NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B
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www.dec.ny.gov

VIA EMAIL

November 14, 2017

Martin Dunn
c/o: Dumont Commons, L.P
316 Douglass Street, 2nd Floor
Brooklyn, NY 11217

Re: Dumont Commons, L.P
Site ID No. C224253
Brooklyn, Kings
Remedial Work Plan & Decision Document

Dear Mr. Dunn:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Work Plan (RWP) for the Dumont Commons, L.P site dated October 2017 and prepared by Tyll Engineering and Consulting PC and CA RICH Consultants, Inc. on behalf of the Dumont Commons, L.P. The RWP is hereby approved. Please ensure that a copy of the approved RWP is placed in the document repositories. The draft plan should be removed.

Attached is a copy of the Department's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repositories.

Please contact the Department's Project Manager, MD S. Hoque at (518) 402-9475 or md.hoque@dec.ny.gov at your earliest convenience to discuss next steps. Please recall the Department requires seven days notice prior to the start of field work.

Sincerely,

Gerard Burke
Director
Remedial Bureau B
Division of Environmental Remediation

Enclosure

ec *w/attachments*:

M. Ryan
G. Burke
M. Komoroske
J. O’Connell
M. Hoque
T. Chiu
A. Krista
J. Deming
S. Wagh
W. Fitchett
L.Schnapf

DECISION DOCUMENT

Dumont Commons, L.P.
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224253
November 2017

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

DECLARATION STATEMENT - DECISION DOCUMENT

Dumont Commons, L.P.
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224253
November 2017

Statement of Purpose and Basis

This document presents the remedy for the Dumont Commons, L.P. 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 Dumont Commons, L.P. 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
a) Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil with visual waste material or non-aqueous phase liquid;
- soil containing total SVOCs exceeding 500 ppm; and
- 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 22,200 tons (12,600 cubic yards) of contaminated soil will be removed from the site.

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

c) 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.

3. Vapor Intrusion Evaluation

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

Conditional Track 1

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

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

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

4. Cover System

A site cover will be required to allow for **restricted residential** use of the site in areas where the upper **two feet** of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of **two feet** of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks,

building foundations and building slabs.

5. Institutional Control

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

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

6. Site Management Plan

A Site Management Plan is required, which includes the following:

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

Institutional Controls: The environmental easement discussed in Paragraph 5, above.
Engineering Controls: The cover system discussed in Paragraph 4, above.
This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- 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 for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above;
- a schedule of monitoring and frequency of submittals to the Department.

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 system(s); and

• compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

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.

11/14/17

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Dumont Commons, L.P.
Brooklyn, Kings County
Site No. C224253
November 2017

SECTION 1: SUMMARY AND PURPOSE

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

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

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

SECTION 2: CITIZEN PARTICIPATION

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

Brooklyn Community Board 16
444 Thomas Boyland Street, Rm 103
Brooklyn, NY 11233
Phone:

Brooklyn Public Library - Stone Avenue Branch
Attn: Library Manager
581 Mother Gaston Blvd.
Brooklyn, NY 11212
Phone: 718-485-8347

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 site is located in the Brownsville section of Brooklyn within a block formed by Mother Gaston Blvd. to the west, Blake Avenue to the north, Powell Street to the east, and Dumont Avenue to the south. Multi-story residential buildings, part of an apartment complex known as the Van Dyke Houses, are located immediately to the east and west. The Van Dyke Housing Community Center and outdoor community facility area is located directly north of the site.

Site Features:
The majority of this 0.723-acre site is an asphalt-covered parking lot with small sections of concrete sidewalks and trees. There are no buildings on the site. There is a small sitting area in the center of the site. The entrance to the parking lot is located on Dumont Avenue. The site is relatively level and has no natural or artificial surface water bodies or impoundments. Rainwater runs off into the New York City sewer system.

Current Zoning and Land Use:
The site is zoned R6 for multi-family housing but is currently vacant. It is used as a parking lot and trash storage area.

