

DECISION DOCUMENT

Post Road Corridor - White Plains
Brownfield Cleanup Program
White Plains, Westchester County
Site No. C360129
March 2017



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

Post Road Corridor - White Plains
Brownfield Cleanup Program
White Plains, Westchester County
Site No. C360129
March 2017

Statement of Purpose and Basis

This document presents the remedy for the Post Road Corridor - White Plains site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Post Road Corridor - White Plains site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;

- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Excavation and off-site disposal of contaminated soil, including:

- Soil which exceeds the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards;
- Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- Non-aqueous phase liquids;
- Soil with visual waste material or non-aqueous phase liquid; and
- Soil that creates a nuisance condition as defined in Commissioner Policy CP-51 Section G.

Approximately 3,390 cubic yards of contaminated soil will be removed from the site.

Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) for restricted residential use and protection of groundwater will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

The site will be re-graded to accommodate installation of a cover system as described in remedy element 4.

4. Cover System

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). The site cover may consist of paved surface parking areas, sidewalks, or a soil cover. Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). In areas where building foundations or building slabs

exist, or will be constructed, which preclude contact with the soil, the requirements for a site cover will be deferred until such time that they may be removed.

5. In-Situ Chemical Oxidation

In-situ chemical oxidation will be implemented to treat volatile organic compounds (VOCs) in groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants in the areas where petroleum hydrocarbons and chlorinated VOCs are elevated in the groundwater. The impacted zone ranges from 10 to 30 feet below ground surface.

6. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- Require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
- Allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- Require compliance with the Department approved Site Management Plan.

7. Site Management Plan

A site management plan is required which includes the following:

a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in paragraph 6 above.

Engineering Controls: The cover system discussed in Paragraph 4 and the ISCO injections discussed in Paragraph 5 above.

This plan includes, but may not be limited to:

- o An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- o Descriptions of the provisions of the environmental easement including any land use, and/or groundwater use restrictions;

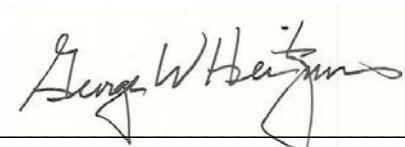
- o A provision for evaluation of the potential for soil vapor intrusion in future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - o A provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
 - o Provisions for the management and inspection of the identified engineering controls;
 - o Maintaining site access controls and Department notification; and
 - o The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- o Monitoring of groundwater to assess the performance and effectiveness of the remedy;
 - o A schedule of monitoring and frequency of submittals to the Department;
 - o Monitoring for vapor intrusion for any future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

March 8, 2017

Date



George Heitzman, Director
Remedial Bureau C

DECISION DOCUMENT

Post Road Corridor - White Plains
White Plains, Westchester County
Site No. C360129
March 2017

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

White Plains Public Library
Attn: Tim Baird
100 Martine Avenue
White Plains, NY 10601
Phone: 914-422-1400

NYSDEC Region 3
Attn: Please call for an appointment
21 S. Putt Corners Road
New Paltz, NY 12561

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Post Road Corridor - White Plains site is located at 77 West Post Road in the City of White Plains, Westchester County. This site is made up of 10 tax parcels occupying 3.69 acres of the overall 5-acre redevelopment project. The site is bounded by West Post Road to the north, Maple Avenue to the south, Rathbun Avenue to the west, and South Lexington Avenue to the east, with a separate out-parcel lot on the northwest corner of West Post Road and South Lexington Avenue.

Site Features: All 10 parcels are currently vacant. Abandoned former commercial buildings of varying size on the site have been demolished, leaving only grass, trees and former parking lots.

Current Zoning and Land Use: Nine of the 10 parcels are zoned B-3, which is a general retail district allowing retail, office and service business uses and multi-family dwellings. The other parcel is zoned B-2, which is an intermediate business district. The site is part of a planned mixed-use (commercial and residential) development. Surrounding land use is mixed, consisting of residential and commercial properties including a church.

