DECISION DOCUMENT

Kristal Auto Mall
Brownfield Cleanup Program
BROOKLYN, Kings County
Site No. C224140
August 2018

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

DECLARATION STATEMENT - DECISION DOCUMENT

Kristal Auto Mall
Brownfield Cleanup Program
BROOKLYN, Kings County
Site No. C224140
August 2018

Statement of Purpose and Basis

This document presents the remedy for the Kristal Auto Mall 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 Kristal Auto Mall 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.
- 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. Excavation

The on-site building(s) will be demolished and materials which can't be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy. The remedy includes excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- non-aqueous phase liquids;
- soil with visual waste material or non-aqueous phase liquid; and
- soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards.

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 33,000 cubic yards (cy) of contaminated soil will be removed from the site. The excavation depth would be to approximately 19 feet below grade in the LNAPL zone and shallower for the remainder of the Site. A Pre-Design Investigation (PDI) will be conducted to collect waste characterization samples and collect in-situ end-point samples that will pre-establish the lower limit of the excavation. Additional hot-spot excavations may be required in the source area in order to meet the groundwater protection SCOs.

Free-product recovery will be actively conducted in the open excavation via skimming technology using a combination of vacuum truck and oil absorbent booms. Recovered free-product will be temporarily stored onsite in an aboveground tank or drums for future offsite disposal.

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. Groundwater Extraction and Treatment

Dewatering at the site will be required to enable the excavation and subgrade work. Contaminated groundwater from dewatering operations will be treated as necessary prior to discharge to the municipal sewer system. The well-point system will lower the groundwater level to approximately two feet below the proposed depth of excavation.

4. In-Situ Chemical Oxidation

In-situ chemical oxidation (ISCO) will be implemented to treat contaminants in groundwater. Sodium persulfate will be applied the base and sidewalls of the excavation to destroy the contaminants in the LNAPL area and in the 24-inch strip behind the support of excavation (SOE) if residual soils with compounds of concern exceed groundwater protection SCOs.

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.

Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (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 groundwater use.

Contingent Track 1

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then an SMP and 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.

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

6. Cover System

A site cover will be required to allow for commercial use of the site in areas where the upper one foot 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 one foot 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.

7. Institutional Control

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

- requires 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);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

8. 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 Section 7 above.
   - Engineering Controls: The Cover System discussed in Section 6 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 on the site, including a provision for implementing actions recommended to address exposures related to soil vapor intrusion;
   - 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:
   - monitoring for soil vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
   - compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
   - maintaining site access controls and Department notification; and
   - providing the Department access to the site and O&M records.

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.

August 15, 2018

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Kristal Auto Mall
BROOKLYN, Kings County
Site No. C224140
August 2018

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
Paerdegat Branch
850 East 59th Street
Brooklyn, NY 11234
(718) 566-0054

Brooklyn Community Board 18
1097 Bergen Ave
Brooklyn, NY 11234
(718) 241-0422

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 property is located at 5200 Kings Highway in the East Flatbush section of Brooklyn, Kings County. The site is 2.28 acres in size.

Site Features: A single slab-on-grade building is present on the site, which includes both one-story and one-and-a-half-story sections. The on-site building is currently vacant. The proposed redevelopment entails the demolition of the existing building and the structures and the construction of a retail redevelopment occupying the majority of the site. The remainder of the property (approximately 15,000 square feet) along Utica Avenue will consist of paved entrance/exit areas. The site is bordered to the south by the Premier Ford auto dealership, to the north by the Favorite Plastics Corporation, and to the northeast at 5226 Kings Highway by the Kristal Auto Mall Used Cars.

Current Zoning and Land Use: The site is currently zoned for commercial use. The site is located in an area that is industrial to the northeast, north, northwest, west and southwest. Farther to the west and north of the site is continued industrial and commercial land use. To the east and southeast is a residential community consisting of attached one and two family homes. The nearest school is approximately one-quarter mile southeast of the site.

Past Use of the Site: The site is active and has been in use since the original construction in 1959. From 1959 to 1968, the site was occupied by a bowling alley. In 1968, new occupants expanded the existing building began operation of a retail automobile dealership including sales and auto service. The site continues to be operated as an auto dealership.

Site Geology and Hydrogeology: Review of the United States Geological Survey (USGS) 7.5-minute series topographic quadrangle map of Brooklyn, New York reveals that the elevation of the site is approximately 14 feet above mean sea level. The topography of the site is essentially flat with only a slight grade toward the southeast. Groundwater at the Site is approximately 10 feet below grade and groundwater flow is to the southeast as per remedial investigation data.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

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

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

SECTION 5: ENFORCEMENT STATUS

One or more of the Applicants under the Brownfield Cleanup Agreement is a Participant. The Participant(s) has/have an obligation to address on-site and off-site contamination. 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:

- air
- 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:

benzene	cis-1,2-dichloroethene
ethylbenzene	methyl-tert-butyl ether (MTBE)
toluene	tetrachloroethene (PCE)
xylene (mixed)	trichloroethene (TCE)

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

- groundwater
- soil
- soil vapor intrusion
- indoor air

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 has been completed at this site based on conditions observed during the RI.

