

DECISION DOCUMENT

CE - York Ave Station
Manufactured Gas Plant Project
New York, New York County
Site No. 231117
May 2021



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

CE - York Ave Station
Manufactured Gas Plant Project
New York, New York County
Site No. 231117
May 2021

Statement of Purpose and Basis

This document presents the remedy for the CE - York Ave Station remediation 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, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the CE - York Ave Station 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) Green Remediation

Green remediation principles and techniques will be implemented to the extent feasible in the 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 gas 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; and,
- additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2) Cover System

A site cover currently exists on parcels identified as Block 1456, Lots 21, 26, and 7501, Block

1457, Lot 17, and Block 1475, Lot 5. These parcels are occupied by buildings and the cover will be maintained to allow for restricted residential use of the site. Any site redevelopment will maintain the existing site cover or install a new cover system which allows for restricted residential use. The site cover may include paved surface parking areas, sidewalks, newly imported soils meeting the restricted residential Soil Cleanup Objectives (SCOs) in the top two feet, or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3) Institutional Controls

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 NYCDOH; and
- require compliance with the Department approved Site Management Plan.

4) 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 and all local use restrictions discussed in Paragraph 3 above.

Engineering Controls: The cover discussed in Paragraph 2 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;
- a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based upon the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes the areas of on-site buildings and parking lot areas on all parcels included in the site definition;

- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any redeveloped and newly occupied buildings on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion. Note, there are potential soil vapor intrusion (SVI) concerns at the site which are not related to former MGP operations, and therefore not the responsibility of Consolidated Edison. The soil vapor contamination originates from an off-site source. The owner of the site was notified of the soil vapor contamination. SVI should be evaluated and delineated if the site is redeveloped in the future;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs). This provision extends to the landscaped areas on the museum Lot should the area be redeveloped. However, since the landscaped areas were constructed long after the MGP operations ceased, they are typical of urban fill and are unrelated to the MGP operations. The owner of the museum was notified of urban fill constituents found in the landscaped areas;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; 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:

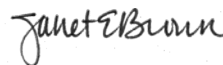
- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed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

5/17/2021

Date



Janet Brown, Director
Remedial Bureau C

DECISION DOCUMENT

CE - York Ave Station
New York, New York County
Site No. 231117
May 2021

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.

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:

DECInfo Locator - Web Application
<https://www.dec.ny.gov/data/DecDocs/231117>

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 former York Avenue Holder Station site is located on the west side of York Avenue, from East 61st to East 63rd Street, and on a portion of a parcel on the east side of York Avenue, between East 63rd and East 62nd Streets, in the Borough of Manhattan in New York City. The former site is made up of portions of three different tax parcels, identified as Block 1456, Lots 12, 21, 26 and 7501; Block 1457, Lot 17; and a portion of Block 1475, Lot 5. The site acreage totals 3.96 acres. Block 1456 is bounded by East 61st Street to the south, York Avenue to the east, East 62nd to the north, and 1st Avenue to the west. Block 1457 is bounded by East 62nd Street to the south, York Avenue to the east, East 63rd Street to the north, and 1st Avenue to the west. The final parcel, Block 1475, is bounded by York Avenue to the west, East 62nd Street to the south, FDR Drive to the east, and East 63rd Street to the north.

Site Features: The main site features on Block 1456 are a 15-story health care condominium/office building (Lot 21), a two-story museum (Lot 12), a 13-story, 22 unit commercial building with parking garage (Lot 7501), and a 19-story, 157 unit cooperative residential building (Lot 26). On Block 1457 there are four 12-story residential buildings, with a total of 503 residential and 6 commercial units, with ground-level courtyards and a four-level underground parking garage (Lot 17). On Block 1475, the 26-story, 250 unit Rockefeller University housing tower with a separate three-level partially underground parking structure (Lot 5) currently occupies the property.

Current Zoning and Land Use: The site is currently zoned C1 and C8 (Block 1456), which allows for residential, commercial and manufacturing; R8 (Block 1457), which allows for residential and commercial; and R10 (Block 1475), which allows for residential and commercial uses. The current site use for Block 1456 is a mixture of commercial offices, a museum, and residential units. For Blocks 1457 and 1475 the current use is residential units. The surrounding parcels are mixed residential and commercial uses.

