DECISION DOCUMENT

Former Hygrade Polishing and Plating Co.
Brownfield Cleanup Program
Long Island City, Queens County
Site No. C241148
January 2020

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

DECLARATION STATEMENT - DECISION DOCUMENT

Former Hygrade Polishing and Plating Co.
Brownfield Cleanup Program
Long Island City, Queens County
Site No. C241148
January 2020

Statement of Purpose and Basis

This document presents the remedy for the Former Hygrade Polishing and Plating Co. 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 Former Hygrade Polishing and Plating Co. 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 with balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development;
- 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. Groundwater Treatment Using Activated Carbon

Liquid activated carbon will be used to contain per- and poly-fluorinated alkyl substances in groundwater. The material will be injected into the subsurface via injection wells to prevent migration of the contaminants. The method and depth of injection is detailed in the remedial design document which is appended to the RAWP.

3. Monitored Natural Attenuation

Groundwater contamination remaining after active remediation will be addressed with monitored natural attenuation (MNA). Groundwater will be monitored for site related contamination, the effectiveness of the remedy, and MNA indicators which will provide an understanding of the chemical and biological activity breaking down the contamination. It is anticipated that contamination will decrease by an order of magnitude over time. Reports of the attenuation will be provided at a frequency determined in the Site Management Plan.

4. Vapor Mitigation

Continued operation and maintenance of the on-site sub-slab depressurization system, which was installed as an interim remedial measure (IRM), to mitigate the migration of vapors into the building from groundwater. Any future on-site buildings will be required to have a sub-slab depressurization system, or a similar engineered system, to prevent the migration of vapors into the building from soil and/or groundwater.

5. Cover System

A site cover currently exists and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for commercial 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).

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 commercial 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 NYCDOH; 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 above.
    - Engineering Controls: The Cover System and Sub-Slab Depressurization System discussed 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 removal or treatment of the source area if the building is demolished or becomes vacant;
    - descriptions of the provisions of the environmental easement including any land use, and groundwater or surface water use restrictions;
    - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
    - 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, Cover System and the Sub-Slab Depressurization System to assess the performance and effectiveness of the remedy;
    - a schedule of monitoring and frequency of submittals to the Department; and

c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:
    - procedures for operating and maintaining the remedy; and
    - compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting.

Treatment Remedy Shutdown
The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

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.

January 9, 2020

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Former Hygrade Polishing and Plating Co.
Long Island City, Queens County
Site No. C241148
January 2020

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:

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C241148

Queens Community Board 1
45-02 Ditmars Boulevard
Astoria, NY 11105
Phone: 718-626-1021

Queens Library, Long Island City Branch
37-44 21st Street

Long Island City, NY 11101
Phone: 718-752-3700

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 site is located in the Long Island City section of Queens (Borough of Queens, New York City). The site is located along the north side of 41st Avenue between 22nd and 23rd Streets.

Site Features:
The site is approximately 2,500 square feet (0.058 acres) in size and is currently improved with a four-story building and basement that covers the entire property. The building was recently renovated to convert the former factory to an occupied professional office space. To the west of the site is a multi-story hotel, and a parking area and a multi-story commercial building are located east of the site. Metropolitan Transportation Authority property (the F train) runs directly underneath 41st Avenue along the southern side of the property.

Current Zoning and Land Use:
The site is zoned M1-3 (manufacturing) which also allows for commercial uses. The current land use is commercial. The upper four floors of the building were recently renovated for use as professional office space. The surrounding area is mixed-use commercial and residential.

Past Use of the Site:
The property was occupied by an electroplating facility from 1962 to 2012. During an August 2012 inspection, NYSDEC discovered over a hundred 55-gallon drums in various states of decay containing numerous chemicals, several plating baths and rinsate tanks, and heavily stained walls and floors. Pursuant to a NYC Department of Environmental Protection Commissioners order, the new property owner undertook a limited clean up in 2013.

