issues of public concern may be identified during the Site's remedial process.

Implementation of the BCP process at this site will benefit most stakeholders, who include residents of the area, by investigating and remediating known contamination and allowing for new residential opportunities. Current exposure to site contaminants is limited since the property is vacant and fenced. The area is served by a public water supply and therefore there is no exposure to groundwater. Potential exposure to Site contaminants during investigation and remediation will be addressed by adherence to a Health and Safety Plan (HASP) and a Community Air Monitoring Plan (CAMP), which will be implemented during site investigation and remediation. Any potential odors, nuisances or air quality concerns which may affect the community during remediation will be addressed by adherence to the Odor, Dust, and Nuisance Control Plan, which will be included in the Remedial Action Work Plan.

4. Site Information

Appendix C contains a map identifying the location of the site.

Site Description

Location: 922 Main Street and 921 Diven Street, Peekskill, New York
Setting: urban
Site Size: 0.57-acre
Adjacent Properties: residential and mixed-use properties.

History of Site Use, Investigation, and Cleanup

The site consists of two vacant parcels that were historically utilized for residential, commercial, and possibly manufacturing purposes.

Previous investigations have documented the presence of soil that has been contaminated with both semi-volatile organic compounds and metals. Low-level volatile organic compounds were also identified in soil vapor at the site. The source of the documented soil contamination is consistent with historical manufacturing operations or other commercial uses and possibly debris materials from the demolition of former on-site structures that has resulted in contaminated media

5. Investigation and Cleanup Process

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program as a Volunteer. This means that the Applicant was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination onsite, and must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the site and to contamination that has migrated from the site.

The Applicant in its Application proposes that the site will be used for mixed-use (residential and artist lofts) purposes.

To achieve this goal, the Applicant will conduct investigation and cleanup activities at the site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the site.

Investigation

The Applicant has completed a partial site investigation before it entered into the BCP. For the partial investigation, NYSDEC will determine if the data are useable.

The Applicant will conduct an investigation of the site officially called a "remedial investigation" (RI). This investigation will be performed with NYSDEC oversight. The Applicant must develop a remedial investigation work plan, which is subject to public comment.

The site investigation has several goals:

1) Define the nature and extent of contamination in soil, surface water, groundwater and any other parts of the environment that may be affected;
2) Identify the source(s) of the contamination;
3) Assess the impact of the contamination on public health and the environment; and
4) Provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

When the investigation is complete, the Applicant will prepare and submit a report that summarizes the results. This report also will recommend whether cleanup action is needed to address site-related contamination. The investigation report is subject to review and approval by NYSDEC.

NYSDEC will use the information in the investigation report to determine if the site poses a significant threat to public health or the environment. If the site is a "significant threat", it must be cleaned up using a remedy selected by NYSDEC from an analysis of alternatives prepared by the Applicant and approved by NYSDEC. If the site does not pose a significant threat, the Applicant may select the remedy from the approved analysis of alternatives.

Remedy Selection

When the investigation of the site has been determined to be complete, the project likely would proceed in one of two directions:

1. The Applicant may recommend in its investigation report that no action is necessary at the site. In this case, NYSDEC would make the investigation report available for public comment for 45 days. NYSDEC then would complete its review, make any necessary revisions, and, if appropriate, approve the investigation report. NYSDEC would then issue a "Certificate of Completion" (described below) to the Applicant.

or

2. The Applicant may recommend in its investigation report that action needs to be taken to address site contamination. After NYSDEC approves the investigation report, the Applicant may then develop a cleanup plan, officially called a "Remedial Work Plan". The Remedial Work Plan describes the Applicant's proposed remedy for addressing contamination related to the site.

When the Applicant submits a proposed Remedial Work Plan for approval, NYSDEC would announce the availability of the proposed plan for public review during a 45-day public comment period.

Cleanup Action

NYSDEC will consider public comments, and revise the draft cleanup plan if necessary, before approving the proposed remedy. The New York State Department of Health (NYSDOH) must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy.

The Applicant may then design and perform the cleanup action to address the site contamination. NYSDEC and NYSDOH oversee the activities. When the Applicant completes cleanup activities, it will prepare a Final Engineering Report (FER) that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the site.

Certificate of Completion

When NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the site, it will approve the final engineering report. NYSDEC then will issue a Certificate of Completion (COC) to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the site after it receives a COC.

Site Management

Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management may be conducted by the Applicant under NYSDEC oversight, if contamination will remain in place. Site management incorporates any institutional and engineering controls required to ensure that the remedy implemented for the site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan.

An institutional control is a non-physical restriction on use of the site, such as a deed restriction that would prevent or restrict certain uses of the property. An institutional control may be used when the cleanup action leaves some contamination that makes the site suitable for some, but not all uses.

An engineering control is a physical barrier or method to manage contamination. Examples include: caps, covers, barriers, fences, and treatment of water supplies.

Site management also may include the operation and maintenance of a component of the remedy, such as a system that is pumping and treating groundwater. Site management continues until NYSDEC determines that it is no longer needed.

Appendix A
Project Contacts and Locations of Reports and Information

Project Contacts

For information about the site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Douglas MacNeal
Project Manager
NYSDEC Division of Environmental
Remediation - Bureau B
625 Broadway
Albany, New York 12233-7016
Ph. (518) 402-9564
douglas.macneal@dec.ny.gov

Wendy Rosenbach Public Affairs Officer
NYSDEC
21 South Putt Corners Road
New Paltz, NY 12561
Ph. (845) 256-3018
wendy.rosenbach@dec.ny.gov

New York State Department of Health (NYSDOH):

Stephanie Selmer, Public Health Specialist, Bureau of
Environmental Exposure Investigation
New York State Department of Health Corning Tower, Room 1787
Albany New York 12237
Ph. (518) 402-7860
stephanie.selmer@health.ny.gov

Locations of Reports and Information

The facilities identified below are being used to provide the public with convenient access to important project documents:

Robert Boyle
Peekskill Public Library
Field Library
4 Nelson Avenue
Peekskill, NY 10566

Appendix B
Site Contact List

Public Officials:

City of Peekskill Mayor
Frank A. Catalina
Peekskill City Hall
840 Main Street
Peekskill, NY 10566

City Manager of City of Peekskill
Richard Leins
City of Peekskill
840 Main Street
Peekskill, NY 10566

City of Peekskill Council Member
Carol Capobianco, Chair
City of Peekskill
840 Main Street
Peekskill, NY 10566

Building Planning & Zoning:
Jeffrey Stern, Chair
City of Peekskill
840 Main Street
Peekskill, NY 10566

Media:

The Journal News
1133 Westchester Ave
Suite N110
White Plains NY 10604

Public Water Supplier:

City of Peekskill Department of Public Works
Edward A. Khuns III, Superintendent
840 Main Street
Peekskill, NY 10566