IRM - LNAPL Recovery

Use of manual bailing of the free-phase product on a bi-weekly basis from all accessible wells on-site that exhibited free-phase product. This effort has been ongoing since April 2017 and will continue to be performed until just before demolition activities are set to begin for the new

development or when measurable free-phase product is no longer encountered in any of the wells on-site, whichever comes first.

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. Based upon investigations conducted to date, the primary contaminants of concern include the petroleum VOCs benzene, toluene, ethylbenzene and xylene (BTEX), MTBE and chlorinated VOCs tetrachloroethene (PCE), trichloroethene (TCE) and dichloroethene (DCE). During the remedial investigation, free phase petroleum was discovered in the northern portion of the property.

Soil - Benzene is found at a concentration up to 1.2 parts per million (ppm) which exceeds the unrestricted use soil cleanup objective (UUSCO) of 0.06 ppm, toluene is found at a concentration up to 340 ppm (UUSCO is 0.7 ppm), ethylbenzene is found at a concentration up to 12 ppm (UUSCO is 1 ppm), MTBE is found at a concentration up to 2 ppm (UUSCO is 0.93 ppm), xylene is found at a concentration up to 51 ppm (UUSCO is 0.26 ppm), TCE is found at a concentration up to 0.76 ppm (UUSCO is 0.47 ppm), PCE is found at a concentration up to 6.1 ppm (UUSCO is 1.3 ppm) and DCE is found at a concentration up to 12 ppm (UUSCO is 0.25 ppm). Data does not indicate any off-site impacts in soil related to this site.

Groundwater - Benzene is found at a concentration up to 5.2 parts per billion (ppb) which exceeds the NYSDEC groundwater standard of 1 ppb, MTBE is found at a concentration up to 100 ppb (groundwater standard is 10 ppb), DCE is found at a concentration up to 350 ppb (groundwater standard is 5 ppb). Data does not indicate any off-site impacts in groundwater related to this site.

Sub-slab, Soil Vapor and Indoor Air - In sub-slab soil vapor, TCE is found at a concentration up to 21 micrograms per cubic meter (ug/m3), PCE is found at a concentration up to 1,100 ug/m3. In indoor air, TCE is found at a concentration up to 1.2 ug/m3 and PCE is found at a concentration up to 2.1 ug/m3, both are below their respective NYSDOH air guideline for TCE and PCE of 2 and 30 ug/m3. No access was granted to evaluate offsite vapor intrusion conditions at the neighboring property to the north.

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 or groundwater if they dig below the existing pavement or buildings. 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 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. The potential exists for the inhalation of site contaminants due to soil vapor intrusion on-site and monitoring has been recommended. Environmental sampling suggests that soil vapor intrusion is not a concern for off-site structures.

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 1: Unrestricted use remedy.

The selected remedy is referred to as the Excavation and Groundwater Treatment 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;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
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- 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.
- 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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- soil with visual waste material or non-aqueous phase liquid; and
- soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards.

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 33,000 cubic yards (cy) of contaminated soil will be removed from the site. The excavation depth would be to approximately 19 feet below grade in the LNAPL zone and shallower for the remainder of the Site. A Pre-Design Investigation (PDI) will be conducted to collect waste characterization samples and collect in-situ end-point samples that will pre-establish the lower limit of the excavation. Additional hot-spot excavations may be required in the source area in order to meet the groundwater protection SCOs.

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4. In-Situ Chemical Oxidation

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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.

Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (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 groundwater use.

Contingent Track 1

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then an SMP and 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.

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

Contingent Remedial Elements

6. Cover System

A site cover will be required to allow for commercial use of the site in areas where the upper one foot 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 one foot 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.

7. Institutional Control

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

- requires 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);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