Past Uses of the Site:
According to the Sanborn Fire Insurance Maps, the past usage of the site includes: 1928 - Five-story structure and a garage with a gasoline tank; and from 1966 to the present, the site has been a parking lot. The property from which the site was broken out was previously used for manufacturing, as indicated on the 1934-1938 New York City Department of Building Certificate of Occupancy. At that time the property (but not necessarily the site proper) was listed as fruit, ice, and ice cream manufacturing along with cold storage and office space.

Site Geology and Hydrogeology:
Soil beneath the site consists of a 4- to 5-foot layer of historic fill material, consisting of sand, crushed rock, and brick fragments. Below the fill is medium-grained sand. The elevation of the site ranges from 37-39 feet above mean sea level. The depth to groundwater ranges from 29-31 feet below surface grade and groundwater flow is generally southwest beneath the site. Underlying groundwater in this area of Brooklyn is not used for potable supply purposes. Based on

investigations, the site is known to be underlain by medium-grained sand from grade to 29 feet below grade.

A site location map is attached as Figure 1 and a site boundary map is attached as Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative which allows for unrestricted use of the site was evaluated.

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

SECTION 5: ENFORCEMENT STATUS

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

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

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

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil

- 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:

benzo(a)anthracene	xylene (mixed)
benzo(a)pyrene	copper
toluene	lead
tetrachloroethene (PCE)	mercury
trichloroethene (TCE)	zinc

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

- soil

6.2: Interim Remedial Measures

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

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

6.3: Summary of Environmental Assessment

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

RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:
Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides.

Soil - Fifteen soil samples were collected from the site from nine borings installed during the Remedial Investigation (RI). The results were compared to the Part 375 Soil Cleanup Objectives (SCOs) for unrestricted use (UUSCOs) and restricted-residential use (RRUSCOs). No VOCs were detected above UUSCOs. SVOCs including benzo(a)anthracene (maximum of 20 parts per million [ppm]) and benzo(a)pyrene (max of 20 ppm) were detected above UUSCOs and RRUSCOs. Metals including copper (max of 60.6 ppm), lead (max of 205 ppm), mercury (max of 0.796 ppm), and zinc (max of 304 ppm) exceeded UUSCOs. Three pesticides including 4,4'-DDD (max of 4.7 parts per billion [ppb]), 4,4'-DDE (max of 65 ppb) and 4,4'-DDT (max of 4.7 ppb) were detected exceeding UUSCOs. No PCBs were detected in soil samples. Data does not indicate any off-site impacts to soil related to this site. Although none have been identified at this time, contaminant source areas, underground storage tanks, fuel dispensers, underground piping, or other structures associated with a source of contamination could be present on the site.

Groundwater - Four monitoring wells were installed to sample shallow groundwater. Samples were compared to groundwater standards. Samples contained just one VOC, methylene chloride, slightly exceeding its standard. Methylene chloride is a common laboratory contaminant and its presence is not indicative of a problem at the site. SVOCs, pesticides, and PCBs were not detected above their detection limits. Naturally-occurring manganese and sodium exceeded their standards. Data does not indicate any off-site impacts to groundwater related to this site.

Soil Vapor - Samples collected during the RI from five soil vapor points installed to 12 feet below grade showed a wide range of petroleum-related and chlorinated VOCs including trichloroethene (max of 16.9 micrograms/cubic meter [ug/m3]), toluene (max of 240 ug/m3), tetrachloroethene (max of 149 ug/m3), and xylene (max of 347 ug/m3). No on-site source of these contaminants has been identified in soil or groundwater. Data does not indicate any off-site impacts to 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.*

People may contact contaminated soil if they dig below the ground surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the soil or groundwater may move into the soil vapor (air spaces within the soil), which in turn 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. The potential

exists for the inhalation of site contaminants due to soil vapor intrusion in any future on-site development. Environmental sampling indicates that 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.

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 Conditional Track 1 remedy.

The selected remedy is referred to as the Soil Excavation and Soil Vapor Intrusion Evaluation remedy.