Site Geology and Hydrogeology:
The soil below the basement consists of a permeable sand and gravel fill to a depth of approximately 5 feet below the basement slab. The soils underlying the fill are Pleistocene age and consist of gray clays and silts to a depth of approximately 12 to 16 ft below grade (bg), followed by brown clayey sand. The depth to bedrock is believed to be approximately 32 to 35 ft bg. Groundwater was found approximately 6 to 7 ft bg. The property is situated approximately one-half mile east of the East River. Groundwater flows west direction towards the East River.

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 commercial use (which allows for 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 Applicants under the Brownfield Cleanup Agreement are Volunteers. The Volunteers do not have an obligation to address off-site contamination. The Department and the NYSDOH have determined that this site poses a significant threat to human health and the environment.

The Department has sought 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 has attempted to 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
- indoor air
- sub-slab 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:

tetrachloroethene (PCE)
cadmium
nickel
trichloroethene (TCE)
vinyl chloride
cis-1,2-dichloroethene
perfluorooctanoic acid
Perfluorooctane Sulfonic Acid
chromium

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

- groundwater
- 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.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

On-Site Groundwater Treatment and Vapor Mitigation

Under the approved IRM Workplan, the following activities were completed:

- Injection of in-situ chemical reduction solutions into the groundwater below the building basement to treat volatile organic compounds (VOCs) and metals. Two different products were applied: a total of 2000 lbs. of PeroxyChem EHC® was applied to four injection points (1 through 4) in the southern portion of the site to address the elevated levels of VOCs, and a total of 1000 lbs. of and MetaFix® was applied to two injection points (5 and 6) in the northern portion of the site where elevated levels of metals were identified;
- Installation of a sub-slab depressurization system to mitigate the potential for soil vapor intrusion; and
- Restoration of the cover system consisting of an 8-inch building slab.

Results were documented in an IRM Construction Completion Report dated November 2018 which was approved by NYSDEC and NYSDOH.

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. Groundwater was also analyzed for emerging contaminants (ECs) including per- and poly-fluorinated alkyl substances. Soil vapor was analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern include VOCs, metals, and ECs.

Soil - Prior to the site entering into the BCP, 581 tons of soil were removed in the basement and the excavation was backfilled with clean fill. Sampling data from beneath the basement floor taken at depths of 2 to 7 feet below basement slab grade during the October 2016 Remedial Investigation (after completion of the excavation) did not identify VOCs, SVOCs, pesticides, PCBs, or metals at concentrations exceeding the protection of groundwater or commercial soil cleanup objectives (SCOs).

Groundwater - Prior to initiation of the IRM, groundwater was impacted by VOCs including tetrachloroethene (PCE) at a maximum concentration of 11,900 parts per billion (ppb) as compared

to the ambient water quality standard (AWQS) of 5 ppb, trichloroethene (TCE) up to 2,600 ppb (AWQS is 5 ppb), cis-1,2-dicholoroethene (cis 1,2-DCE) up to 4,150 ppb (AWQS is 5 ppb), and vinyl chloride up to 1,070 ppb (AWQS is 2 ppb). Dissolved metals included cadmium up to 27.9 ppb (AWQS is 5 ppb), chromium up to 1,890 ppb (AWQS is 50 ppb), hexavalent chromium up to 2,210 ppb (AWQS is 50 ppb) and nickel up to 600 ppb (AWQS is 100 ppb). Groundwater data collected in April 2019 following completion of the IRM identified PCE at 5.8 ppb, TCE at 5.8 ppb, cis 1,2-DCE at 180 ppb, and vinyl chloride at 71 ppb. Cadmium was detected at a concentration of 9.23 ppb and nickel was detected at a concentration of 256.7 ppb. Hexavalent chromium concentrations have decreased significantly to non-detect. Perfluorooctane sulfonic acid (PFOS) was detected at a maximum concentration of 6,110 parts per trillion (ppt) and perfluorooctanoic acid (PFOA) at a maximum concentration of 138 ppt, which are above the USEPA drinking water health advisory of 70 ppt and the NYSDEC screening level of 10 ppt. Data indicates that contaminants in groundwater are migrating off-site.