Past Use of the Site: The site's 10 parcels initially contained residential buildings as early as 1905 which later were used for commercial purposes beginning in the 1930s. Former commercial uses included dry cleaners; gas stations with underground storage tanks (USTs); automobile sales and service facilities with USTs, aboveground storage tanks (ASTs), hydraulic lifts, and associated parking lots; various commercial businesses and offices; and commercial parking lots.

In 2005 two in-ground hydraulic lifts were removed from the site. In 2010 two USTs, eleven in-ground hydraulic lifts, a floor drain and an oil water separator were also removed from the site. Approximately 408 tons of impacted soil and 1,180 gallons of contaminated groundwater were removed from the site during this work. In 2012 four USTs and approximately 360 tons of petroleum impacted soil were removed from the site. These removals were completed under the DEC spill program and associated spill numbers have been closed.

Site Geology and Hydrogeology: The site geology consists of historic fill material, native till, and highly weathered bedrock. The depth to bedrock ranges across the site from approximately

17 to 52 feet below grade. Groundwater at the site ranges from approximately 3 to 11 feet below ground surface and flows to the northeast.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Volunteer does not have an obligation to address off-site contamination. The Department has determined that this site poses a significant threat to human health and the environment and there are potential off-site impacts that require further investigation; accordingly, enforcement actions are necessary.

The Department will seek to identify any parties (other than the Volunteer(s)) known or suspected to be responsible for contamination at or emanating from the site, referred to as Potentially Responsible Parties (PRPs). The Department will bring an enforcement action against the PRPs. If an enforcement action cannot be brought, or does not result in the initiation of a remedial program by any PRPs, the Department will evaluate the off-site contamination for action under the State Superfund. The PRPs are subject to legal actions by the State for recovery of all response costs the State incurs or has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess

groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

1,2,4-trimethylbenzene	benzo(a)anthracene
1,3,5-trimethylbenzene	benzo(b)fluoranthene
benzene	benzo(a)pyrene
ethylbenzene	chrysene
n-propylbenzene	indeno(1,2,3-CD)pyrene
toluene	dibenz[a,h]anthracene
xylene (mixed)	arsenic
tetrachloroethene (PCE)	barium
cis-1,2-dichloroethene	lead
naphthalene	mercury
trichloroethene (TCE)	MTBE (methyl-tert-butyl ether)
vinyl chloride	benzo[k]fluoranthene

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination: Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Based upon investigation conducted to date, the primary contaminants of concern include chlorinated VOCs, petroleum related compounds and metals. No other VOCs, SVOCs, metals or PCBs/pesticides than those identified below were found in soil or groundwater at levels exceeding restricted residential soil cleanup objectives, protection of groundwater soil cleanup objectives or groundwater standards.

Soil - Soil samples collected from across the site indicate the presence of certain contaminants in varying degrees generally consistent with the former use of each parcel. VOCs, including acetone up to 0.51 parts per million (ppm)(protection of groundwater soil cleanup objective (PGWSCO)of 0.50 parts per million (ppm)), benzene up to 3.4 ppm (PGWSCO of 0.060 ppm), cis-1,2-dichloroethene (cis-1,2-DCE) up to 1.2 ppm (PGWSCO of 0.25 ppm), ethylbenzene up to 140 ppm (PGWSCO of 1 and restricted residential soil cleanup objective (RRSCO) of 41 ppm), tetrachloroethene (PCE) up to 2.32 ppm (PGWSCO of 1.3 ppm), toluene up to 37 ppm (PGWSCO of 0.7 ppm) and xylenes up to 430 ppm (PGWSCO of 1.6 ppm and RRSCO 100 ppm), SVOCs, including benzo(a)anthracene up to 8.9 ppm (PGWSCO and RRSCO of 1 ppm), benzo(b)fluoranthene up to 8.8 ppm (PGWSCO of 1.7 ppm and RRSCO of 1 ppm), benzo(k)fluoranthene up to 3.7 ppm (PGWSCO of 1.7 ppm), benzo(a)pyrene up to 7 ppm (RRSCO of 1 ppm), chrysene up to 7.6 ppm (PGWRSCO of 1 ppm and RRSCO of 3.9 ppm), naphthalene up to 26 ppm (PGWSCO of 12 ppm), indeno(1,2,3-cd)pyrene up to 4.6 ppm (RRSCO of 0.5 ppm) and dibenzo(a,h)anthracene up to 2 ppm (RRSCO of .33 ppm) and metals including arsenic up to 18 ppm (PGWSCO and RRSCO of 16 ppm), barium up to 490 ppm (RRSCO of 400 ppm), lead up to 1,100 ppm (PGWSCO of 450 ppm and RRSCO of 400 ppm), and mercury up to 2.9 ppm (PGWSCO of 0.73 ppm and RRSCO of 0.81 ppm) were detected in

