Jackson Heights Shopping Center

75-11 31st Avenue

Queens County

Jackson Heights, New York 11370

SITE MANAGEMENT PLAN

NYSDEC Site Number: C241176

Prepared for:

Jeffrey Kay

Allied Jackson Heights, LLC

118-35 Queens Boulevard

Forest Hills, New York 11375

Prepared by:

PSG Engineering and Geology, D.P.C.

362 Fifth Avenue, Suite 501

New York, New York 10001

732-380-1700

Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

OCTOBER 2019

CERTIFICATION STATEMENT

I, Kristine McCarthy MacWilliams, certify that I am currently a NYS registered professional engineer as in defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Kristine McCarthy MacWilliams, P.E.
License No. 096177

10/8/19
Date

TABLE OF CONTENTS

List of Tables

List of Figures

List of Appendices

List of Acronyms

AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Green House Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective

RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines

List of Acronyms (continued)

SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification: BCP Site C241176 Jackson Heights Shopping Center

Institutional Controls:	1. The property may be used for commercial or industrial use.	
	2. All ECs must be inspected at a frequency and in a manner defined in the SMP.	
Engineering Controls:	1. Cover system	
	2. Sub-Slab Depressurization System	
Inspections:		Frequency
1. Cover inspection		Annually
2. SSDS O&M visit		Annually, during the heating season
Monitoring:		
1. Groundwater Monitoring Wells MW-2, MW-3, MW-4, MW-8, and MW-10		Annually
2. Indoor Air Sampling (basement of dry cleaners, basement/first floor of Optical Academy and dentist's office)		Annually, during the heating season
Maintenance:		
1. SSDS maintenance		As needed
Reporting:		
1. Inspection Report		Annually
2. Periodic Review Report		18 months after COC, then annually

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Jackson Heights Shopping Center located at 7507 31st Avenue, Jackson Heights, New York. See Figure 1 for site location. A portion of the site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C241176 which is administered by New York State Department of Environmental Conservation (NYSDEC), the boundaries of the portion enrolled in the BCP is outlined in Figure 2, and will hereinafter be referred to as the "Site".

Allied Jackson Heights, LLC entered into a Brownfield Cleanup Agreement (BCA), in December 2015 with the NYSDEC to remediate the Site. A BCA was amended to correct the site acreage on July 31, 2019. A figure showing the site location and boundaries of this site is provided in Figure 3.

Some contamination remains at this Site, which is hereafter referred to as "remaining contamination". Institutional and Engineering Controls (ICs and ECs) will be imposed to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement has been granted to the NYSDEC, and recorded with the NYC Department of Finance Office of the City Register, requiring compliance with this SMP and all ECs and ICs to be placed on the Site. A copy of the recorded Environmental Easement is included in Appendix L.

This SMP was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Index #C241176-10-15) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Appendix A of this SMP.

This SMP was prepared by PSG Engineering and Geology D.P.C. (PSG), on behalf of Allied Jackson Heights, LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated June 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the Site's conditions. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the Brownfield Cleanup Agreement (BCA), and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1 on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in Appendix A.

Table 1: Notifications*

Name	Contact Information
Sadique Ahmed - NYSDEC Project Manager	518-402-9656; sadique.ahmed@dec.ny.gov
John Grathwol - NYSDEC Regional HW Engineer	518-402-9649; john.grathwol@dec.ny.gov
Angela Martin - NYSDOH	518-402-7860; angela.martin@health.ny.gov
Alexandra Servis – NYSDEC Site Control Section	518-402-9473; alexandra.servis@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The Site is located in Jackson Heights, Queens County, New York and is identified as a portion of Block 1124 Lot 1 on the Jackson Heights Tax Map (see Figure 2). The Site is an approximately 0.72-acre area and is bounded by commercial units attached to and associated with the on-site strip mall to the north, residential multi-family properties to the south, a parking lot associated with the strip mall to the east, and residential multi-family properties across 75th Street to the west (see Figure 3 – Site Map). The owner(s) of the Site parcel(s) at the time of issuance of this SMP is:

Allied Jackson Heights, LLC
118-35 Queens Boulevard
Forest Hills, New York 11375

2.2 Physical Setting

2.2.1 Land Use

The Site consists of the following: a portion of a strip mall shopping center improved with sidewalks, asphalt-paved parking areas and associated landscaping. The Site is zoned residential with a commercial overlay and is currently utilized for commercial uses. Site occupants include a dry cleaner, a dentist's office, and other commercial retail stores.

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include commercial and residential properties. The properties immediately south of the Site include residential properties; the properties immediately north of the Site include commercial and residential properties; the properties immediately east of the Site

include residential properties; and the properties to the west of the Site include residential properties.

2.2.2 Geology

The subject property is situated within the Atlantic Coastal Plain Physiographic Province of the State of New York. According to the New York State Geological Survey (NYSGS), the Atlantic Coastal Plain Province is an extensive plain of marine sands, clays, gravels, and marls that are seaward-sloping. Long Island is underlain by a mass of wedge-shaped unconsolidated geological deposits that overlie southward-sloping consolidated bedrock. According to the USGS, the bedrock underlying the subject property consists of the Quaternary Age Glacial and Alluvial Deposits. Based on borings advanced during preliminary (Phase II) investigations and remedial investigation activities, the underlying subsurface consists predominantly of tan/brown fine to medium sand with fill (cobbles and brick) (SP) from the ground surface to approximately 14.5 feet below ground surface (bgs). From 14.5 to 27 feet bgs, the subsurface consists predominantly of grey fine sand with layers of clay (SC).

A geologic cross section is shown in Figure 4A/4B. Site specific boring logs are provided in Appendix B.

2.2.3 Hydrogeology

Based on the urban development of the area, groundwater depth and flow below New York City can vary from the surface topography and is often erratic. However, according to information obtained from existing monitoring wells at the property, groundwater at the subject property is present at approximately 8 to 12.5 feet bgs and flows to the north-northeast.

A groundwater contour map is shown in Figure 5. Groundwater elevation data is provided in Table 2. Groundwater monitoring well construction logs are provided in Appendix C.

2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 - References.

According to historical sources, the subject property was formerly undeveloped as early as 1898 until as late as 1941; developed with residential apartments between 1941 and 1954; and developed with two of the current structures in approximately 1959 (buildings located on northern and southwestern extent). The subject property has been occupied by a dry-cleaning business from as early as 1979 to the present day. The ownership is currently vested in Allied Jackson Heights, LLC.

Partner Engineering and Science (Partner) completed a Phase I ESA Report, dated January 26, 2015. Subsequent to the Phase I, Partner completed a Phase II Subsurface Investigation Report, dated February 23, 2015, investigating the presence of volatile organic compounds (VOCs) in soil, groundwater, and sub-slab soil vapor as a consequence of a potential release or releases from the dry- cleaning operations.

Partner prepared an Additional Phase II Subsurface Investigation Report, dated March 27, 2015, investigating the presence of VOCs in soil, groundwater, and sub-slab soil vapor as a consequence of a potential release or releases from the dry-cleaning operations.

Allied Jackson Heights, LLC entered into a Brownfield Cleanup Agreement (BCA), in December 2015 with the NYSDEC to remediate the Site. Mr. Jonathan Greco was the NYSDEC Project Manager assigned to the Site.

Spill Number 1600745 was called in to the NYSDEC for the petroleum-like odor and visual sheen encountered on the purge water from temporary well location SB-3GW. Please refer to Figure 7A for location of the temporary well location.

On April 22, 2016, a Remedial Investigation Work Plan (RIWP) was submitted and later approved by the NYSDEC. The RIWP was then placed in the three document repositories and was entered into a 30-day public review comment period.

On July 11 through 13, 2016, PSG subcontracted with GES to provide and operate drilling equipment to advance six soil borings (SB-4, SB-5, SB-8, B-2R, ISB-1, and ISB-2), six temporary wells (SB-4GW, SB-5GW, SB-8GW, B-2RGW, ISB-1GW, and ISB-2GW), and two permanent monitoring wells (MW-4 and MW-5D) onsite.

On July 20-21, 2016, fourteen indoor air canisters (IA-1 through IA-14) and two ambient air canisters (AA-1 and AA-2) were set throughout the interior and exterior of the strip mall and fourteen sub-slab soil vapor samples (SG-1R through SG-6R, SG-9 through SG-16) were collected from beneath the basement level floor throughout the strip mall. Sub-slab soil vapor samples showed several VOCs including 1,2-dibromoethane, tetrachloroethene (PCE), and trichloroethene (TCE) above the EPA Commercial Screening Levels. Indoor air samples showed that methylene chloride, PCE, and TCE were detected above the NYSDOH guidelines and Immediate Action Levels.

On August 18 to 19, 2016, PSG returned to the site to complete offsite work located in the NYCDOT Right-of-Way including five soil borings (SB-6, SB-7, SB-9, SB-10, and SB-1R), five temporary wells (SB-6GW, SB-7GW, SB-9GW, SB-10GW, and SB-1RGW), one permanent monitoring well (MW-6), and two sub-slab soil vapor samples (SG-7 and SG-8R). Twenty-three soil samples were collected from the five soil borings. Vinyl chloride, cis-1,2-dichloroethene, and acetone was detected above the Unrestricted Use SCOs in soil samples collected from beneath the dry cleaner building slab. Semi-volatile organic compounds (SVOCs) and metals were detected above the Restricted Commercial Use SCOs in soil throughout the Site but are related to historic fill present at the Site. Several VOCs including vinyl chloride, cis-1,2-dichloroethene, PCE, benzene, trans-1,2-dichloroethene, and acetone were detected in groundwater at the Site above the applicable standards.

In December 2016, the NYSDEC project manager changed from Mr. Jonathan Greco to Ms. Sarah Quandt. During this time, the RIWP was amended per the NYSDEC to include the installation of five additional monitoring wells throughout the site. In addition, the Sub-Slab Depressurization System Proposal & Design Plan was approved by the NYSDEC and NYSDOH on February 17, 2017. On the same day, the NYSDEC project manager changed again from Ms. Sarah Quandt to Mr. Sadique Ahmed.

On March 6, 2017, the installation of the sub-slab depressurization system (SSDS) began. SSDS installation and system commissioning start-up was completed on March 28, 2017 by OBAR Systems, Inc. (OBAR).

Post-system installation indoor air sampling was completed after 30+ days of system operation on May 2 to 3, 2017 by PSG. Fifteen indoor air canisters (IA-15 through IA-29) and two ambient air canisters (AA-3 and AA-4) were set throughout the interior and exterior of the strip mall. Results showed a decrease in contaminant levels as compared to the July 2016 sampling results. PCE was detected below the NYSDOH Guideline at all basement and first floor sampling locations. TCE was detected above the NYSDOH Guideline in four of the tenant spaces and Immediate Action Level in the dry cleaner tenant space.

Indoor/ambient air sampling was completed after 90+ days of system operation on August 9 and 10 and September 6 and 7, 2017 by PSG. Eight indoor air canisters (IA-15R, IA-16R, IA-18R, IA-19R, IA-20R, IA-22R, IA-23R, and IA-24R) and two ambient air canisters (AA-5 and AA-6) were set throughout the interior and exterior of the strip mall. Results showed a decrease in contaminant levels as compared to the July 2016 sampling results. PCE was detected below the NYSDOH Guideline at all basement and first floor sampling locations, except on the first floor of the dry cleaners. TCE was detected above the NYSDOH Guideline in one of the tenant spaces and Immediate Action Level in the dry cleaner tenant space.

A Remedial Investigation Report (RIR) was submitted to the NYSDEC on November 22, 2017. A Construction Completion Report (CCR) was submitted to the NYSDEC on December 1, 2017.

Indoor/ambient air sampling was completed on January 30-31, 2018 by PSG, as the third round of confirmation sampling during the heating season as directed by the NYSDEC. On January 30, 2018, fifteen indoor air canisters (IA-30 through IA-44) and two ambient air canisters (AA-7 and AA-8) were set throughout the interior and exterior of the strip mall. PCE was detected below the NYSDOH Guideline at all basement and first floor sampling locations, except on the first floor and basement of the dry cleaners. TCE was detected below the NYSDOH Guideline at all basement and first floor sampling locations.

On August 1 to 2, 2018, PSG returned to the site to complete on-site soil borings as requested by the NYSDEC. A PSG representative was onsite to oversee the advancement of three soil borings (SB-11 through SB-13). All three soil borings were advanced behind the dry cleaners and Optical Academy tenant spaces of the strip mall. Ethylbenzene, total xylenes, PCE, TCE, vinyl chloride, cis-1,2-dichloroethene, and trans-1,2-dichloroethene were detected at concentrations exceeding the Unrestricted Use SCOs, Protection of Groundwater SCOs, and/or Restricted Use Commercial SCOs in soil sample SB-11B (14.5-15.0). Per the March 22, 2018 NYSDEC RIR comment letter, the NYSDEC and NYSDOH required further investigation of elevated PCE concentrations in previous soil vapor sample SG-8R located across 75th Street to the west of the strip mall and also required mapping of the subsurface utilities along 75th Street between the site and the adjacent residential area to determine and delineate any potential preferential pathways. A utility survey was conducted and a figure depicting the subsurface utility locations along 75th Street is included as Figure 17. On August 1, 2018, PSG installed two soil vapor sampling points (SG-17 and SG-8RR). One soil vapor point was installed onsite adjacent to a storm sewer drain and sewer underground piping and the second soil vapor point was installed in the sidewalk across 75th Street to re-assess the previous soil vapor sample (SG-8R) collected in 2016. PCE was either non-detect or detected at low concentrations in the samples. On August 2, 2018, a groundwater sample was collected from monitoring well MW-2 and was analyzed for VOCs. PCE, TCE, vinyl chloride, cis-1,2-dichoroethene, and trans-1,2-dichloroethene were detected at concentrations above the NY Technical & Operational Guidance Series Ambient Water Quality Standards (TOGS AWQS).

A Remedial Work Plan (RWP) was submitted to the NYSDEC on December 2018. The RWP was approved by the NYSDEC on March 8, 2019.

Indoor/ambient air sampling was completed on February 20-21, 2019 by PSG, as per the SMP. On February 20, 2019, six indoor air canisters (IA-45 through IA-50) and two ambient air canisters (AA-9 and AA-10) were set throughout the interior and exterior of the strip mall. PCE and TCE were detected below the NYSDOH Guideline at all basement and first floor sampling locations, except in the basement of the dry cleaners.

Groundwater monitoring and sampling events were conducted on September 7, 2016, March 16, 2017, June 13, 2017, and April 11, 2019. VOCs including benzene, PCE,

TCE, vinyl chloride, cis-1,2-dichloroethene, and trans-1,2-dichoroethene were consistently detected at concentrations above the NY-TOGS AWQS in monitoring well MW-2.

Remedial activities in accordance with the approved RWP began on April 25, 2019. The Environmental Protection Agency Underground Injection Control (EPA UIC) was notified of the injection activities on March 18, 2019 and confirmed receipt on March 25, 2019. The remedial treatment consisted of injecting a 5% by weight potassium permanganate solution via 20 temporary injection points into the areas surrounding the contaminated soil borings and groundwater monitoring wells (B-2, B-2R, SB-1, SB-2, SB-11, SB-12, ISB-1, and MW-2). PSG completed 20 injection points at the Site between April 26, 2019 and May 3, 2019. The potassium permanganate was injected at 2-foot intervals from 6 to 23 feet bgs covering the soil and groundwater column. Each injection point received 190 gallons of reagent for an approximate total of 3,800 gallons. However, injection point E4 only received 142 gallons due to the injection point collapsing. The remaining 48 gallons was added to injection point D4, for a total of 238 gallons. The approximate area covered by the chemical injection plan was 1,350 square feet. The exterior (outside the building) injection area included approximately 1,050 square feet and the interior (beneath the building) injection area included approximately 300 square feet. Please refer to Figure 16 for the Injection Location map.

Direct-push drilling equipment was used to install the 16 exterior injection points, to 23 feet. Hand tools were used to install the 4 interior injection points, to 13 feet below the basement floor. The specific locations and depths were advanced to provide:

- Establish hydraulic control of the groundwater plume to prevent further contaminant migration during treatment;
- Direct saturation of the impacted soils above the vadose zone to reduce or eliminate future source materials.

Existing monitoring well MW-2 was utilized to monitor pump rate and volume vs. radius of influence values generated to maximize the efficiency of the ISCO treatment. The injection process (actual mechanics of delivery) began beneath and surrounding the contaminant plume moving from downgradient toward upgradient from a bottom-up approach. This will require that the groundwater contamination zone is treated first. The

radius of influence was observed by the change in pH, ORP, DO, etc. in MW-2 and MW-3. PSG monitored the groundwater parameters continuously at all depth increments for every injection point.

The potassium permanganate was delivered to the Site by a tanker truck. The injection compounds were mixed off-Site and were stored in a large tank onsite. It was batched mixed in stainless steel tanks to concentrations as high as 5%. The permanganate was injected through a progressive cavity pump where pressure, flow and total flow are continuously monitored. The preliminary design was based upon the use of 1,657 pounds of reagent. This mass was injected uniformly among the temporary 20 injection points.

In accordance with the March 2019 approved RWP, PSG completed a 60-day post-injection groundwater sampling event in early July 2019. PSG expects to see decreasing trends of all chlorinated compounds in September 2019 when the 120-day post-injection groundwater sampling event is completed. PSG will need to evaluate the 120-post injection groundwater and soil sampling results before making a determination about whether additional chemical injections are necessary. If additional chemical injections are deemed necessary, PSG will complete additional injections in accordance with the approved RWP.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the RWP dated December 2018 are as follows:

Groundwater

RAOs for Public Health Protection

- 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.