Sub-Slab Soil Vapor & Indoor Air - Sub-slab vapor samples were collected in November 2016, prior to initiation of the IRM. Maximum concentrations of PCE were 43.5 micrograms per cubic meter (ug/m3), TCE at a maximum concentration of 192 ug/m3, cis-1,2-DCE at 61.1 ug/m3 and vinyl chloride at 0.8 ug/m3. Indoor air samples collected in January 2019 (after the IRM was implemented) indicated the presence of low levels of chlorinated VOCs in indoor air, including PCE at 0.62 ug/m3, TCE at 0.25 ug/m3, cis-1,2-DCE at 0.08 ug/m3. Vinyl chloride was non-detect. Data indicates that it is unlikely that contaminants in soil vapor are migrating off-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*.

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 the 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. A sub-slab depressurization system (system that ventilates/removes the air beneath the building) was installed in the onsite building to address the identified indoor air quality impacts from the contaminated soil vapor. Sampling indicates soil vapor intrusion is not a concern for one adjacent offsite building.

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: Commercial Use Cleanup.

The selected remedy is referred to as Groundwater Treatment, Monitored Natural Attenuation, Vapor Mitigation, and Cover System remedy.

The elements of the selected remedy, as shown in Figure 2, 3, and 4, 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;
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- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes with balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development;
- 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.

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Liquid activated carbon will be used to contain per- and poly-fluorinated alkyl substances in groundwater. The material will be injected into the subsurface via injection wells to prevent migration of the contaminants. The method and depth of injection is detailed in the remedial design document which is appended to the RAWP.

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Continued operation and maintenance of the on-site sub-slab depressurization system, which was installed as an interim remedial measure (IRM), to mitigate the migration of vapors into the building from groundwater. Any future on-site buildings will be required to have a sub-slab depressurization system, or a similar engineered system, to prevent the migration of vapors into the building from soil and/or groundwater.

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

7. Site Management Plan

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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:
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    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;
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    - descriptions of the provisions of the environmental easement including any land use, and groundwater or surface water use restrictions;
    - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
    - 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, Cover System and the Sub-Slab Depressurization System to assess the performance and effectiveness of the remedy;
    - a schedule of monitoring and frequency of submittals to the Department; and

c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:

- procedures for operating and maintaining the remedy; and
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Treatment Remedy Shutdown