Appendix C Site Location Map

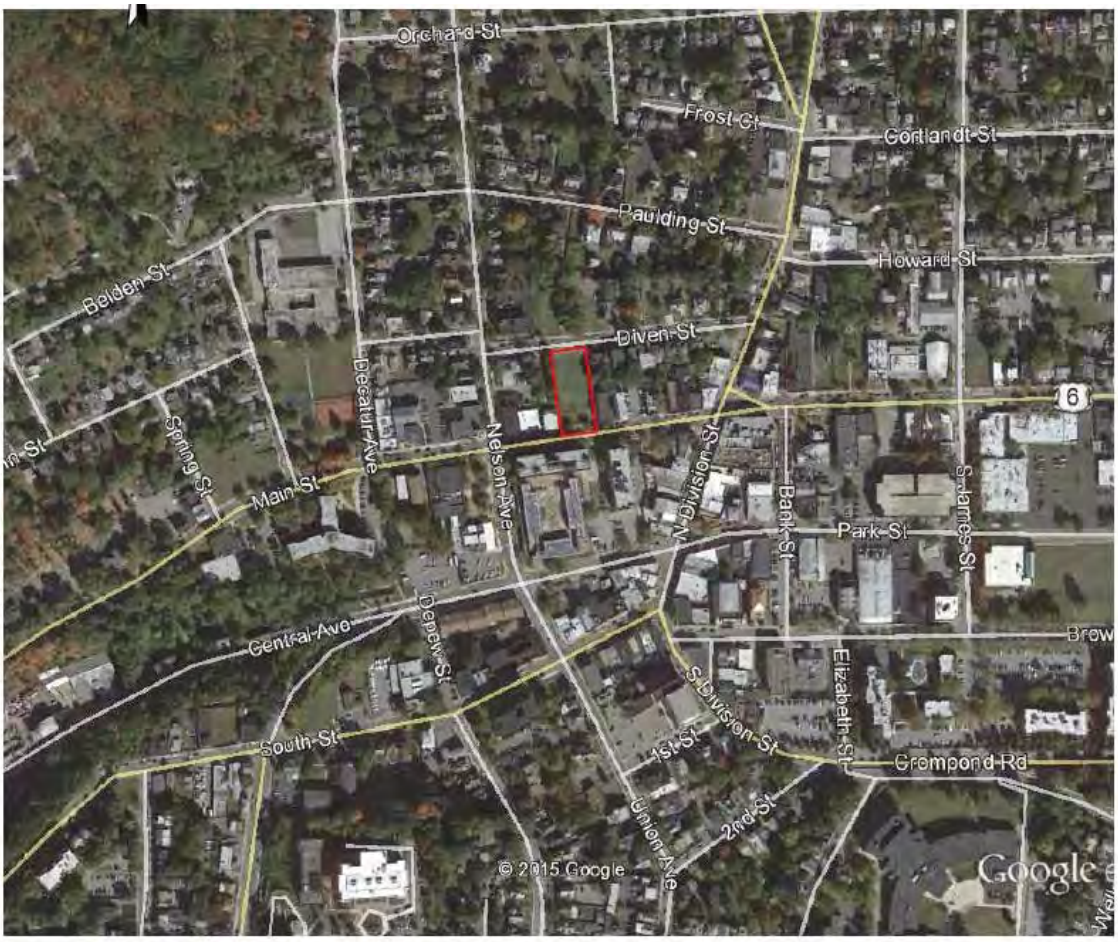


Exhibit A - Site Location Map

922 Main Street and 921 Diven Street
City of Peekskill
Westchester County, New York

Legend: subject property border

Longitude = -73°55'16.78"W
Latitude = 41°17'30.90"N

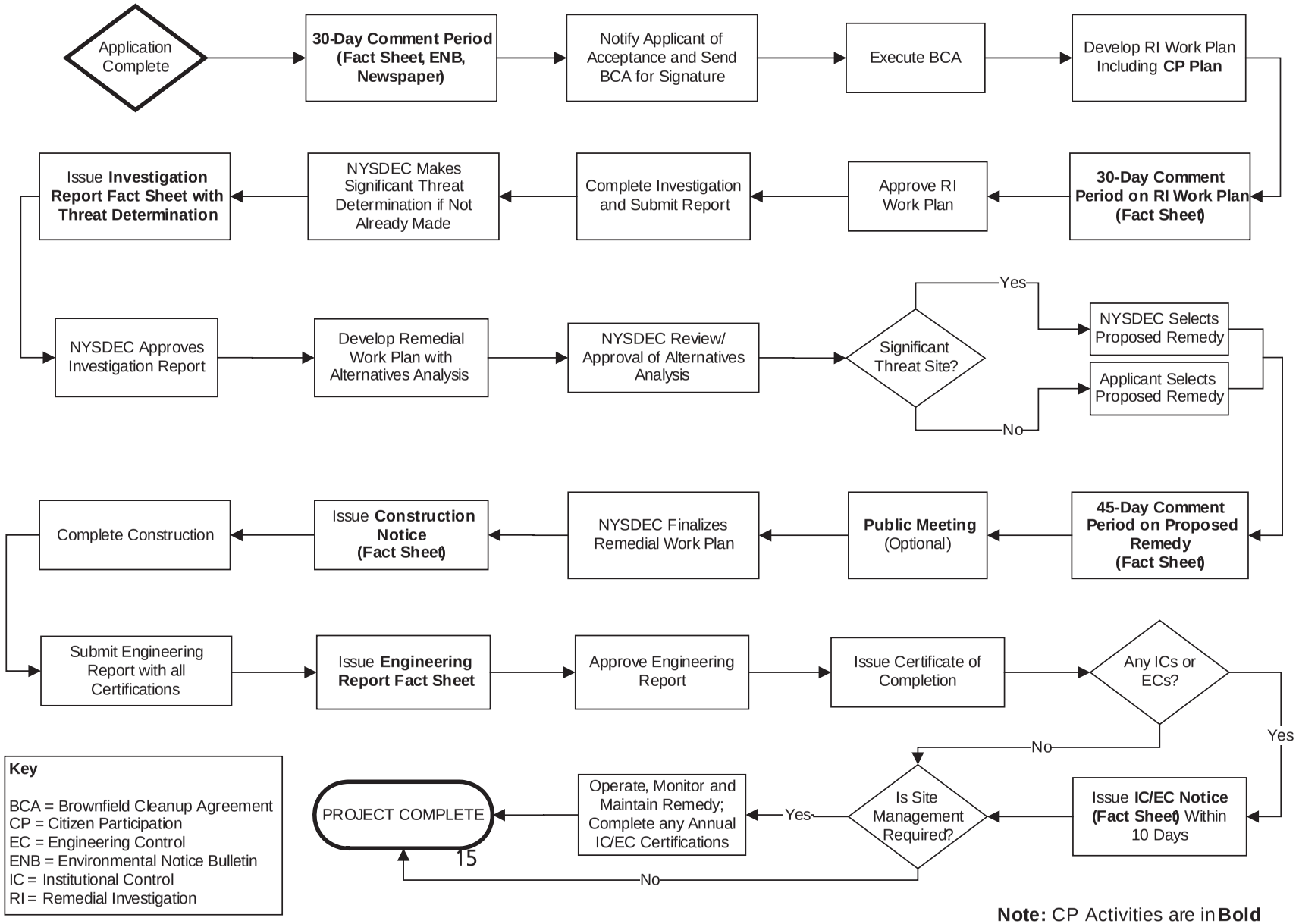
0 250 500
SCALE IN FEET (APPROXIMATELY)

ESI File: KP14175.50

August 2015

Attachment B

Appendix D– Brownfield Cleanup Program Process



APPENDIX G

Cost Estimates

The Lofts on Main Remediation Cost Estimate (Track 1 Alternative)
922 Main Street and 921 Diven Street, Peekskill, New York
ESI File: KP14175.50
(Prepared: 1/20/2016)

Task 1: Pre-remedial Services	
RE/QEP Design Services	$15,000
Laboratory (additional waste characterization)	$25,000
Disbursements	$2,000
Task Subtotal	**$42,000**
Task 2: Soil Removal	
Excavator (20 days)	$80,000
Professional Oversight (including CAMP)	$40,000
Fill Soils ($65/ton-7,500 yd^3/10,500 tons)	$685,000
Laboratory (post-excavation samples)	$4,000
Materials/disbursement	$5,000
Task Subtotal	**$814,000**
Task 3: Site Restoration (Clean Fill)	
Excavation 6 days	$30,000
Oversight/Testing (6 days)	$9,000
Fill material ($35/2,900 yd^3)	$101,500
Reporting/Documentation	$5,000
Task Subtotal	**$145,500**
Task 4: Administrative Services	
Status Reports/Communications	$10,000
Final Engineering Report	$10,000
Meetings (4 budgeted)	$5,000
Task Subtotal	**$25,000**
BASE TOTAL	**$1,026,500**
Contingency (10%)	**$102,650**
TOTAL	**$1,129,150**

The Lofts on Main Remediation Cost Estimate (Track 4 Alternative)
922 Main Street and 921 Diven Street, Peekskill, New York
ESI File: KP14175.50
(Prepared: 1/20/2016)

Task 1: Pre-remedial Services	
RE/QEP Design Services	$15,000
Laboratory (additional waste characterization)	$15,000
Disbursements	$2,000
Task Subtotal	**$32,000**
Task 2: Soil Removal	
Excavator (15 days)	$60,000
Environmental Oversight (15 days)	$30,000
Urban Fill T&D ($65/ton - 5,300 yd^3/7,420 tons)	$482,300
Laboratory (post-excavation samples)	$12,000
Materials/disbursement	$2,000
Task Subtotal	**$586,300**
Task 3: Importation of Cover Material	
Excavation (2 days)	$8,000
Environmental Oversight (2 days)	$3,000
Clean fill soils (370 yd^3)	$13,000
Reporting/Documentation	$3,000
Task Subtotal	**$27,000**
Task 4: Design/Installation of Vapor Barrier	
Design/approval	$3,000
Installation	$39,000
Inspection/Documentation	$3,000
Task Subtotal	**$45,000**
Task 5: Administrative Services	
Status Reports/Communications	$10,000
Final Engineering Report	$10,000
Site Management Plan	$5,000
Meetings (4 budgeted)	$5,000
Task Subtotal	**$30,000**
Task 5: SMP Implementation (30 years)	**$60,000**
Site Inspection	
PRR preparation and submittal	
BASE TOTAL	**$780,300**
Contingency (10%)	**$78,030**
TOTAL	**$858,330**

APPENDIX H

Significant Threat Determination

(to be provided)