2.5 Remaining Contamination

2.5.1 Soil

Soil/fill samples collected during the RI showed several volatile organic compounds (VOCs) including vinyl chloride (max. 32 mg/kg) and cis-1,2-dichloroethene (max. 589 mg/kg) above Restricted Commercial Use SCOs; total xylenes (max. 3.87 mg/kg) above Protection of Groundwater SCOs; and ethylbenzene (max. 1.09 mg/kg), PCE (max. 6.01 mg/kg, TCE (max. 7.35 mg/kg), trans-1,2-dichloroethene (max. 5.28 mg/kg), and acetone (max. 0.157 mg/kg) above Unrestricted Use SCOs. Acetone is a common laboratory contaminant and it is believed that the low levels of acetone detected across the site are not related to the dry-cleaning operations. Several semi-volatile organic compounds (SVOCs) including benzo(a)anthracene (max. 10.3 mg/kg), benzo(a)pyrene (max. 9.69 mg/kg), benzo(b)fluoranthene (max. 11.6 mg/kg), dibenzo(a,h)anthracene (max. 2.18

mg/kg), and indeno(1,2,3-cd)pyrene (max. 6.67 mg/kg) were detected above Restricted Commercial Use SCOs in two samples at the 2.0-2.5' bgs interval. Benzo(k)fluoranthene (max. 3.98 mg/kg) and chrysene (max. 9.92 mg/kg) were detected above Restricted Use Groundwater SCOs but below Restricted Commercial Use SCOs in two samples at the 2.0-2.5' bgs interval. Several metals including arsenic (max. 19.2 mg/kg), barium (max. 824 mg/kg), cadmium (max. 13.8 mg/kg), and lead (max. 2,710 mg/kg) were detected above the Restricted Commercial Use SCOs. Iron (max. 18,200 mg/kg) was detected above the Restricted Residential Use SCOs. Mercury (max. 1.2 mg/kg) and zinc (max. 4,960 mg/kg) were detected above the Restricted Use Groundwater SCOs but below Restricted Commercial Use SCOs. Trivalent chromium (max. 36.2 mg/kg), hexavalent chromium (max. 2.7 mg/kg), copper (max. 76.4 mg/kg), and nickel (max. 35.9 mg/kg) were detected above the Unrestricted Use SCOs but below the Restricted Commercial Use SCOs. Trace pesticides were detected above Unrestricted Use SCOs in one of the soil samples, but were below the Restricted Commercial Use SCOs. Total PCBs were not detected in any of the samples. Overall, soil chemistry is typical of sites with urban historic fill in New York City.

Table 3 and Figure 6 summarize the results of all soil samples collected that exceed the Unrestricted Use SCOs and the commercial Use SCOs at the site after completion of remedial action.

2.5.2 Groundwater

Groundwater samples collected during the RI showed several VOCs including vinyl chloride (max. 1,860 µg/l), cis-1,2-dichloroethene (max. 1,450 µg/l), benzene (max. 12.6 µg/l), PCE (max. 18 µg/l), TCE (max. 77.2 µg/l), trans-1,2-dichloroethene (max. 10.7 µg/l), and acetone (max. 80 µg/l) above their respective Ambient Water Quality Standard (AWQS). Several metals including arsenic (max. 50.6 µg/l), barium (max. 1,450 µg/l), iron (max. 67,500 µg/l), lead (max. 105 µg/l), manganese (max. 7,320 µg/l), and sodium (max. 930,000 µg/l) were detected above their respective AWQS. No SVOCs, pesticides or PCBs were detected above their respective AWQS.

Tables 2 & 4 and Figures 7A through 7G summarize the results of all samples of groundwater that exceed the SCGs after completion of the remedial action.

2.5.3 Soil Vapor/Indoor Air

Sub-slab soil vapor samples collected during the RI prior to the SSDS installation showed several VOCs including 1,2-dibromoethane (max. 159 µg/m³), PCE (max. 5,170 µg/m³), and TCE (max. 132 µg/m³) were detected.

Indoor air samples collected during the RI following the SSDS installation showed methylene chloride (max. 239 µg/m³) which exceeded the NYSDOH guideline. PCE (max. 185 µg/m³) was detected above the NYSDOH in the first floor of the dry cleaners and TCE (max. 35 µg/m³) was detected above the NYSDOH Immediate Action Level in the first floor and basement of the dry cleaners and above the NYSDOH guideline in the basement under the dentist office tenant space, first floor and basement of the Optical Academy tenant space, basement under the Rock Realty tenant space, and the first floor and basement of the Stand Up MRI tenant space.

Tables 5A through 5C and Figures 8A & 8B summarize the results of all samples of soil vapor and sub-slab soil vapor that exceed the SCGs after completion of the remedial action. Table 6 and Figures 9A, 9B, 10A, 10B, 11, 12A, 12B, and 13 summarize the results of all samples of indoor air that exceed the SCGs after completion of the remedial action.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the site, ICs and ECs are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;

- A description of the controls to be evaluated during each required inspection and periodic review;

- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix D) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and

- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the RAWP to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the site to commercial uses only. Adherence to these ICs on the site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on Figure 14. These ICs are:

- The property may be used for: commercial and industrial use;

- Compliance with the Environmental Easement by the Grantee and the Grantee's successors and adherence of all elements of the SMP is required;

- A composite cover system consisting of asphalt covered roads, concrete covered sidewalks, and concrete building slabs must be inspected, certified and maintained as required in the SMP;

- A soil vapor mitigation system consisting of a sub-slab depressurization system under all building structures must be inspected, certified, operated and maintained as required by the SMP;

- All Engineering Controls on the Controlled Property must be operated, maintained, inspected, and certified at a frequency and in a manner defined in the SMP;

- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;

- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP
- Groundwater, indoor air, and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- On-Site environmental monitoring devices, including but not limited to, groundwater monitor wells and sub slab vacuum permanent test ports, must be protected and replaced as necessary to ensure proper functioning in the manner specified in the SMP;
- Engineering Controls may not be discontinued without an amendment to the SMP, as approved by NYSDEC and NYSDOH, or extinguishment of the Environmental Easement.

Adherence to these Institutional Controls for the Site is mandated by the Environmental Easement and will be implemented under the Site Management Plan (discussed in the next section). The Controlled Property (Site) will also have a series of Institutional Controls in the form of Site restrictions and requirements. The Site restrictions that apply to the Controlled Property are:

- Vegetable gardens and farming on the Controlled Property are prohibited;
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- All future activities on the Controlled Property that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in the Site Management Plan;
- The Controlled Property may be used for restricted commercial and industrial uses only, provided the long-term Engineering and Institutional Controls included in the Site Management Plan are employed;
- The Controlled Property may not be used for a higher level of use, such as restricted residential use, without an amendment or extinguishment of this Environmental Easement;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;

- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

3.3 Engineering Controls

3.3.1 Cover (or Cap)

Exposure to remaining contamination at the site is prevented by a cover system placed over the Site. This cover system is comprised of a minimum of 6 inches of concrete building slab, approximately 6-inches of concrete sidewalk, and 4-inches of asphalt pavement. Figure 14 presents the location and extents of the cover system. The Excavation Work Plan (EWP) provided in Appendix D outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) provided in Appendix H and associated Community Air Monitoring Plan (CAMP) prepared for the site and provided in Appendix D.

3.3.2 Sub-slab Depressurization System

Based on the sub-slab soil vapor and indoor/ambient air sampling results, a specialized subcontractor (OBAR Systems, Inc.) was contracted to inspect and evaluate the HVAC system(s), ventilation systems and pressure differentials between the different strip mall tenant units. In addition, OBAR was contracted to complete diagnostic testing of vacuum influence beneath the slab of the building for a future SSDS design. Because the

building basement area of concern measures approximately 23,000 square feet, 10 suction points and 53 test points were completed on November 21 and 22, 2016. During diagnostic testing, the radius of influence ranged from 10 to 30 feet at different applied vacuums throughout the Jackson Heights Shopping Center basement.

OBAR proposed installation of an SSDS consisting of five mitigation systems and 18 suction points to depressurize the building area of concern. The system was designed to depressurize and encompass the following tenant spaces: the Chinese restaurant, the Subway restaurant, the stationary store, the former hair/nail salon, the Stand-Up MRI, the Optical Academy, the dry cleaner, the dentist's office, and Rock Realty. Blowers were proposed to be installed on the exterior rear (western) wall (8 feet above grade using wall mounts) of the building for the proposed system. The blowers' exhausts would run vertically up the wall and terminate 12 inches above the roofline and 10 feet from all doors, windows, intakes and passive relief vents.

Construction plans and specifications for the Jackson Heights Shopping Center SSDS were prepared by OBAR based on the February 17, 2017 Updated SSDS Proposal & Design Drawing and Response to NYSDEC's December 27, 2016 Letter approved by the NYSDEC and NYSDOH on February 17, 2017. Allied Jackson Heights, LLC applied for two building permits (permit # 421394538-01EW-MH and # 421394538-01-EW-OT) and an electrical permit for construction and SSDS installation at the Site. The permits were issued by the New York City Department of Buildings (NYC DOB) on March 15, 2017 and are included in Appendix K.

The objective of the SSDS is to mitigate the contamination and effects of sub-slab soil vapor at the Site. The SSDS was designed to extract the sub-slab soil vapors containing VOCs from beneath the concrete slab of the building area of concern.

On March 6, 2017, installation of the SSDS began. Installation and system commissioning start-up was completed on March 28, 2017. The SSDS installation completed at the Site was constructed in accordance the Final SSDS Proposal and Design Drawing. Upon system start-up, the mitigation fans were tuned for optimal efficiency. The systems' applied vacuum and airflow and the sub-slab pressure differentials at the

permanent test ports were measured and all measurements were within the required target range.

Procedures for operating and maintaining the SSD system are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As built drawings, signed and sealed by a professional engineer, are included in Appendix J – Operations and Maintenance Manual. Figure 14 shows the location of the ECs for the site.

3.3.3 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

3.3.3.1 - Cover (or Cap)

The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this SMP in perpetuity.

3.3.3.2 - Sub-Slab Depressurization (SSD) System

The active SSD system will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSD system may no longer be required, a proposal to discontinue the SSD system will be submitted by the remedial party to the NYSDEC and NYSDOH.

3.3.3.3 – Groundwater Monitoring

Groundwater monitoring activities following the in-situ chemical oxidation (ISCO) will continue, as determined by the NYSDEC with consultation with NYSDOH, to assess the effectiveness of the remedy in reducing site-related contaminants, until residual groundwater concentrations are found to be consistently below AWQS, the site SCGs, or have become asymptotic at an acceptable level over an extended period. In the event that monitoring data indicates that monitoring for natural attenuation may no longer be required, a proposal to discontinue will be submitted by the remedial party. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the Site are included in the Quality Assurance Project Plan provided in Appendix G.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and

- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site Wide Inspection

Site-wide inspections will be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix I – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that Site records are up to date.

Inspections of all remedial components installed at the Site will be conducted. A comprehensive Site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;

- If Site records are complete and up to date; and
- Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 Treatment System Monitoring and Sampling

4.3.1 Remedial System Monitoring

Monitoring of the SSDS will be performed on a routine basis, as identified in Table 7 Remedial System Monitoring Requirements and Schedule (see below). Modification of the frequency or sampling requirements will require approval from the NYSDEC. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS components to be monitored include, but are not limited to, the components included in Table 7 below.

Table 7 – Remedial System Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
Visual Inspection	N/A	N/A	Annual
Vacuum Gauge Readings	Vacuum	No required range	Annual
Sub Slab Vacuum at test ports	Vacuum	Above -0.004" w.c.	Annual
Riser Vacuum	Vacuum	No required range	Annual

A complete list of components to be inspected is provided in the Inspection Checklist, provided in Appendix I - Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.4 Post-Remediation Media Monitoring and Sampling

Samples shall be collected from the groundwater and indoor air on a routine basis. Sampling locations, required analytical parameters and schedule are provided in Table 8 – Remedial System Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

Table 8 – Post Remediation Sampling Requirements and Schedule

Sampling Location	Analytical Parameters		Schedule
	VOCs (EPA Method 624)	VOCs (EPA Method TO-15)	
MW-2	X		Annual
MW-3	X		Annual
MW-4	X		Annual
MW-8	X		Annual
MW-10	X		Annual
Indoor Air (basement of cleaners, basement/first floor of Optical Academy and dentist office)		X	Annual, during the heating season

Detailed sample collection and analytical procedures and protocols are provided in Appendix F – Field Activities Plan and Appendix G – Quality Assurance Project Plan.

4.4.1 Groundwater Sampling

Post-ISCO groundwater monitoring will be performed annually to assess the performance and effectiveness of the ISCO remedy in reducing site-related contaminants. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

The network of monitoring wells has been installed to monitor upgradient, on-site and downgradient groundwater conditions at the Site.

Table 9 summarizes the wells identification number, as well as the purpose, location, depths, diameter and screened intervals of the wells. As part of the groundwater monitoring, one upgradient well, two on-site source area wells, and two downgradient wells will be sampled to evaluate the effectiveness of the remedial system.

Table 9 – Monitoring Well Construction Details

Monitoring Well ID	Well Location	Coordinates (longitude/ latitude)	Well Depth (ft.)	Screen Length (ft.)	Water Table Depth (ft.)	Well Diam. (inches)	Elevation (feet above mean sea level)			
							Casing	Surface	Screen Top	Screen Bottom
MW-2	Source Area	40.759779°N 73.892564° W	20	10	11-12	2	26.71	26.95	16.71	6.71
MW-3	Source Area	40.759784°N 73.892600° W	20	10	10-11	2	25.39	25.63	15.39	5.39
MW-4	Upgradient	40.759505°N 73.892513° W	20	10	10-11	2	27.23	27.54	17.23	7.23
MW-8	Downgradient	40.760511°N 73.891550° W	20	10	9-11	2	23.21	23.87	13.21	3.21
MW-10	Downgradient	40.760427°N 73.892460° W	20	10	11-12	2	24.22	24.62	14.22	4.22

Please refer to Figure 15 showing the monitoring well network. Please refer to Table 2 for a historical results summary table and depth to water details. Monitoring well construction logs are included in Appendix C of this document.

If biofouling or silt accumulation occurs in the on-site wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced, if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC.

The sampling frequency may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.

4.4.2 Indoor Air Sampling

Indoor air sampling will be performed annually, during the heating season (November 15 – March 31), to assess the performance of the remedy. (See Table 7.) Modification to the frequency or sampling requirements will require approval from the NYSDEC. Sampling will be conducted in accordance with the NYSDOH 2006 *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. Monitoring of the SSDS will be performed on a routine basis, as identified in Table 7 Remedial System Monitoring Requirements and Schedule. A pressure differential test will be conducted before each sampling event to support that the SSDS is working as designed.

The on-site indoor air sample locations have been designed based on the following criteria:

Indoor air samples will be collected from the basement level of the dry cleaners, the basement and first floor levels of the Optical Academy, the basement and first floor levels of the dentist office, and the basement of the MRI tenant space. These areas are chosen as the dry cleaner contains the original source area, and therefore, is the most likely to have exceedances in indoor air. The other tenant spaces are located on either side of the dry cleaner and, therefore, are the most likely to be impacted first, should the SSDS become ineffective. Indoor air samples will be collected during the heating season to represent worst-case scenario conditions, with certified clean 6L Summa canisters from a NYSDOH Environmental Laboratory Approval Program (ELAP) laboratory, with flow controllers set to not exceed 0.2 L/min. Samples will be collected for 8 hours to represent a commercial exposure scenario and analyzed for Method TO-15 analytes.

The sampling frequency may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

Deliverables for the indoor air sampling program are specified in Section 7.0 – Reporting Requirements.

4.4.3 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in Appendix I - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity, etc.) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network. Additional detail regarding monitoring and sampling protocols are provided in the site-specific Field Activities Plan provided as Appendix F of this document.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the SSDS;
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDS are operated and maintained.

Further detail regarding the Operation and Maintenance of the cover (cap) and SSDS is provided in Appendix J - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

5.2 Remedial System (or other Engineering Control) Performance Criteria

The performance criteria of the SSDS is detailed in Table 7 above.

For the cap to perform as designed, no cracks, holes, or other penetrations can be present, and the cap must be intact at all times.

5.3 Operation and Maintenance

The following sections provide a description of the operations and maintenance of the SSDS and cap. Cut-sheets and as-built drawings for the SSDS are provided in Appendix J - Operations and Maintenance Manual.

5.3.1 System Start-Up and Testing

The system was commissioned on March 28, 2017. Please refer to the OBAR Vapor Intrusion Mitigation System Post Mitigation Report dated March 31, 2017, included as Appendix G of the Construction Completion Report submitted to the NYSDEC on December 1, 2017, for measurements collected following system commissioning.

5.3.2 Routine System Operation and Maintenance

The system will be inspected annually. Visual inspection and vacuum gauge readings shall be performed and recorded annually. Visual inspection, vacuum gauge readings, sub-slab vacuum at the test ports, and riser vacuum shall be performed and recorded during annual O&M visits.

The system testing described above will also be conducted if, in the course of the SSD system lifetime, the system fails or significant changes are made to the system and the system must be restarted.

5.3.3 Non-Routine System Operation and Maintenance

Cap

PSG will be notified by the property manager if damage to the cover (cap) or SSDS occurs.

Concrete and asphalt pavement will deteriorate over time. Concrete can crack and settle, and the surface can erode and become more pervious over time. Asphalt can also crack and settle, as well as break off and erode with wear and tear. Any cracks in the slab will be repaired immediately with crack sealant. Any other signs of concrete distress or damage should be addressed immediately by a concrete specialist. Spalling and other surface damage should be repaired with concrete resurfacer. Any cracks observed in the asphalt or concrete pavement should be repaired immediately with patching material and sealed. If bigger areas need repair, such as pot holes, tack coat should be applied to the edges where the new material meets the old material. Any areas that are larger than what can be fixed via a patch, must be paved by a paving contractor to general industry

specifications. A minimum of 4-inches of asphalt and 6-inches of concrete should be maintained at any time.

SSDS

The SSDS is equipped with two audible and visual alarm panels. In the event of a system failure, the red light will illuminate and the audible alarm will sound. PSG Engineering will then be notified by the property manager. In the event of a blower malfunction, the system can be manually restarted by de-energizing the blower (via the circuit breaker or the fan switch) for approximately 1 minute and then restarting the blower. If a manual restart does not work, the blower motor may require replacement. Table 7 provides a summary and schedule of routine maintenance.

