DECISION DOCUMENT

Cottage Place Gardens Phase 4 Parcel Site
Brownfield Cleanup Program
Yonkers, Westchester County
Site No. C360160
January 2019

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

DECLARATION STATEMENT - DECISION DOCUMENT

Cottage Place Gardens Phase 4 Parcel Site
Brownfield Cleanup Program
Yonkers, Westchester County
Site No. C360160
January 2019

Statement of Purpose and Basis

This document presents the remedy for the Cottage Place Gardens Phase 4 Parcel Site 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 Cottage Place Gardens Phase 4 Parcel Site 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. Excavation

The existing on-site buildings will be demolished and materials which can't be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

Excavation and off-site disposal of all on-site soil which exceeds the unrestricted soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 12,750 cubic yards of contaminated soil will be removed from the Phase 4 parcel. Excavation will encompass the entire Phase 4 parcel to an average depth of 5 feet below ground surface (bgs). Select areas of the site will be excavated to between 8 and 10 feet bgs. The soil removal is expected to achieve at least a bulk reduction in groundwater contamination to asymptotic levels through source removal and excavation dewatering (if necessary). Confirmation sampling will be conducted in accordance with DER-10 to document that any soil above bedrock left on-site meets the unrestricted SCOs.

Excavation and removal of any encountered underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

2. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation to establish the design grades at the site.

3. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion, if identified.

4. Contingent Track 1

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report and/or it's determined that post-excavation groundwater treatment is necessary, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address the SVI evaluation and/or implement other actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

If no EE or SMP is needed to achieve soil or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Chapter 873, article VII of the Laws of Westchester County, which prohibits potable use of groundwater without prior approval.

In the event that Track 1 unrestricted use is not achieved, including the achievement of groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required and the remedy will achieve a Track 2 or Track 4 restricted residential cleanup.

Contingent Remedial Elements:

Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a site management plan, as described below, will be required. The remedy will achieve a Track 4 restricted residential cleanup at a minimum and will include imposition of a site cover (as a contingency if soil greater than 2 feet but less than 15 feet deep does not meet the restricted residential SCOs), an environmental easement, and site management plan as described below. If all soil above 15 feet or bedrock meets the SCOs for restricted residential use, then a Track 2 remedy will be achieved and no cover system will be required.

A. 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).

Where a soil cover is to be used 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 for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, cement, paved surface parking areas, sidewalks, building foundations and building slabs.

B. 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, commercial, and industrial uses 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.

C. 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 the contingent institutional section above.

Engineering Controls: The site cover discussed in the contingent cover system section above.

This plans includes, but may not be limited to:

-An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

-descriptions of the provisions of the environmental easement including land use;

-provisions for the management and inspection of the identified engineering controls;

-a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

-maintaining site access controls and Department notifications; and

-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:

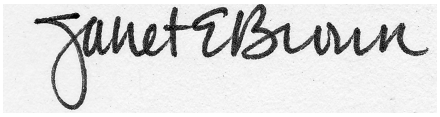
-Monitoring of groundwater to assess the performance and effectiveness of the remedy;

-a schedule of monitoring and frequency of submittals to the Department;

-monitoring for vapor intrusion for any buildings 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.



01/25/2019

Date

Janet Brown, Director
Remedial Bureau C

DECISION DOCUMENT

Cottage Place Gardens Phase 4 Parcel Site
Yonkers, Westchester County
Site No. C360160
January 2019

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 repository:

Yonkers Public Library - Riverfront Library
One Larkin Center
Yonkers, NY 10701
Phone: 914-337-1500

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 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 Cottage Place Gardens Phase 4 Parcel (the site) is located in an urban area within the City of Yonkers, Westchester County. The site is approximately 1.51 acres in size and is an assemblage of three tax parcels and a portion of another. The site is located along the eastern side of Warburton Avenue and Irving Place. The Phase 1 (C360119) parcel is located to the northwest, and the remediation has been completed. The Phase 2 (C360138) parcel is located to the southeast, and the remediation has been completed. The Phase 3 (C360150) parcel is located to the north, and the remedial action is almost complete. The Phase 5 (C360161) parcel is located to the east, and the remedial investigation is underway.

Site Features: The site is developed with three occupied multi-story brick apartment buildings and one vacant three-story wood-frame multi-family (three apartments) building. The wood-frame apartment building is located on the westernmost portion of the site fronting Warburton Avenue. The remainder of the site consists of landscaped areas, and concrete and asphalt walkways and access-ways.

Current Zoning and Land Use: The site is zoned â€œMâ€• â€“ Apartments Medium Density and is currently being used as an apartment complex. The surrounding parcels are zoned for a mix of commercial (C) and high-density residential apartments (A).