8. 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 Section 7 above.
   - Engineering Controls: The Cover System discussed in Section 6 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 on the site, including a provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
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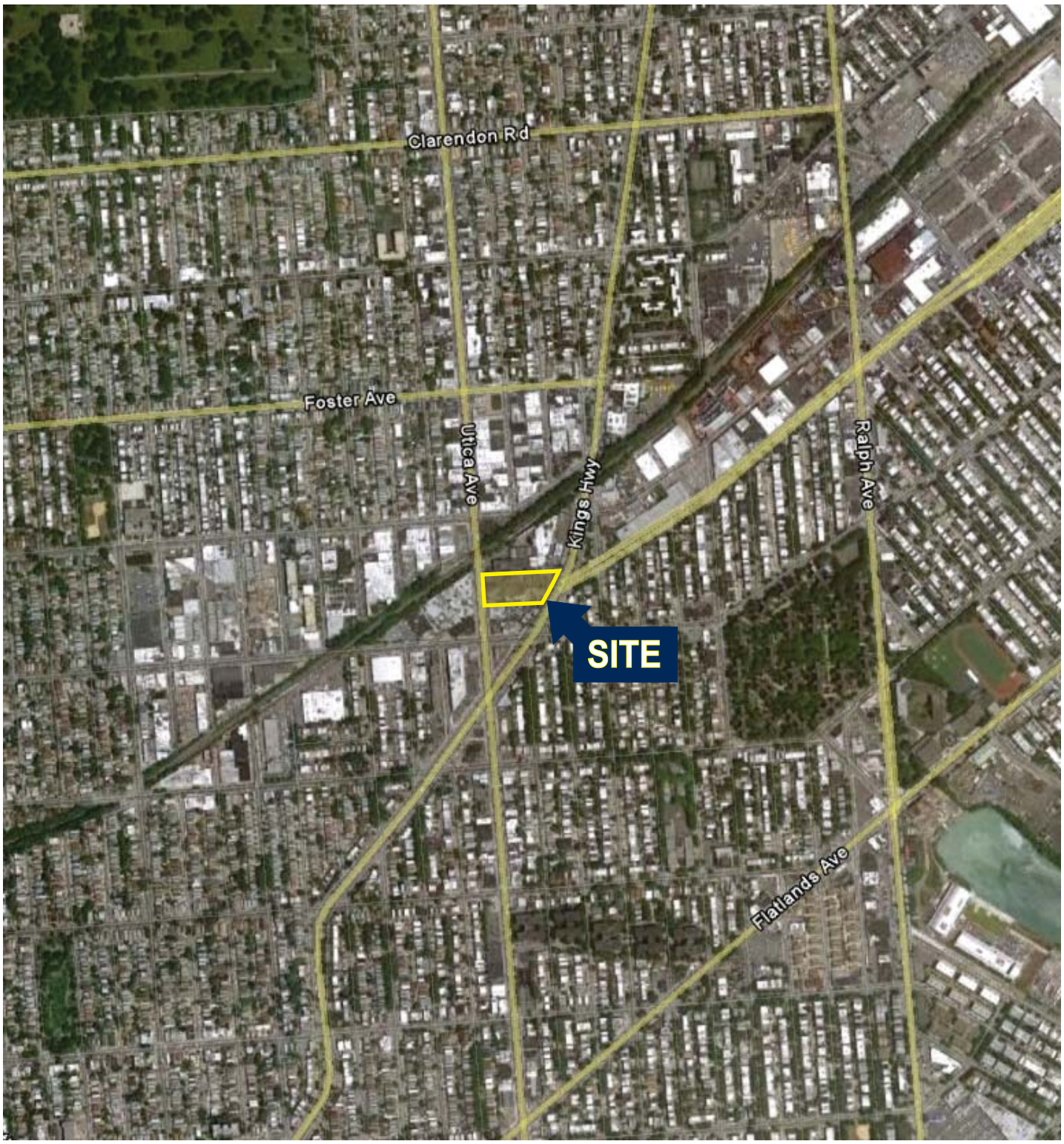
b. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
   - monitoring of groundwater to assess the performance and effectiveness of the remedy;
   - a schedule of monitoring and frequency of submittals to the Department:
   - monitoring for soil vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
   - compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
   - maintaining site access controls and Department notification; and
   - providing the Department access to the site and O&M records.

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.