5.3.4 System Monitoring Devices and Alarms

The SSDS has a warning device to indicate that the system is not operating properly. The system is equipped with two audible and visual alarm panels. One two-gauge panel for systems 4 and 5 is located in the gas and meter room underneath the dentist's office tenant space. A second three-gauge alarm panel is located in the contractors' workshop underneath the Stand-Up MRI and services Systems 1-3. In the event of a system failure, the red light will illuminate and the audible alarm will sound. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

Based on the location of the Site and lack of surface water bodies in the immediate vicinity of the Site, a climate change vulnerability assessment is not required for the Site.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the Site during site management, and as reported in the Periodic Review Report (PRR).

6.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System

Optimization (RSO), or at any time that the Project Manager feels appropriate, e.g. during significant maintenance events or in conjunction with storm recovery activities.

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.2.2 Building Operations

Structures including buildings and sheds will be operated and maintained to provide for the most efficient operation of the remedy, while minimizing energy, waste generation and water consumption.

6.2.3 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to conduct system checks and or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

6.2.4 Metrics and Reporting

As discussed in Section 7.0 and as shown in Appendix I – Site Management Forms, information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits; a set of metrics has been developed.

6.3 Remedial System Optimization

A Remedial Site Optimization (RSO) study will be conducted any time that the NYSDEC or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;
- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the site management to another remedial party or agency; and
- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a site's conceptual model, give a summary of past performance, document current cleanup practices, summarize progress made toward the site's cleanup goals, gather additional performance or media specific data and information and provide recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

The RSO study will focus on overall site cleanup strategy, process optimization and management with the intent of identifying impediments to cleanup and improvements to site operations to increase efficiency, cost effectiveness and remedial time frames. Green remediation technology and principals are to be considered when performing the RSO.

7.0. REPORTING REQUIREMENTS

7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in Appendix I. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 10 and summarized in the Periodic Review Report.

Table 10: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Inspection Report	Annually
Periodic Review Report	18 months after the COC and then annually thereafter

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);

- Type of samples collected (e.g., groundwater, indoor air, etc.);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and

- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link http://www.dec.ny.gov/chemical/62440.html.

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department 18 months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted annually to the Department or at another frequency as may be required by the Department. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in the Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site.
- Results of the required annual site inspections and severe condition inspections, if applicable.
- All applicable site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances

highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.

- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.

- A site evaluation, which includes the following:

  – The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;

  – The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;

  – Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;

  – Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan; and

  – Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document.

  – The overall performance and effectiveness of the remedy.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- *The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;*

- *The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;*

- *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*

- *Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;*

- *Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*

- *If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;*

- *Use of the site is compliant with the environmental easement;*

- *The engineering control systems are performing as designed and are effective;*

- *To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and*

- *The information presented in this report is accurate and complete.*

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Kristine McCarthy MacWilliams, of Partner Engineering, PLLC, am certifying as Owner's/Remedial Party's Designated Site Representative:

- *No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and*

- *The assumptions made in the qualitative exposure assessment remain valid.*

The signed certification will be included in the Periodic Review Report.

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Work Plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC.

7.4 Remedial Site Optimization Report

In the event that an RSO is to be performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the Department for approval. The RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located, Site Control and the NYSDOH Bureau of Environmental Exposure Investigation.

8.0 REFERENCES

6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation".

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

Partner, Phase I Environmental Site Assessment Report. January 26, 2015.

Partner, Phase II Subsurface Investigation Report. February 23, 2015.

Partner, Additional Phase II Subsurface Investigation Report. March 27, 2015.

PSG Engineering, Remedial Investigation Workplan. April 22, 2016.

PSG Engineering, Updated Remedial Investigation Workplan Amendment. January 12, 2017.

PSG Engineering, Updated Sub-Slab Depressurization System Proposal & Design Drawing. February 17, 2017.

PSG Engineering, Construction Completion Report.

PSG Engineering, Remedial Investigation Report.

PSG Engineering, Remedial Work Plan.

TABLES

TABLE 2A
HISTORIC GROUNDWATER SAMPLING RESULTS - VOCs
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Product Thickness (ft)	Corrected Groundwater Elevation (ft)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Tetrachloroethene	Trichloroethene	Vinyl chloride	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Acetone	2-Butanone	1,4-Dioxane*	VO TICs	Sulfate
NY-TOGS AWQS (ug/l)							**1**	**5**	**5**	**5**	**5**	**5**	**2**	**5**	**5**	**50**	**50**	**--**	**--**	**250**
MW-1	L1505636-01	03/23/15	26.72	12.10	0.00	14.62	ND (0.16)	ND (0.70)	ND (0.70)	ND (0.70)	0.58	ND (0.18)	ND (0.07)	ND (0.70)	ND (0.70)	1.7 J	ND (1.9)	NA	NA	NA
	JC27127-1	09/07/16		12.28	0.00	14.44	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	--	10/14/16		12.51	0.00	14.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-1	03/16/17		12.36	0.00	14.36	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-1	06/13/17		12.34	0.00	14.38	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	JC86327-1	04/11/19		12.60	0.00	14.12	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	189
	JC91208-1	07/02/19		12.28	0.00	14.44	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	ND (0.049)	7.1 J	197
	JC94875-1	09/11/19		12.42	0.00	14.30	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	199
MW-2	L1505636-02	03/23/15	26.71	11.65	0.00	15.06	**3.3 J**	**ND (7)**	**ND (7)**	**ND (7)**	**18**	2.6 J	**1,600**	**780**	**ND (7)**	**80**	38 J	NA	NA	NA
	JC27127-2	09/07/16		12.10	0.00	14.61	**12.6**	0.46 J	ND (0.20)	ND (0.21)	1.5	1.6	**1,860**	**1,450**	**10.7**	7.1 J	ND (1.9)	NA	0	NA
	--	10/14/16		12.10	0.00	14.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-2	03/16/17		11.99	0.00	14.72	0.85	ND (0.23)	ND (0.20)	ND (0.21)	1.7	0.80 J	**113**	**83.3**	0.88 J	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-2	06/13/17		11.95	0.00	14.76	**8.3**	ND (0.25)	ND (0.22)	ND (0.22)	2.2	1.6	**1,030**	**641**	3	ND (5.0)	ND (4.8)	0.37*	0	NA
	JC71235-1	08/02/18		11.85	0.00	14.86	**ND (2.1)**	ND (2.7)	ND (3.0)	ND (3.0)	**17.3**	**77.2**	**356**	**1,310**	**7.7**	ND (30)	ND (34)	NA	0	NA
	JC86327-2	04/11/19		11.94	0.00	14.77	**3.3**	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	**67.2**	**30**	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	66.1
	JC91208-2	07/02/19		11.76	0.00	14.95	**1.4**	ND (0.53)	ND (0.60)	ND (0.59)	1.9	1.5	**129**	**292**	3	ND (6.0)	ND (6.9)	ND (0.049)	8.9 J	**360**
	JC94875-2	09/11/19		11.94	0.00	14.77	**2**	ND (0.53)	ND (0.60)	ND (0.59)	2	1.2	**95.1**	**57.7**	2	ND (6.0)	ND (6.9)	NA	0	205
MW-3	L1505636-03	03/23/15	25.39	10.42	0.00	14.97	ND (0.16)	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.18)	0.35 J	**22**	**18**	ND (0.70)	1.9 J	ND (1.9)	NA	NA	NA
	JC27127-3	09/07/16		10.84	0.00	14.55	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	1.4	2.2	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	--	10/14/16		10.86	0.00	14.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-3	03/16/17		10.73	0.00	14.66	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	1.1	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-3	06/13/17		10.65	0.00	14.74	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	JC86327-3	04/11/19		10.67	0.00	14.72	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	0.66 J	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	89.6
	JC91208-3	07/02/19		10.60	0.00	14.79	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	1.1	ND (0.54)	7.1 J	ND (6.9)	NA	0	**251**
	JC94875-3	09/11/19		10.77	0.00	14.62	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	1.4	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	179
MW-4	JC27127-4	09/07/16	27.23	10.64	0.00	16.59	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	--	10/14/16		10.78	0.00	16.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-4	03/16/17		10.80	0.00	16.43	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-4	06/13/17		10.33	0.00	16.90	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	--	04/11/19		10.64	0.00	16.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.19	0.00	17.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.56	0.00	16.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5D	JC27127-5	09/07/16	25.95	8.25	0.00	17.70	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	--	10/14/16		8.30	0.00	17.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-5	03/16/17		8.05	0.00	17.90	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	37.4	ND (1.9)	NA	19.8 J	NA
	JC45226-5	06/13/17		7.92	0.00	18.03	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	--	04/11/19		7.74	0.00	18.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		7.79	0.00	18.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		6.09	0.00	19.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 (Well Abandoned)	JC27127-6	09/07/16	25.85	8.17	0.00	17.68	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC29704-1	10/14/16		8.19	0.00	17.66	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
MW-7	JC39069-6	03/16/17	26.41	11.71	0.00	14.70	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	0.45 J	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-6	06/13/17		11.68	0.00	14.73	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	JC86327-4	04/11/19		11.72	0.00	14.69	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	115
	JC91208-4	07/02/19		11.65	0.00	14.76	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	ND (0.049)	7.1 J	166
	JC94875-4	09/11/19		11.82	0.00	14.59	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	93
MW-8	JC39069-7	03/16/17	23.21	9.38	0.00	13.83	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-7	06/13/17		9.21	0.00	14.00	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	JC86327-5	04/11/19		10.66	0.00	12.55	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	**495**
	JC91208-5	07/02/19		9.45	0.00	13.76	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	**451**
	JC94875-5	09/11/19		9.33	0.00	13.88	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	**487**
MW-9	JC39069-8	03/16/17	23.91	10.60	0.00	13.31	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-8	06/13/17		10.72	0.00	13.19	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	JC86327-6	04/11/19		9.30	0.00	14.61	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	61.6
	JC91208-6	07/02/19		10.78	0.00	13.13	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	7.3 J	58.8
	JC94875-6	09/11/19		11.19	0.00	12.72	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	58.2
MW-10	JC39069-9	03/16/17	24.22	11.25	0.00	12.97	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-9	06/13/17		11.25	0.00	12.97	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	JC86327-7	04/11/19		11.32	0.00	12.90	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	87
	JC91208-7	07/02/19		11.28	0.00	12.94	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	98.6
	JC94875-7	09/11/19		11.33	0.00	12.89	ND (0.43)	ND (0.53)	ND (0.60)	ND (0.59)	ND (0.90)	ND (0.53)	ND (0.79)	ND (0.51)	ND (0.54)	ND (6.0)	ND (6.9)	NA	0	76.5
MW-11	JC39069-10	03/16/17	25.38	10.45	0.00	14.93	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (5.0)	ND (1.9)	NA	0	NA
	JC45226-10	06/13/17		10.51	0.00	14.87	ND (0.17)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.50)	ND (0.27)	ND (0.62)	ND (0.50)	ND (0.40)	ND (5.0)	ND (4.8)	ND (0.18)	0	NA
	--	04/11/19		10.55	0.00	14.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.45	0.00	14.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.59	0.00	14.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Legend:

µg/l: micrograms per liter, ppb
NY-TOGS AWQS: New York Technical & Operational Guidance Series Ambient Water Quality Standards
VO TICs: Volatile Organic Tentatively Identified Compounds
--: Not Established
NA: Not Analyzed
NS: Not Sampled
J: Estimated Concentration
ND: Not Detected
ND (0.21): Not Detected followed by method detection limit (MDL)
260: Concentration in excess of NY TOGS AWQS
ND (1.6): MDL exceeds the NY TOGS AWQS
***:** 1,4-dioxane does not have a NY-TOGS AWQS. However, it does have a NYSDEC drinking water standard of 50 ug/l.

On March 23, 2015, the method detection limits of several compounds exceeded the NJ TOGS AWQS in monitoring wells MW-1, MW-2, and MW-3.
On September 7, 2016, carbon disulfide (0.71 J ug/l) was detected in monitoring well MW-1.
On September 7, 2016, 1,1-dichloroethene (1.5 ug/l) was detected in monitoring well MW-2.
On March 16, 2017, chloroethane (1.2 ug/l) was detected in monitoring well MW-2.
On March 16, 2017, carbon disulfide (4.8 ug/l) and methylene chloride (1.1 J ug/l) was detected in monitoring well MW-5D.
On June 13, 2017, MTBE (0.29 ug/l) was detected in monitoring well MW-8.
On August 2, 2018, the method detection limits of several compounds exceeded the NJ TOGS AWQS in monitoring wells MW-2.
On September 11, 2019, chloroethane (3 ug/l) was detected in monitoring well MW-2.

TABLE 2B
HISTORIC GROUNDWATER SAMPLING RESULTS - SVOCs, PESTICIDES, PCBs
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Product Thickness (ft)	Corrected Groundwater Elevation (ft)	Anthracene	B(a)A	B(a)P	B(b)F	B(g,h,i)P	B(k)F	Carbazole	Chrysene	D(a,h)A	Fluoranthene	I(1,2,3-cd)P	2-MN	Naphthalene	Phenanthrene	Pyrene	SVO TICs	PCBs	2,4,5-TP (Silvex)
NY-TOGS AWQS (µg/l)							--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.09**	**0.26**
MW-1	L1505636-01	03/23/15	26.72	12.10	0.00	14.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.70)	NA	NA	NA	NA	NA
	JC27127-1	09/07/16		12.28	0.00	14.44	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.34)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.33)	ND (0.17)	ND (0.33)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.22)	0	ND	ND (0.039)
	--	10/14/16		12.51	0.00	14.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-1	03/16/17		12.36	0.00	14.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-1	06/13/17		12.34	0.00	14.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-1	04/11/19		12.60	0.00	14.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-1	07/02/19		12.28	0.00	14.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-1	09/11/19		12.42	0.00	14.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	L1505636-02	03/23/15	26.71	11.65	0.00	15.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (7)	NA	NA	NA	NA	NA
	JC27127-2	09/07/16		12.10	0.00	14.61	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.34)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.33)	ND (0.17)	ND (0.33)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.22)	13.9 J	ND	ND (0.059)
	--	10/14/16		12.10	0.00	14.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-2	03/16/17		11.99	0.00	14.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-2	06/13/17		11.95	0.00	14.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC71235-1	08/02/18		11.85	0.00	14.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-2	04/11/19		11.94	0.00	14.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-2	07/02/19		11.76	0.00	14.95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-2	09/11/19		11.94	0.00	14.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	L1505636-03	03/23/15	25.39	10.42	0.00	14.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.70)	NA	NA	NA	NA	NA
	JC27127-3	09/07/16		10.84	0.00	14.55	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.34)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.33)	ND (0.17)	ND (0.33)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.22)	0	ND	ND (0.039)
	--	10/14/16		10.86	0.00	14.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-3	03/16/17		10.73	0.00	14.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-3	06/13/17		10.65	0.00	14.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-3	04/11/19		10.67	0.00	14.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-3	07/02/19		10.60	0.00	14.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-3	09/11/19		10.77	0.00	14.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	JC27127-4	09/07/16	27.23	10.64	0.00	16.59	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.34)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.33)	ND (0.17)	ND (0.33)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.22)	4.6 J	ND	ND (0.039)
	--	10/14/16		10.78	0.00	16.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-4	03/16/17		10.80	0.00	16.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-4	06/13/17		10.33	0.00	16.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		10.64	0.00	16.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.19	0.00	17.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.56	0.00	16.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5D	JC27127-5	09/07/16	25.95	8.25	0.00	17.70	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.34)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.33)	ND (0.17)	ND (0.33)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.22)	9.4 J	ND	ND (0.039)
	--	10/14/16		8.30	0.00	17.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-5	03/16/17		8.05	0.00	17.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-5	06/13/17		7.92	0.00	18.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		7.74	0.00	18.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		7.79	0.00	18.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		6.09	0.00	19.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 (Well Abandoned)	JC27127-6	09/07/16	25.85	8.17	0.00	17.68	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.34)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.33)	ND (0.17)	ND (0.33)	ND (0.21)	ND (0.23)	ND (0.18)	ND (0.22)	0	ND	ND (0.039)
	JC29704-1	10/14/16		8.19	0.00	17.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7	JC39069-6	03/16/17	26.41	11.71	0.00	14.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-6	06/13/17		11.68	0.00	14.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-4	04/11/19		11.72	0.00	14.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-4	07/02/19		11.65	0.00	14.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-4	09/11/19		11.82	0.00	14.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	JC39069-7	03/16/17	23.21	9.38	0.00	13.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-7	06/13/17		9.21	0.00	14.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-5	04/11/19		10.66	0.00	12.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-5	07/02/19		9.45	0.00	13.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-5	09/11/19		9.33	0.00	13.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	JC39069-8	03/16/17	23.91	10.60	0.00	13.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-8	06/13/17		10.72	0.00	13.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-6	04/11/19		9.30	0.00	14.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-6	07/02/19		10.78	0.00	13.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-6	09/11/19		11.19	0.00	12.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 2B
HISTORIC GROUNDWATER SAMPLING RESULTS - SVOCs, PESTICIDES, PCBs
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Product Thickness (ft)	Corrected Groundwater Elevation (ft)	Anthracene	B(a)A	B(a)P	B(b)F	B(g,h,i)P	B(k)F	Carbazole	Chrysene	D(a,h)A	Fluoranthene	I(1,2,3-cd)P	2-MN	Naphthalene	Phenanthrene	Pyrene	SVO TICs	PCBs	2,4,5-TP (Silvex)
NY-TOGS AWQS (µg/l)							--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.26
MW-10	JC39069-9	03/16/17	24.22	11.25	0.00	12.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-9	06/13/17		11.25	0.00	12.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-7	04/11/19		11.32	0.00	12.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-7	07/02/19		11.28	0.00	12.94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-7	09/11/19		11.33	0.00	12.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-11	JC39069-10	03/16/17	25.38	10.45	0.00	14.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-10	06/13/17		10.51	0.00	14.87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		10.55	0.00	14.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.45	0.00	14.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.59	0.00	14.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Legend:

µg/l: micrograms per liter, ppb
NY-TOGS AWQS: New York Technical & Operational Guidance Series Ambient Water Quality Standards
--: Not Established
NA: Not Analyzed
NS: Not Sampled
J: Estimated Concentration
ND: Not Detected
ND (0.21) Not Detected followed by method detection limit (MDL)
260 Concentration in excess of NY TOGS AWQS
ND (1.6) MDL exceeds the NY TOGS AWQS
B(a)A: Benzo(a)anthracene
B(a)P: Benzo(a)pyrene
B(b)F: Benzo(b)fluoranthene
B(g,h,i)P: Benzo(g,h,i)perylene
B(k)F: Benzo(k)fluoranthene
D(a,h)A: Dibenzo(a,h)anthracene
I(1,2,3-cd)P: Indeno(1,2,3-cd)pyrene
2-MN: 2-Methylnaphthalene
SVO TICs: Semi-volatile organic tentatively identified compounds
PCBs: Polychlorinated biphenyls

On September 7, 2016, delta-BHC (0.0035 J ug/l) was detected in monitoring well MW-1.
On September 7, 2016, acenaphthene (0.80 J ug/l) was detected in monitoring well MW-2.
On September 7, 2016, delta-BHC (0.0039 J ug/l) was detected in monitoring well MW-3.
On September 7, 2016, delta-BHC (0.0033 J ug/l) was detected in monitoring well MW-6.