Past Use of the Site: The site was formerly a manufactured gas plant holder site. The gas manufacturing process, which occurred at a separate location, involved the heating of coal or petroleum products to produce a gas mixture. Once cooled and purified, the gas was distributed through a local pipeline network. The gas was used for heating and cooking in much the same way that natural gas is used today. In early years, the gas was also used for lighting in homes and streetlights. There were no manufacturing processes on this site, only distribution holders. The first gas holders were constructed on Block 1457 between 1874 and 1879. A third holder was constructed on this parcel in 1889. Between 1905 and 1915 the original two holders were removed and replaced with a single large holder, and another large holder was built on Block 1456. All of the gas holders operated until 1948, when the structures were removed. Between 1949 and 1960, all of the parcels were redeveloped into the current residential and commercial uses.

Site Geology and Hydrogeology: The site consists of three unconsolidated soil units varying widely in thickness and distribution across the site overlying the bedrock surface. The site is underlain by historic fill material (up to 12 feet in thickness), under which native deposits of sand and gravel layers of varying textures and thicknesses sitting atop bedrock. The bedrock

ranges from at or just below the ground surface at the western side of the site, to approximately 48 feet below ground surface along the east side.

Groundwater was found at depths of 6 to 16 feet below ground surface. The flow direction is generally to the east towards the East River.

This site was previously tracked as #V00544 in the Voluntary Cleanup Program (VCP), until July 13, 2018, when the VCP ended and the remedial program obligations for the site transitioned from a Voluntary Cleanup Agreement to a Consent Order.

A site location map and site boundary map are attached as Figures 1 and 2, respectively.

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.

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

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Consolidated Edison Company of NY, Inc.

The Department and Consolidated Edison Co. of New York, Inc., entered into a Consent Order on July 25, 2018. The Order obligates Consolidated Edison Co. of New York, Inc., to implement a full remedial program for MGP-related contamination both on and off the site. Prior to entering into the Consent Order, Consolidated Edison Co. of New York, Inc., and the Department signed a Voluntary Cleanup Agreement in August 2002. The Voluntary Cleanup Program ended in 2018.

Non-MGP contamination (i.e., chlorinated solvents), for which Consolidated Edison is not responsible, was found in soil vapor and groundwater samples at the site. Additionally, polycyclic aromatic hydrocarbons (PAHs) and metals were found in surficial (top 2 inches) of soil within the landscaped areas on the Block 1456, Lot 12 (museum) portion of the site. The landscaped areas were built long after the MGP holder station ceased operation. The constituents found in the landscaped areas are typical of urban fill and their presence is unrelated to historic

MGP operations. Based on the investigations conducted, the MGP operations are not the source of the chlorinated solvents in soil vapor and groundwater, nor the source of the PAHs and metals in the landscaped areas on the lot containing the museum. The owners of the parcels comprising the site were provided the investigation data related to the chlorinated solvents. The owner of the museum was notified of the urban fill constituents found in the landscaped areas.

On-site and off-site contamination unrelated to former MGP activities identified during the environmental investigations will be addressed separately by the Department, if needed. The responsible party, in accordance with the Order on Consent, is not responsible for non-MGP contamination.

As necessary, the Department will seek to identify any parties (other than the MGP RP) known or suspected to be responsible for non-MGP-related contamination at or emanating from the site, as appropriate. 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 on- and off-site non-MGP-related 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 hazardous waste 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:

| | |
|---|--------------------------------|
| benzene, toluene, ethylbenzene and xylenes (BTEX) | naphthalene |
| benzo(a)anthracene | tetrachloroethene (PCE) |
| benzo(a)pyrene | 1,1,2-TCA |
| benzo(b)fluoranthene | methyl-tert-butyl ether (MTBE) |
| chrysene | lead |
| cyanides(soluble cyanide salts) | arsenic |
| indeno(1,2,3-CD)pyrene | mercury |
| | styrene |

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

- groundwater
- soil
- soil vapor intrusion

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.

Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compound (SVOCs), metals, and cyanide. Based on investigations conducted to date, the primary contaminants of concern are benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, lead, arsenic, styrene, naphthalene, and polycyclic aromatic hydrocarbons (PAHs). Inorganic compounds are also observed in exceedance of restricted residential Soil Cleanup Objectives (SCOs) but would not be considered primary constituents of concern, with the exception of cyanide. Since PCBs and pesticides are not associated with MGP operations, they were not required analytes for this site.