APPENDIX I

Resumes

RESUME

Jolanda G. Jansen, P.E. 72 Colburn Drive, Poughkeepsie, NY 12603

Education

Bachelor of Civil Engineering, University of Canterbury, Christchurch, New Zealand, 1975
Juris Doctor, Pace University School of Law, 2010, admitted in NYS

Engineering License

New York State #068972-1, 1992

Professional Experience

Owner, 2009 – present, **Jansen Engineering, PLLC**
Key Projects: RAR report for PCE cleanup.
Composting Facilities Plans.
Stormwater Facilities Design
Drinking Water Facilities Design
Senior Engineer, 2010 – present, **Sloan Architects, PC**
Key Projects: Sustainability Master Plan, Camphill Village
Construction Inspection, Anderson Center for Autism
Project Manager, 2007 – 2008, **Hudson Valley Development Group, LLC**
Key Projects: 26 Home Cluster Subdivision with Central Sewer
4-story School to Condo Conversion
Project Manager, 2001 – 2007, **Spectra Engineering, P.C.**
Key Projects: 130 Lot Subdivision with Central Water and Sanitary
Vassar College Student Housing, Site Plan
Bright Horizons Children's Center, Site Plan
Project Manager, 1996 – 2001, **Hayward and Pakan Associates**
Key Projects: Buddhist Monastery Master Plan
Seventh Day Adventist Camp, WWTF
Staff Engineer, 1994 – 1996, **Morris Associates**
Assistant Engineer, 1987 – 1994, **Hayward and Pakan Associates**
Assistant Surveyor, 1986 – 1987, **Kemble Surveying**

Special Skills & Training

40-hour Safety at Hazardous Materials Sites, Annual 8-hour Refreshers
AutoCAD, bilingual Dutch

Community Service

Coordinator, 2002 – 2009, **Hudson Valley Smart Growth Alliance**

Coordinated conferences on the following topics: SEQRA & Green Building; Sustainable Energy Infrastructure; Magnetizing Downtowns; Planning for Biodiversity; Building Green; Smart Growth – Smart Jobs; Transit Oriented Development; Wind Power; Transfer of Development Rights; Cost of Sprawl; Decentralized Wastewater Systems; Strengthening our Hamlets, Villages and Cities; Affordable Housing and Smart Growth Successes.

Public Speaking

Sustainability Knowledge Exchange with the Netherlands, 2009
Carbon Neutral Community Planning in the Netherlands, 2008
Reducing the Carbon Footprint of Used-Water Treatment, 2008
Innovative Wastewater Treatment in Dutchess County, 2007

References

Available upon request

Paul H. Ciminello, CEM, CAQS
PRESIDENT
paul@ecosystemsstrategies.com

EDUCATION

Master of Environmental Management, 1986
School of the Environment, Duke University, Durham, North Carolina

Master of Arts in Public Policy Sciences, 1986
Institute of Policy Sciences and Public Affairs, Duke University, Durham, North Carolina

Bachelor of Arts, 1980
Tufts University, Medford, Massachusetts

CERTIFICATIONS AND TRAINING

Certified Qualified Environmental Professional (QEP), Institute of Professional Environmental Practice (Cert. Number 08130024)
In compliance with OSHA Hazardous Materials Safety (29 CFR 1910) requirements (updated 2012)
Certified Air Quality Specialist, Environmental Assessment Association, 2007
Certified Environmental Manager, Environmental Assessment Association, 2006
NJ Dept. of Environmental Protection Licensed Subsurface Evaluator (License Number: 0014686)
NYS Dept. of Labor Certified Asbestos Building Inspector (Cert. Number: AH92-14884)
NYS Department of State, Division of Licensing Services, Real Estate Instructor

PROFESSIONAL EXPERIENCE

President, Ecosystems Strategies, Inc., Poughkeepsie, New York *1992 to present*

Coordinates corporate strategic planning, financial management and marketing activities. Oversees corporate work on state and federal superfund sites and manages education/training services. Responsible for technical services in areas of pollution prevention, contaminant delineation and site remediation. Twenty years experience in the investigation and remediation of petroleum contamination at commercial and residential properties. Major recent projects of relevance include:

- Irvington Waterfront Park (Irvington, NY): Project Manager for site investigation and remedial design of abandoned industrial riverfront properties. Documented soil and groundwater contamination and designed remediation including soil removal and site capping. Project completed in 2000; project awarded the 2000 Gold Medal Award by Consulting Engineers Council of New York State.

- Greyston Bakery Site (Yonkers, NY): Project Manager for site investigation and remedial design of former manufactured gas plant site for future use as a bakery. Documented soil, groundwater and soil gas contamination. Remedial systems included installations of a DNAPL collection system, a barrier layer, a subslab depressurization system under the building, and groundwater monitoring. Project completed in 2004.

- 400 Block Redevelopment (Poughkeepsie, NY): Project Manager for site investigation and remedial design of multi-use industrial development property (boiler repair, clothing manufacturer, auto repair) for future retail/residential use. Documented soil (petroleum, PCBs, metals) and groundwater (petroleum) contamination. Remedial systems include: soil (and tank) removal, installation of a barrier, and groundwater monitoring. Project completed in 2006.

- Prospect Court Housing Site (Bronx, NY): Project Manager for site investigation and remediation of a former gas station/auto repair facility. Documented contamination included both dissolved and free-phase petroleum hydrocarbons, dissolved halogenated solvents, and metals contamination in soil. Remedial systems consisted of In-Situ Chemical Oxidation, soil excavation, vapor interception systems, and on-going groundwater monitoring. Project anticipates securing Certificate of Completion from the NYSDEC in December 2012.

- Parkview Commons Site (Bronx, NY): Project Manager for site investigation and remedial design of former gas station/auto repair facility for future use as a residential/commercial building. Certificate of Completion was secured from the NYSDEC in 2007.

Senior Hazardous Waste Specialist, U.S. Hydrogeologic, Inc., Poughkeepsie, New York 1986 to 1992

Supervisor for corporate hazardous and solid waste investigatory and remedial services. Major projects included:

- Coordination of subsurface investigations at a New York State Superfund site (former industrial facility); project manager in charge of site reclassification (delisted as of January, 1991).
- Coordination of petroleum storage tank management plan for Dutchess County (NY) Department of Public Works, including an assessment of regulatory compliance, product utilization and physical conditions of more than 100 tanks at over 20 facilities.
- Environmental compliance Audit of 42,000-square foot printing facility with specific remediations for solvent handling/disposal, inks storage and metal recovery processes.

Adjunct Professor, (various institutions) *1991 to Present*

Dutchess Community College, Poughkeepsie, New York
*M*arist College, Poughkeepsie, New York
Vassar College, Poughkeepsie, New York

Courses: Macroeconomics, Environmental Economics (DCC)
Introduction to Environmental Issues (Marist)
Environmental Geology (Vassar)

Policy Intern, Southern Growth Policies Board, North Carolina *1985*

Prepared several in-depth and short analyses of environmental and economic issues, with specific concern for their impact on Southern state policies. Analyses included: hazardous waste facility setting policies and environmental impacts of "high tech" industries on host communities.

Research Assistant, University of Oregon, Eugene, Oregon *1983*

Analyzed (with Dr. John Baldwin, Chairman of the Department of Planning, Public Policy and Management, U. of Oregon) the "Oregon Riparian Tax Incentive Program". Designed survey, conducted interviews and analyzed data. Summary paper with programmatic recommendations, was presented at the Annual Conference of the National Association of Environmental Educators.

PRESENTATIONS

- "Environmental Risks in Lending" Training Session for Pawling Savings Bank employees, December 18 and 19, 1989; and July 1, 1993.
- "Identifying Environmental Concerns in Appraisals", Workshops for Lakewood Appraisal Corporation, October, and November, 1989 and April, 1990.
- "State and Local Groundwater Protection Strategies", Annual meeting of the New York State Association of Towns, February, 1990.
- "Environmental Audits on Orchards and Agricultural Properties", Resource Education Institute, Inc., Real Estate Site Assessment and Environmental Audits Conference, December 4, 1990.

- "Environmental Audits on Orchards and Agricultural Properties", National Water Well Association Annual Conference, July 29-31, 1991.
- "Principles of Environmental Economics for Ground Water Professionals", National Groundwater Association Outdoor Action Conference, May 27, 1993.
- "Impact of Environmental Liabilities on Real Estate Transactions", a NYS Department of Education approved course for licensed real estate professionals, March 1995; April 1995; May 1995; October 1995.
- "Brownfields Redevelopment in New York: A Discussion of Two Case Studies", New England Environmental Conference 1996, March, 1996.
- "Quantifying Environmental Liabilities", a NYS Department of Education approved course for licensed real estate professionals, March 1997.
- "Environmental Assessments in Urban Settings", Vassar College, Fall 1999 and Fall 2000.
- "Navigating Property Contaminant Problems", Land Trust Alliance Rally 2001, Oct 2001.