TABLE 2C
HISTORIC GROUNDWATER SAMPLING RESULTS - METALS UNFILTERED
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Product Thickness (ft)	Corrected Groundwater Elevation (ft)	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Trivalent Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Silver	Sodium	Thallium	Vanadium	Zinc	Cyanide
NY-TOGS AWQS (ug/l)							--	25	1,000		5	--	--	50	--	200	300	25	--	300	0.7	100	--	50	20,000	--	--	--	200
MW-1	L1505636-01	03/23/15	26.72	12.10	0.00	14.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC27127-1	09/07/16		12.28	0.00	14.44	1,730	17.8	982	ND (1.0)	ND (3.0)	510,000	ND (20)	11	ND (50)	ND (10)	22,500	105	91,300	3,250	0.23	ND (10)	14,600	ND (10)	416,000	ND (6.0)	ND (50)	57.1	15
	--	10/14/16		12.51	0.00	14.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-1	03/16/17		12.36	0.00	14.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-1	06/13/17		12.34	0.00	14.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-1	04/11/19		12.60	0.00	14.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-1	07/02/19		12.28	0.00	14.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-1	09/11/19		12.42	0.00	14.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	L1505636-02	03/23/15	26.71	11.65	0.00	15.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC27127-2	09/07/16		12.10	0.00	14.61	555	50.6	546	ND (1.0)	ND (3.0)	282,000	ND (40)	31	ND (50)	ND (10)	43,700	10.8	105,000	4,560	ND (0.20)	12.8	ND (10000)	ND (10)	80,300	ND (2.0)	ND (50)	ND (20)	120
	--	10/14/16		12.10	0.00	14.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-2	03/16/17		11.99	0.00	14.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-2	06/13/17		11.95	0.00	14.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC71235-1	08/02/18		11.85	0.00	14.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-2	04/11/19		11.94	0.00	14.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-2	07/02/19		11.76	0.00	14.95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-2	09/11/19		11.94	0.00	14.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	L1505636-03	03/23/15	25.39	10.42	0.00	14.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC27127-3	09/07/16		10.84	0.00	14.55	ND (200)	6.6	679	ND (1.0)	ND (3.0)	447,000	ND (20)	17	ND (50)	ND (10)	41,200	4.3	63,700	4,200	ND (0.20)	ND (10)	18,300	ND (10)	570,000	ND (6.0)	ND (50)	ND (20)	56
	--	10/14/16		10.86	0.00	14.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-3	03/16/17		10.73	0.00	14.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-3	06/13/17		10.65	0.00	14.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-3	04/11/19		10.67	0.00	14.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-3	07/02/19		10.60	0.00	14.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-3	09/11/19		10.77	0.00	14.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	JC27127-4	09/07/16	27.23	10.64	0.00	16.59	ND (200)	6.9	1,450	ND (1.0)	ND (3.0)	750,000	ND (40)	33	ND (50)	ND (10)	67,500	ND (3.0)	131,000	7,320	ND (0.20)	ND (10)	25,100	ND (10)	955,000	ND (10)	ND (50)	ND (20)	46
	--	10/14/16		10.78	0.00	16.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-4	03/16/17		10.80	0.00	16.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-4	06/13/17		10.33	0.00	16.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		10.64	0.00	16.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.19	0.00	17.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.56	0.00	16.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5D	JC27127-5	09/07/16	25.95	8.25	0.00	17.70	285	3.8	251	ND (1.0)	ND (3.0)	73,900	ND (20)	ND (10)	ND (50)	ND (10)	721	ND (3.0)	35,600	202	0.34	ND (10)	ND (10000)	ND (10)	17,400	ND (2.0)	ND (50)	ND (20)	ND (10)
	--	10/14/16		8.30	0.00	17.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-5	03/16/17		8.05	0.00	17.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-5	06/13/17		7.92	0.00	18.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		7.74	0.00	18.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		7.79	0.00	18.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		6.09	0.00	19.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 (Well Abandoned)	JC27127-6	09/07/16	25.85	8.17	0.00	17.68	ND (200)	9.2	344	ND (1.0)	ND (3.0)	201,000	ND (20)	ND (10)	ND (50)	ND (10)	8,330	ND (3.0)	42,400	3,370	ND (0.20)	ND (10)	ND (10000)	ND (10)	183,000	ND (2.0)	ND (50)	ND (20)	54
	JC29704-1	10/14/16		8.19	0.00	17.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7	JC39069-6	03/16/17	26.41	11.71	0.00	14.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-6	06/13/17		11.68	0.00	14.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-4	04/11/19		11.72	0.00	14.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-4	07/02/19		11.65	0.00	14.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-4	09/11/19		11.82	0.00	14.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	JC39069-7	03/16/17	23.21	9.38	0.00	13.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-7	06/13/17		9.21	0.00	14.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-5	04/11/19		10.66	0.00	12.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-5	07/02/19		9.45	0.00	13.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-5	09/11/19		9.33	0.00	13.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	JC39069-8	03/16/17	23.91	10.60	0.00	13.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-8	06/13/17		10.72	0.00	13.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-6	04/11/19		9.30	0.00	14.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-6	07/02/19		10.78	0.00	13.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-6	09/11/19		11.19	0.00	12.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	JC39069-9	03/16/17	24.22	11.25	0.00	12.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-9	06/13/17		11.25	0.00	12.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-7	04/11/19		11.32	0.00	12.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-7	07/02/19		11.28	0.00	12.94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-7	09/11/19		11.33	0.00	12.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-11	JC39069-10	03/16/17	25.38	10.45	0.00	14.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-10	06/13/17		10.51	0.00	14.87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		10.55	0.00	14.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.45	0.00	14.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.59	0.00	14.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Legend:
µg/l: micrograms per liter, ppb
NY-TOGS AWQS: New York Technical & Operational Guidance Series Ambient Water Quality Standards
--: Not Established
NA: Not Analyzed
NS: Not Sampled
J: Estimated Concentration
ND: Not Detected
ND (0.21) Not Detected followed by method detection limit (MDL)
260 Concentration in excess of NY TOGS AWQS
ND (1.6) MDL exceeds the NY TOGS AWQS

TABLE 2D
HISTORIC GROUNDWATER SAMPLING RESULTS - METALS FILTERED
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Product Thickness (ft)	Corrected Groundwater Elevation (ft)	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Trivalent Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Silver	Sodium	Thallium	Vanadium	Zinc	Cyanide
NY-TOGS AWQS (µg/l)							--	25	1,000	--	5	--	--	50	--	200	300	25	--	300	0.7	100	--	50	20,000	--	--	--	200
MW-1	L1505636-01	03/23/15	26.72	12.10	0.00	14.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC27127-1	09/07/16		12.28	0.00	14.44	ND (200)	6.8	894	ND (1.0)	ND (3.0)	527,000	NA	NA	ND (50)	ND (10)	5,380	ND (3.0)	93,000	3,310	ND (0.20)	ND (10)	14,600	ND (10)	465,000	ND (6.0)	ND (50)	ND (20)	NA
	--	10/14/16		12.51	0.00	14.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-1	03/16/17		12.36	0.00	14.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-1	06/13/17		12.34	0.00	14.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-1	04/11/19		12.60	0.00	14.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-1	07/02/19		12.28	0.00	14.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-1	09/11/19		12.42	0.00	14.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	L1505636-02	03/23/15	26.71	11.65	0.00	15.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC27127-2	09/07/16		12.10	0.00	14.61	ND (200)	13.8	318	ND (1.0)	ND (3.0)	259,000	NA	NA	ND (50)	ND (10)	1,480	3	99,700	4,130	ND (0.20)	11.8	ND (10000)	ND (10)	76,400	ND (2.0)	ND (50)	ND (20)	NA
	--	10/14/16		12.10	0.00	14.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-2	03/16/17		11.99	0.00	14.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-2	06/13/17		11.95	0.00	14.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC71235-1	08/02/18		11.85	0.00	14.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-2	04/11/19		11.94	0.00	14.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-2	07/02/19		11.76	0.00	14.95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-2	09/11/19		11.94	0.00	14.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	L1505636-03	03/23/15	25.39	10.42	0.00	14.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC27127-3	09/07/16		10.84	0.00	14.55	ND (200)	3.5	548	ND (1.0)	ND (3.0)	436,000	NA	NA	ND (50)	ND (10)	14,900	ND (3.0)	62,400	4,110	ND (0.20)	ND (10)	17,900	ND (10)	562,000	ND (6.0)	ND (50)	ND (20)	NA
	--	10/14/16		10.86	0.00	14.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-3	03/16/17		10.73	0.00	14.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-3	06/13/17		10.65	0.00	14.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-3	04/11/19		10.67	0.00	14.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-3	07/02/19		10.60	0.00	14.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-3	09/11/19		10.77	0.00	14.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	JC27127-4	09/07/16	27.23	10.64	0.00	16.59	ND (200)	ND (3.0)	1,290	ND (1.0)	ND (3.0)	720,000	NA	NA	ND (50)	ND (10)	42,500	ND (3.0)	128,000	7,150	ND (0.20)	ND (10)	24,200	ND (10)	930,000	ND (10)	ND (50)	ND (20)	NA
	--	10/14/16		10.78	0.00	16.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-4	03/16/17		10.80	0.00	16.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-4	06/13/17		10.33	0.00	16.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		10.64	0.00	16.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.19	0.00	17.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.56	0.00	16.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5D	JC27127-5	09/07/16	25.95	8.25	0.00	17.70	ND (200)	3.8	233	ND (1.0)	ND (3.0)	70,400	NA	NA	ND (50)	ND (10)	ND (100)	ND (3.0)	34,200	189	ND (0.20)	ND (10)	ND (10000)	ND (10)	17,000	ND (2.0)	ND (50)	ND (20)	NA
	--	10/14/16		8.30	0.00	17.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	JC39069-5	03/16/17		8.05	0.00	17.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-5	06/13/17		7.92	0.00	18.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		7.74	0.00	18.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		7.79	0.00	18.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		6.09	0.00	19.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 (Well Abandoned)	JC27127-6	09/07/16	25.85	8.17	0.00	17.68	ND (200)	4.2	300	ND (1.0)	ND (3.0)	194,000	NA	NA	ND (50)	ND (10)	1,820	ND (3.0)	41,400	3,230	ND (0.20)	ND (10)	ND (10000)	ND (10)	179,000	ND (2.0)	ND (50)	ND (20)	NA
	JC29704-1	10/14/16		8.19	0.00	17.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7	JC39069-6	03/16/17	26.41	11.71	0.00	14.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-6	06/13/17		11.68	0.00	14.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-4	04/11/19		11.72	0.00	14.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-4	07/02/19		11.65	0.00	14.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-4	09/11/19		11.82	0.00	14.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	JC39069-7	03/16/17	23.21	9.38	0.00	13.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-7	06/13/17		9.21	0.00	14.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-5	04/11/19		10.66	0.00	12.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-5	07/02/19		9.45	0.00	13.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-5	09/11/19		9.33	0.00	13.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	JC39069-8	03/16/17	23.91	10.60	0.00	13.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-8	06/13/17		10.72	0.00	13.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-6	04/11/19		9.30	0.00	14.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-6	07/02/19		10.78	0.00	13.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-6	09/11/19		11.19	0.00	12.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	JC39069-9	03/16/17	24.22	11.25	0.00	12.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-9	06/13/17		11.25	0.00	12.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC86327-7	04/11/19		11.32	0.00	12.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC91208-7	07/02/19		11.28	0.00	12.94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC94875-7	09/11/19		11.33	0.00	12.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-11	JC39069-10	03/16/17	25.38	10.45	0.00	14.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	JC45226-10	06/13/17		10.51	0.00	14.87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	--	04/11/19		10.55	0.00	14.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	07/02/19		10.45	0.00	14.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	--	09/11/19		10.59	0.00	14.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Legend:
µg/l: micrograms per liter, ppb
NY-TOGS AWQS: New York Technical & Operational Guidance Series Ambient Water Quality Standards
--: Not Established
NA: Not Analyzed
NS: Not Sampled
J: Estimated Concentration
ND: Not Detected
ND (0.21) Not Detected followed by method detection limit (MDL)
260 Concentration in excess of NY TOGS AWQS
ND (1.6) MDL exceeds the NY TOGS AWQS

TABLE 2E
HISTORIC GROUNDWATER SAMPLING RESULTS - PFAS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No:			MW-1	MW-2	MW-7
Laboratory ID#:			JC91208-1	JC91208-2	JC91208-4
Date Collected:			7/2/2019	7/2/2019	7/2/2019
Matrix:		NY-TOGS AWQS	Ground Water	Ground Water	Ground Water
Perfluorobutanoic acid	ng/l	-	19.5	36.6	19
Perfluoropentanoic acid	ng/l	-	38.1	65.7	28.2
Perfluorohexanoic acid	ng/l	-	29.9	46.5	22.4
Perfluoroheptanoic acid	ng/l	-	20.1	36.4	17.1
Perfluorooctanoic acid	ng/l	-	56.4	136	74.7
Perfluorononanoic acid	ng/l	-	1.12 J	9.75	5.24
Perfluorodecanoic acid	ng/l	-	ND (1.0)	10.3	2.01 J
Perfluoroundecanoic acid	ng/l	-	ND (1.0)	ND (1.0)	ND (1.0)
Perfluorododecanoic acid	ng/l	-	ND (1.5)	ND (1.5)	ND (1.5)
Perfluorotridecanoic acid	ng/l	-	ND (1.0)	ND (1.0)	ND (1.0)
Perfluorotetradecanoic acid	ng/l	-	ND (1.0)	ND (1.0)	ND (1.0)
Perfluorobutanesulfonic acid	ng/l	-	17.6	24.8	30.4
Perfluorohexanesulfonic acid	ng/l	-	22	15.2	26.8
Perfluoroheptanesulfonic acid	ng/l	-	1.45 J	3.66 J	2.50 J
Perfluorooctanesulfonic acid	ng/l	-	31.1	70.9	65
Perfluorodecanesulfonic acid	ng/l	-	ND (1.0)	ND (1.0)	ND (1.0)
PFOSA	ng/l	-	ND (1.0)	ND (1.0)	ND (1.0)
MeFOSAA	ng/l	-	ND (4.0)	ND (4.0)	ND (4.0)
EtFOSAA	ng/l	-	ND (4.0)	ND (4.0)	ND (4.0)
6:2 Fluorotelomer sulfonate	ng/l	-	ND (2.0)	11.1	2.36 J
8:2 Fluorotelomer sulfonate	ng/l	-	ND (2.0)	ND (2.0)	ND (2.0)

Legend:

ng/l:	nanograms per liter, ppt
NY-TOGS AWQS:	New York Technical & Operational Guidance Series Ambient Water Quality Standards
PFOSA:	Perfluorooctanesulfonamide
MeFOSAA:	2-(N-Methyl-perfluorooctane sulfonamido) acetic acid
EtFOSAA:	2-(N-Ethyl-perfluorooctane sulfonamido) acetic acid
--:	Not Established
NA:	Not Analyzed
NS:	Not Sampled
J:	Estimated Concentration
ND:	Not Detected
ND (0.21)	Not Detected followed by method detection limit (MDL)
260	Concentration in excess of NY TOGS AWQS
ND (1.6)	MDL exceeds the NY TOGS AWQS