Surface Soil (0 to 2 inches below ground surface)- The only exposed on-site surficial soils are on the Block 1456, Lot 12 (museum) portion of the site. However, since the landscaped areas were constructed long after the MGP operations ceased, and are typical of urban fill (PAHs and metals) which are unrelated to the MGP operations, they are not considered to be part of the MGP remedy. The owner of the museum complex was notified of the urban fill constituents found in the landscaped areas.

There were no detections of VOCs or cyanide above restricted residential soil cleanup objectives (RRSCOs) on Lot 12. The PAHs which exceeded RRSCOs were benzo(a)anthracene at 3.9 parts per million (ppm), benzo(a)pyrene at 3.8 ppm, and benzo(b)fluoranthene at 2.5 ppm (all with an RRSCO of 1.0 ppm); chrysene at 4.4 ppm (RRSCO of 3.9 ppm); and indeno(1,2,3-cd)pyrene at 1.2 ppm (RRSCO of 0.5 ppm). Inorganics (metals) detected above the RRSCOs included arsenic at a maximum of 40.6 ppm (RRSCO of 16 ppm), lead at a maximum of 1,990 ppm (RRSCO of 400 ppm), and mercury at a maximum of 3.6 ppm (RRSCO of 0.81 ppm).

Subsurface Soil (below 2 inches)- In subsurface soils, the only VOC detected was benzene at a maximum concentration of 5.9 ppm (protection of groundwater SCO [PGWSCO] of 0.06 ppm), on the Block 1457, Lot 17 portion of the site. PAHs found to exceed RRSCOs were benzo(a)anthracene at a maximum of 5.2 ppm, benzo(b)fluoranthene at a maximum of 5.8 ppm, benzo(a)pyrene at a maximum of 4.9 ppm, and chrysene at a maximum of 5.4 ppm (all with an RRSCO of 1 ppm); indeno(1,2,3-cd)pyrene at a maximum of 2.3 ppm (RRSCO of 0.5 ppm); dibenz(a,h)anthracene at a maximum of 0.66 ppm (RRSCO of 0.33 ppm); and naphthalene at a maximum of 210 ppm (PGWSCO of 12 ppm). The inorganics found to exceed RRSCOs were lead at a maximum of 23,100 ppm (RRSCO of 400 ppm); total mercury at a maximum of 2.2 ppm (RRSCO of 0.18); arsenic at a maximum of 17.5 ppm (RRSCO of 16 ppm); and total cyanide at a maximum of 69.6 ppm (RRSCO of 27 ppm). These exceedances were detected at both the Block 1457, Lot 17, and Block 1456, Lot 21 portions of the site. There were no exceedances found in subsurface soils at the Block 1475 portion of the site. Data did not indicate any off-site migration of soil contamination related to this site.

Groundwater- The highest concentrations of the primary contaminants of concern (i.e., BTEX, PAHs, and metals) above groundwater standards, criteria, or guidance values (SCGs) were found at one location on Block 1457 in the western gas holder (No. 3) in the overburden groundwater at 12-16 feet below ground surface. Benzene was found at a maximum concentration of 690 parts per billion (ppb) (SCG of 1 ppb); ethylbenzene at a maximum of 140 ppb (SCG of 5 ppb); toluene at a maximum of 800 ppb (SCG of 5 ppb); total xylenes at a maximum of 580 ppb (SCG of 5 ppb); and styrene at a maximum of 240 ppb (SCG of 5 ppb). Two other VOC compounds were found to exceed groundwater standards but are not attributable to the former MGP operations. They are methyl tert-butyl ether (MTBE), a gasoline additive, at a maximum of 11 ppb (SCG of 10 ppb), and 1,1,2-trichloroethane, a chlorinated solvent, at a maximum of 18 ppb (SCG of 1 ppb). Data indicates that the MGP-related groundwater contamination does not appear to be migrating off-site, and that the 1,1,2-trichloroethane and MTBE appear to be migrating onto the property from off-site.