the soil above PGWSCOs and/or RRSCOs. There is no evidence of off-site contamination in soils.

Groundwater - Groundwater samples collected from across the site indicate the presence of certain contaminants in varying degrees generally consistent with the former use of each parcel. VOCs, including benzene up to 530 parts per billion (ppb) (SCG of 1 ppb), cis-1,2-DCE up to 340 ppb (SCG of 5 ppb), ethylbenzene up to 1,100 ppb (SCG of 5 ppb), isopropylbenzene up to 95 ppb (SCG of 5 ppb), xylene (total) up to 3,000 ppb (SCG of 5 ppb), methyl tert-butyl ether (MTBE) up to 120 ppb (SCG of 10 ppb), tetrachloroethene up to 3,300 ppb (SCG of 5 ppb), toluene up to 110 ppb (SCG of 5 ppb), trans-1,2-dichloroethene up to 18 ppb (SCG of 5 ppb), trichloroethene up to 420 ppb (SCG of 5 ppb) and vinyl chloride up to 49 ppb (SCG of 2 ppb), SVOCs, including naphthalene up to 180 ppb (SCG of 10 ppb) and pentachlorophenol up to 2 ppb (SCG of 1 ppb) and metals including antimony up to 5.03 ppb (SCG of 3 ppb), iron up to 35,500 ppb (SCG of 300 ppb), manganese up to 4,724 ppb (SCG of 300 ppb) and sodium up to 583,000 ppb (SCG of 20,000 ppb) were found in excess of ambient water quality standards and guidance. Groundwater contaminated with chlorinated VOCs appear to be migrating from the site to off-site locations.

Soil Vapor - On-site soil vapor was not completed during the RI based on the lack of existing structures, but is presumed to be contaminated given the results in other environmental media.

Some petroleum related compounds, including 2-hexanone up to 75 ug/m³, ethanol up to 211 ug/m³, hexane up to 20.4 ug/m³, benzene up to 17.6 ug/m³, toluene up to 68.2 ug/m³, xylenes up to 92.1 ug/m³, heptane up to 23.7 ug/m³, and cyclohexane up to 164 ug/m³ were detected in off-site soil vapor samples along Maple Avenue. The potential exists for soil vapor intrusion impacts in off-site buildings.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People will not come into contact with site-related soil and groundwater contamination unless they dig below the ground surface. People are not drinking the contaminated groundwater because the area is served by a public supply that is not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into the overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The site is vacant so inhalation of site contaminants in indoor air via vapor intrusion is not a current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. An evaluation is needed to determine whether soil vapor intrusion is a concern for any off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

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 groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

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

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation, Cover, In-Situ Chemical Oxidation (ISCO) and Institutional Controls remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Excavation and off-site disposal of contaminated soil, including:

- Soil which exceeds the protection of groundwater soil cleanup objectives (PGWSCO's), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards;
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- Non-aqueous phase liquids;
- Soil with visual waste material or non-aqueous phase liquid; and
- Soil that creates a nuisance condition as defined in Commissioner Policy CP-51 Section G.