TABLE 3A
HISTORIC SOIL SAMPLING RESULTS - VOLATILE ORGANICS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Sample Depth (ft.)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Tetrachloroethene	Trichloroethene	Vinyl chloride	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Acetone	2-Butanone	Carbon Disulfide	VO TICs
NY-UNRES (mg/kg)				0.06	0.7	1	0.26	1.3	0.47	0.02	0.25	0.19	0.05	0.05	0.12	--	--
NY-RESGW (mg/kg)				0.06	0.7	1	1.6	1.3	0.47	0.02	0.25	0.19	0.05	0.05	0.3	2.7	--
NY-RESR (mg/kg)				2.9	100	30	100	5.5	10	0.21	59	100	51	100	100	100	--
NY-RESC (mg/kg)				44	500	390	500	150	200	13	500	500	500	500	500	--	--
B-1	L1502751-01	02/12/15	16.0-17.0	ND (0.00012)	ND (0.00020)	ND (0.00013)	ND (0.00018)	ND (0.00015)	ND (0.00013)	ND (0.00012)	ND (0.00015)	ND (0.00022)	ND (0.0012)	0.011	0.0024 J	ND (0.0011))	NA
B-2	L1502751-02	02/12/15	19.0-20.0	0.019 J	ND (0.015)	ND (0.0098)	ND (0.013)	ND (0.011)	ND (0.0096)	6.7	8.2	ND (0.016)	**ND (0.085)**	**ND (0.080)**	ND (0.021)	**ND (0.085)**	NA
SB-1A	L1505134-01	03/18/15	8.0-8.5	ND (0.0068)	ND (0.011)	ND (0.0073)	ND (0.0099)	2.2	0.14	ND (0.0067)	ND (0.0082)	ND (0.012)	**ND (0.063)**	0.086 J	ND (0.016)	ND (0.063)	NA
SB-1B	L1505134-02	03/18/15	13.0-13.5	ND (0.0061)	ND (0.01)	ND (0.0066)	ND (0.0088)	0.74	0.99	ND (0.014)	0.19	0.068 J	**ND (0.057)**	**ND (0.053)**	ND (0.014)	ND (0.057)	NA
SB-2A	L1505134-03	03/18/15	6.0-6.5	ND (0.014)	ND (0.023)	ND (0.015)	ND (0.02)	26	0.48	ND (0.006)	0.076 J	ND (0.025)	**ND (0.13)**	**ND (0.12)**	ND (0.033)	ND (0.13)	NA
SB-2B	L1505134-04	03/18/15	13.0-13.5	ND (0.00011)	ND (0.00018)	ND (0.00012)	ND (0.00016)	0.013	0.0028	0.00032 J	0.005	ND (0.0002)	ND (0.001)	0.0044 J	ND (0.00026)	ND (0.001)	NA
SB-3A	L1505134-05	03/18/15	4.0-4.5	ND (0.0001)	0.015	0.014	0.042	0.00056 J	0.00064 J	0.0031	0.0017	ND (0.00018)	ND (0.00096)	0.057	0.015	0.0036 J	NA
SB-3B	L1505134-06	03/18/15	12.0-12.5	0.0037	0.0034	0.0036	0.007	0.0082	0.00011	0.0006 J	0.0015	ND (0.00019)	ND (0.001)	0.035	0.007 J	0.015	NA
SB-4	JC23877-6	07/11/16	4.0-4.5	ND (0.00013)	ND (0.00029)	ND (0.00016)	ND (0.00021)	ND (0.00029)	ND (0.00020)	ND (0.00021)	ND (0.00046)	ND (0.00017)	ND (0.00036)	0.0075 J	ND (0.0018)	ND (0.00018)	0
SB-4	JC23877-7	07/11/16	6.0-6.5	ND (0.00014)	ND (0.00015)	ND (0.00018)	ND (0.00024)	ND (0.00034)	ND (0.00023)	ND (0.00024)	ND (0.00053)	ND (0.00019)	0.00042 J	ND (0.0023)	ND (0.0021)	ND (0.00021)	0
SB-4	JC23877-8	07/11/16	8.0-8.5	ND (0.00015)	ND (0.00015)	ND (0.00018)	ND (0.00025)	0.0011 J	0.00026 J	ND (0.00025)	ND (0.00053)	ND (0.00019)	ND (0.00042)	ND (0.0023)	ND (0.0021)	ND (0.00021)	0
SB-4	JC23877-9	07/11/16	14.0-14.5	0.0436 J	0.167	ND (0.019)	ND (0.026)	ND (0.036)	ND (0.024)	**ND (0.026)**	0.189	ND (0.020)	ND (0.044)	**ND (0.24)**	ND (0.23)	ND (0.022)	82.3 J
SB-4	JC23877-10	07/11/16	19.5-20.0	ND (0.00016)	ND (0.00016)	ND (0.00019)	ND (0.00026)	ND (0.00036)	ND (0.00025)	ND (0.00026)	ND (0.00057)	ND (0.00020)	ND (0.00044)	0.0505	0.0137	0.00046 J	0
SB-5	JC23877-1	07/11/16	4.0-4.5	ND (0.00013)	ND (0.00013)	ND (0.00016)	ND (0.00022)	0.0020 J	ND (0.00021)	ND (0.00022)	ND (0.00047)	ND (0.00017)	ND (0.00037)	ND (0.0020)	ND (0.0019)	ND (0.00018)	0
SB-5	JC23877-2	07/11/16	6.0-6.5	ND (0.00015)	ND (0.00015)	ND (0.00018)	ND (0.00024)	0.00099 J	ND (0.00023)	ND (0.00024)	ND (0.00053)	ND (0.00019)	ND (0.00041)	ND (0.0023)	ND (0.0021)	ND (0.00021)	0
SB-5	JC23877-3	07/11/16	8.0-8.5	ND (0.00016)	ND (0.00017)	ND (0.00020)	ND (0.00027)	0.00073 J	ND (0.00025)	ND (0.00027)	ND (0.00058)	ND (0.00021)	ND (0.00045)	ND (0.0025)	ND (0.0023)	ND (0.00023)	0
SB-5	JC23877-4	07/11/16	13.0-13.5	ND (0.00012)	ND (0.00013)	0.00021 J	ND (0.00021)	0.0015 J	ND (0.00020)	ND (0.00021)	ND (0.00045)	ND (0.00016)	ND (0.00035)	ND (0.0019)	ND (0.0018)	ND (0.00018)	0.201 J
SB-5	JC23877-5	07/11/16	19.5-20.0	ND (0.00014)	ND (0.00015)	ND (0.00018)	ND (0.00024)	ND (0.00033)	ND (0.00023)	ND (0.00024)	ND (0.00052)	ND (0.00019)	ND (0.00041)	0.0099 J	ND (0.0021)	ND (0.00020)	0
B-2R	JC23877-11	07/11/16	19.5-20.0	ND (0.00017)	ND (0.00018)	ND (0.00021)	ND (0.00029)	ND (0.00040)	ND (0.00027)	ND (0.00029)	ND (0.00062)	ND (0.00022)	ND (0.00049)	0.0667	0.0165	0.00048 J	0
B-2R	JC23877-12	07/11/16	24.5-25.0	ND (0.00016)	ND (0.00017)	ND (0.00020)	ND (0.00028)	ND (0.00038)	ND (0.00026)	ND (0.00028)	ND (0.00060)	ND (0.00022)	ND (0.00047)	0.0607	0.0167	0.00062 J	0
B-2R	JC23877-13	07/11/16	26.5-27.0	ND (0.00017)	ND (0.00017)	ND (0.00021)	ND (0.00028)	ND (0.00039)	ND (0.00026)	ND (0.00028)	ND (0.00061)	ND (0.00022)	ND (0.00048)	0.0559	0.0149	0.00043 J	0
SB-8	JC23951-1	07/12/16	4.0-4.5	ND (0.00012)	ND (0.00013)	ND (0.00015)	ND (0.00020)	ND (0.00028)	ND (0.00019)	ND (0.00020)	ND (0.00044)	ND (0.00016)	0.00057 J	ND (0.0019)	ND (0.0018)	ND (0.00017)	0
SB-8	JC23951-2	07/12/16	6.0-6.5	ND (0.00012)	ND (0.00012)	ND (0.00014)	ND (0.00020)	ND (0.00027)	ND (0.00018)	ND (0.00020)	ND (0.00042)	ND (0.00015)	0.00060 J	ND (0.0018)	ND (0.0017)	ND (0.00016)	0
SB-8	JC23951-3	07/12/16	8.0-8.5	ND (0.00011)	ND (0.00012)	ND (0.00014)	ND (0.00019)	ND (0.00026)	ND (0.00018)	ND (0.00019)	ND (0.00041)	ND (0.00015)	0.00085 J	ND (0.0017)	ND (0.0016)	ND (0.00016)	0
SB-8	JC23951-4	07/12/16	13.0-13.5	0.00022 J	ND (0.00014)	ND (0.00016)	ND (0.00022)	ND (0.00030)	ND (0.00021)	ND (0.00022)	ND (0.00047)	ND (0.00017)	0.00086 J	0.0112	ND (0.0019)	0.0015 J	0
SB-8	JC23951-5	07/12/16	19.5-20.0	ND (0.00012)	ND (0.00013)	ND (0.00015)	ND (0.00020)	ND (0.00028)	ND (0.00019)	ND (0.00020)	ND (0.00044)	ND (0.00016)	0.0012 J	0.0261	ND (0.0018)	0.0019 J	0
ISB-1	JC24077-5	07/13/16	2.0-2.5	ND (0.00014)	ND (0.00014)	ND (0.00017)	ND (0.00023)	0.0163	ND (0.00022)	ND (0.00023)	0.00070 J	ND (0.00018)	ND (0.00040)	0.0095 J	ND (0.0020)	ND (0.00020)	0
ISB-1	JC24077-6	07/13/16	4.0-4.5	ND (0.00012)	ND (0.00013)	ND (0.00015)	ND (0.00021)	0.0061	ND (0.00019)	ND (0.00021)	0.001	ND (0.00016)	ND (0.00035)	0.0081 J	ND (0.0018)	ND (0.00017)	0
ISB-1	JC24077-7	07/13/16	7.5-8.0	0.0013	ND (0.00022)	ND (0.00026)	ND (0.00035)	0.013	0.0065	2.69	8.81	0.0043	ND (0.00060)	0.0586	ND (0.0031)	0.0014 J	0
ISB-2	JC24077-1	07/13/16	2.0-2.5	ND (0.00014)	ND (0.00015)	ND (0.00018)	ND (0.00024)	0.007	ND (0.00023)	ND (0.00024)	ND (0.00052)	ND (0.00019)	0.0011 J	0.0097 J	ND (0.0021)	ND (0.00020)	0.0142 J
ISB-2	JC24077-2	07/13/16	4.0-4.5	ND (0.00016)	ND (0.00017)	ND (0.00020)	ND (0.00027)	0.0027	ND (0.00025)	ND (0.00027)	ND (0.00059)	ND (0.00021)	0.0012 J	0.0343	0.0048 J	0.00084 J	0
ISB-2	JC24077-3	07/13/16	6.0-6.5	ND (0.00029)	ND (0.00030)	ND (0.00035)	ND (0.00027)	ND (0.00067)	ND (0.00045)	ND (0.00048)	ND (0.0010)	ND (0.00038)	0.0022 J	0.157	0.0332	0.00098 J	0
ISB-2	JC24077-4	07/13/16	8.5-9.0	ND (0.00015)	ND (0.00016)	ND (0.00018)	ND (0.00025)	0.0017 J	ND (0.00024)	ND (0.00025)	ND (0.0054)	ND (0.00020)	0.0012 J	0.0284	0.0027 J	0.0018 J	0
SB-6	JC26155-5	08/18/16	4.0-4.5	ND (0.00012)	ND (0.00012)	ND (0.00014)	ND (0.00020)	0.0029	ND (0.00018)	ND (0.00020)	ND (0.00043)	ND (0.00015)	0.00045 J	ND (0.0018)	ND (0.0017)	ND (0.00017)	0
SB-6	JC26216-4	08/19/16	6.0-6.5	0.00059	0.00016 J	ND (0.00014)	ND (0.00019)	ND (0.00027)	ND (0.00018)	ND (0.00019)	ND (0.00042)	ND (0.00015)	0.0013 J	0.045	0.0112	0.00081 J	0
SB-6	JC26216-5	08/19/16	8.0-8.5	ND (0.00012)	ND (0.00012)	ND (0.00015)	ND (0.00020)	ND (0.00027)	ND (0.00019)	ND (0.00020)	ND (0.00043)	ND (0.00015)	0.0021 J	ND (0.0018)	ND (0.0017)	0.00054 J	0
SB-6	JC26216-6	08/19/16	13.0-13.5	ND (0.00010)	ND (0.00011)	ND (0.00013)	ND (0.00028)	ND (0.00024)	ND (0.00016)	ND (0.00017)	ND (0.00037)	ND (0.00013)	0.00084 J	0.0109	ND (0.0015)	0.00059 J	0
SB-6	JC26216-7	08/19/16	19.5-20.0	ND (0.00017)	ND (0.00017)	ND (0.00021)	ND (0.00028)	ND (0.00039)	ND (0.00026)	ND (0.00028)	ND (0.00061)	ND (0.00022)	ND (0.00048)	0.0381	0.0103 J	0.00079 J	0
SB-7	JC26155-3	08/18/16	4.0-4.5	0.00013 J	ND (0.00012)	ND (0.00014)	ND (0.00019)	ND (0.00026)	ND (0.00018)	ND (0.00019)	ND (0.00041)	ND (0.00015)	0.00048 J	0.0249	ND (0.0017)	0.00043 J	0
SB-7	JC26155-4	08/18/16	6.0-6.5	ND (0.00010)	ND (0.00010)	ND (0.00012)	ND (0.00017)	ND (0.00023)	ND (0.00016)	ND (0.00017)	0.00069 J	0.00073 J	0.00043 J	0.0208	ND (0.0015)	0.00053 J	0
SB-7	JC26216-8	08/19/16	8.0-8.5	0.00027 J	ND (0.00011)	ND (0.00013)	ND (0.00018)	ND (0.00025)	ND (0.00017)	0.00094 J	0.0064	0.0016	0.0014 J	0.0128	ND (0.0016)	0.00035 J	0
SB-7	JC26216-9	08/19/16	13.0-13.5	ND (0.00014)	ND (0.00014)	ND (0.00017)	ND (0.00023)	ND (0.00032)	ND (0.00022)	0.00040 J	0.00080 J	ND (0.00018)	0.0016 J	0.0362	0.0081 J	0.0011 J	0
SB-7	JC26216-10	08/19/16	19.5-20.0	ND (0.00016)	ND (0.00016)	ND (0.00020)	ND (0.00027)	ND (0.00037)	ND (0.00025)	ND (0.00027)	ND (0.00058)	ND (0.00021)	0.0012 J	0.0471	0.0131	0.00068 J	0
SB-9	JC26155-2	08/18/16	4.0-4.5	ND (0.00012)	ND (0.00013)	ND (0.00015)	ND (0.00021)	ND (0.00029)	ND (0.00019)	ND (0.00021)	ND (0.00045)	ND (0.00016)	0.00050 J	0.0090 J	ND (0.0018)	ND (0.00017)	0
SB-9	JC26216-15	08/19/16	6.0-6.5	ND (0.00011)	ND (0.00011)	ND (0.00013)	ND (0.00018)	ND (0.00025)	ND (0.00017)	ND (0.00018)	ND (0.00039)	ND (0.00014)	0.00090 J	0.0063 J	ND (0.0016)	0.00039 J	0
SB-9	JC26216-16	08/19/16	8.0-8.5	ND (0.00011)	ND (0.00011)	ND (0.00014)	ND (0.00018)	ND (0.00026)	ND (0.00017)	ND (0.00018)	ND (0.00040)	ND (0.00014)	0.0015 J	0.0191	0.0044 J	0.00074 J	0
SB-9	JC26216-17	08/19/16	13.0-13.5	ND (0.00012)	ND (0.00013)	ND (0.00015)	ND (0.00020)	ND (0.00028)	ND (0.00019)	ND (0.00020)	ND (0.00044)	ND (0.00016)	0.0015 J	0.0137	0.0030 J	0.0014 J	0
SB-9	JC26216-18	08/19/16	19.5-20.0	ND (0.00016)	ND (0.00017)	ND (0.00020)	ND (0.00027)	ND (0.00037)	ND (0.00025)	ND (0.00027)	ND (0.00058)	ND (0.00021)	0.0012 J	0.0507	0.0148	0.0024 J	0
SB-10	JC26155-1	08/18/16	4.0-4.5	ND (0.00011)	ND (0.00011)	ND (0.00013)	ND (0.00018)	ND (0.00025)	ND (0.00017)	ND (0.00018)	ND (0.00039)	ND (0.00014)	0.00046 J	ND (0.0017)	ND (0.0016)	ND (0.00015)	0
SB-10	JC26216-11	08/19/16	6.0-6.5	ND (0.00012)	ND (0.00012)	ND (0.00015)	ND (0.00020)	ND (0.00028)	ND (0.00019)	ND (0.00020)	ND (0.00044)	ND (0.00016)	0.0018 J	0.0047 J	ND (0.0018)	ND (0.00017)	0