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

a) Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil with visual waste material or non-aqueous phase liquid;
- soil containing total SVOCs exceeding 500 ppm; and
- 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 22,200 tons (12,600 cubic yards) of contaminated soil will be removed from the site.

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

c) 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.

3. Vapor Intrusion Evaluation

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

Conditional Track 1

The intent of the remedy is to achieve Track 1 unrestricted use; therefore no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address the SVI evaluation and implement actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can

only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

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

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

4. Cover System

A site cover will be required to allow for **restricted residential** use of the site in areas where the upper **two feet** of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of **two feet** of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

5. Institutional Control

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

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

6. Site Management Plan

A Site Management Plan is required, which includes the following:

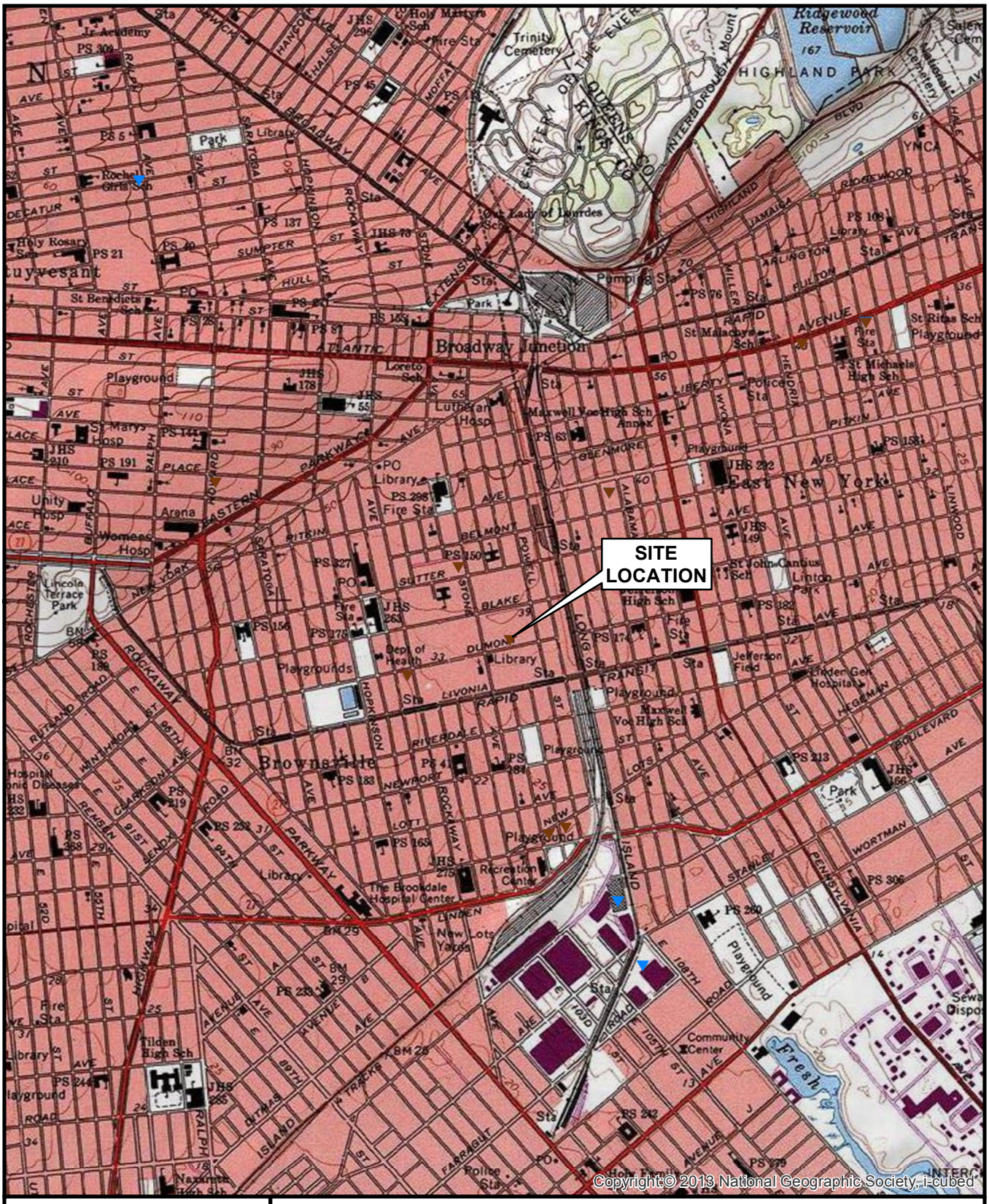
a) An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The environmental easement discussed in Paragraph 5, above.
Engineering Controls: The cover system discussed in Paragraph 4, above.
This plan includes, but may not be limited to:

• an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
• descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
• a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
• a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
• 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 for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above;
• a schedule of monitoring and frequency of submittals to the Department.

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 system(s); and
• compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.



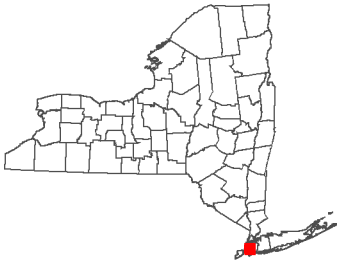


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Figure 1

Site Location Map

Dumont Commons, L.P.
Block No. 3777 Lot No. 1
Brooklyn, Kings County
Site No. C224253

DEPARTMENT OF ENVIRONMENTAL CONSERVATION • NEW YORK STATE •

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Figure 2

Site Plan

Dumont Commons, L.P.
Block No. 3777 Lot No. 1
Brooklyn, Kings County
Site No. C224253

DEPARTMENT OF ENVIRONMENTAL CONSERVATION • NEW YORK STATE •

Soil Removal Calculations

Area A
Square footage = 1,680
Excavation depth = 7-feet
Cubic feet = 11,760
11,760 ft^3 / 27 = 435.6 yds^3
435.6 yds^3 x 1.75 = 762.3 Tons

Area B
Square footage = 1,627.5
Excavation depth = 5-feet
Cubic feet = 8,137.5
8,137.5 ft^3 / 27 = 301.4 yds^3
301.4 yds^3 x 1.75 = 527.5 Tons

Area C
Square footage = 1,185
Excavation depth = 13-feet
Cubic feet = 15,405
15,405 ft^3 / 27 = 570.6 yds^3
570.6 yds^3 x 1.75 = 998.6 Tons

Area D
Square footage = 10,021.1
Excavation depth = 17-feet
Cubic feet = 170,358.7
170,358.7 ft^3 / 27 = 6,309.6 yds^3
6,309.6 yds^3 x 1.75 = 11,041.8 Tons