ARTICLES

Ciminello, P. 1993. A Primer on Petroleum Bulk Storage Tanks and Petroleum Contamination of Property, ASHI Technical Journal, Volume 3, No. 1

Ciminello, P. 1991. Environmental Audits on Orchard and Other Agricultural Properties, Proceedings of the National Water Well Association Annual Conference

Ciminello, P. 1991. Property Managers Should Carefully Examine Current Fuel Storage Practices, NYS Real Estate Journal, Vol. 3, No. 9

Ciminello, P. 1991. New DEC Regulations Affect Development of Agricultural Lands, NYS Real Estate Journal, Vol. 3, No. 6

Ciminello, P., Hodges-Copple, J. 1986. Managing Toxic Risks From High Tech Manufacturing, Growth and Environmental Management Series (Southern Growth Policies Board)

Ciminello, P. 1986. State Assistance in Financing Water Treatment Facilities, Growth and Environmental Management Series (Southern Growth Policies Board)

Ciminello, P. 1985. Plants Amid Plantings: The Future Role of Environmental Factors in Business Climate Ratings, Southern Growth ALERT (Southern Growth Policies Board)

Ciminello, P., J. Baldwin, N. Duhnkrack,1984, An Incentive Approach to Riparian Lands Conservation, Monographs in Environmental Education and Environmental Studies (North American Association of Environmental Educators)

PROFESSIONAL AFFILIATIONS

American Water Resources Association
National Groundwater Association
Hazardous Materials Control Research Institute
Environmental Assessment Association

ADDITIONAL INFORMATION

Member, Dutchess County (NY) Youth Board (1987-1992); Chairman, 1992
Member, City of Poughkeepsie (NY) School District Ad Hoc Committee on Teen Parents and Pregnancy Prevention (1991)
Member, City of Poughkeepsie School District Budget Advisory Committee (1994 to 2000)
Member, City of Poughkeepsie PTA and Middle School Building Level Team

Scott Spitzer
Director of Environmental Investigations
scott@ecosystemsstrategies.com

PROFESSIONAL EXPERIENCE

Director of Environmental Investigations, Ecosystems Strategies, Inc., Poughkeepsie, NY 2013 - present

Management and quality review of environmental site assessments, technical environmental investigations, and remedial projects including Brownfield sites. Conducts research to obtain field and regulatory information about the environmental status of a designated area. Reviews all documents prepared by ESI to ensure consistency and technical accuracy. Responsibilities associated with the preparation of site assessments include: investigating site histories, conducting facility inspections, reviewing regulatory agency records, documenting facility compliance with relevant State and Federal regulations, and preparing reports. Management of complex technical environmental investigations (including sites currently on the NYSDEC Registry of Inactive Hazardous Waste Sites), including coordinating subcontractors, overseeing fieldwork, designing and implementing sampling plans, preparing technical reports, and interfacing with regulatory agency personnel.

Senior Project Manager, Long-Form Reports, The 451 Group, Inc., New York, NY 2008-2011

- Managed the production of over 150 technical white papers.

Senior Project Manager, Ecosystems Strategies, Inc., Poughkeepsie, NY 2001 - 2008

- Conducted Environmental Site Investigations and prepared final site assessment reports. Over 300 Investigations and Final Reports completed as lead manager.
- Investigated site histories.
- Conducted facility inspections.
- Reviewed regulatory agency records.
- Documented facility compliance with relevant State and Federal regulations.
- Conducted Phase II Technical Environmental Investigations and prepared technical reports.
- Researched field and regulatory information.
- Managed tank removals.
- Coordinated subcontractors.
- Oversaw fieldwork and handled collection of material, soil and water samples.

Select Projects

Scenic Hudson Land Trust, Inc., Beacon Waterfront Project, Beacon, NY

ESI conducted soil and groundwater investigations on a former MOSF and adjacent scrap yard. Projects involved soil remediation of both petroleum and PCB-contaminated soils and long-term groundwater monitoring. Both projects were classified as Voluntary Clean-Up projects by the NYSDEC and closure status was attained.

Sakmann Restaurant Corporation Site, Fort Montgomery, NY

Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigations for former filling station and automotive repair garage contaminated by solvent and waste-oil discharges to an on-site drywell.

Designed and implemented a sampling plan for soils impacted by chlorinated hydrocarbons, petroleum, and metals. Created Workplan (in coordination with the NYSDEC Voluntary Cleanup Program) for remediation of on-site contamination and long-term sampling of on-site groundwater monitoring wells.

Staten Island Marina Site, Staten Island, NY

Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigation for an active marine facility engaged in boat painting and engine maintenance activities. Coordinated the delineation of metals contamination over a three-acre area and analyzed potential impacts from on-site fill materials. Submitted remedial and budgetary analysis in support of regulatory agency approval for conversion of boatyard into a public park.

Octagon House Development Site, Roosevelt Island, NY

Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigations at the former site of a large, urban hospital. Interpreted the results of geotechnical studies, extended test pits, and conducted extensive soil sampling, to document subsurface soil conditions in support of client's application to the U.S. Housing and Urban Development Agency (HUD). Created Workplan (in coordination with the NYCDEP Office of Environmental Planning and Assessment) for site-wide remediation of contaminated soils and secured NYCDEP approval for site remediation as required by HUD.

Camp Glen Gray Boy Scout Facility, Mahwah, NJ

Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigations at an approximately 800-acre campground containing numerous structures. Documented subsurface soil conditions at the locations of aboveground and underground storage tanks, and delineated lead contamination at a former firing range. Assisted in design and implementation of remediation plans for removal of petroleum and lead contaminated soils, and obtained NJDEP approvals.

EDUCATION

SUNY at Stony Brook, Bachelor of Science - Biology, SUNY at Stony Brook *May 1992*
SUNY at Purchase, extensive studies in Environmental Science

PROFESSIONAL CERTIFICATIONS

OSHA Hazardous Waste Site Operations and Emergency Response (HAZWOPER) – 40 hr

APPENDIX J

BCP Signage

Brownfield Cleanup Program

922 Main Street and 921 Diven Street
Site Number: **C360152**
The Lofts on Main

Governor: Andrew M. Cuomo
Acting Commissioner: Basil Seggos
Mayor: Frank Catalina

Transform the Past…. Build for the Future

APPENDIX K

QAPP

QUALITY ASSURANCE PROJECT PLAN

FOR

SITE REMEDIATION

The Lofts on Main

922 Main Street and 921 Diven Street

City of Peekskill, New York

NYSDEC BCP SITE: C360152

January 2016

ESI File: KP14175.50

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Attachment(s):

1.0 PROJECT MANAGEMENT

1.1 Project/Task Organization

The following individuals are major participants in the project. Following each project participant is their specific responsibilities and authorities for the project.

Douglas MacNeal, P.E. New York State Department of Environmental Conservation (NYSDEC)

Douglas MacNeal is the Project Manager for the NYSDEC. Mr. MacNeal is responsible for review and approval of all project submittals.

Jolanda Jansen, P.E. Jansen Engineering, PLLC

Jolanda G. Jansen will be the Remedial Engineer, responsible for preparing and implementing the Remedial Action Work Plan (RAWP), Final Engineering Report (FER), Site Management Plan (SMP) and all certifications, with general oversight for all project activities.

Paul Ciminello President, Ecosystems Strategies, Inc. (ESI)

Paul Ciminello, a Qualified Environmental Professional (QEP), will be responsible for overview of all project activities, including overall project management and allocation of staff and other resources required to complete the project within the specified schedule and budget.

Scott Spitzer Director of Environmental Investigations, ESI

Scott Spitzer will act as Project Manager on behalf of the Volunteer, and will be responsible for managing all project activities in consultation with the Remedial Engineer. Mr. Spitzer will review all project documents and ensure that project plans are followed, manage day-to-day project operations and administrative aspects, and will function as the client and regulatory contact for the project. Mr. Spitzer has authority to direct the activities of the field team (OSC and drilling subcontractor).

Adam Atkinson Quality Assurance Officer, ESI

Adam Atkinson will be responsible for reviewing all sampling procedures and certifying that the data was collected and analyzed using the appropriate procedures and will act in conjunction with the Project Manager in the development of the sampling and analytical portion of a site-specific quality assurance project plan (QAPP).

To be Determined **On-Site Coordinator (OSC) ESI**

The OSC will be responsible for the completion of all on-site fieldwork, collection of all samples, completion of the field log, and chains of custody. The OSC will have authority over all on-site subcontractors.