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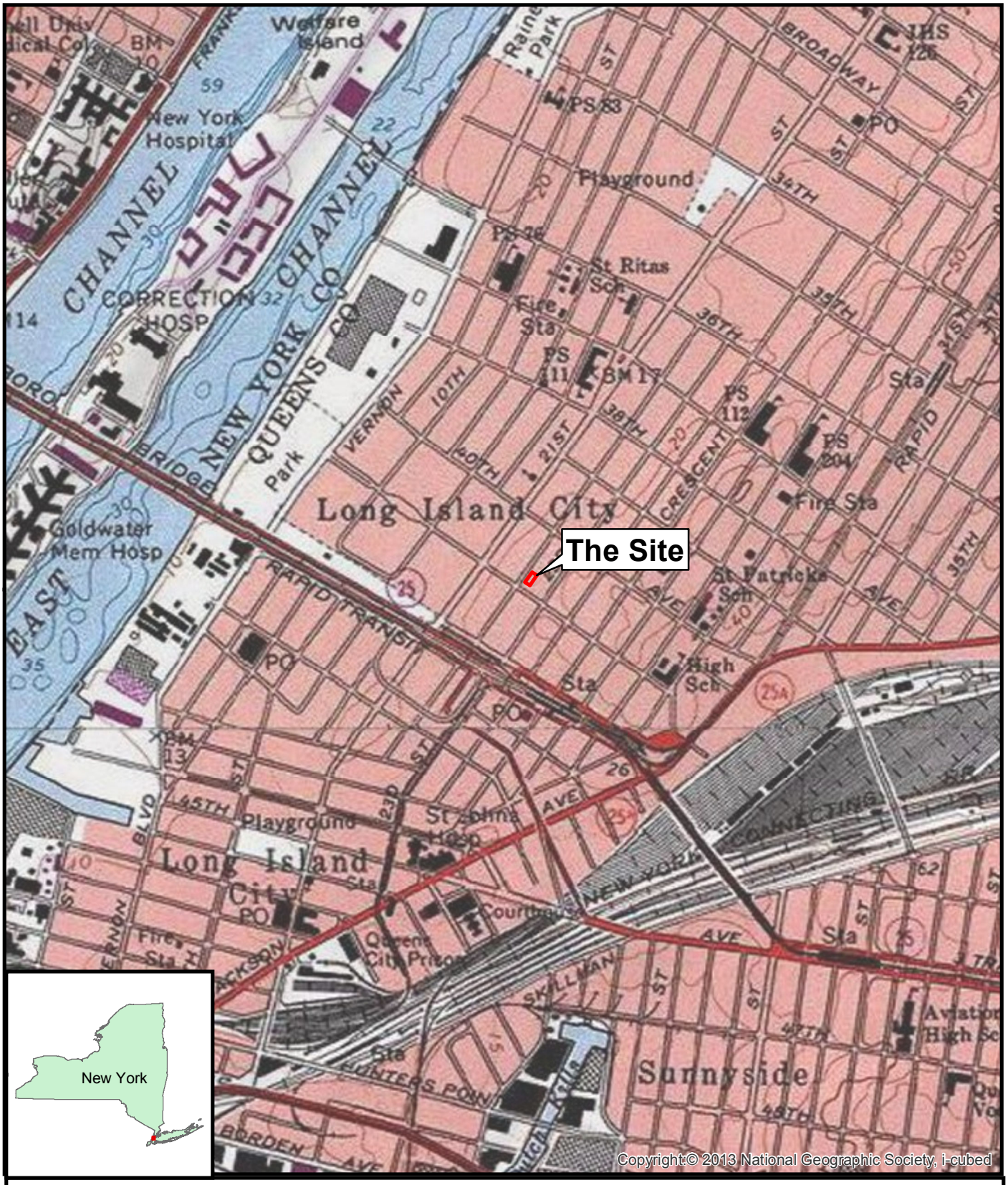
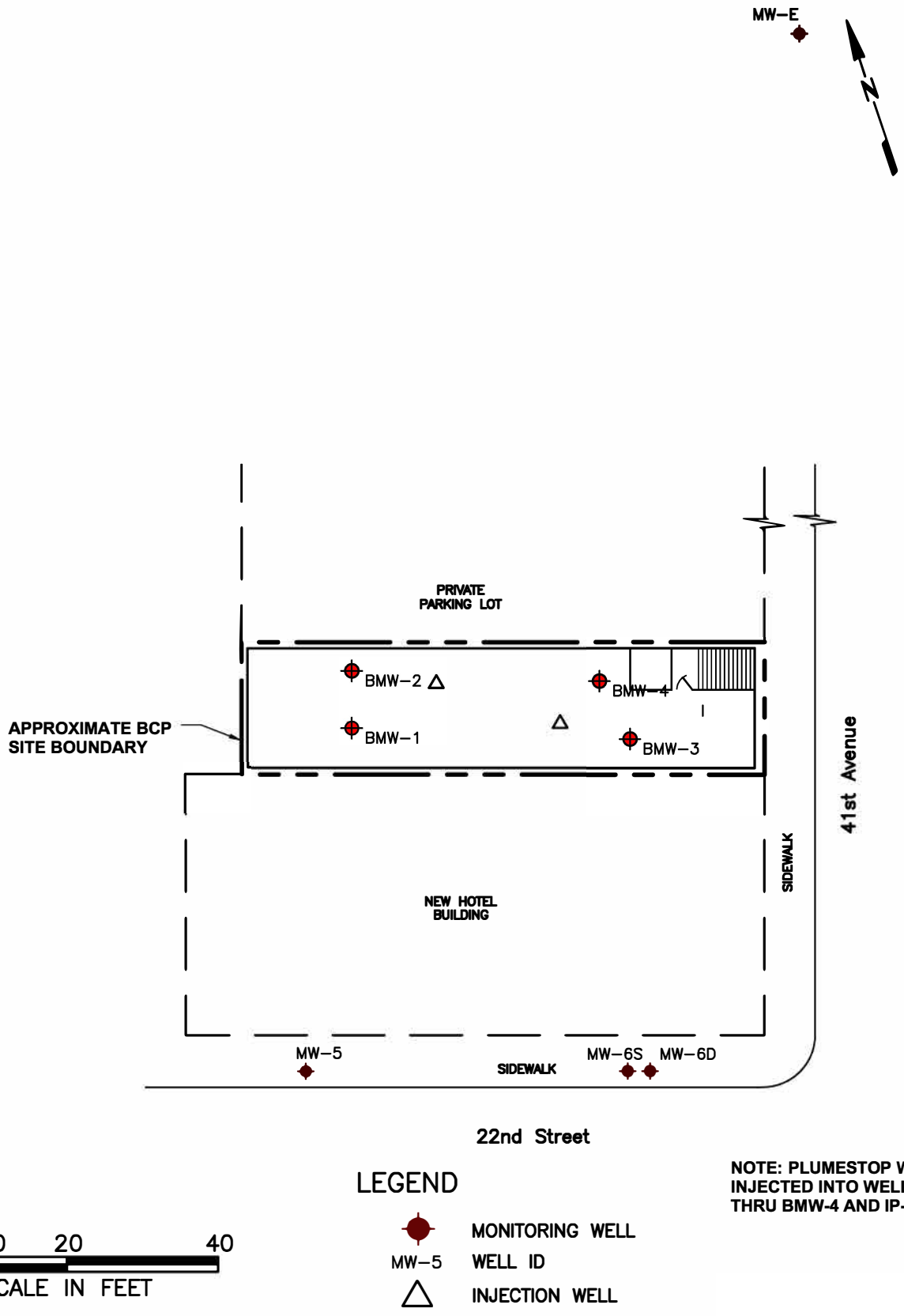