Past Use of the Site: The majority of the site has consisted of a portion of the Cottage Place Gardens public housing apartment complex since its construction in the 1940s. Prior to this time, the Cottage Place Gardens complex was developed with multiple single and multi-family dwellings, stores and a garage since as early as 1886.

Site Geology and Hydrogeology: The site is comprised of fill material that typically consists of fine to coarse sand, containing little to some gravel, various amounts of silt, and occasional cobbles, brick, porcelain, ash, coal, concrete, glass and metal. The thickness of the fill deposit ranges from four feet to 10 feet below the ground surface. Native soil underlying the fill material consists of sand that contains little to some silt and trace to little amounts of gravel. Underlying the sand deposit is glacial till. Groundwater was measured at depths that ranged from 9.5 feet to 12.5 feet below the ground surface. The inferred groundwater flow direction is from the southeast towards the northwest.

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, an alternative which allows for unrestricted use of the site was evaluated.

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

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

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

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:

chromium
mercury
DDD
DDE
DDT
dieldrin
PCB aroclor 1268
lead
p-xylene
benzo(a)anthracene
benzo(b)fluoranthene
chrysene
biphenyl

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:

Sub-surface soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs),

and pesticides. Based upon investigations conducted, the primary contaminants of concern were p-xylene (VOC), polycyclic hydrocarbons (PAHs/SVOCs), 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin (pesticides), Aroclor 1268 (PCB), and chromium, mercury, and lead (metals). No surface soil or soil vapor samples were collected on-site.

The subsurface soil showed exceedances of the unrestricted soil cleanup objectives (SCOs) for pesticides, PCBs, and metals. The VOCs detected were acetone at a maximum concentration of 0.2 parts per million (ppm), and methylene chloride at 1.6 ppm; both exceeded an SCO of 0.05 ppm. The pesticides 4,4'-DDD with a maximum concentration of 0.0055 ppm, 4,4'-DDE with a maximum of 0.293 ppm, and 4,4'-DDT with a maximum of 0.234 ppm; all with an SCO of 0.0033 ppm. Dieldrin was also detected at 0.0111 ppm, with an SCO of 0.005 ppm. Aroclor 1268 was detected at a concentration of 0.238 ppm, compared to its SCO of 0.1 ppm. The metal constituents that exceeded the unrestricted SCOs were as follows: chromium as high as 76 ppm (30 ppm SCO); mercury as high as 1.2 ppm (0.18 ppm SCO); and lead as high as 2,300 ppm (63 ppm SCO). Similar concentrations were found off-site at the Phase 1, 2 and 5 parcels, which can be attributed to the presence of historical fill throughout the area, rather than migration from the Phase 4 parcel.

Groundwater was sampled from eight on-site monitoring wells during the investigation. The only VOC detected above standards was p-xylene with a concentration of 8 parts per billion (ppb), compared to a standard of 5 ppb. There were four PAHs detected above standards: benzo(a)anthracene at a maximum concentration of 0.05 ppb (standard of 0.002 ppb), benzo(b)fluoranthene at 0.03 ppb (0.002 ppb standard), chrysene at 0.05 ppb (0.002 ppb standard), and biphenyl at 11 ppb (5 ppb standard). Chromium, detected at a maximum concentration of 119 ppb (50 ppb standard), and lead, detected at a maximum of 486 ppb (25 ppb standard), were the only metal constituents above standards. There is no indication that any of these constituents are present in off-site groundwater.

As stated above, there were no soil vapor samples collected on the Phase 4 parcel. However, the lack of VOC detections in both subsurface soil and groundwater indicates that on-site soil concerns are unlikely.

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*.

The site is not fenced and persons who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into nearby 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. While environmental sampling indicates that on-site soil vapor intrusion concerns are unlikely, an

evaluation of the potential for soil vapor intrusion to occur on-site is recommended. The potential for off-site soil vapor intrusion concerns will be evaluated on the adjacent Cottage Place Garden Phase 5 site and soil vapor intrusion has been evaluated and determined to not be a concern for the nearby Cottage Place Phase 3 site.

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.

RAOs for Environmental Protection

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

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated 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 1: Unrestricted use remedy.

The selected remedy is referred to as the Excavation to Unrestricted Soil Cleanup Objectives (SCOs) remedy.

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

1. Excavation

The existing on-site buildings will be demolished and materials which can't be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

Excavation and off-site disposal of all on-site soil which exceeds the unrestricted soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 12,750 cubic yards of contaminated soil will be removed from the Phase 4 parcel. Excavation will encompass the entire Phase 4 parcel to an average depth of 5 feet below ground surface (bgs). Select areas of the site will be excavated to between 8 and 10 feet bgs. The soil removal is expected to achieve at least a bulk reduction in groundwater contamination to asymptotic levels through source removal and excavation dewatering (if necessary). Confirmation sampling will be conducted in accordance with DER-10 to document that any soil above bedrock left on-site meets the unrestricted SCOs.

