DECISION DOCUMENT

262 Green
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224265
July 2019

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

DECLARATION STATEMENT - DECISION DOCUMENT

262 Green
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224265
July 2019

Statement of Purpose and Basis

This document presents the remedy for the 262 Green 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 262 Green site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

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

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

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted 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 13,520 cubic yards of contaminated soil will be removed from the site.

3. 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 and establish the designed grades at the site.

4. Local Institutional Controls

If no EE or SMP is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code, which prohibits potable use of groundwater without prior approval.

5. 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.

Contingent Remedy

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.

In the event that Track 1 unrestricted use is not achieved, including the achievement of groundwater and soil vapor remedial objectives, the contingent remedial elements discussed below will be required and the remedy will achieve a Track 2 commercial cleanup. If all soil above 15 feet or bedrock meets the SCOs for commercial use, then a Track 2 remedy will be achieved and no cover system will be required.

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 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 Control Plan that identifies all use restrictions for the site and details the steps and media-specific requirements necessary to ensure the following institutional controls remain in place and effective:

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

This plan includes, but may not be limited to:

o descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;

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

o maintaining site access controls and Department notification; and

o the steps necessary for the periodic reviews and certification of the institutional controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

o monitoring of groundwater to assess the performance and effectiveness of the remedy;

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

o a schedule of monitoring and frequency of submittals to the Department.

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.

July 26, 2019
Date

Eric B Obrecht
Eric Obrecht, Director
Remedial Bureau A

DECISION DOCUMENT

262 Green
Brooklyn, Kings County
Site No. C224265
July 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 repositories:

Brooklyn Public Library - Greenpoint Branch
107 Norman Avenue
Brooklyn, NY 11222
Phone: 718-349-8504

Brooklyn Community Board 1
435 Graham Avenue
Brooklyn, NY 11211
Phone: 718-389-0009

Receive Site Citizen Participation Information By Email

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

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The 262 Green Site is a 0.57-acre site located at 262-276 Green Street and 264 Huron Street in Brooklyn NY.

Site Features: The site is relatively flat and contains no buildings or structures. All previous structures were demolished. The site is unpaved and is surrounded by construction fencing.

Current Zoning and Land Use: The site is currently inactive, and its zoning is M3-1. M3 districts are designated for areas with heavy industries that generate noise, traffic or pollutants. Surrounding land use includes the NYC Department of Public works water treatment plant to the east, and commercial properties to the north, south and west.

Past Use of the Site: Since initial development in the early 20th Century, the site has been used for several commercial and industrial purposes. Prior uses include bed manufacturing, jewelry manufacturing, and a metal products company. The property was most recently used by a steel fabrication and painting facility that occupied the site for 40 years, until around 2014.

Site Geology and Hydrogeology: The elevation of the property is approximately 11 feet above the National Geodetic Vertical Datum (NGVD). Subsurface soils at the site consist of historic fill materials to a depth of approximately 2 to 5 feet below the surface followed by native silty-sand. Groundwater occurs beneath the site at a depth of approximately 9-11 feet below grade. Groundwater flows east toward the Newtown Creek.

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 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
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

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

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has

developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

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

tert-butylbenzene
lead
trichloroethene (TCE)

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.

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Based upon investigations conducted to date, the primary contaminants of concern include tert-butylbenzene and lead.

Soil - Tert-butylbenzene was found in the deep soil at 8.6 parts-per-million (ppm), exceeding the unrestricted use soil cleanup objective (USCO) of 5.9 ppm. Lead was detected in the soil at a maximum concentration of 4,120 ppm, exceeding its USCO of 63 ppm. One sample failed a Toxicity Characteristic Leaching Procedure (TCLP) test for lead, indicating some of the on-site soil would be classified as hazardous waste. Trichloroethene (TCE) was not detected in soil. Data does not indicate any off-site impacts in soil related to this site.

Groundwater - Tert-butylbenzene was found in the groundwater at a maximum concentration of 13 parts-per-billion (ppb), exceeding the groundwater standard of 5 ppb. The maximum lead concentration was 32 ppb, exceeding the groundwater standard of 25 ppb. TCE was detected at a concentration of 3.1 ppb. Data does not indicate any off-site impacts in groundwater related to this site.

Soil Vapor - TCE was detected in soil vapor at a maximum concentration of 40.2 micrograms per cubic meter. Data does not indicate any off-site impacts in 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*.