Figure 1 Site Location Map

BCP Site No. C241148
Former Hygrade Polishing and Plating Co. 22-07
41st Avenue Long Island City, New York

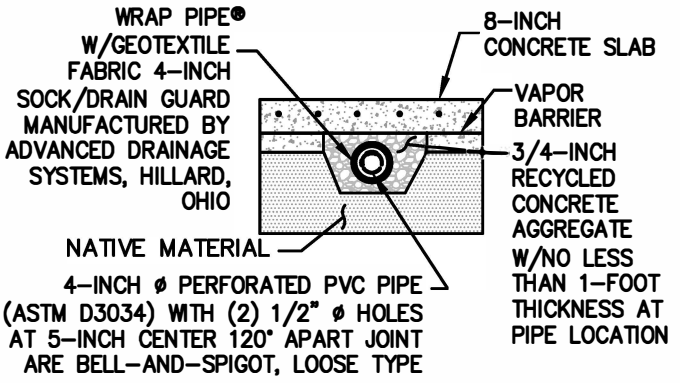
N

0 500 1,000 Feet

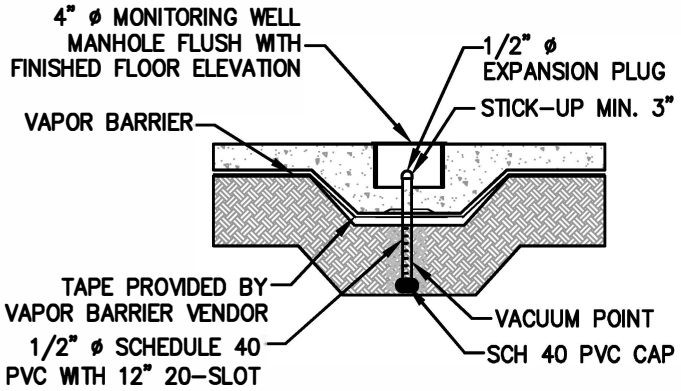


NOTE: PLUMESTOP WILL BE INJECTED INTO WELLS BMW-1 THRU BMW-4 AND IP-1 & IP-2

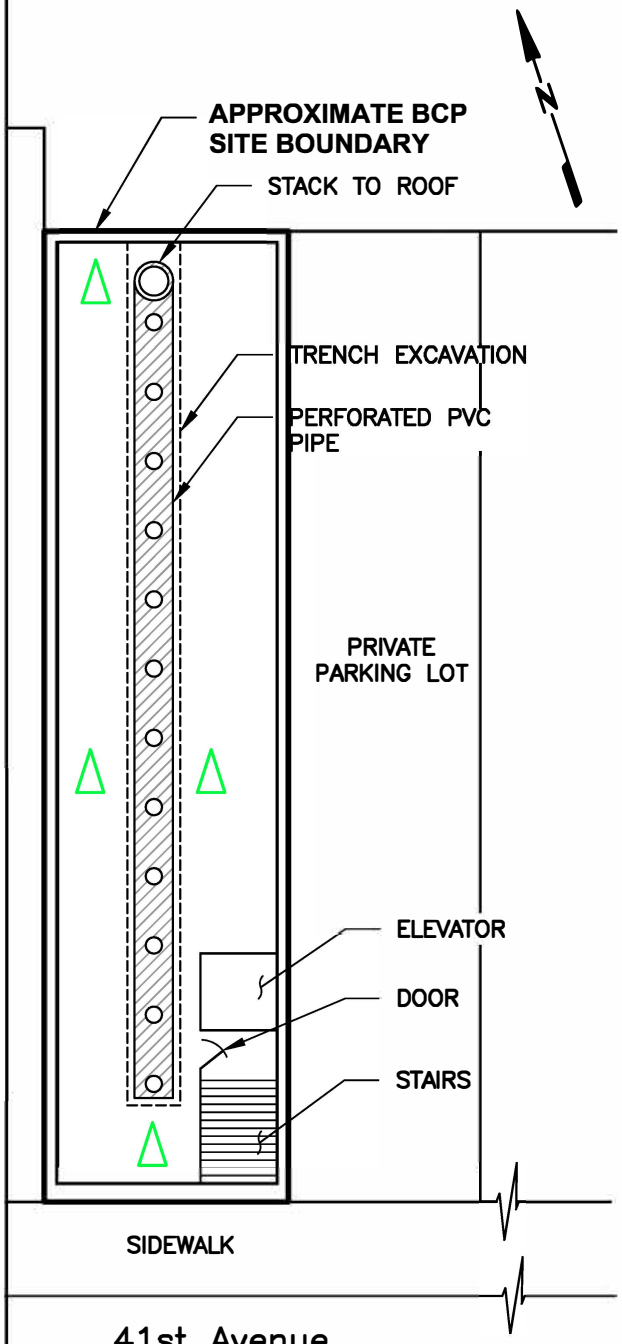
BCP Site No. C241148 Former Hygrade Plating Co. 22-07 41st Ave Long Island City, NY		Groundwater Monitoring Well and Injection Well Locations Map Project 3612-162-331 Figure 2



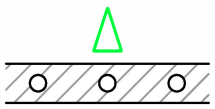
TYPICAL VENT PIPE CROSS-SECTION (NTS)

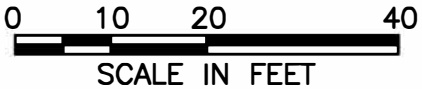


TYPICAL VACUUM MONITORING POINT (NTS)



LEGEND

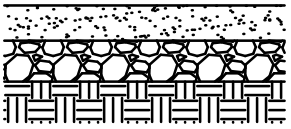




BCP Site No. C241148
Former Hygrade Plating Co.
22-07 41st Ave
Long Island City, NY