Laboratory Subcontractor

The laboratory subcontractor will be responsible for the analysis of samples. The laboratory subcontractor will be New York State Department of Health Environmental Laboratory Approved Program (ELAP) certified in the appropriate categories.

Data Validator (TBD)

An independent, third-party data validator will be responsible for reviewing and evaluating all analytical data packages and preparing Data Usability Reports in accordance with DER-10. A current resume outlining education and experience of the data validator will be provided to DER for review and approval (once the data validator has been selected).

1.2 Principal Data Users

The principal users of the generated data in this project are listed below.

- Residents of the City of Peekskill, especially those residing in the vicinity of the Site
- Parkview Development and Construction, LLC (Volunteer)
- NYSDEC and NYSDOH

1.3 Problem Definition/Background

The Site is a 0.57-acre parcel located at 922 Main Street and 921 Diven Street, City of Peekskill, Westchester County, New York, which has been enrolled in the NYSDEC Brownfield Cleanup Program (BCP). Previous environmental investigations documented the presence of urban-fill soils containing elevated concentrations of SVOCs, metals, and pesticides. Proposed environmental remediation consists of the removal of all contaminated soil/fill and collection and analysis of confirmatory endpoint soil samples.

1.4 Project/Task Description

The project will meet its objective through the following actions:

- Compliance with NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010; and,
- Compliance with the Remedial Action Work Plan (RAWP).

1.5 Quality Objectives and Criteria

The data collected in this project will be used to characterize contaminated media prior to off-site disposal, provide confirmatory data indicating effective remedial actions and document (as required) the integrity of any materials imported to the Site.

In order to meet the data quality objectives of precision, accuracy, representation, comparability and completeness the following actions will be taken:

- Duplicate samples will be collected and analyzed in order to determine the degree to which measurements obtained under the same protocols are consistent and reproducible.
- Matrix spike samples will be collected and analyzed in order to determine accuracy for the samples.
- A trip blank sample will also be analyzed in order to detect potential contamination during sample transport of VOC samples
- A rinse blank will be prepared and analyzed for each non-dedicated piece of sampling equipment, as applicable.
- Data generated during the completion of the RAWP will be submitted for review by a third, independent party.

Prior to field activities, the Project Manager and the OSC will review the RAWP to ensure that the data quality objectives of precision, accuracy, representation, comparability and completeness will be met during the field activities. At the completion of field activities, the Project Manager will review field logs and chains of custody to ensure that field activities met the intent of the RAWP. If a problem is identified, Mr. Paul Ciminello and the Project Manager will meet to determine corrective measures necessary to meet data quality objectives.

1.6 Documents and Records

Electronic and paper copies of all measurements will be retained by ESI. Documentation of sufficient quality and quantity to represent environmental conditions at the Site will be provided to the NYSDEC in the Final Engineering Report (FER), which will document all findings and results of the implementation of the RAWP.

2.0 SAMPLING AND ANALYSIS PLAN

This section of the QAPP details field parameters and identifies methods for soil sample collection and handling, and analysis.

2.1 Sampling Overview

Sampling will be conducted to document the integrity of:

- Existing soil conditions prior to excavation (as warranted);
- Confirmatory endpoint samples;
- Unknown materials encountered during Site remediation;
- Excavated material requiring characterization prior to off-site disposal; and,
- Fill and soil to be imported to the Site, if required.

The proposed number of soil sampling locations, is summarized below (the actual number of samples may be higher, based on encountered field conditions and/or excavation dimensions).

Quantity	Fieldwork Element	Purpose
10	Collect Waste Characterization Samples	Document Quality of Fill/Soil Planned for Removal
22 (approximate)	Collect Confirmatory Endpoint Samples	Document Soil Quality at Excavation Perimeter

2.2 Sampling Methods

2.2.1 General Methodology

Soil at all sampling locations (confirmatory endpoint and waste characterization samples, and samples collected to document any encountered unknown materials) will be screened for volatile vapors with a photoionization detector (PID). All field screening will be conducted using properly calibrated precision instruments operated according to manufacturer's instructions. All media sampling will be conducted in a manner consistent with NYSDEC and/or NYSDOH sample collection protocols. All samples will be properly characterized and field screened, and findings will be recorded in logbooks.

Samples will be collected into appropriately-sized and preserved laboratory-supplied containers, using either disposable or properly decontaminated sampling equipment. The field technician will wear a new pair of disposable gloves during the collection of each sample, and will handle samples such that the potential for cross-contamination, and contamination of exterior surfaces of collection containers, is minimized (placement of media into containers will take place in a clean area remote from contaminant sources, as possible). PPE and sampling equipment will be decontaminated (as warranted) between sampling locations.

2.2.2 Soil

Waste characterization soil samples will be collected from material excavated during the extension of test pits prior to or during Site remediation. Confirmatory endpoint soil samples will be collected from exposed excavation areas after remedial (excavation) activities are complete. Soil samples will be collected using disposable plastic trowels or properly decontaminated stainless steel instruments, or may be manually collected directly from exposed soil or the sampling instrument using dedicated disposable latex gloves.

Soil sampling for VOC analysis will be conducted following USEPA Method 5035 protocols, using disposable 5-gram Terra Core samplers (or similar equipment) to place material into laboratory-supplied glass vials with appropriate preservatives and stir bars.

2.2.3 Other Materials

Any non-soil solid materials requiring laboratory analysis will be placed into laboratory supplied glassware when possible, or will alternatively be placed into double locking plastic bags and then boxed in order to prevent a tear or other breach in the bags. Samples to be collected from liquids present in excavations, collection pits, or drums/tanks, etc., will be sampled using a dedicated disposal sampling device.

2.3 Sample Handling and Custody

2.3.1 Sample Containers

The following laboratory-supplied containers will be used for sample collection (as applicable):

Media Sample	Collection Container
Soil – VOCs	USEPA 5035 VOA kit (4, 40-ml glass vials)
Soil – all other analyses (metals, pesticides, PCBs, SVOCs)	1, 8-oz glass jar
Soil – duplicate and MS/MSD samples	1 additional 8-oz glass jar

2.3.2 Sampling Frequency

Excavation end-point sampling will be performed in accordance with DER-10, Section 4.4, sample frequency requirements. Discreet grab samples will be collected from side-walls (minimum of one sample every 30 linear feet) and from the excavation base (one sample for every 900 square feet of floor area, if necessary), unless otherwise modified with the consent of the NYSDEC Project Manager. The Remedial Alternative selected in the RAWP includes the removal of all urban fill/soil above bedrock. The base of all excavation areas will consist of bedrock and collection of base level endpoint samples is therefore not anticipated. End-point wall samples will be collected approximately 1 foot above bedrock and will be

biased towards the potentially highest contaminated location determined by fieldwork observations and/or previous sampling data. All samples will be submitted for laboratory analysis of TCL organic compounds, pesticides/PCBs, and TAL metals.

The estimated approximate number of samples to be collected is outlined below (the actual number of samples may vary based on conditions encountered during remediation.

Media / QC Parameter	Number of Collection Points (Number of Samples)	Analyte(s)
Soil	22**	VOCs and SVOCs (TCL, 8260/8270), metals (TAL, 6010C and 7471A), pesticides/PCBs (8081/8082)
Trip Blank	One per sample cooler per day (when samples are collected)	VOCs (TCL+10, 8260)
Rinse Blank	One per 20 samples collected (non-dedicated equipment only)	As per the analyte list(s) for the sample type
Duplicates & MS/MSD	One per 6 samples collected (minimum one/week)	As per the analyte list(s) for the sample type
** Assumes no confirmatory endpoint samples will be collected from bedrock located at excavation base levels. One confirmatory endpoint sample will be collected for every 900 square feet of soil remaining at the excavation base.		

2.3.3 Sample Custody

Samples will be handled by the OSC. All soil and groundwater samples will be placed in a sample cooler that is maintained at 4 (+/-2) °C. All soil vapor sampling canisters will be kept in a cool, dry environment.

For each sampling day, sampling personnel will be required to complete a sampling custody worksheet indicating all pertinent information about the samples collected, handling methods, name of the collector, and chain of custody (which will require a Category B Data Deliverable). Upon the completion of each day of sample collection activities, all samples will be shipped via either courier or overnight delivery (per laboratory requirements) to a NYSDOH ELAP certified laboratory. Laboratory personnel will record the cooler temperature upon receipt and analyze the samples prior to the expiration of the hold times as specified in the NYSDEC Analytical Service Protocol.