Approximately 3,390 cubic yards of contaminated soil will be removed from the site.

Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) for restricted residential use and protection of groundwater will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

The site will be re-graded to accommodate installation of a cover system as described in remedy element 4.

4. Cover System

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5. In-Situ Chemical Oxidation

In-situ chemical oxidation will be implemented to treat volatile organic compounds (VOCs) in groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants in the areas where petroleum hydrocarbons and chlorinated VOCs are elevated in the groundwater. The impacted zone ranges from 10 to 30 feet below ground surface.

6. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- Require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
- Allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

- Restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- Require compliance with the Department approved Site Management Plan.

7. Site Management Plan

A site management plan is required which includes the following:

a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

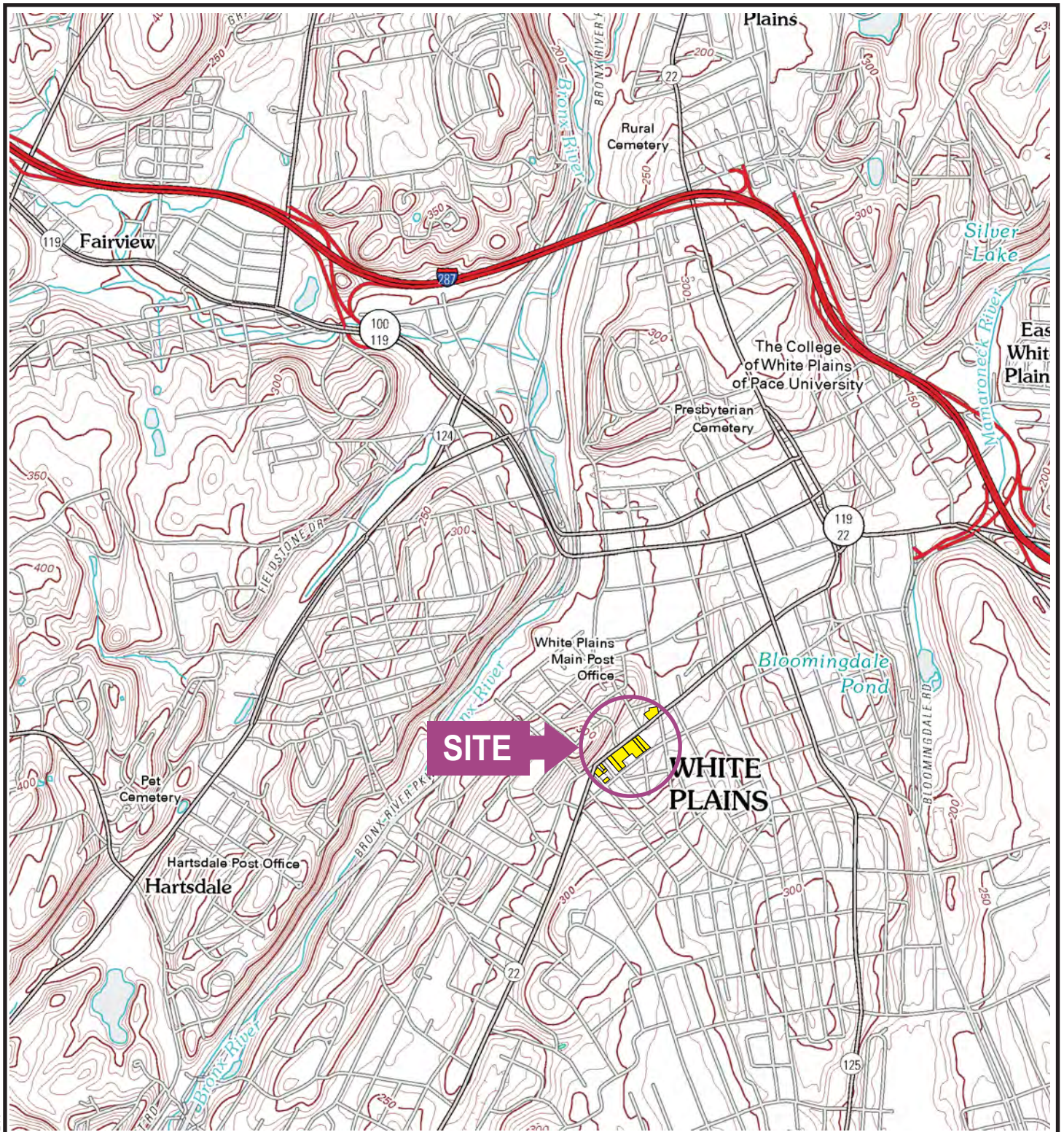
Institutional Controls: The Environmental Easement discussed in paragraph 6 above.