TABLE 3A
HISTORIC SOIL SAMPLING RESULTS - VOLATILE ORGANICS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Sample Depth (ft.)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Tetrachloroethene	Trichloroethene	Vinyl chloride	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Acetone	2-Butanone	Carbon Disulfide	VO TICs
NY-UNRES (mg/kg)				0.06	0.7	1	0.26	1.3	0.47	0.02	0.25	0.19	0.05	0.05	0.12	--	--
NY-RESGW (mg/kg)				0.06	0.7	1	1.6	1.3	0.47	0.02	0.25	0.19	0.05	0.05	0.3	2.7	--
NY-RESR (mg/kg)				2.9	100	30	100	5.5	10	0.21	59	100	51	100	100	100	--
NY-RESC (mg/kg)				44	500	390	500	150	200	13	500	500	500	500	500	--	--
SB-10	JC26216-12	08/19/16	8.0-8.5	ND (0.00011)	0.00014 J	ND (0.00013)	ND (0.00018)	ND (0.00025)	ND (0.00017)	ND (0.00018)	ND (0.00039)	ND (0.00014)	0.0014 J	0.0129	ND (0.0016)	0.00043 J	0
SB-10	JC26216-13	08/19/16	13.0-13.5	ND (0.00030)	0.00095 J	ND (0.00037)	ND (0.00050)	ND (0.00070)	ND (0.00047)	ND (0.00050)	ND (0.0011)	ND (0.00039)	0.0022 J	0.143	0.0367	0.0017 J	0
SB-10	JC26216-14	08/19/16	19.5-20.0	ND (0.00013)	ND (0.00013)	ND (0.00016)	ND (0.00022)	ND (0.00030)	ND (0.00022)	ND (0.00021)	ND (0.00047)	ND (0.00017)	0.0011 J	0.0227	0.0041 J	0.00074 J	0
SB-1R	JC26216-1	08/19/16	13.0-13.5	ND (0.00010)	ND (0.00011)	ND (0.00013)	ND (0.00017)	ND (0.00024)	ND (0.00016)	ND (0.00017)	ND (0.00038)	ND (0.00014)	0.00094 J	0.0105	ND (0.0015)	0.00019 J	0
SB-1R	JC26216-2	08/19/16	18.0-18.5	ND (0.00015)	ND (0.00016)	ND (0.00019)	ND (0.00026)	ND (0.00036)	ND (0.00024)	ND (0.00026)	ND (0.00056)	ND (0.00020)	0.0017 J	0.051	0.0151	0.0013 J	0
SB-1R	JC26216-3	08/19/16	19.5-20.0	ND (0.00015)	ND (0.00016)	ND (0.00018)	ND (0.00025)	ND (0.00035)	ND (0.00024)	ND (0.00025)	ND (0.00054)	ND (0.00020)	ND (0.00042)	0.04	0.0100 J	0.00065 J	0
SB-11A	JC71234-1	08/02/18	12.5-13.0	0.00056 J	ND (0.00044)	ND (0.00064)	ND (0.00068)	0.0387	ND (0.00089)	ND (0.00055)	ND (0.0011)	ND (0.00078)	ND (0.0029)	0.025	ND (0.0044)	0.0016 J	0
SB-11B	JC71234-2	08/02/18	14.5-15.0	**ND (0.61)**	ND (0.61)	1.09 J	3.87	6.01	7.35	32	589	5.28	**ND (4.1)**	**ND (8.2)**	**ND (6.1)**	ND (1.5)	504.6 J
SB-12A	JC71234-3	08/02/18	12.5-13.0	ND (0.00040)	ND (0.00040)	ND (0.00059)	ND (0.00062)	0.017	ND (0.00082)	ND (0.00050)	0.0011	ND (0.00071)	ND (0.0027)	0.0224	ND (0.0040)	ND (0.00099)	0
SB-12B	JC71234-4	08/02/18	19.5-20.0	ND (0.00047)	ND (0.00047)	ND (0.00068)	ND (0.00072)	0.00064 J	ND (0.00094)	ND (0.00058)	ND (0.0012)	ND (0.00083)	ND (0.0031)	0.0296	ND (0.0046)	ND (0.0011)	0
SB-13A	JC71234-5	08/02/18	9.5-10.0	ND (0.00046)	ND (0.00046)	ND (0.00067)	ND (0.00071)	0.0298	ND (0.00093)	ND (0.00057)	ND (0.0012)	ND (0.00081)	ND (0.0031)	0.0091 J	ND (0.0046)	ND (0.0011)	0
SB-13B	JC71234-6	08/02/18	19.5-20.0	ND (0.00050)	ND (0.00050)	ND (0.00074)	ND (0.00078)	ND (0.00062)	ND (0.0010)	ND (0.00063)	ND (0.0013)	ND (0.00089)	ND (0.0033)	0.0281	ND (0.0050)	ND (0.0012)	0
PR-1	JC94766-1	09/10/19	8.0-8.5	ND (0.00040)	ND (0.00046)	ND (0.00048)	ND (0.00051)	0.0171	0.0024	ND (0.00042)	0.0013	ND (0.00053)	ND (0.00087)	ND (0.0035)	ND (0.0033)	ND (0.00081)	0
PR-1A	JC94766-2	09/10/19	13.0-13.5	ND (0.00046)	ND (0.00054)	ND (0.00056)	ND (0.00059)	ND (0.00059)	ND (0.00078)	ND (0.00049)	0	ND (0.00062)	ND (0.0010)	0.0084 J	ND (0.0038)	ND (0.00095)	0
PR-1B	JC94766-3	09/10/19	19.5-20.0	ND (0.00060)	ND (0.00069)	ND (0.00073)	ND (0.00077)	ND (0.00077)	ND (0.0010)	ND (0.00064)	ND (0.0011)	ND (0.00081)	ND (0.0013)	0.0286	ND (0.0049)	ND (0.0012)	0
PR-2	JC94766-4	09/10/19	6.0-6.5	ND (0.00044)	ND (0.00051)	ND (0.00053)	ND (0.00056)	0.0445	0.0066	ND (0.00046)	0.0031	ND (0.00059)	ND (0.00096)	0.0181	ND (0.0036)	ND (0.00089)	0
PR-2A	JC94766-5	09/10/19	14.5-15.0	ND (0.00055)	ND (0.00064)	ND (0.00067)	ND (0.00071)	0.00089 J	ND (0.00093)	ND (0.00058)	0.0038	ND (0.00074)	ND (0.0012)	0.0155	ND (0.0045)	ND (0.0011)	0
PR-2B	JC94766-6	09/10/19	19.5-20.0	ND (0.00060)	ND (0.00069)	ND (0.00073)	ND (0.00077)	ND (0.00076)	ND (0.0010)	ND (0.00063)	ND (0.0011)	ND (0.00080)	ND (0.0013)	0.0378	0.0073 J	ND (0.0012)	0
PR-3	JC94766-7	09/10/19	8.0-8.5	0.00069	ND (0.00052)	ND (0.00055)	ND (0.00058)	0.0043	0.002	0.00061 J	0.002	ND (0.00060)	ND (0.00098)	0.0163	ND (0.0037)	ND (0.00092)	0.0856 J
PR-3A	JC94766-8	09/10/19	14.5-15.0	ND (0.00047)	ND (0.00054)	ND (0.00057)	ND (0.00060)	ND (0.00060)	ND (0.00078)	ND (0.00049)	ND (0.00086)	ND (0.00063)	ND (0.0010)	0.0112	ND (0.0038)	ND (0.00096)	0.0214 J
PR-3B	JC94766-9	09/10/19	19.5-20.0	ND (0.00058)	ND (0.00067)	ND (0.00070)	ND (0.00074)	ND (0.00074)	ND (0.00097)	ND (0.00061)	ND (0.0011)	ND (0.00078)	ND (0.0013)	0.0308	0.0055 J	ND (0.0012)	0
PR-4	JC94766-10	09/10/19	8.0-8.5	ND (0.00044)	ND (0.00051)	ND (0.00053)	ND (0.00056)	0.0393	0.0054	ND (0.00046)	0.0134	ND (0.00059)	ND (0.00096)	0.0095 J	ND (0.0036)	ND (0.00090)	0
PR-4A	JC94766-11	09/10/19	13.0-13.5	ND (0.00051)	ND (0.00059)	ND (0.00062)	ND (0.00065)	0.0346	0.0039	ND (0.00054)	0.0045	ND (0.00068)	ND (0.0011)	0.0074 J	ND (0.0042)	ND (0.0010)	0
PR-4B	JC94766-12	09/10/19	17.5-18.0	0.0336	0.0315	0.0117	0.0317	ND (0.00072)	ND (0.00095)	7.54	19	0.0274	ND (0.0012)	0.0365	ND (0.0047)	ND (0.0012)	0.131 J
PR-4C	JC94766-13	09/10/19	19.5-20.0	0.0932	0.114	0.0888	0.213	ND (0.047)	ND (0.062)	4.93	3.76	ND (0.050)	**ND (0.081)**	**ND (0.33)**	**ND (0.31)**	ND (0.076)	7.39 J

Legend:

mg/kg:	milligrams per kilogram, ppm
--:	Not Established
NY-UNRES:	New York Unrestricted Use Criteria
NY-RESC:	New York Restricted Use Commercial Criteria
NY-RESR*:	New York Restricted Use Residential Criteria (only compared to soil borings SB-9 and SB-10 since they were conducted offsite in residential area)
NY-RESGW:	New York Restricted Use Protection of Groundwater Criteria
VO TICs:	Volatile Organic Tentatively Identified Compounds
NA:	Not Analyzed
J:	Estimated Concentration
ND:	Not Detected
ND (0.00019)	Not Detected followed by method detection limit (MDL)
2.2	Concentration in excess of NY SCO criteria
ND (0.026)	MDL exceeds the most stringent NJDEP criteria

On February 12, 2015, bromomethane (0.033 J mg/kg) and ethyl ether (0.023 J mg/kg) were detected in soil boring B-2 (19.0-20.0).
On March 18, 2015, 1,4-Dioxane had a MDL exceedance in soil boring SB-1A (8.0-8.5).
On March 18, 2015, 1,4-Dioxane had a MDL exceedance in soil boring SB-1B (8.0-8.5).
On March 18, 2015, 1,4-Dioxane had a MDL exceedance in soil boring SB-2A (6.0-6.5).
On March 18, 2015, p-isopropyltoluene (0.0018 mg/kg) was detected in soil boring SB-2B (13.0-13.5).
On March 18, 2015, styrene (0.0061 mg/kg), isopropylbenzene (0.011 mg/kg), p-isopropyltoluene (0.0032 mg/kg), n-propylbenzene (0.00052 J mg/kg), 1,3,5-trimethylbenzene (0.0032 mg/kg), 1,2,4-trimethylbenzene (0.018 mg/kg), p-ethyltoluene (0.012 mg/kg), 1,2,4,5-tetramethylbenzene (0.00085 J mg/kg) were detected in soil boring SB-3A (4.0-4.5).
On March 18, 2015, styrene (0.0023 mg/kg), sec-butylbenzene (0.00021 J mg/kg), isopropylbenzene (0.00027 J mg/kg), p-isopropyltoluene (0.00034 J mg/kg), 1,3,5-trimethylbenzene (0.003 J mg/kg), 1,2,4-trimethylbenzene (0.0018 J mg/kg), p-diethylbenzene (0.00094 J mg/kg), p-ethyltoluene (0.0017 J mg/kg), 1,2,4,5-tetramethylbenzene (0.00043 J mg/kg) were detected in soil boring SB-3B (12.0-12.5).
On July 11, 2016, isopropylbenzene (0.0865 J mg/kg) and methylcyclohexane (0.335 mg/kg) were detected in soil boring SB-4 (14.0-14.5).
On July 13, 2016, methylcyclohexane (0.0012 J mg/kg) was detected in soil boring ISB-2 (6.0-6.5).

TABLE 3A
HISTORIC SOIL SAMPLING RESULTS - VOLATILE ORGANICS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Sample Depth (ft.)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Tetrachloroethene	Trichloroethene	Vinyl chloride	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Acetone	2-Butanone	Carbon Disulfide	VO TICs
NY-UNRES (mg/kg)				0.06	0.7	1	0.26	1.3	0.47	0.02	0.25	0.19	0.05	0.05	0.12	--	--
NY-RESGW (mg/kg)				0.06	0.7	1	1.6	1.3	0.47	0.02	0.25	0.19	0.05	0.05	0.3	2.7	--
NY-RESR (mg/kg)				2.9	100	30	100	5.5	10	0.21	59	100	51	100	100	100	--
NY-RESC (mg/kg)				44	500	390	500	150	200	13	500	500	500	500	500	--	--

On August 19, 2016, MTBE (0.0021 mg/kg) was detected in soil boring SB-1R (18.0-18.5).
On August 19, 2016, MTBE (0.00071 J mg/kg) was detected in soil boring SB-1R (19.5-20.0).
On August 2, 2018, MDLs of carbon tetrachloride, chloroform, 1,1-DCA, 1,2-DCA, 1,1-DCE, and 1,1,1-TCA exceeded the NY-UNRES and NY-RESGW in soil sample SB-11B (14.5-15).
On September 10, 2019, 1,1-dichloroethene (0.0083 mg/kg) was detected in soil sample PR-4B.
On September 10, 2019, styrene (0.0012 J mg/kg) was detected in soil sample PR-3.
On September 10, 2019, styrene (0.00073 J mg/kg) was detected in soil sample PR-4.

TABLE 3B
HISTORIC SOIL SAMPLING RESULTS - SEMIVOLATILE ORGANICS, PESTICIDES, PCBs
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, NY 11370

Sample No.	Laboratory ID.#	Date Collected	Sample Depth (ft.)	Anthracene	B(a)A	B(a)P	B(b)F	B(g,h,i)P	B(k)F	Carbazole	Chrysene	D(a,h)A	Fluoranthene	I(1,2,3-cd)P	2-MN	Naphthalene	Phenanthrene	Pyrene	SVO TICs	alpha-Chlordane	gamma-Chlordane	4,4'-DDE	4,4'-DDT	PCBs	2,4,5-TP (Silvex)
NY-UNRES (mg/kg)				100	1	1	1	100	0.8	--	1	0.33	100	0.5	--	12	100	100	--	0.094	--	0.0033	0.0033	0.1	3.8
NY-RESGW (mg/kg)				1,000	1	22	1.7	1,000	1.7	--	1	1,000	1,000	8.2	36.4	12	1,000	1,000	--	2.9	14	17	136	3.2	3.8
NY-RESR (mg/kg)*				100	1	1	1	100	1	--	1	0.33	100	0.5	0.41	100	100	100	--	0.91	0.54	1.8	1.7	1	58
NY-RESC (mg/kg)				500	5.6	1	5.6	500	56	--	56	0.56	500	5.6	--	500	500	500	--	24	--	62	47	1	500
B-1	L1502751-01	2/12/2015	16.0-17.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.00014)	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-2	L1502751-02	2/12/2015	19.0-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.028 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1A	L1505134-01	3/18/2015	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.0079)	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1B	L1505134-02	3/18/2015	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.0071)	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-2A	L1505134-03	3/18/2015	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.016)	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-2B	L1505134-04	3/18/2015	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.00013)	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3A	L1505134-05	3/18/2015	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3B	L1505134-06	3/18/2015	12.0-12.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-6	7/11/2016	4.0-4.5	ND (0.022)	0.0220 J	0.0236 J	0.0268 J	0.0183 J	ND (0.017)	ND (0.0052)	0.0189 J	ND (0.016)	0.0314 J	ND (0.017)	ND (0.0081)	ND (0.010)	ND (0.012)	0.0251 J	0	0.0012	0.0018	0.0012	ND (0.00026)	ND	ND (0.0021)
SB-4	JC23877-7	7/11/2016	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-8	7/11/2016	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-9	7/11/2016	14.0-14.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-10	7/11/2016	19.5-20.0	ND (0.028)	ND (0.013)	ND (0.020)	ND (0.020)	ND (0.022)	ND (0.021)	ND (0.0065)	ND (0.014)	ND (0.020)	ND (0.020)	ND (0.021)	ND (0.010)	ND (0.013)	ND (0.015)	ND (0.014)	3.24 J	ND (0.00047)	ND (0.00068)	ND (0.00030)	ND (0.00034)	ND	ND (0.0013)
SB-5	JC23877-1	7/11/2016	4.0-4.5	0.0389	0.127	0.128	0.157	0.109	0.0643	0.0181 J	0.144	0.0293 J	0.199	0.108	ND (0.0081)	ND (0.010)	0.129	0.299	0.38 J	ND (0.00036)	ND (0.00052)	ND (0.00023)	0.0011	ND	ND (0.0021)
SB-5	JC23877-2	7/11/2016	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-5	JC23877-3	7/11/2016	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-5	JC23877-4	7/11/2016	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-5	JC23877-5	7/11/2016	19.5-20.0	ND (0.026)	0.0234 J	ND (0.020)	ND (0.019)	ND (0.022)	ND (0.020)	ND (0.0062)	0.0224 J	ND (0.019)	0.044	ND (0.020)	ND (0.0097)	ND (0.012)	0.0717	0.0414 J	1.99 J	ND (0.00045)	ND (0.00064)	ND (0.00028)	ND (0.00032)	ND	ND (0.0012)
B-2R	JC23877-11	7/11/2016	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-2R	JC23877-12	7/11/2016	24.5-25.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-2R	JC23877-13	7/11/2016	26.5-27.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-1	7/12/2016	4.0-4.5	ND (0.022)	0.0300 J	0.0264 J	0.0338 J	0.0188 J	ND (0.017)	ND (0.0052)	0.0300 J	ND (0.016)	0.0561	0.0185 J	0.0199 J	0.0151 J	0.0532	0.0574	1.62 J	ND (0.00037)	ND (0.00053)	ND (0.00023)	ND (0.00026)	ND	ND (0.0021)
SB-8	JC23951-2	7/12/2016	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-3	7/12/2016	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-4	7/12/2016	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-5	7/12/2016	19.5-20.0	ND (0.026)	0.0269 J	0.0255 J	0.0319 J	ND (0.021)	ND (0.020)	ND (0.0061)	0.0190 J	ND (0.019)	0.0406 J	0.0224 J	ND (0.0095)	ND (0.012)	0.0248 J	0.0408 J	0.68 J	ND (0.00040)	ND (0.00057)	ND (0.00025)	ND (0.00029)	ND	ND (0.0011)
ISB-1	JC24077-5	7/13/2016	2.0-2.5	0.68	2.88	2.61	3.3	1.67	0.981	0.23	2.61	0.462	6.36	1.87	0.0161 J	0.0261 J	3.99	5.47	11.46 J	ND (0.0019)	ND (0.0027)	ND (0.0012)	ND (0.0014)	ND	ND (0.0021)
ISB-1	JC24077-6	7/13/2016	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISB-1	JC24077-7	7/13/2016	7.5-8.0	ND (0.038)	0.0255 J	ND (0.028)	ND (0.028)	ND (0.031)	ND (0.029)	ND (0.0091)	ND (0.020)	ND (0.028)	0.0389 J	ND (0.029)	ND (0.014)	ND (0.018)	ND (0.021)	0.0400 J	10.84 J	ND (0.00068)	ND (0.00098)	ND (0.00043)	ND (0.00049)	ND	ND (0.0018)
ISB-2	JC24077-1	7/13/2016	2.0-2.5	1.88	10.3	9.69	11.6	6.15	3.98	0.446	9.92	2.18	20.2	6.67	0.0733 J	0.148	10.3	19	33.67 J	ND (0.0019)	ND (0.0027)	ND (0.0012)	0.0078	ND	ND (0.0022)
ISB-2	JC24077-2	7/13/2016	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISB-2	JC24077-3	7/13/2016	6.0-6.5	0.0928	0.197	0.168	0.262	0.114	0.0606	0.0428 J	0.22	0.0376 J	0.476	0.129	0.0336 J	0.0908	0.333	0.506	119.7 J	ND (0.00092)	ND (0.0013)	ND (0.00057)	ND (0.00066)	ND	ND (0.0034)
ISB-2	JC24077-4	7/13/2016	8.5-9.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26155-5	08/18/16	4.0-4.5	ND (0.021)	0.0241 J	0.0234 J	0.0337 J	0.0208 J	ND (0.016)	ND (0.0050)	0.0261 J	ND (0.015)	0.0481 J	0.0205 J	ND (0.0078)	ND (0.0098)	0.0165 J	0.0343 J	0	ND (0.00039)	ND (0.00055)	ND (0.00024)	ND (0.00028)	ND	ND (0.0020)
SB-6	JC26216-4	08/19/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26216-5	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26216-6	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26216-7	08/19/16	19.5-20.0	ND (0.027)	ND (0.012)	ND (0.020)	ND (0.019)	ND (0.022)	ND (0.020)	ND (0.0064)	ND (0.014)	ND (0.019)	ND (0.020)	ND (0.021)	ND (0.0099)	ND (0.012)	ND (0.015)	ND (0.014)	3.64 J	ND (0.000470)	ND (0.00068)	ND (0.00030)	ND (0.00034)	ND	ND (0.0024)
SB-7	JC26155-3	08/18/16	4.0-4.5	ND (0.023)	0.0734	0.0805	0.0951	0.0558	0.0373 J	ND (0.0055)	0.0783	ND (0.017)	0.14	0.0459	ND (0.0086)	ND (0.011)	0.0575	0.13	2.18 J	0.0023	ND (0.00057)	ND (0.00025)	0.0012	ND	ND (0.0021)
SB-7	JC26155-4	08/18/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	JC26216-8	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	JC26216-9	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	JC26216-10	08/19/16	19.5-20.0	ND (0.028)	ND (0.013)	ND (0.021)	ND (0.020)	ND (0.023)	ND (0.021)	ND (0.0065)	ND (0.014)	ND (0.020)	ND (0.020)	ND (0.021)	ND (0.010)	ND (0.013)	ND (0.015)	ND (0.014)	5.56 J	ND (0.00047)	ND (0.00067)	ND (0.00029)	ND (0.00033)	ND	ND (0.0027)
SB-9	JC26155-2	08/18/16	4.0-4.5	ND (0.023)	0.0233 J	0.0229 J	0.0296 J	ND (0.018)	ND (0.017)	ND (0.0054)	0.0245 J	ND (0.016)	0.0392	ND (0.017)	ND (0.0083)	ND (0.010)	0.0225 J	0.0360 J	2.05 J	ND (0.00040)	ND (0.00057)	ND (0.00025)	ND (0.00028)	ND	ND (0.0022)
SB-9	JC26216-15	08/19/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-9	JC26216-16	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-9	JC26216-17	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-9	JC26216-18	08/19/16	19.5-20.0	ND (0.029)	ND (0.013)	ND (0.021)	ND (0.021)	ND (0.023)	ND (0.022)	ND (0.0068)	ND (0.015)	ND (0.021)	ND (0.021)	ND (0.022)	ND (0.011)	ND (0.013)	ND (0.016)	ND (0.015)	4.88 J	ND (0.00051)	ND (0.00072)	ND (0.00032)	ND (0.00036)	ND	ND (0.0013)
SB-10	JC26155-1	08/18/16	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-11	08/19/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-12	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-13	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-14	08/19/16	19.5-20.0	ND (0.024)	ND (0.011)	ND (0.018)	ND (0.017)	ND (0.019)	ND (0.018)	ND (0.0056)	ND (0.012)	ND (0.017)	ND (0.017)	ND (0.018)	ND (0.0088)	ND (0.011)	ND (0.013)	ND (0.012)	0.95 J	ND (0.00043)	ND (0.00062)	ND (0.00027)	ND (0.00031)	ND	ND (0.0012)
SB-1R	JC26216-1	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1R	JC26216-2	08/19/16	18.0-18.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1R	JC26216-3	08/19/16	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-11A	JC71234-1	08/02/18	12.5-13.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-11B	JC71234-2	08/02/18	14.5-15.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-12A	JC71234-3	08/02/18	12.5-13.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-12B	JC71234-4	08/02/18	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-13A	JC71234-5	08/02/18	9.5-10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-13B	JC71234-6	08/02/18	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-1	JC94766-1	09/10/19	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-1A	JC94766-2	09/10/19	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-1B	JC94766-3	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-2	JC94766-4	09/10/19	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-2A	JC94766-5	09/10/19	14.5-15.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-2B	JC94766-6	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-3	JC94766-7	09/10/19	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-3A	JC94766-8	09/10/19	14.5-15.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-3B	JC94766-9	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 3B
HISTORIC SOIL SAMPLING RESULTS - SEMIVOLATILE ORGANICS, PESTICIDES, PCBs
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, NY 11370