2.4 Analytical Methods

Media samples will be analyzed as indicated in Section 2.3.2, above. Analytical methods for the samples will be implemented as follows:

Matrix	Sample Analysis (Holding Time)	Analytical Method	Recommended Number of Container(s) Per Sample	Preservation
Soil	TCL VOCs+10 (14 days)	8260C	4, 40-ml vials (laboratory 5035 VOA kit)	Preserved per Method 5035
Soil	TCL SVOCs+20 (14 days)	8270B	1, 8 oz. glass jar**	4° C
Soil	TAL metals (28 days)	6010C/7471B	1, 8 oz. glass jar**	4° C
Soil	Pesticides/PCBs (14 days)	8081/8082	1, 8 oz. glass jar**	4° C
** Soil for SVOC, metals and pesticides/PCBs may be combined into a single 8 oz. jar, or collected separately in 4 oz. jars.				

2.5 Quality Control

Accuracy and precision will be determined by repeated analysis of laboratory standards, and matrix effects and recovery will be determined through use of spiked samples. With each sample run, standards, blanks and spiked samples will be run.

One duplicate sample will be collected for every 20 matrix samples (or one per week). One in 20 samples will also be submitted for Matrix spike (MS) and Matrix Spike Duplicate (MSD) analysis. One rinse blank will be prepared for each non-dedicated piece of sampling equipment for every 20 analytical samples collected using that piece of equipment. For each day of sampling, a trip blank will be included with each sample cooler (analyzed for VOCs, only). Equipment blanks and duplicate samples will be analyzed for all parameters.

Samples will be identified using a unique ID number. This ID will be recorded on the sampling log and/or field record and the sampling container. Samples for each day of fieldwork will be assigned to a Sample Delivery Group (SDG) for that day and will be shipped via either courier or overnight delivery to the laboratory following proper chain of custody procedure, as described above.

3.0 Quality Assurance

3.1 Instrument/Equipment, Testing, Inspection, and Maintenance

Field measurements will be conducted using monitoring equipment specialized for each task, including use of a PID during all fieldwork events to screen for volatile organic vapors. All instruments will be stored at ESI offices when not in use. All instruments will be calibrated (as warranted) in accordance with the manufacturer's instructions.

Instrument malfunction is normally apparent during calibration. In the event of malfunction, equipment will be cleaned and tested. Equipment testing, inspection and maintenance will be the responsibility of the Project Manager and OSC for the project. Any other equipment selected for field measurements will be similarly managed.

3.2 Inspection/Acceptance of Supplies and Consumables

All supplies and consumables will be inspected and tested (if necessary) by either the Project Manager or the OSC upon receipt. The following supplies and consumables will be used:

- Soil samples: Four 40-ml vials (laboratory-supplied 5035 VOA kits) will be used for each sample collected for analysis of VOCs and one 8-oz clear glass jar will be used for each sample collected for analysis of SVOCs, metals and/or pesticides/PCBs. Duplicate samples will each require one additional sample volume.
- Disposable gloves (nitrile or equivalent).
- Distilled water (for decontamination and the preparation of blanks).

3.3 Data Management

For the purpose of data management, the data can be divided into field and laboratory data. Field data will be recorded at the time of measurement on written field logs. Laboratory data will be reviewed upon receipt and summarized in data summary tables.

4.0 DATA VALIDATION AND USABILITY

4.1 Data Review, Verification and Validation

Data generated by this project will be reviewed, verified and validated as follows:

4.1.1 Field Measurements

If field instruments are determined to be functioning correctly through calibration and measurements of standards, and if there are no inconsistencies between written records and data recorded in the meters, the data will be assumed to be valid and will be accepted as an indication of field conditions.

If instruments malfunction prior to field measurement, they will be restored to proper function prior to re-use. If they malfunction immediately after field measurements are taken, the measurements will be retaken as soon as possible. Inconsistencies between written records and recorded meter data will be resolved by re-testing the material, if possible. If re-testing is not possible, (e.g., a sample has been shipped to the laboratory), the inconsistency will be described in the FER and the laboratory analysis will be utilized to classify the material. In addition, all field data will be reviewed by the Project Manager for consistency and plausibility.

4.1.2 Laboratory Analysis

A NYSDOH ELAP-certified laboratory will provide a NYSDEC ASP Category B data package for the determinative sample analyses, as described in Section 2 of DER-10 and the July 2005 NYSDEC ASP.

4.1.3 Soil Cleanup Objectives (SCOs)

The SCOs for this BCP Site are provided in 6 NYCRR Subpart 375, Table 375-6.8(a) Unrestricted Use SCOs, and in Supplemental SCOs and Soil Cleanup Levels presented in NYSDEC CP-51 (Soil Cleanup Guidance, October 2010), Tables 1 through 3. Copies of these tables are provided as an attachment to this QAPP.

4.2 Verification and Validation Methods

4.2.1 Verification Method

Once collected, all data will go to the Project Manager for review and verification. Review will involve determining that all data has been collected at the proper locations by the proper persons and that all field and laboratory logs are complete.

In addition, a Data Usability Summary Report (DUSR) in accordance with DER-10, Appendix 2B, will be prepared by a third, independent party, which maintains NYSDOH ELAP CLP Certification (the DUSR will also include a current resume for the person who prepared it).

4.2.2 Authority for Verification

Authority for verification, validation and resolution of data issues will be distributed among the investigators. Authority to resolve issues regarding verification of field measurements will rest with the Remedial Engineer, Project Manager and Mr. Paul Ciminello.

4.2.3 Project Reports

Following review, validation and verification, all data will be conveyed to users via the FER, which will document the findings and results of the implementation of the RAWP. This report will include the following:

- All laboratory analytical results obtained from the sampling event(s), summarized in tables and provided in NYSDEC EDD format (EquIS).
- A detailed account of any deviations from field procedures specified in the RAWP.
- A complete set of field notes and/or Field Observation Tables.
- Results of the DUSR review of all laboratory results.

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Attachment – SCO Tables

Department of Environmental Conservation

Division of Environmental Remediation

6 NYCRR PART 375

Environmental Remediation Programs

Subparts 375-1 to 375- 4 & 375-6

Effective December 14, 2006

New York State Department of Environmental Conservation

375-6.8 Soil cleanup objective tables.

(a) Unrestricted use soil cleanup objectives.

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
Metals		
Arsenic	7440-38-2	13 [c]
Barium	7440-39-3	350 [c]
Beryllium	7440-41-7	7.2
Cadmium	7440-43-9	2.5 [c]
Chromium, hexavalent [e]	18540-29-9	1[b]
Chromium, trivalent [e]	16065-83-1	30 [c]
Copper	7440-50-8	50
Total Cyanide [e, f]		27
Lead	7439-92-1	63 [c]
Manganese	7439-96-5	1600 [c]
Total Mercury		0.18 [c]
Nickel	7440-02-0	30
Selenium	7782-49-2	3.9[c]
Silver	7440-22-4	2
Zinc	7440-66-6	109 [c]
PCBs/Pesticides		
2,4,5-TP Acid (Silvex) [f]	93-72-1	3.8
4,4'-DDE	72-55-9	0.0033 [b]
4,4'-DDT	50-29-3	0.0033 [b]
4,4'-DDD	72-54-8	0.0033 [b]
Aldrin	309-00-2	0.005 [c]
alpha-BHC	319-84-6	0.02
beta-BHC	319-85-7	0.036
Chlordane (alpha)	5103-71-9	0.094

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
delta-BHC [g]	319-86-8	0.04
Dibenzofuran [f]	132-64-9	7
Dieldrin	60-57-1	0.005 [c]
Endosulfan I [d, f]	959-98-8	2.4
Endosulfan II [d, f]	33213-65-9	2.4
Endosulfan sulfate [d, f]	1031-07-8	2.4
Endrin	72-20-8	0.014
Heptachlor	76-44-8	0.042
Lindane	58-89-9	0.1
Polychlorinated biphenyls	1336-36-3	0.1
Semivolatile organic compounds		
Acenaphthene	83-32-9	20
Acenapthylene [f]	208-96-8	100 [a]
Anthracene [f]	120-12-7	100 [a]
Benz(a)anthracene [f]	56-55-3	1 [c]
Benzo(a)pyrene	50-32-8	1 [c]
Benzo(b)fluoranthene [f]	205-99-2	1 [c]
Benzo(g,h,i)perylene [f]	191-24-2	100
Benzo(k)fluoranthene [f]	207-08-9	0.8 [c]
Chrysene [f]	218-01-9	1 [c]
Dibenz(a,h)anthracene [f]	53-70-3	0.33 [b]
Fluoranthene [f]	206-44-0	100 [a]
Fluorene	86-73-7	30
Indeno(1,2,3-cd)pyrene [f]	193-39-5	0.5 [c]
m-Cresol [f]	108-39-4	0.33 [b]
Naphthalene [f]	91-20-3	12
o-Cresol [f]	95-48-7	0.33 [b]