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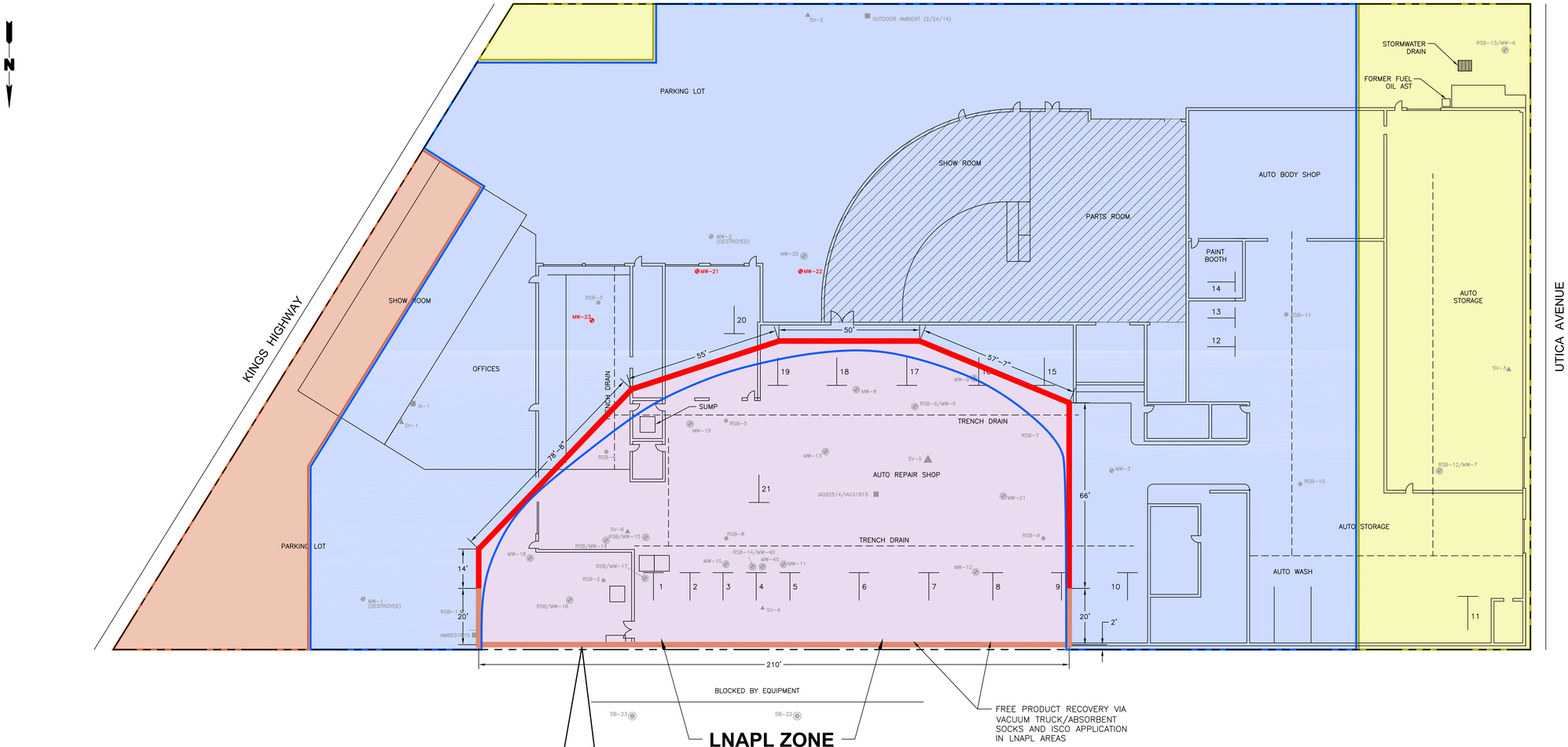
SOURCE:
GOOGLE EARTH
IMAGERY DATE: 6/17/2010

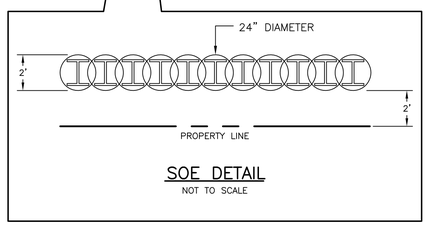
Title:

SITE LOCATION MAP

KRISTAL AUTO MALL
5200 KINGS HIGHWAY
BROOKLYN , NEW YORK 11234

Figure: 1





SOE DETAIL
NOT TO SCALE

LEGEND

- MW-21 — PROPOSED MONITORING WELL
- MW-1 — EXISTING MONITORING WELL
- MW-4 — EXISTING MONITORING WELL INSTALLED BY ROUX ASSOCIATES
- RSB-5 — EXISTING SOIL SAMPLE
- SV-1 — EXISTING SOIL VAPOR SAMPLE POINT
- SB-22 — SB-22 AND SB-23 HISTORICAL SOIL BORINGS INSTALLED BY TESTWELL LABORATORIES, INC. 2007
- IA-1 — INDOOR/AMBIENT AIR SAMPLE
- 16 — NON FUNCTIONING HYDRAULIC LIFTS WITH DESIGNATION

- AREA NOT EXCAVATED (PENDING PRE-DELINEATION SAMPLING)
- AREA TO BE EXCAVATED TO 9 FEET BELOW GRADE (CELLAR)
- AREA TO BE EXCAVATED UP TO 19 FEET BELOW GRADE (LNAPL PETROLEUM ZONE)
- AREA TO BE EXCAVATED TO 4 FEET BELOW GRADE
- PROPOSED SOE
- PROPOSED SHEETING PLAN

SOURCE

BASEMAP ADAPTED FROM TESTWELL LABORATORIES, INC, PHASE II ESA, DATE: 9/5/07

30' 0 30'

Title:

REMEDIAL ALTERNATIVE 1 TRACK 1 UNRESTRICTED

KRISTAL AUTO MALL
5200 KINGS HIGHWAY
BROOKLYN, NEW YORK 11234

Figure: 2

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