Sample No.	Laboratory ID.#	Date Collected	Sample Depth (ft.)	Anthracene	B(a)A	B(a)P	B(b)F	B(g,h,i)P	B(k)F	Carbazole	Chrysene	D(a,h)A	Fluoranthene	I(1,2,3-cd)P	2-MN	Naphthalene	Phenanthrene	Pyrene	SVO TICs	alpha-Chlordane	gamma-Chlordane	4,4'-DDE	4,4'-DDT	PCBs	2,4,5-TP (Silvex)
NY-UNRES (mg/kg)				100	1	1	1	100	0.8	--	1	0.33	100	0.5	--	12	100	100	--	0.094	--	0.0033	0.0033	0.1	3.8
NY-RESGW (mg/kg)				1,000	1	22	1.7	1,000	1.7	--	1	1,000	1,000	8.2	36.4	12	1,000	1,000	--	2.9	14	17	136	3.2	3.8
NY-RESR (mg/kg)*				100	1	1	1	100	1	--	1	0.33	100	0.5	0.41	100	100	100	--	0.91	0.54	1.8	1.7	1	58
NY-RESC (mg/kg)				500	5.6	1	5.6	500	56	--	56	0.56	500	5.6	--	500	500	500	--	24	--	62	47	1	500
PR-4	JC94766-10	09/10/19	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-4A	JC94766-11	09/10/19	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-4B	JC94766-12	09/10/19	17.5-18.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-4C	JC94766-13	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Legend:

mg/kg: milligrams per kilogram, ppm
NY-UNRES: New York Unrestricted Use Criteria
NY-RESC: New York Restricted Use Commercial Criteria
NY-RESR*: New York Restricted Use Residential Criteria (only compared to soil borings SB-9 and SB-10 since they were conducted offsite in residential area)
NY-RESGW: New York Restricted Use Groundwater Criteria
--: Not Established
NA: Not Analyzed
J: Estimated Concentration
ND: Not Detected
ND (0.00019) Not Detected followed by method detection limit (MDL)
560 J Concentration in excess of most stringent NJDEP criteria
ND (0.0093) MDL exceeds the most stringent NJDEP criteria
B(a)A: Benzo(a)anthracene
B(a)P: Benzo(a)pyrene
B(b)F: Benzo(b)fluoranthene
B(g,h,i)P: Benzo(g,h,i)perylene
B(k)F: Benzo(k)fluoranthene
D(a,h)A: Dibenzo(a,h)anthracene
I(1,2,3-cd)P: Indeno(1,2,3-cd)pyrene
2-MN: 2-Methylnaphthalene
SVO TICs: Semi-volatile organic tentatively identified compounds
PCBs: Polychlorinated biphenyls

On July 12, 2016, phenol (0.168 mg/kg) was detected in soil boring SB-8 (19.5-20.0).
On July 13, 2016, acenaphthene (0.229 mg/kg), acenaphthylene (1.24 mg/kg), 1,1'-biphenyl (0.0309 J mg/kg), dibenzofuran (0.198 mg/kg), and fluorene (0.433 mg/kg) were detected in soil boring ISB-2 (2.0-2.5).
On July 13, 2016, acenaphthene (0.0662 mg/kg), acenaphthylene (0.0485 J mg/kg), acetophenone (0.0423 J mg/kg), benzaldehyde (0.435mg/kg), and dibenzofuran (0.0487 J mg/kg)were detected in soil boring ISB-2 (2.0-2.5).
On July 13, 2016, acenaphthene (0.179 mg/kg), acenaphthylene (0.0818 mg/kg), dibenzofuran (0.4078 mg/kg), and fluorene (0.126 mg/kg) were detected in soil boring ISB-1 (2.0-2.5).
On August 18, 2016, bis(2-ethylhexyl)phthalate (0.0481 J mg/kg) was detected in soil boring SB-6 (4.0-4.5).
On August 18, 2016, bis(2-ethylhexyl)phthalate (0.0469 J mg/kg) and 4,4'-DDD (0.00082 mg/kg) were detected in soil boring SB-7 (4.0-4.5).

TABLE 3C
HISTORIC SOIL SAMPLING RESULTS - METALS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, NY 11370

Sample No.	Laboratory ID.#	Date Collected	Sample Depth (ft.)	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Trivalent Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Silver	Thallium	Vanadium	Zinc	Cyanide
NY-UNRES (mg/kg)				--	13	350	7.2	2.5	--	30	1	--	50	--	63	--	1,600	0.18	30	--	2	--	--	109	27
NY-RESGW (mg/kg)				--	16	820	47	7.5	--	--	19	--	1,720	--	450	--	2,000	0.73	130	--	8.3	--	--	2,480	40
NY-RESR (mg/kg)*				--	16	350	14	2.5	--	36	22	30	270	2,000	400	--	2,000	0.81	140	--	36	--	100	2,200	27
NY-RESC (mg/kg)				--	16	400	590	9.3	--	1,500	400	--	270	--	1,000	--	10,000	2.8	310	--	1,500	--	--	10,000	27
B-1	L1502751-01	2/12/2015	16.0-17.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-2	L1502751-02	2/12/2015	19.0-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1A	L1505134-01	3/18/2015	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1B	L1505134-02	3/18/2015	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-2A	L1505134-03	3/18/2015	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-2B	L1505134-04	3/18/2015	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3A	L1505134-05	3/18/2015	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3B	L1505134-06	3/18/2015	12.0-12.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-6	7/11/2016	4.0-4.5	7,830	ND (2.2)	59.8	0.41	ND (0.55)	4,010	19.5	ND (0.44)	7	23.1	13,500	8.4	4,950	272	ND (0.035)	17.8	1,680	ND (0.55)	ND (1.1)	23.1	50.4	ND (0.24)
SB-4	JC23877-7	7/11/2016	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-8	7/11/2016	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-9	7/11/2016	14.0-14.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	JC23877-10	7/11/2016	19.5-20.0	13,400	3.9	99.3	0.58	ND (0.71)	3,360	32.3	ND (0.56)	13.7	24.8	19,300	10.9	6,840	222	ND (0.039)	35.9	3,150	ND (0.71)	18.4	38.9	68.3	ND (0.32)
SB-5	JC23877-1	7/11/2016	4.0-4.5	12,300	5.6	824	ND (0.65)	ND (0.55)	7,580	29.1	0.74	13	57.2	28,200	2,710	7,080	325	0.37	28.4	7,080	1.9	28.6	38.5	230	0.73
SB-5	JC23877-2	7/11/2016	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-5	JC23877-3	7/11/2016	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-5	JC23877-4	7/11/2016	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.45	NA	NA	NA	NA	NA	NA	NA
SB-5	JC23877-5	7/11/2016	19.5-20.0	11,200	3.2	82.8	0.51	ND (0.67)	3,880	28.8	ND (0.52)	9.9	20.1	17,800	9.1	6,410	213	ND (0.031)	24.5	2,570	ND (0.67)	17	33.5	57.3	ND (0.28)
B-2R	JC23877-11	7/11/2016	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-2R	JC23877-12	7/11/2016	24.5-25.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-2R	JC23877-13	7/11/2016	26.5-27.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-1	7/12/2016	4.0-4.5	7,030	ND (2.1)	33.6	0.42	ND (0.53)	1,770	12.2	0.71	5.6	19.8	9,610	10.5	2,400	283	ND (0.036)	15.7	ND (1100)	ND (0.53)	ND (1.1)	16.8	38.3	0.64
SB-8	JC23951-2	7/12/2016	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-3	7/12/2016	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-4	7/12/2016	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	JC23951-5	7/12/2016	19.5-20.0	11,800	4.6	107	0.6	ND (0.61)	6,680	27.6	ND (0.50)	10.1	22.8	19,400	9.8	7,500	342	ND (0.036)	25.1	3,200	ND (0.61)	ND (1.2)	34.9	53.5	ND (0.29)
ISB-1	JC24077-5	7/13/2016	2.0-2.5	9,020	5.6	217	0.44	ND (0.56)	22,600	18.2	1.4	7.4	43.5	17,000	473	4,650	280	0.54	17.4	2,370	ND (0.56)	ND (1.1)	26.3	292	1.6
ISB-1	JC24077-6	7/13/2016	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISB-1	JC24077-7	7/13/2016	7.5-8.0	11,900	6.1	418	1.3	ND (0.93)	20,000	36.2	1.1	ND (9.3)	53.8	15,900	49	4,300	360	0.32	17.5	ND (1900)	ND (0.93)	ND (1.9)	55	55.7	ND (0.42)
ISB-2	JC24077-1	7/13/2016	2.0-2.5	8,210	5.9	261	0.38	1.4	26,000	20.7	0.91	7	49.8	20,600	799	3,730	305	1.2	16.8	1,890	0.59	ND (1.1)	24.6	670	1.8
ISB-2	JC24077-2	7/13/2016	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISB-2	JC24077-3	7/13/2016	6.0-6.5	5,800	19.2	188	0.43	13.8	37,400	24.5	2.7	10.4	76.4	115,000	242	2,420	1,130	0.51	18.8	ND (1700)	ND (4.3)	ND (8.5)	43.5	4,960	ND (0.41)
ISB-2	JC24077-4	7/13/2016	8.5-9.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26155-5	08/18/16	4.0-4.5	10,000	2.8	60.5	0.6	ND (0.54)	5,410	20.1	0.99	6.5	24.7	13,900	16.4	3,800	297	ND (0.033)	15.4	ND (1100)	ND (0.54)	ND (1.1)	23.1	46.4	2.1
SB-6	JC26216-4	08/19/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26216-5	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26216-6	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	JC26216-7	08/19/16	19.5-20.0	14,100	4.4	117	0.78	ND (0.67)	5,040	33.5	ND (0.56)	12	24.2	20,900	9.8	8,130	338	ND (0.034)	29.4	3,680	ND (0.67)	ND (1.3)	40.3	67	ND (0.35)
SB-7	JC26155-3	08/18/16	4.0-4.5	8,290	3.1	76.7	0.42	ND (0.57)	1,670	16.8	0.71	6.5	20.2	13,300	32.6	2,490	129	ND (0.036)	15.3	1,200	ND (0.57)	ND (1.1)	23.9	79.8	ND (0.25)
SB-7	JC26155-4	08/18/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	JC26216-8	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	JC26216-9	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	JC26216-10	08/19/16	19.5-20.0	13,900	4.2	112	0.74	ND (0.67)	5,360	32.3	ND (0.55)	12	23.5	19,500	9.7	8,110	254	ND (0.034)	29.1	3,610	ND (0.67)	ND (1.3)	39.8	66.2	ND (0.33)
SB-9	JC26155-2	08/18/16	4.0-4.5	9,700	3.3	62.3	0.71	ND (0.56)	920	14.1	ND (0.46)	11.5	20.9	13,200	18.6	1,990	285	0.24	18.1	ND (1100)	ND (0.56)	ND (1.1)	19.9	53.6	6.8
SB-9	JC26216-15	08/19/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-9	JC26216-16	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-9	JC26216-17	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-9	JC26216-18	08/19/16	19.5-20.0	13,800	5.8	92.3	0.76	ND (0.74)	3,480	32.3	ND (0.57)	11.4	23.4	18,200	10.1	6,880	235	ND (0.034)	29.3	3,350	ND (0.74)	ND (1.5)	40	69.3	ND (0.35)
SB-10	JC26155-1	08/18/16	4.0-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-11	08/19/16	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-12	08/19/16	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-13	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-10	JC26216-14	08/19/16	19.5-20.0	11,500	3.2	88.9	0.62	ND (0.61)	7,020	25.8	ND (0.51)	9.7	20	17,800	7.4	8,340	289	ND (0.033)	23.9	3,410	ND (0.61)	ND (1.2)	33	53.1	ND (0.31)
SB-1R	JC26216-1	08/19/16	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1R	JC26216-2	08/19/16	18.0-18.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1R	JC26216-3	08/19/16	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 3C
HISTORIC SOIL SAMPLING RESULTS - METALS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, NY 11370

Sample No.	Laboratory ID.#	Date Collected	Sample Depth (ft.)	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Trivalent Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Silver	Thallium	Vanadium	Zinc	Cyanide
NY-UNRES (mg/kg)				--	13	350	7.2	2.5	--	30	1	--	50	--	63	--	1,600	0.18	30	--	2	--	--	109	27
NY-RESGW (mg/kg)				--	16	820	47	7.5	--	--	19	--	1,720	--	450	--	2,000	0.73	130	--	8.3	--	--	2,480	40
NY-RESR (mg/kg)*				--	16	350	14	2.5	--	36	22	30	270	2,000	400	--	2,000	0.81	140	--	36	--	100	2,200	27
NY-RESC (mg/kg)				--	16	400	590	9.3	--	1,500	400	--	270	--	1,000	--	10,000	2.8	310	--	1,500	--	--	10,000	27
SB-11A	JC71234-1	08/02/18	12.5-13.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-11B	JC71234-2	08/02/18	14.5-15.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-12A	JC71234-3	08/02/18	12.5-13.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-12B	JC71234-4	08/02/18	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-13A	JC71234-5	08/02/18	9.5-10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-13B	JC71234-6	08/02/18	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-1	JC94766-1	09/10/19	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-1A	JC94766-2	09/10/19	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-1B	JC94766-3	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-2	JC94766-4	09/10/19	6.0-6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-2A	JC94766-5	09/10/19	14.5-15.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-2B	JC94766-6	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-3	JC94766-7	09/10/19	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-3A	JC94766-8	09/10/19	14.5-15.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-3B	JC94766-9	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-4	JC94766-10	09/10/19	8.0-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-4A	JC94766-11	09/10/19	13.0-13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-4B	JC94766-12	09/10/19	17.5-18.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PR-4C	JC94766-13	09/10/19	19.5-20.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Legend: mg/kg: milligrams per kilogram, ppm

NY-UNRES: New York Unrestricted Use Criteria
NY-RESC: New York Restricted Use Commercial Criteria
NY-RESR*: New York Restricted Use Residential Criteria (only compared to soil borings SB-9 and SB-10 since they were conducted offsite in residential area)
NY-RESGW: New York Restricted Use Groundwater Criteria
--: Not Established
NA: Not Analyzed
J: Estimated Concentration
ND: Not Detected
ND (0.00019) Not Detected followed by method detection limit (MDL)
560 J Concentration in excess of most stringent NYSDEC criteria
ND (0.0093) MDL exceeds the most stringent NYSDEC criteria

On July 13, 2016, selenium (3.8 mg/kg) was detected in soil boring ISB-2 (7.5-8.0).