The site is completely fenced, which restricts public access. However, people who enter the site could come in contact with contaminants in the soil by walking on the site, 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 the soil vapor (air spaces within the soil) may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there are no on-site buildings, inhalation of site contaminants in indoor air due to soil vapor intrusion does not currently represent a concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site buildings. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

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

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

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 and Off-Site Disposal remedy.

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

1. Remedial Design

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

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o maintaining site access controls and Department notification; and
o the steps necessary for the periodic reviews and certification of the institutional controls.
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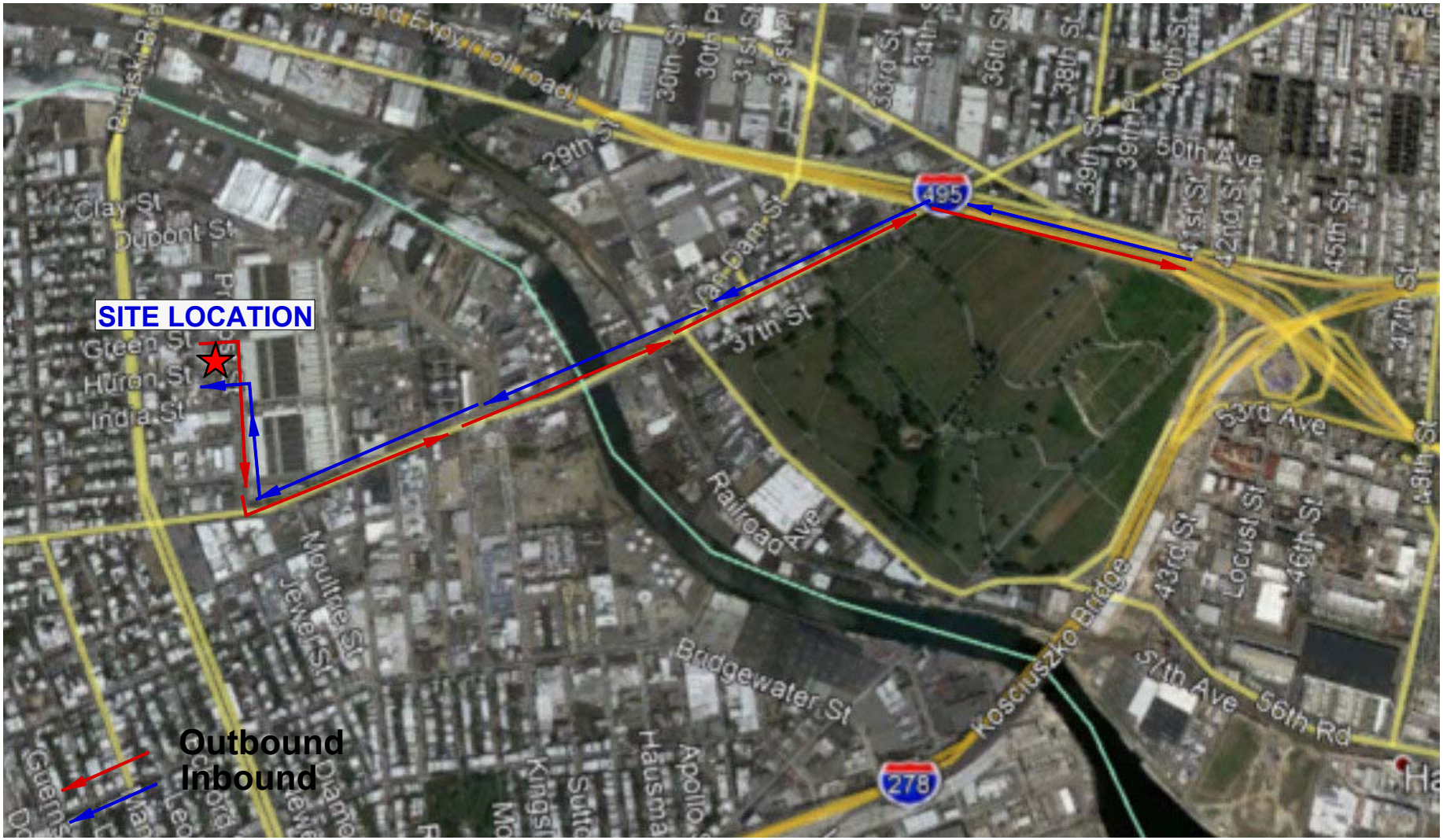
o a schedule of monitoring and frequency of submittals to the Department.