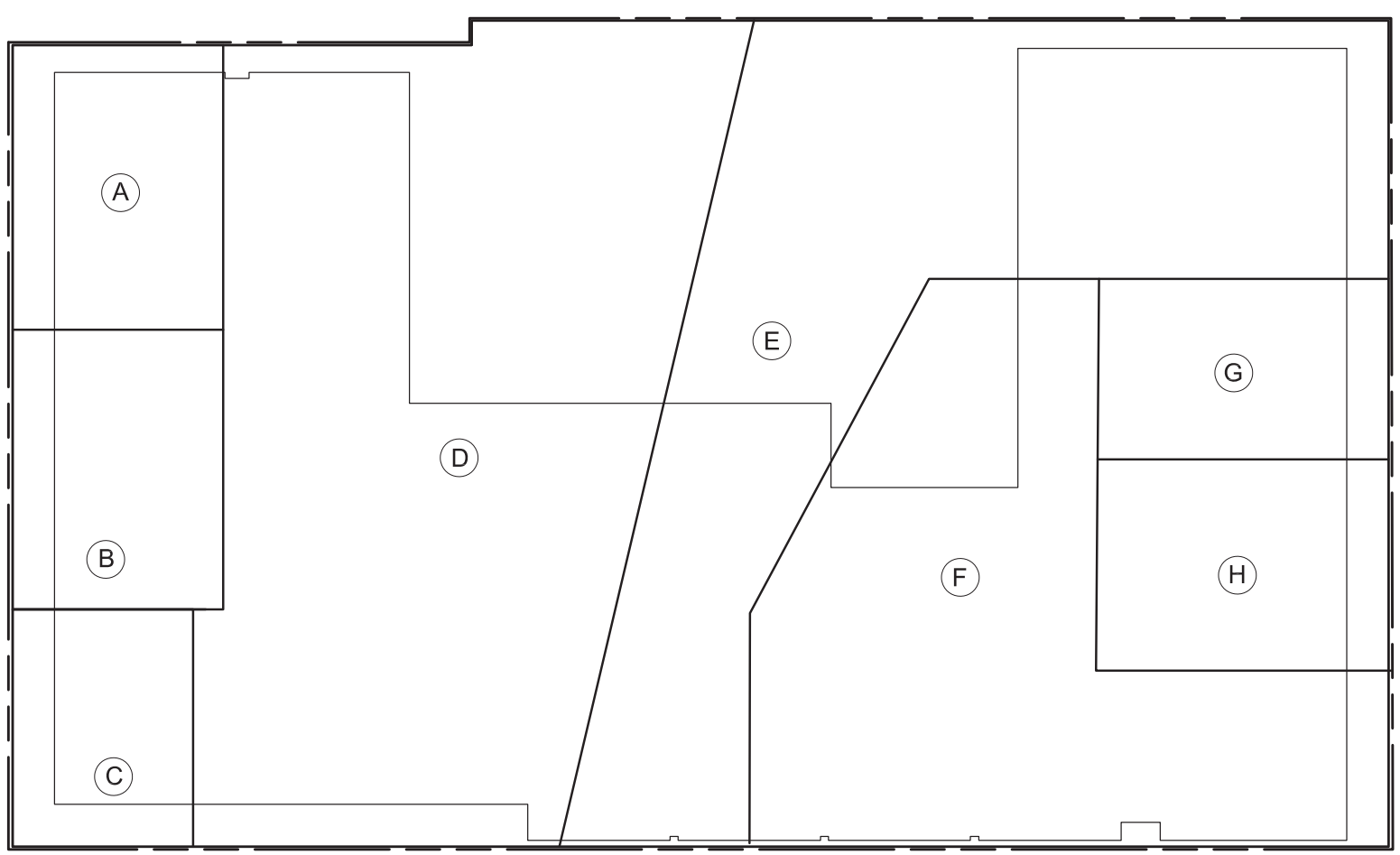
Area E
Square footage = 7,591
Excavation depth = 13-feet
Cubic feet = 98,683
98,683 ft^3 / 27 = 3,654 yds^3
3,654 yds^3 x 1.75 = 6,396.1 Tons

Area F
Square footage = 6,113
Excavation depth = 3-feet
Cubic feet = 18,339
18,339 ft^3 / 27 = 679 yds^3
679 yds^3 x 1.75 = 1,188.2 Tons

Area G
Square footage = 1,463
Excavation depth = 5-feet
Cubic feet = 7,315
7,315 ft^3 / 27 = 270 yds^3
270 yds^3 x 1.75 = 472.5 Tons

Area H
Square footage = 1,724
Excavation depth = 7-feet
Cubic feet = 12,068
12,068 ft^3 / 27 = 446 yds^3
446 yds^3 x 1.75 = 780.5 Tons

Estimated total to be removed = 22,167.5 Tons



Legend

Property Boundary

Proposed Building Outline

G Proposed Excavation Area Identification

Approximate Scale in Feet

0 40 80

CA RICH CONSULTANTS, INC.
Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803

TITLE: Site Excavation Diagram		DATE: 9/12/2017
		SCALE: AS SHOWN
FIGURE: 3	395–427 Dumont Ave Brooklyn, NY	DRAWN BY: J.T.C.
DRAWING NO: 2017–4		APPR. BY: W.F.