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
p-Cresol [f]	106-44-5	0.33 [b]
Pentachlorophenol	87-86-5	0.8 [b]
Phenanthrene [f]	85-01-8	100
Phenol	108-95-2	0.33 [b]
Pyrene [f]	129-00-0	100
Volatile organic compounds		
1,1,1-Trichloroethane [f]	71-55-6	0.68
1,1-Dichloroethane [f]	75-34-3	0.27
1,1-Dichloroethene [f]	75-35-4	0.33
1,2-Dichlorobenzene [f]	95-50-1	1.1
1,2-Dichloroethane	107-06-2	0.02 [c]
cis -1,2-Dichloroethene [f]	156-59-2	0.25
trans-1,2-Dichloroethene [f]	156-60-5	0.19
1,3-Dichlorobenzene [f]	541-73-1	2.4
1,4-Dichlorobenzene	106-46-7	1.8
1,4-Dioxane	123-91-1	0.1 [b]
Acetone	67-64-1	0.05
Benzene	71-43-2	0.06
n-Butylbenzene [f]	104-51-8	12
Carbon tetrachloride [f]	56-23-5	0.76
Chlorobenzene	108-90-7	1.1
Chloroform	67-66-3	0.37
Ethylbenzene [f]	100-41-4	1
Hexachlorobenzene [f]	118-74-1	0.33[b]
Methyl ethyl ketone	78-93-3	0.12
Methyl tert-butyl ether [f]	1634-04-4	0.93
Methylene chloride	75-09-2	0.05

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
n - Propylbenzene [f]	103-65-1	3.9
sec-Butylbenzene [f]	135-98-8	11
tert-Butylbenzene [f]	98-06-6	5.9
Tetrachloroethene	127-18-4	1.3
Toluene	108-88-3	0.7
Trichloroethene	79-01-6	0.47
1,2,4-Trimethylbenzene [f]	95-63-6	3.6
1,3,5-Trimethylbenzene[f]	108-67-8	8.4
Vinyl chloride[f]	75-01-4	0.02
Xylene (mixed)	1330-20-7	0.26

All soil cleanup objectives (SCOs) are in parts per million (ppm).

Footnotes

[a] The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

[b] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

[c] For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

[d] SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

[e] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[f] Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with “NS”. Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.

(b) Restricted use soil cleanup objectives.

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Metals							
Arsenic	7440-38-2	16[f]	16[f]	16[f]	16[f]	13[f]	16[f]
Barium	7440-39-3	350[f]	400	400	10,000 [d]	433	820
Beryllium	7440-41-7	14	72	590	2,700	10	47
Cadmium	7440-43-9	2.5[f]	4.3	9.3	60	4	7.5
Chromium, hexavalent [h]	18540-29-9	22	110	400	800	1[e]	19
Chromium, trivalent [h]	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50-8	270	270	270	10,000 [d]	50	1,720
Total Cyanide [h]		27	27	27	10,000 [d]	NS	40
Lead	7439-92-1	400	400	1,000	3,900	63[f]	450
Manganese	7439-96-5	2,000[f]	2,000[f]	10,000 [d]	10,000 [d]	1600[f]	2,000[f]
Total Mercury		0.81[j]	0.81[j]	2.8[j]	5.7[j]	0.18[f]	0.73
Nickel	7440-02-0	140	310	310	10,000 [d]	30	130
Selenium	7782-49-2	36	180	1,500	6,800	3.9[f]	4[f]
Silver	7440-22-4	36	180	1,500	6,800	2	8.3
Zinc	7440-66-6	2200	10,000 [d]	10,000 [d]	10,000 [d]	109[f]	2,480
PCBs/Pesticides							
2,4,5-TP Acid (Silvex)	93-72-1	58	100[a]	500[b]	1,000[c]	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 [e]	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 [e]	136
4,4'- DDD	72-54-8	2.6	13	92	180	0.0033 [e]	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04[g]	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71-9	0.91	4.2	24	47	1.3	2.9

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
delta-BHC	319-86-8	100[a]	100[a]	500[b]	1,000[c]	0.04[g]	0.25
Dibenzofuran	132-64-9	14	59	350	1,000[c]	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan II	33213-65-9	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan sulfate	1031-07-8	4.8[i]	24[i]	200[i]	920[i]	NS	1,000[c]
Endrin	72-20-8	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36-3	1	1	1	25	1	3.2
Semivolatiles							
Acenaphthene	83-32-9	100[a]	100[a]	500[b]	1,000[c]	20	98
Acenapthylene	208-96-8	100[a]	100[a]	500[b]	1,000[c]	NS	107
Anthracene	120-12-7	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benz(a)anthracene	56-55-3	1[f]	1[f]	5.6	11	NS	1[f]
Benzo(a)pyrene	50-32-8	1[f]	1[f]	1[f]	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1[f]	1[f]	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1[f]	3.9	56	110	NS	1[f]
Dibenz(a,h)anthracene	53-70-3	0.33[e]	0.33[e]	0.56	1.1	NS	1,000[c]
Fluoranthene	206-44-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Fluorene	86-73-7	100[a]	100[a]	500[b]	1,000[c]	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5[f]	0.5[f]	5.6	11	NS	8.2
m-Cresol	108-39-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
Naphthalene	91-20-3	100[a]	100[a]	500[b]	1,000[c]	NS	12

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
o-Cresol	95-48-7	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
p-Cresol	106-44-5	34	100[a]	500[b]	1,000[c]	NS	0.33[e]
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8[e]	0.8[e]
Phenanthrene	85-01-8	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Phenol	108-95-2	100[a]	100[a]	500[b]	1,000[c]	30	0.33[e]
Pyrene	129-00-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Volatiles							
1,1,1-Trichloroethane	71-55-6	100[a]	100[a]	500[b]	1,000[c]	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33
1,2-Dichlorobenzene	95-50-1	100[a]	100[a]	500[b]	1,000[c]	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02[f]
cis-1,2-Dichloroethene	156-59-2	59	100[a]	500[b]	1,000[c]	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100[a]	100[a]	500[b]	1,000[c]	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1[e]	0.1[e]
Acetone	67-64-1	100[a]	100[b]	500[b]	1,000[c]	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100[a]	100[a]	500[b]	1,000[c]	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100[a]	100[a]	500[b]	1,000[c]	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33[e]	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100[a]	100[a]	500[b]	1,000[c]	100[a]	0.12

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Methyl tert-butyl ether	1634-04-4	62	100[a]	500[b]	1,000[c]	NS	0.93
Methylene chloride	75-09-2	51	100[a]	500[b]	1,000[c]	12	0.05
n-Propylbenzene	103-65-1	100[a]	100[a]	500[b]	1,000[c]	NS	3.9
sec-Butylbenzene	135-98-8	100[a]	100[a]	500[b]	1,000[c]	NS	11
tert-Butylbenzene	98-06-6	100[a]	100[a]	500[b]	1,000[c]	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100[a]	100[a]	500[b]	1,000[c]	36	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6
1,3,5- Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02
Xylene (mixed)	1330-20-7	100[a]	100[a]	500[b]	1,000[c]	0.26	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm).
NS=Not specified. See Technical Support Document (TSD).

Footnotes

[a] The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

[b] The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

[c] The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

[d] The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

[e] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

[f] For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

[g] This SCO is derived from data on mixed isomers of BHC.

[h] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[i] This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.

[j] This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

CP-51 / Soil Cleanup Guidance

New York State Department of Environmental Conservation

DEC Policy

Issuing Authority: Alexander B. Grannis, Commissioner

Date Issued: October 21, 2010	**Latest Date Revised:**

I. Summary

This policy provides the framework and procedures for the selection of soil cleanup levels appropriate for each of the remedial programs in the New York State Department of Environmental Conservation (DEC) Division of Environmental Remediation (DER). This policy applies to the Inactive Hazardous Waste Disposal Site Remedial Program, known as the State Superfund Program (SSF); Brownfield Cleanup Program (BCP); Voluntary Cleanup Program (VCP); Environmental Restoration Program (ERP); Spill Response Program - Navigation Law (NL) section 176 (SRP); and the Resource Conservation and Recovery Act (RCRA) Corrective Action Program. It replaces *Technical and Administrative Guidance Memorandum (TAGM) 4046: Determination of Soil Cleanup Objectives and Cleanup Levels* (January 24, 1994); the *Petroleum Site Inactivation and Closure Memorandum* (February 23, 1998); and Sections III and IV of *Spill Technology and Remediation Series (STARS) #1* (August 1992).