Engineering Controls: The cover system discussed in Paragraph 4 and the ISCO injections discussed in Paragraph 5 above.

This plan includes, but may not be limited to:

- o An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - o Descriptions of the provisions of the environmental easement including any land use, and/or groundwater use restrictions;
 - o A provision for evaluation of the potential for soil vapor intrusion in future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - o A provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
 - o Provisions for the management and inspection of the identified engineering controls;
 - o Maintaining site access controls and Department notification; and
 - o The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- o Monitoring of groundwater to assess the performance and effectiveness of the remedy;

- o A schedule of monitoring and frequency of submittals to the Department;
- o Monitoring for vapor intrusion for any future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



QUADRANGLE LOCATION



SOURCE:
USGS; 2010, White Plains, NY
7.5 Minute Topographic Quadrangle



Title:

SITE LOCATION MAP

APPENDIX C
CITIZENS PARTICIPATION PLAN
POST ROAD CORRIDOR - WHITE PLAINS, NY

Prepared for:

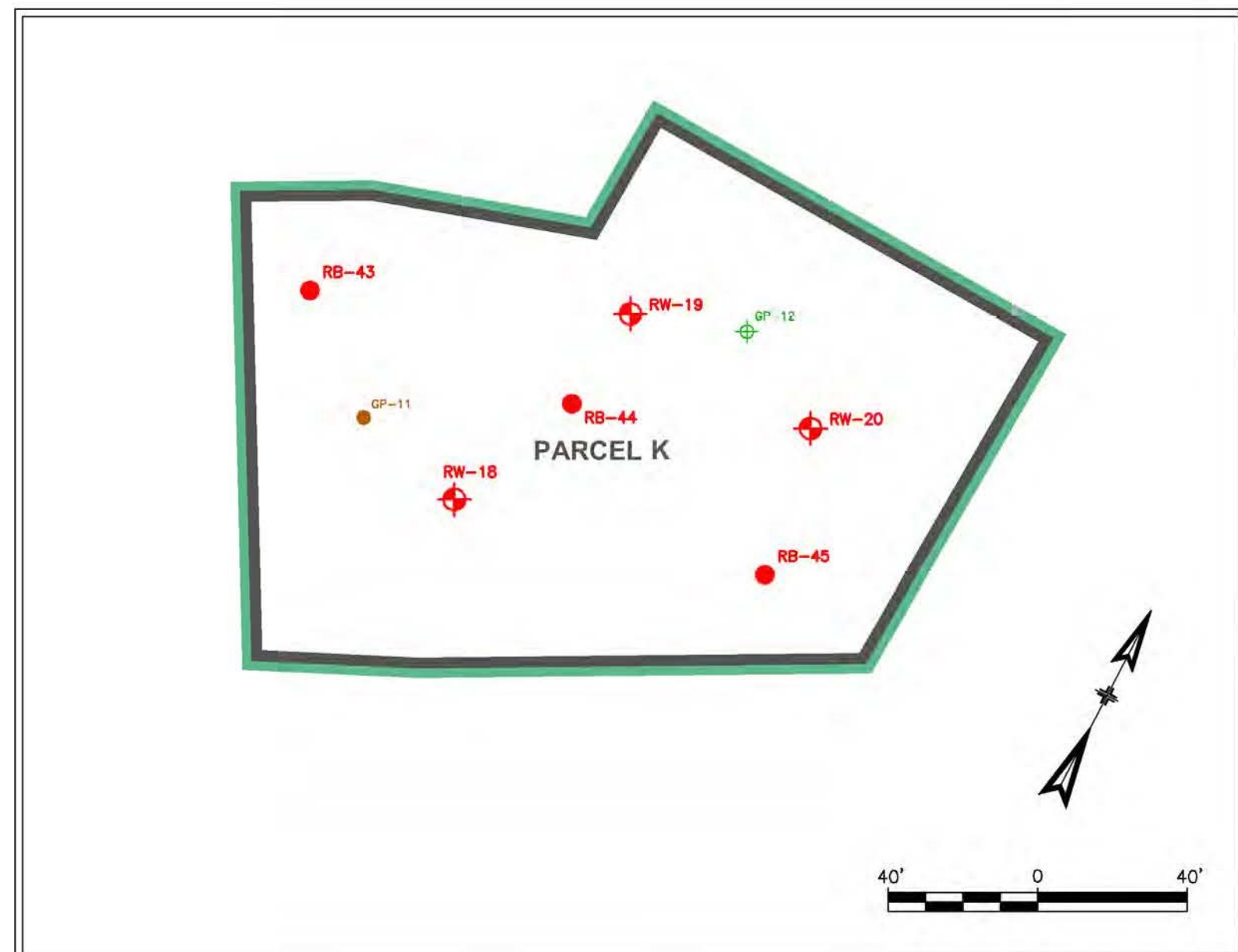
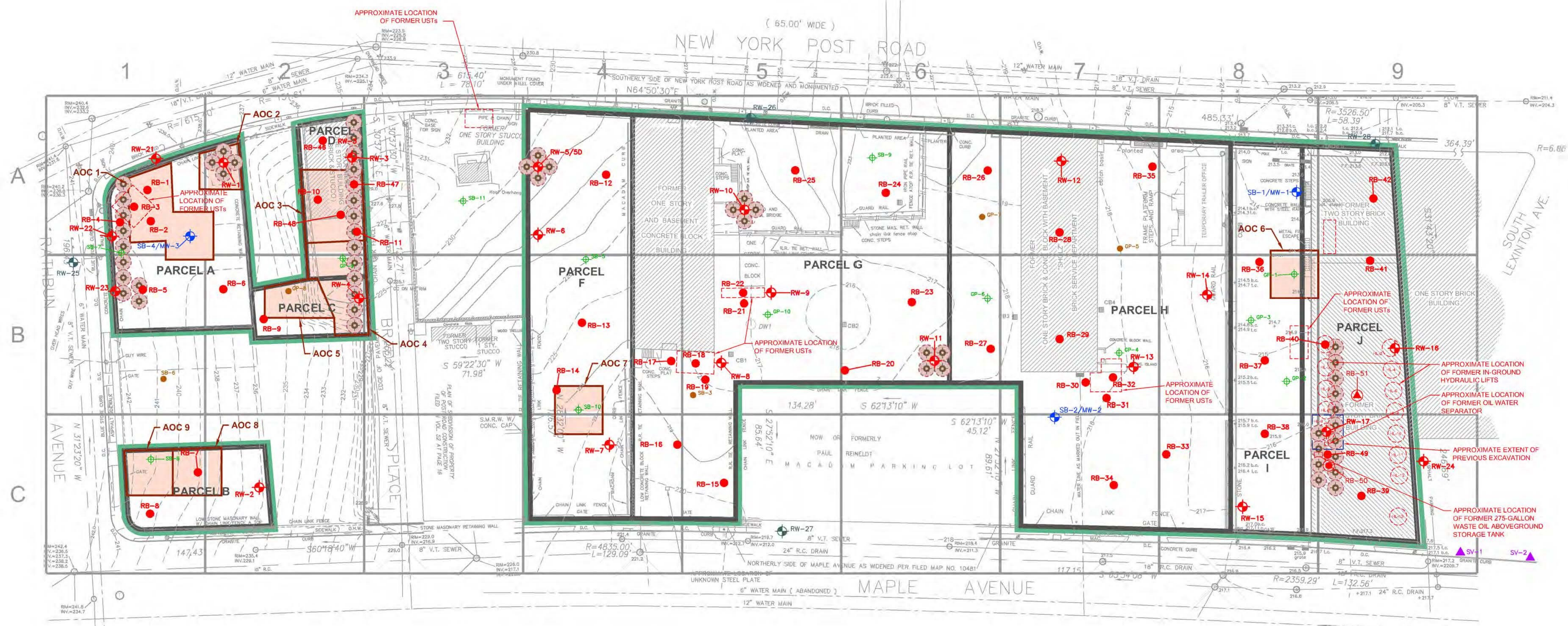
POST MAPLE 77, LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