The PAHs found to exceed SCGs were benzo(a)anthracene at a maximum of 0.43 ppb (SCG of 0.002 ppb); benzo(b)fluoranthene at a maximum of 0.29 ppb (SCG of 0.002 ppb); and naphthalene at a maximum of 300 ppb (SCG of 10 ppb).

Inorganics detected in groundwater were total lead at a maximum of 182 ppb (SCG of 25 ppb); and total cyanide at a maximum of 1,050 ppb (SCG of 200 ppb).

Soil Vapor- Soil vapor samples collected from the site (Block 1457, Lot 17, and Block 1456, Lot 21) detected both MGP-related and non-MGP-related compounds. The MGP-related detections included toluene at 9.1 micrograms per cubic meter (ug/m³), ethylbenzene at 2.7 ug/m³, xylenes at 17 ug/m³, 1,2,4-trimethylbenzene at a maximum of 51 ug/m³, and 1,3,5-trimethylbenzene at 8.0 ug/m³. The low MGP-related concentrations are not a soil vapor intrusion (SVI) concern for on- or off-site structures. There are no NYSDOH SVI matrices for these compounds. The non-MGP constituents included tetrachloroethene (PCE) at a maximum of 78 ug/m³, trichloroethane (TCA) at 1.7 ug/m³, trichloroethene (TCE) at 0.65 ug/m³, trichlorofluoromethane (Freon 11) at 10 ug/m³, and dichlorodifluoromethane (Freon 12) at 11 ug/m³. Since the latter contamination is not associated with former MGP operations, actions that include further investigations and remediation (if necessary) may be undertaken in the future by others. Data did not indicate any off-site migration of soil vapor related to this site.

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*.

Direct contact with site-related contaminants in the soil is unlikely because the majority of the site is covered with buildings and pavement. In areas with exposed soil, persons who dig below the ground surface may come into contact with site contaminants in subsurface 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 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 potential exists for people to inhale contaminants that are not site related in indoor air due to soil vapor intrusion in on and offsite 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.

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.

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 remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation.

The selected remedy is referred to as the Site Cover, Site Management Plan (SMP) with Institutional Controls remedy.

The elements of the selected remedy, as shown in Figure 3, are as follows:

1) Green Remediation

Green remediation principles and techniques will be implemented to the extent feasible in the 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 gas 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; and,
- additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2) Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for restricted residential use of the site. Any site redevelopment will maintain the existing site cover or install a new cover system which allows for restricted residential use. The site cover may include paved surface parking areas, sidewalks, newly imported soils meeting the restricted residential Soil Cleanup Objectives (SCOs) in the top two feet, or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3) Institutional Controls

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 NYCDOH; and
- require compliance with the Department approved Site Management Plan.

4) 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 and all local use restrictions discussed in Paragraph 2 above.

Engineering Controls: The cover discussed in Paragraph 2 above.

This plan includes, but may not be limited to:

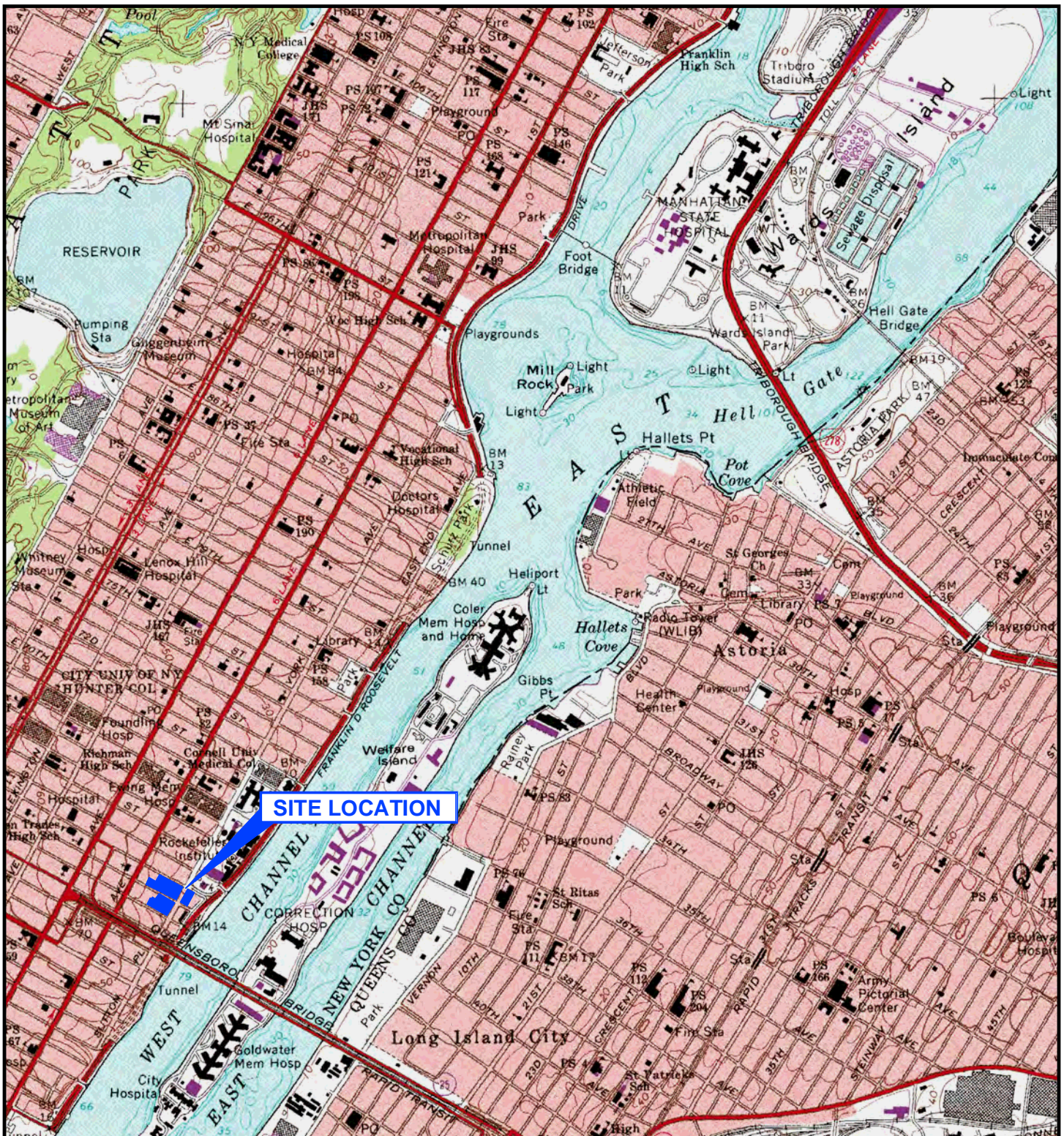
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based upon the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes the areas of on-site buildings and parking lot areas on all parcels included in the site definition;
- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion of MGP-related contaminants for any redeveloped and newly occupied buildings on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion. Note, there are potential soil vapor intrusion (SVI) concerns at the site which are not related to former MGP operations, and therefore not the responsibility of Consolidated Edison. The soil vapor contamination originates from an off-site source. The owner of the site was notified of the soil vapor contamination. SVI should be evaluated and delineated if the site is redeveloped in the future;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 1 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs). This provision extends to the landscaped areas on the museum Lot should the area be redeveloped. However, since the landscaped areas were constructed long after the MGP operations ceased, they are typical of urban fill and are unrelated to the MGP operations. The owner of the museum was notified of urban fill constituents found in the landscaped areas;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; 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; and

- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

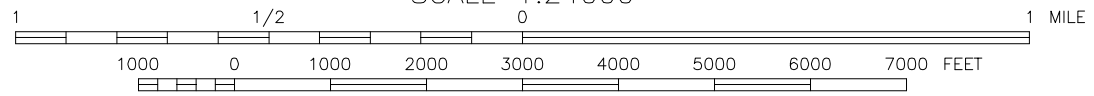
File: J:\Rem_Eng\Project Files\Con Edison\60155845 - York Ave. SC\CADD\2011\60155845-700-HI-SLOC.dwg Layout: ANSL_AVI-CP User: vershonb Plotted: Nov 14, 2011 - 5:01pm Xref's:



UNITED STATES GEOLOGIC SURVEY
 CENTRAL PARK QUADRANGLE
 NEW YORK - NEW JERSEY
 7.5 MINUTE SERIES (TOPOGRAPHY)