EBC
Environmental Business Consultants

Phone 631.504.6000
Fax 631. 924 .2870

Figure 1

Site Name: 262 GREEN

Site Address: 262-276 GREEN STREET, & 263 HURON STREET, BROOKLYN, NY

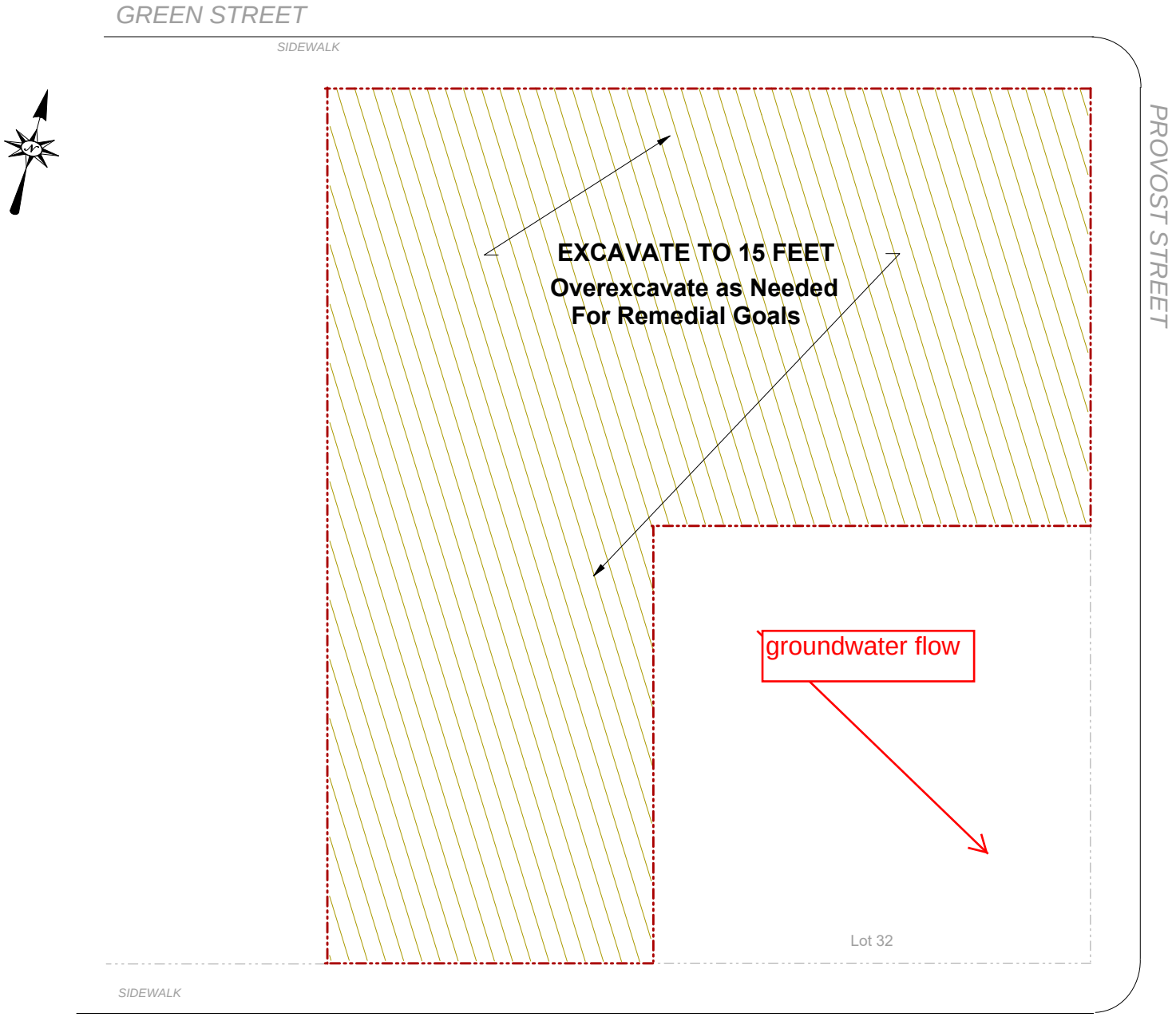
Drawing Title: TRUCK ROUTE

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD. RIDGE. NY 11961
Phone: 631.504.6000
Fax: 631.924.2780

262 GREEN

262-276 GREEN STREET, & 263 HURON STREET, BROOKLYN, NY

Figure 2



EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

Figure 3

Site Name: 262 GREEN

Site Address: 260-276 GREEN STREET AND 263 HURON STREET, BROOKLYN, NY

Drawing Title: EXCAVATION PLAN