SUB-SLAB DEPRESSERIZATION LAYOUT
Project 3612-162-331
Figure 3

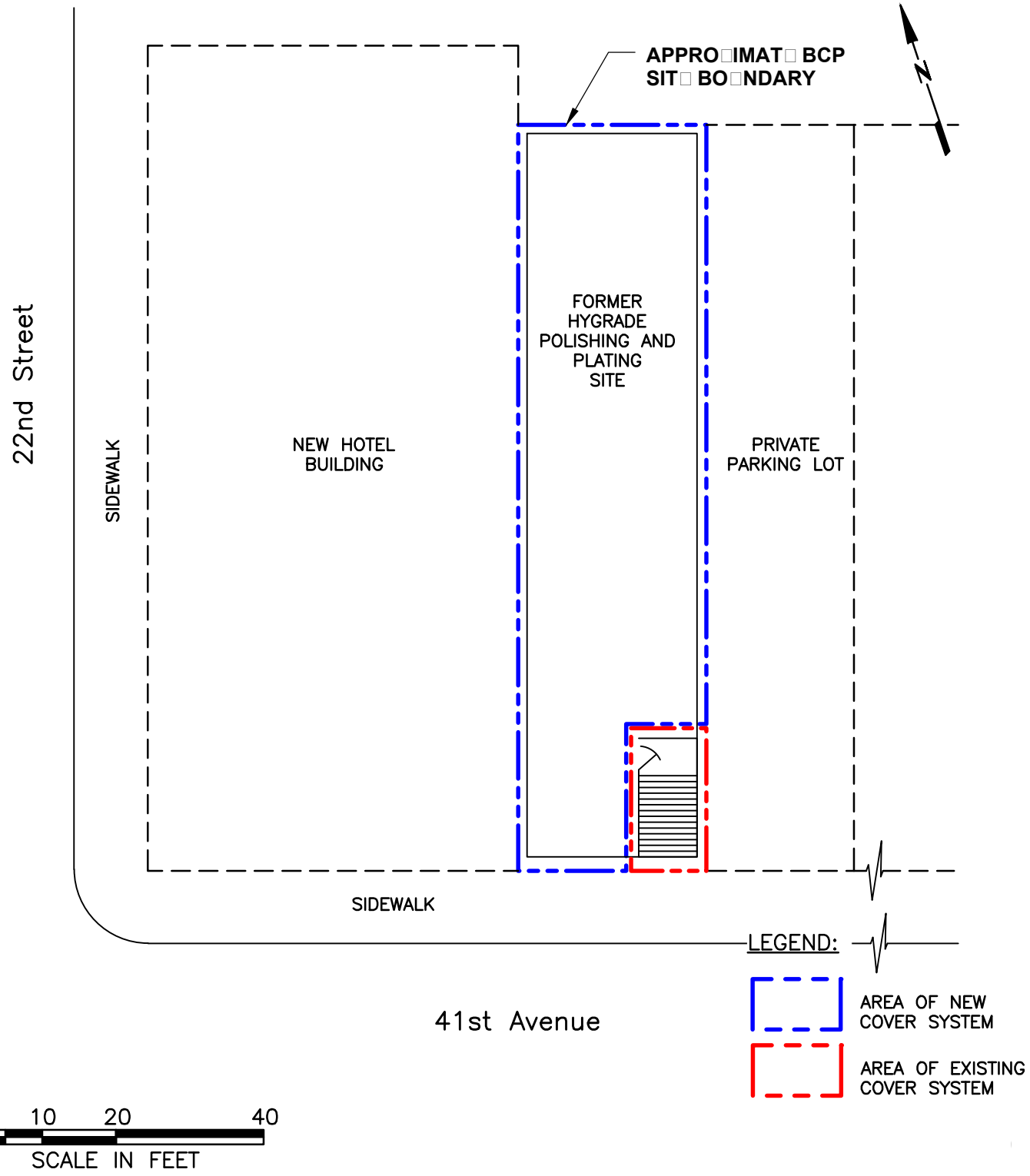
NEW COVER SYSTEM DETAIL



8" REINFORCED CONCRETE
3/4"ø GRAVEL
IMPORTED FILL

EXISTING COVER SYSTEM DETAIL

4" (ASSUMED) CONCRETE
NATIVE SOIL



BCP Site No. C241148 Former Hygrade Plating Co. 22-07 41st Ave Long Island City, NY		COVER SYSTEM LOCATIONS MAP Project 3612-162-331 Figure 4

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