CENTRAL PARK, N.Y. - N.J.
 1966
 PHOTOREVISED 1979

SCALE 1:24000

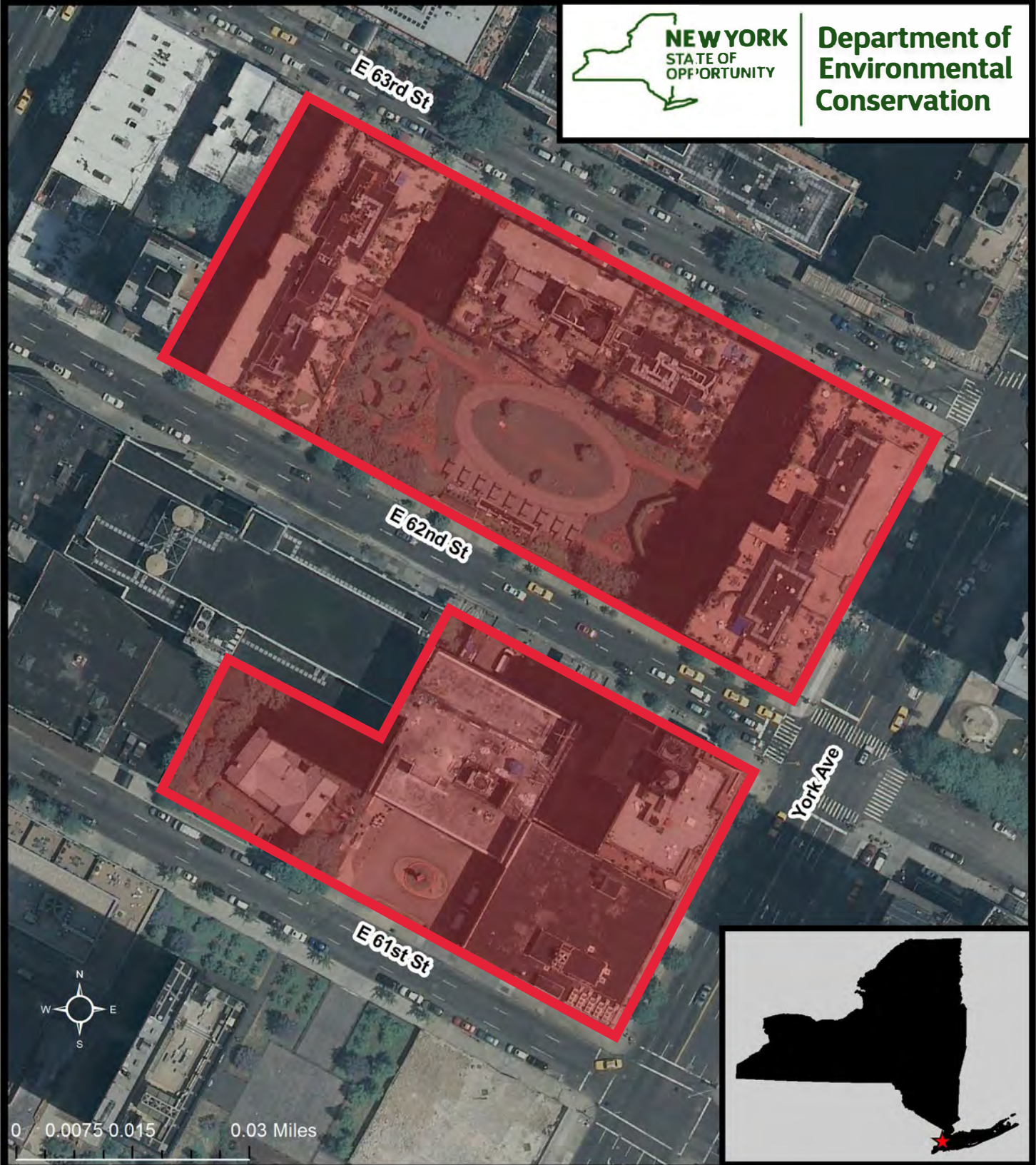


CONSOLIDATED EDISON COMPANY
 OF NEW YORK, INC.
 YORK AVENUE FORMER
 GAS HOLDER SITE

SITE LOCATION MAP



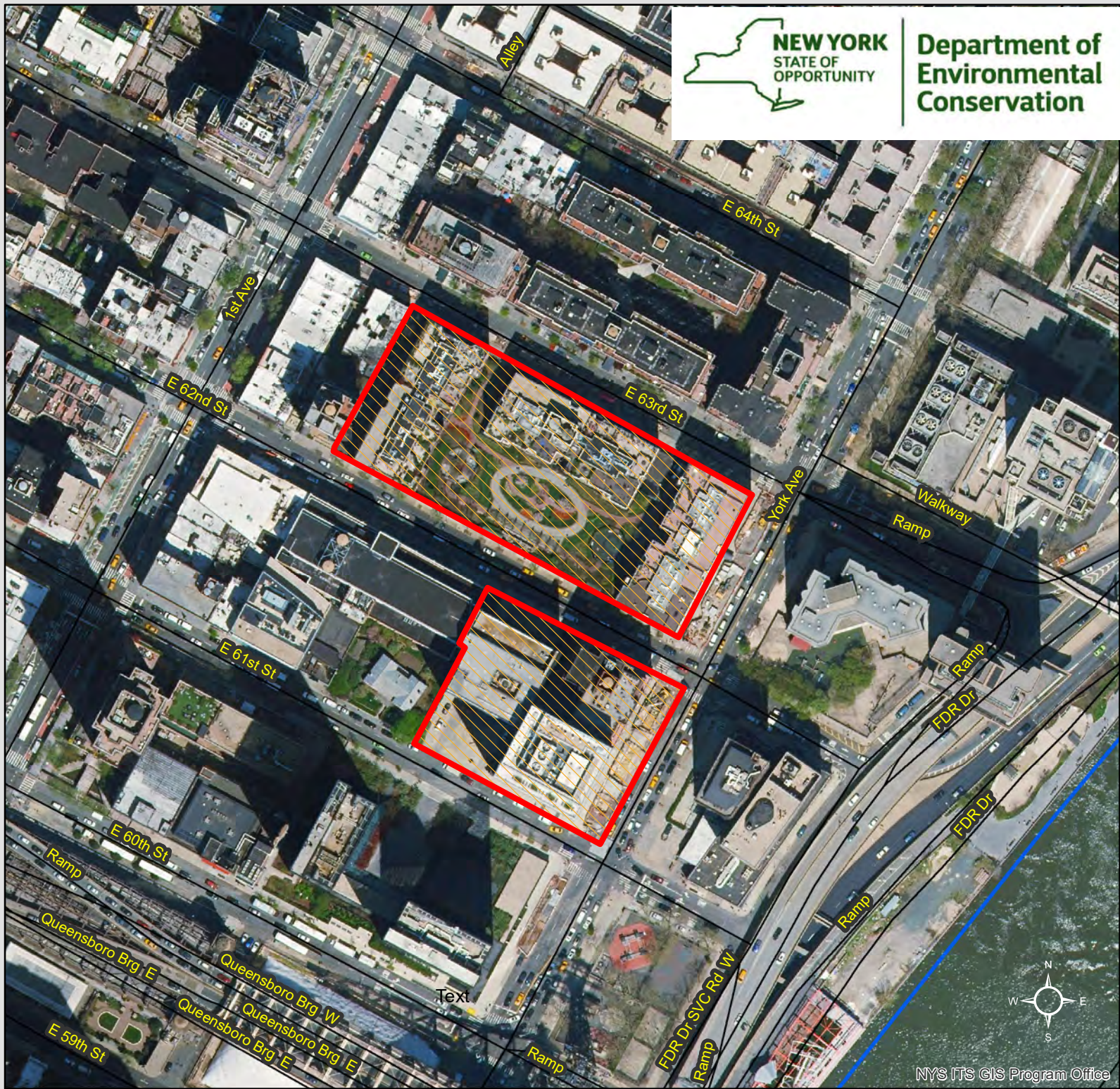
Department of
Environmental
Conservation



Legend

 Site Boundary

Figure 2 Site Boundary
York Avenue MGP
23117
New York, NY



60 30 0 60 Feet

Legend



Extent of Site Cover and
Environmental Easement

FIGURE 3

Selected Remedy:
Site Management Plan and
Environmental Easement