This document is used in conjunction with the applicable statutes, regulations and guidance. Site-specific soil cleanup levels, determined in accordance with this guidance, are only applied after:

- the site, or area of concern, is fully investigated to determine the nature and extent of contamination;
- all sources of contamination are addressed consistent with the hierarchy provided in 6 NYCRR 375-1.8(c) or consistent with the RCRA Corrective Action Program (as appropriate);
- groundwater, if contaminated, has been evaluated for appropriate remedial actions consistent with 6 NYCRR 375-1.8(d) or consistent with the RCRA Corrective Action Program (as appropriate); and
- impacts on adjacent residential properties, surface water, aquatic ecological resources are evaluated, as well as indoor air, soil vapor, vapor intrusion and other appropriate media.

II. Policy

It is DEC's policy, consistent with applicable statutes and regulations, that all remedies will be protective of public health and the environment. DEC's preference is that remedial programs, including the selection of soil cleanup levels, be designed such that the performance standard results in the implementation of a permanent remedy resulting in no future land use restrictions. However, some of

Table 1

Supplemental Soil Cleanup Objectives
(ppm)

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
METALS							
Aluminum	7429-90-5					10,000 [a,b]	
Antimony	7440-36-0					12[c]	
Boron	7440-42-8					0.5	
Calcium	7440-70-2					10,000 [a,b]	
Cobalt	7440-48-4	30				20	
Iron	7439-89-6	2,000					
Lithium	7439-93-2					2	
Molybdenum	7439-98-7					2	
Technetium	7440-26-8					0.2	
Thallium	7440-28-0					5[c]	
Tin	7440-31-5					50	
Uranium	7440-61-1					5	
Vanadium	7440-62-2	100[a]				39[b]	
PESTICIDES							
Biphenyl	92-52-4					60	
Chlordecone (Kepone)	143-50-0					0.06	
Dibenzofuran	132-64-9						6.2
2,4-D (2,4-Dichloro-phenoxyacetic acid)	94-75-7	100[a]					0.5
Furan	110-00-9					600	
Gamma Chlordane	5103-74-2	0.54					14
Heptachlor Epoxide	1024-57-3	0.077					0.02
Methoxychlor	72-43-5	100[a]				1.2	900

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
Parathion	56-38-2	100 [a]					1.2
2,4,5-T	93-76-5	100 [a]					1.9
2,3,7,8-TCDD	1746-01-6					0.000001	
2,3,7,8-TCDF	51207-31-9					0.000001	
SEMIVOLATILE ORGANIC COMPOUNDS							
Aniline	62-53-3	48	100[a]	500[a]	1000[a]		0.33[b]
Bis(2-ethylhexyl) phthalate	117-81-7	50				239	435
Benzoic Acid	65-85-0	100[a]					2.7
Butylbenzyl-phthalate	85-68-7	100 [a]					122
4-Chloroaniline	106-47-8	100 [a]					0.22
Chloroethane	75-00-3						1.9
2-Chlorophenol	95-57-8	100 [a]				0.8	
3-Chloroaniline	108-42-9					20	
3-Chlorophenol	108-43-0					7	
Di-n-butyl-phthalate	84-74-2	100 [a]				0.014	8.1
2,4-Dichlorophenol	120-83-2	100 [a]				20	0.40
3,4-Dichlorophenol	95-77-2					20	
Diethylphthalate	84-66-2	100 [a]				100	7.1
Di-*n*-hexyl-phthalate	84-75-3					0.91	
2,4-Dinitrophenol	51-28-5	100 [a]				20	0.2
Dimethylphthlate	131-11-3	100 [a]				200	27
Di-n-octylphthlate	117-84-0	100 [a]					120
1,2,3,6,7,8-HCDF	57117-44-9					0.00021	
Hexachloro-benzene	118-74-1	0.41					1.4
2,6-Dinitrotoluene	606-20-2	1.03					1.0
Isophorone	78-59-1	100 [a]					4.4

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
4-methyl-2-pentanone	108-10-1						1.0
2-methyl-naphthalene	91-57-6	0.41					36.4
2-Nitroaniline	88-74-4						0.4
3-Nitroaniline	99-09-2						0.5
Nitrobenzene	98-95-3	3.7	15	69	140	40	0.17[b]
2-Nitrophenol	88-75-5					7	0.3
4-Nitrophenol	100-02-7					7	0.1
Pentachloroaniline	527-20-8					100	
2,3,5,6-Tetrachloroaniline	3481-20-7					20	
2,3,4,5-Tetrachlorophenol	4901-51-3					20	
2,4,5-Trichloroaniline	636-30-6					20	
2,4,5-Trichlorophenol	95-95-4	100[a]				4	0.1
2,4,6-Trichlorophenol	88-06-2					10	
VOLATILE ORGANIC COMPOUNDS							
2-Butanone	78-93-3	100[a]					0.3
Carbon Disulfide	75-15-0	100[a]					2.7
Chloroacetamide	79-07-2					2	
Dibromochloro-methane	124-48-1					10	
2,4-Dichloro aniline	554-00-7					100	
3,4-Dichloroaniline	95-76-1					20	
1,2-Dichloropropane	78-87-5					700	
1,3-Dichloropropane	142-28-9						0.3
2,6-Dinitrotoluene	606-20-2	1.03					0.17[b]
Ethylacetate	141-78-6					48	

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
4-methyl-2-pentanone	108-10-1						1.0
113 Freon (1,1,2- TFE)	76-13-1	100 [a]					6
isopropylbenzene	98-82-8	100 [a]					2.3
p-isopropyltoluene	99-87-6						10
Hexachlorocyclo-pentadiene	77-47-4					10	
Methanol	67-56-1					6.5	
N-nitrosodiphenyl-amine	86-30-6					20	
Pentachloro-benzene	608-93-5					20	
Pentachloronitro-benzene	82-68-8					10	
Styrene	100-42-5					300	
1,2,3,4-Tetrachlorobenzene	634-66-2					10	
1,1,2,2-Tetrachloroethane	79-34-5	35					0.6
1,1,2,2-Tetrachloroethylene	127-18-4					2	
1,2,3-Trichlorobenzene	87-61-6					20	
1,2,4-Trichlorobenzene	120-82-1					20	3.4
1,2,3-Trichloropropane	96-18-4	80					0.34

[a] SCOs for organic contaminants (volatile organic compounds, semivolatile organic compounds, and pesticides) are capped at 100 ppm for residential use, 500 ppm for commercial use, 1000 ppm for industrial use. SCOs for metals are capped at 10,000 ppm.

[b] Based on rural background study

[c] SCO limited by contract required quantitation limit.

Table 2

Soil Cleanup Levels for Gasoline Contaminated Soils

Contaminant	CAS Registry Number	Soil Cleanup Level (ppm)
Benzene	71-43-2	0.06
n-Butylbenzene	104-51-8	12.0
sec-Butylbenzene	135-98-8	11.0
Ethylbenzene	100-41-4	1.0
Isopropylbenzene	98-82-8	2.3
p-Isopropyltoluene	99-87-6	10.0
Methyl-Tert-Butyl-Ether	1634-04-4	0.93
Naphthalene	91-20-3	12.0
n-Propylbenzene	103-65-1	3.9
Tert-Butylbenzene	98-06-6	5.9
Toluene	108-88-3	0.7
1,2,4-Trimethylbenzene	95-63-6	3.6
1,3,5-Trimethylbenzene	108-67-8	8.4
Xylene (Mixed)	1330-20-7	0.26

Table 3

Soil Cleanup Levels for Fuel Oil Contaminated Soil

Contaminant	CAS Registry Number	Soil Cleanup Level (ppm)
Acenaphthene	83-32-9	20
Acenaphthylene	208-96-8	100
Anthracene	120-12-7	100
Benz(a)Anthracene	56-55-3	1.0
Dibenzo(a,h)Anthracene	53-70-3	0.33
Benzene	71-43-2	0.06
n-Butylbenzene	104-51-8	12.0
sec-Butylbenzene	135-98-8	11.0
Tert-Butylbenzene	98-06-6	5.9
Chrysene	218-01-9	1.0
Ethylbenzene	100-41-4	1.0
Fluoranthene	206-44-0	100
Benzo(b)Fluoranthene	205-99-2	1.0
Benzo(k)Fluoranthene	207-08-9	0.8
Fluorene	86-73-7	30
Isopropylbenzene	98-82-8	2.3
p-Isopropyltoluene	99-87-6	10.0
Naphthalene	91-20-3	12.0
n-Propylbenzene	103-65-1	3.9
Benzo(g,h,i)Perylene	191-24-2	100
Phenanthrene	85-01-8	100
Pyrene	129-00-0	100
Benzo(a)Pyrene	50-32-8	1.0
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5
1,2,4-Trimethylbenzene	95-63-6	3.6
1,3,5-Trimethylbenzene	108-67-8	8.4
Toluene	108-88-3	0.7
Xylene (Mixed)	1330-20-7	0.26

APPENDIX L

CAMP

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.