Excavation and removal of any encountered underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

2. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation to establish the design grades at the site.

3. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion, if identified.

4. Contingent Track 1

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report and/or it's determined that post-excavation groundwater treatment is necessary, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address the SVI evaluation and/or implement other actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

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In the event that Track 1 unrestricted use is not achieved, including the achievement of groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required and the remedy will achieve a Track 2 or Track 4 restricted residential cleanup.

Contingent Remedial Elements:

Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a site management plan, as described below, will be required. The remedy will achieve a Track 4 restricted residential cleanup at a minimum and will include imposition of a site cover (as a contingency if soil greater than 2 feet but less than 15 feet deep does not meet the restricted residential SCOs), an environmental easement, and site management plan as described below. If all soil above 15 feet or bedrock meets the SCOs for restricted residential use, then a Track 2 remedy will be achieved and no cover system will be required.

A. 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). Where a soil cover is to be used 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 for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, cement, paved surface parking areas, sidewalks, building foundations and building slabs.

B. 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, commercial, and industrial uses 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.

C. 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 the contingent institutional section above.

Engineering Controls: The site cover discussed in the contingent cover system section above.

This plan includes, but may not be limited to:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including land use;
- provisions for the management and inspection of the identified engineering controls;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- maintaining site access controls and Department notifications; and
- 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:

- Monitoring of groundwater to assess the performance and effectiveness of the remedy;

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

Image Provided By ESRI Street Map

N

Not to Scale

Figure 1

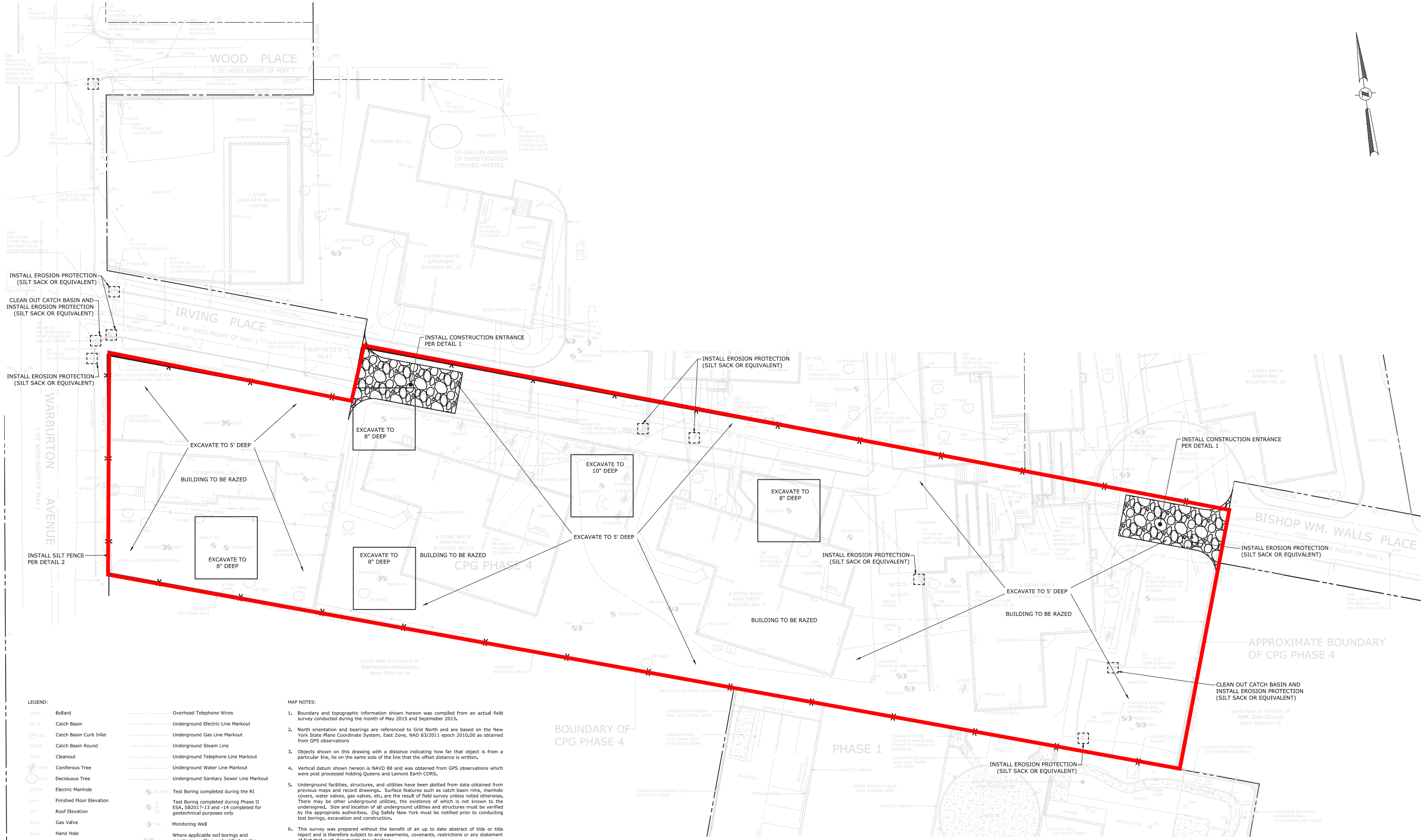
SITE LOCATION MAP
COTTAGE PLACE GARDENS
PHASE 4 PARCEL SITE
CITY OF YONKERS, NEW YORK