Compiled by: R.M.	Date: 29APR13
Prepared by: J.A.D.	Scale: AS SHOWN
Project Mgr.: R.M.	Project No.: 2195.0001Y000
File: 2195.0001Y105.01.CDR	

FIGURE

1



AOC	Area (sq ft)	Development Excavation Depth (ft bls)	Additional Remedial Excavation Depth (ft bls)	Remedial Excavation Volume (cu yd)
1	2,050	7	9	683
2	666	5.5	11.5	284
3	1,713	0	10	634
4	1,742	0	5	323
5	861	5.5	6.5	207
6	900	3	5	67
7	900	7.5	5.5	183
8	904	1.5	17.5	586
9	848	2.5	13.5	424

- LEGEND
- PROPOSED LIMITS OF EXCAVATION AND BACKFILL
 - PROPOSED MONITORING WELL
 - PROPOSED LOCATION OF IN SITU CHEMICAL OXIDATION INJECTION POINT AND APPROXIMATE AREA OF INFLUENCE
 - SOIL BORING/MONITORING WELL, INSTALLED BY ROUX ASSOCIATES
 - SOIL BORING, INSTALLED BY ROUX ASSOCIATES
 - GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES
 - SOIL/GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES
 - SOIL BORING COMPLETED AS TEMPORARY WELL, INSTALLED BY OTHERS
 - BORING COMPLETED AS MONITORING WELL, INSTALLED BY OTHERS
 - SOIL BORING, INSTALLED BY OTHERS
 - TEMPORARY SOIL VAPOR SAMPLING POINT, INSTALLED BY ROUX ASSOCIATES
 - ALPHA-NUMERIC GRID
 - PARCEL BOUNDARY
 - BCP BOUNDARY

- NOTES
- ELEVATIONS SHOWN HEREON REFER TO THE CITY OF WHITE PLAINS DATUM.
 - AOC - AREA OF CONCERN

Title: **REMEDIAL ALTERNATIVE 2: TRACK 4 RESTRICTED RESIDENTIAL USE CLEANUP**

REMEDIAL ACTION WORK PLAN
POST ROAD CORRIDOR - WHITE PLAINS
77 WEST POST ROAD, WHITE PLAINS, NY

Prepared For: POST MAPLE 77, LLC

Compiled by: G.S. Date: 10AUG16
Prepared by: J.A.D. Scale: AS SHOWN
Project Mgr: W.K. Project: 2195.0001Y000
File: 2195.0001Y126.01.DWG

Figure 2

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