Figure 2

Site Plan

Cottage Place Gardens Phase 4
City of Yonkers, Westchester County
Site No. C360160

NEW YORK STATE OF OPPORTUNITY
Department of Environmental Conservation



LEGEND:

- BOL Bollard
- CB Catch Basin
- CBCI Catch Basin Curb Inlet
- CBR Catch Basin Round
- CO Cleanout
- TREE Coniferous Tree
- TREE Deciduous Tree
- MHN Electric Manhole
- FFE Finished Floor Elevation
- RE Roof Elevation
- GV Gas Valve
- HH Hand Hole
- HYD Hydrant
- LP Light Pole
- SMH Sanitary Manhole
- TPED Telephone Pedestal
- UNH Unknown Manhole Type
- UP Utility Pole
- WV Water Valve
- T Overhead Telephone Wires
- UE Underground Electric Line Markout
- G Underground Gas Line Markout
- STM Underground Steam Line
- UT Underground Telephone Line Markout
- W Underground Water Line Markout
- SS Underground Sanitary Sewer Line Markout
- RICP04 Test Boring completed during the RI
- Test Boring completed during Phase II ESA, SB2017-13 and -14 completed for geotechnical purposes only
- MW Monitoring Well
- Where applicable soil borings and monitoring wells are identified on the Figure as being co-located for visual purposes. In actuality, the soil borings were converted into monitoring wells.

MAP NOTES:

1. Boundary and topographic information shown hereon was compiled from an actual field survey conducted during the month of May 2015 and Septmeber 2015.
2. North orientation and bearings are referenced to Grid North and are based on the New York State Plane Coordinate System, East Zone, NAD 83/2011 epoch 2010.00 as obtained from GPS observations
3. Objects shown on this drawing with a distance indicating how far that object is from a particular line, lie on the same side of the line that the offset distance is written.
4. Vertical datum shown hereon is NAVD 88 and was obtained from GPS observations which were post processed holding Queens and Lamont Earth CORS.
5. Underground facilities, structures, and utilities have been plotted from data obtained from previous maps and record drawings. Surface features such as catch basin rims, manhole covers, water valves, gas valves, etc. are the result of field survey unless noted otherwise. There may be other underground utilities, the existence of which is not known to the undersigned. Size and location of all underground utilities and structures must be verified by the appropriate authorities. Dig Safely New York must be notified prior to conducting test borings, excavation and construction.
6. This survey was prepared without the benefit of an up to date abstract of title or title report and is therefore subject to any easements, covenants, restrictions or any statement of fact that such documents may disclose.

MAP REFERENCE:

1. "Boundary and Topographic Survey" Cottage Place, City of Yonkers, Westchester County, New York, Dated June 29, 2010. Prepared by Langan Engineers & Environmental Services.

BAR SCALE
20 0 10 20 40
1 inch = 20 ft.

CAD DWG. FILE NAME: K:\Projects\1166641\Survey\Drawings Maps\FIGURE 2 SITE FEATURES MAP-PHASE 4 PARCEL-17-390 2018.07.03.dwg

CAD DWG. FILE NAME: FIGURE 2 SITE FEATURE

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

DESIGNED:
DRAFTED : S.WUNSCH
CHECKED : S. BIEBER
PROJ. NO : 16.6664
SCALE : 1"=20'
DATE : JULY 06, 2018

FIGURE 3
REMEDIAL ACTION IMPLEMENTATION PLAN

COTTAGE PLACE GARDENS PHASE 4 PARCEL

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

FIG3
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