TABLE 4
HISTORIC GROUNDWATER SAMPLING RESULTS - TEMPORARY WELL POINTS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample No.	Laboratory ID.#	Date Collected	Benzene	Toluene	Ethylbenzene	Total Xylenes	Tetrachloroethene	Trichloroethene	Vinyl chloride	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Acetone	2-Butanone	Carbon Disulfide	Naphthalene	VO TICs
NY-TOGS AWQS (µg/l)			1	5	5	5	5	5	2	5	5	50	50	60	10	--
GW-1	L1502750-01	02/12/15	ND (0.16)	ND (0.70)	ND (0.70)	ND (0.70)	1.3	ND (0.18)	ND (0.33)	ND (0.70)	ND (0.70)	ND (1.5)	ND (1.9)	ND (1.0)	ND (0.70)	NA
GW-2	L1502750-02	02/12/15	0.36 J	ND (0.70)	ND (0.70)	ND (0.70)	1	0.51	**260**	**86**	ND (0.70)	ND (1.5)	ND (1.9)	ND (1.0)	ND (0.70)	NA
SB-1GW	L1505134-07	03/18/15	0.46 J	ND (0.70)	ND (0.70)	ND (0.70)	1.9	2	**20**	**55**	**7.7**	2.9 J	ND (1.9)	ND (1.0)	ND (0.70)	NA
SB-2GW	L1505134-08	03/18/15	ND (0.16)	ND (0.70)	ND (0.70)	ND (0.70)	**71**	**5.5**	0.76 J	2.6	ND (0.70)	2.2 J	ND (1.9)	ND (1.0)	ND (0.70)	NA
SB-3GW	L1505134-09	03/18/15	**ND (1.6)**	**ND (7.0)**	**ND (7.0)**	**ND (7.0)**	**12**	ND (1.8)	**13**	**9.6 J**	**ND (7.0)**	ND (15)	ND (19)	ND (10)	**410**	NA
SB-5GW	JC23877-14	07/11/16	0.16 J	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	9.6 J	ND (1.9)	0.39 J	NA	0
SB-4GW	JC23877-15	07/11/16	0.15 J	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	16.9	ND (1.9)	0.43 J	NA	0
B2R-GW	JC23877-16	07/11/16	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	0.25 J	ND (0.26)	ND (0.33)	1.3	ND (0.36)	12.1	2.1 J	ND (0.33)	NA	6.3 J
SB-8GW	JC23951-6	07/12/16	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (3.8)	ND (1.9)	ND (0.33)	NA	13 J
ISB-1GW	JC24077-8	07/13/16	0.18 J	ND (0.23)	ND (0.20)	ND (0.21)	1.6	1.2	**21.5**	**25.7**	ND (0.36)	6.1 J	ND (1.9)	ND (0.33)	NA	0
ISB-2GW	JC24077-9	07/13/16	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	0.97 J	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (3.8)	ND (1.9)	ND (0.33)	NA	0
SB-1RGW	JC26218-2	08/19/16	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	5.0 J	ND (1.9)	0.34 J	NA	0
SB-6GW	JC26218-1	08/19/16	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (3.8)	ND (1.9)	0.53 J	NA	0
SB-7GW	JC26218-3	08/19/16	ND (0.14)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	0.60 J	0.38 J	ND (0.36)	30.6	3.9 J	0.54 J	NA	0
SB-9GW	JC26218-5	08/19/16	0.87	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	ND (3.8)	ND (1.9)	0.51 J	NA	0
SB-10GW	JC26218-4	08/19/16	ND (0.14)	3.2	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.26)	ND (0.33)	ND (0.31)	ND (0.36)	4.8 J	ND (1.9)	0.35 J	NA	0

Legend:

µg/l:	micrograms per liter, ppb
NY-TOGS AWQS:	New York Technical & Operational Guidance Series Ambient Water Quality Standards
VO TICs:	Volatile Organic Tentatively Identified Compounds
--:	Not Established
NA:	Not Analyzed
J:	Estimated Concentration
ND:	Not Detected
ND (0.21)	Not Detected followed by method detection limit (MDL)
260	Concentration in excess of NY TOGS AWQS
ND (1.6)	MDL exceeds the NY TOGS AWQS

On March 18, 2015, 1,1-dichloroethene (0.20 J µg/l) and **p-isopropyltoluene (13 µg/l)** were detected in temporary well point SB-1GW.
On March 18, 2015, **1,2,4-trimethylbenzene (7 J µg/l)** was detected in temporary well point SB-3GW.
On March 18, 2015, the method detection limits of several compounds exceeded the NJ TOGS AWQS in temporary well point SB-3GW.
On July 11, 2016, isopropylbenzene (1 µg/l) and methylcyclohexane (2.2 J µg/l) were detected in temporary well point SB-4GW.
On August 19, 2016, **MTBE (14.3 µg/l)** was detected in temporary well point SB-1RGW.

Table 5A
Soil Gas Sample Analytical Results Summary - February 12, 2015
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

EPA Method	VOCs via TO-15		
Units	(ug/m3)		
Analyte	Commercial Screeing Level	SG-1	SG-2
1,1,1-Trichloroethane	220,000	<10.9	<3.64
1,1,2,2-Tetrachloroethane	21	<13.7	<4.58
1,1,2-Trichloroethane	8.8	<10.9	<3.64
1,1-Dichloroethane	770	<8.09	<2.70
1,1-Dichloroethene	8,800	<7.93	<2.64
1,2,4-Trichlorobenzene	88	<14.8	<4.95
1,2,4-Trimethylbenzene	310	<9.83	15.3
1,2-Dibromoethane	2	<15.4	<5.13
1,2-Dichlorobenzene	8,800	<12.0	<4.01
1,2-Dichloroethane	47	<8.09	<2.70
1,2-Dichloropropane	120	<9.24	<3.08
1,3,5-Trimethylbenzene	-	<9.83	3.96
1,3-Butadiene	41	<4.42	<1.48
1,3-Dichlorobenzene	-	<12.0	<4.01
1,4-Dichlorobenzene	110	<12.0	<4.01
1,4-Dioxane	-	<7.21	<2.40
2,2,4-Trimethylpentane	-	<9.34	<3.12
2-Butanone	220,000	265	30.7
2-Hexanone	1,300	<8.20	3.02
3-Chloropropene	-	<6.26	<2.09
4-Ethyltoluene	-	<9.83	4.05
4-Methyl-2-pentanone	130,000	<20.5	<6.84
Acetone	1,400,000	5940	394
Benzene	160	6.96	4.38
Benzyl chloride	25	<10.4	<3.45
Bromodichloromethane	33	<13.4	<4.47
Bromoform	-	<20.7	<6.90
Bromomethane	220	<7.77	<2.59
Carbon disulfide	31,000	<6.23	4.64
Carbon tetrachloride	200	<12.6	<4.20
Chlorobenzene	2,200	<9.21	<3.07
Chloroethane	440,000	<5.28	<1.76
Chloroform	53	<9.77	3.73
Chloromethane	3,900	<4.13	<1.38
cis-1,2-Dichloroethene	-	<7.93	137
cis-1,3-Dichloropropene	310	<9.08	<3.03
Cyclohexane	260,000	<6.88	<2.30
Dibromochloromethane	45	<17.0	<5.68
Dichlorodifluoromethane	4,400	<9.89	<3.30
Ethanol	-	119	29
Ethyl Acetate	3,100	<18.0	<6.02
Ethylbenzene	490	10.1	6.47
Freon-113	1,300,000	<15.3	<5.11
Freon-114	-	<14.0	<4.66
Heptane	-	78.3	13.1
Hexachlorobutadiene	-	<21.3	<7.11
Isopropanol	-	<12.3	9.39
Methyl tert butyl ether	4,700	<7.21	<2.40
Methylene chloride	2,600	<17.4	<5.80
n-Hexane	31,000	<7.05	<2.35
o-Xylene	4,400	12.9	10.6

Table 5A
Soil Gas Sample Analytical Results Summary - February 12, 2015
Jackson Heights Shopping Center
7507 31st Avenue, Jackson Heights, New York 11370

EPA Method	VOCs via TO-15		
Units	(ug/m3)		
Analyte	Commercial Screeing Level	SG-1	SG-2
p/m-Xylene	4,400	36.8	30.9
Styrene	440,000	<8.52	<2.84
Tertiary butyl Alcohol	-	<15.2	6.12
Tetrachloroethene	1,800	140	570
Tetrahydrofuran	88,000	19.9	<4.93
Toluene	220,000	60.7	23.6
trans-1,2-Dichloroethene	-	<7.93	<2.64
trans-1,3-Dichloropropene	310	<9.08	<3.03
Trichloroethene	88	<10.7	24.7
Trichlorofluoromethane	3,100	<11.2	<3.75
Vinyl bromide	38	<8.74	<2.92
Vinyl chloride	280	<5.11	<1.71

Notes:
VOCs = volatile organic compounds
EPA = United States Environmental Protection Agency
µg/m3 = micrograms per cubic meter
< = not detected above indicated laboratory Practical Quantitation Limit (PQL)
Screening Level: OSWER VISL default assumption values for the Commercial Scenario, with 1

Table 5B
Soil Gas Sample Analytical Results Summary - March 17-18, 2016
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

LOCATION SAMPLING DATE LAB SAMPLE ID				SG-3 3/17/2015 L1505230-01		SG-4 3/17/2015 L1505230-02		SG-5 3/18/2015 L1505230-03		SG-6 3/18/2015 L1505230-04	
	CasNum	Commercial Screening Level	Units	Results	RL	Results	RL	Results	RL	Results	RL
Volatile Organics in Air - Mansfield Lab											
1,2,4-Trimethylbenzene	95-63-6	310	ug/m3	10.5	1.97	12.5	1.97	14.2	1.97	13.3	1.97
1,3,5-Trimethylbenzene	108-67-8	NS	ug/m3	3.81	1.97	3.71	1.97	4.33	1.97	4.25	1.97
1,3-Butadiene	106-99-0	41	ug/m3	1.24	0.885	<0.885	0.885	<0.885	0.885	<0.885	0.885
2,2,4-Trimethylpentane	540-84-1	NS	ug/m3	10	1.87	<1.87	1.87	<1.87	1.87	2.51	1.87
2-Butanone	78-93-3	220,000	ug/m3	5.16	2.95	12.3	2.95	16.3	2.95	20.6	2.95
2-Hexanone	591-78-6	1,300	ug/m3	<1.64	1.64	<1.64	1.64	4.07	1.64	5	1.64
4-Ethyltoluene	622-96-8	NS	ug/m3	3.54	1.97	3.6	1.97	4.89	1.97	5.26	1.97
4-Methyl-2-pentanone	108-10-1	130,000	ug/m3	<4.1	4.10	4.1	4.10	<4.1	4.10	ND	4.10
Acetone	67-64-1	1,400,000	ug/m3	116	4.75	401	4.75	663	4.75	836	4.75
Benzene	71-43-2	160	ug/m3	11	1.28	1.91	1.28	3.19	1.28	10.6	1.28
Carbon disulfide	75-15-0	31,000	ug/m3	8.13	1.25	<1.25	1.25	3.43	1.25	7.13	1.25
Chloroform	67-66-3	53	ug/m3	5.42	1.95	<1.95	1.95	3.61	1.95	<1.95	1.95
Chloromethane	74-87-3	3,900	ug/m3	0.95	0.826	<0.826	0.826	<0.826	0.826	1.05	0.826
Cyclohexane	110-82-7	260,000	ug/m3	11.4	1.38	2.62	1.38	2.35	1.38	24.5	1.38
Dichlorodifluoromethane	75-71-8	4,400	ug/m3	2.63	1.98	2.53	1.98	<1.98	1.98	2.47	1.98
Ethanol	64-17-5	NS	ug/m3	<9.42	9.42	18	9.42	10.7	9.42	92	9.42
Ethylbenzene	100-41-4	490	ug/m3	25.7	1.74	12.9	1.74	12.6	1.74	15	1.74
Heptane	142-82-5	NS	ug/m3	136	1.64	50.4	1.64	35.4	1.64	53.3	1.64
Isopropanol	67-63-0	NS	ug/m3	<2.46	2.46	8.01	2.46	7.28	2.46	14.5	2.46
n-Hexane	110-54-3	31,000	ug/m3	26.3	1.41	3.01	1.41	5.08	1.41	10.8	1.41
o-Xylene	95-47-6	4,400	ug/m3	25.6	1.74	15.6	1.74	18.4	1.74	20.9	1.74
p/m-Xylene	179601-23-1	4,400	ug/m3	95.6	3.47	56.9	3.47	52.1	3.47	60.4	3.47
Tertiary butyl Alcohol	75-65-0	NS	ug/m3	<3.03	3.03	9.06	3.03	6.46	3.03	6.79	3.03
Tetrachloroethene	127-18-4	1,800	ug/m3	176	2.71	22.6	2.71	67.3	2.71	381	2.71
Tetrahydrofuran	109-99-9	88,000	ug/m3	<2.95	2.95	3.21	2.95	<2.95	2.95	3.13	2.95
Toluene	108-88-3	220,000	ug/m3	239	1.51	89.3	1.51	38.8	1.51	92.3	1.51
Trichloroethene	79-01-6	88	ug/m3	2.29	2.15	<2.15	2.15	<2.15	2.15	<2.15	2.15

Notes:

Commercial Screening Level: OSWER VISL default assumption values for the Commercial Scenario, with 10^{-5} target risk
µg/m3 = micrograms per cubic meter
< = not detected above indicated laboratory Reporting Limit
NS = no standard
RL = reporting limit

Table 5C
Soil Gas Sample Analytical Results Summary - 2016 to 2018
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Client Sample ID:		SG-14	SG-16	SG-12	SG-9	SG-11	SG-10	SG-3R	SG-4R	SG-2R	SG-1R	SG-6R	SG-5R	SG-15	SG-13	SG-7	SG-8R	SG-17	SG-8RR
Lab Sample ID:		JC24572-19	JC24572-20	JC24572-21	JC24572-22	JC24572-23	JC24572-24	JC24572-25	JC24572-26	JC24572-27	JC24572-28	JC24572-29	JC24572-30	JC24572-17	JC24572-18	JC26160-3	JC26223-2	JC71165-1	JC71165-2
Date Sampled:		7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	8/18/2016	8/19/2016	8/1/2018	8/1/2018
Matrix:		Soil Vapor Comp.	Soil Vapor Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.
GC/MS Volatiles (TO-15) - ug/m3																			
Acetone	ug/m3	88.8	119	9.5	314	59.1	34.7	44.4	34.7	179	57.7	297	63.2	264	102	38.5	2,970	62.9	32.8
1,3-Butadiene	ug/m3	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.49)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (3.3)	ND (0.40)
Benzene	ug/m3	2	5.1	ND (0.20)	4.8	1.3	0.83 J	6.4	1.2 J	16	5.1	4.5	18	8	6.7	1.6	5.8	ND (1.2)	9.9
Bromodichloromethane	ug/m3	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (2.1)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (5.7)	ND (0.74)
Bromoform	ug/m3	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (1.3)	ND (0.33)	ND (0.33)	ND (0.33)	7.2	ND (0.33)	ND (0.33)	ND (0.33)	ND (12)	ND (1.6)
Bromomethane	ug/m3	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.58)	ND (0.14)	ND (0.14)	ND (0.14)	3.1	ND (0.14)	ND (0.14)	1.5 J	ND (2.7)	ND (0.34)
Bromoethene	ug/m3	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.66)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	5.2	ND (0.16)	ND (3.1)	ND (0.38)
Benzyl Chloride	ug/m3	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (1.1)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (9.3)	ND (1.2)
Carbon disulfide	ug/m3	2.6	12	ND (0.20)	39.9	2.5	1.2 J	11	1.7	52.3	7.2	5.3	14	44.2	6.2	ND (0.20)	16	ND (2.3)	6.2
Chlorobenzene	ug/m3	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.0)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (3.8)	ND (0.46)
Chloroethane	ug/m3	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.74)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	2.9	ND (4.0)	ND (0.50)
Chloroform	ug/m3	8.3	9.3	4.1	3.1	1.9 J	0.78 J	1.6 J	5.9	16	4.2	ND (0.16)	3.4	2.7	2.3	ND (0.16)	4.9	ND (3.1)	ND (0.39)
Chloromethane	ug/m3	ND (0.21)	ND (0.21)	ND (0.21)	3.1	ND (0.21)	1.2	1.1	ND (0.21)	ND (0.87)	ND (0.21)	ND (0.21)	ND (0.21)	1.3	0.70 J	1.7	3.9	ND (0.99)	1.3 J
3-Chloropropene	ug/m3	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.66)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (4.1)	ND (0.50)
2-Chlorotoluene	ug/m3	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.72)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (4.1)	ND (0.52)
Carbon tetrachloride	ug/m3	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (1.6)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (4.7)	ND (0.59)
Cyclohexane	ug/m3	3.8	ND (0.11)	ND (0.11)	4.1	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	19	8.9	9.6	45.1	18	3.8	ND (0.11)	3	ND (2.4)	2.1 J
1,1-Dichloroethane	ug/m3	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.49)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	ND (1.5)	ND (0.19)
1,1-Dichloroethylene	ug/m3	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.67)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (2.1)	ND (0.27)
1,2-Dibromoethane	ug/m3	ND (0.65)	46	ND (0.65)	ND (0.65)	12	ND (0.65)	ND (0.65)	1.8	ND (2.6)	ND (0.65)	ND (0.65)	2.6	159	ND (0.65)	59	ND (0.65)	ND (4.3)	6.7
1,2-Dichloroethane	ug/m3	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.57)	ND (0.14)	ND (0.14)	ND (0.14)	2.4	ND (0.14)	3.5	ND (0.14)	ND (2.7)	ND (0.34)
1,2-Dichloropropane	ug/m3	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.83)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (2.8)	ND (0.36)
1,4-Dioxane	ug/m3	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (1.3)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (5.8)	ND (0.76)
Dichlorodifluoromethane	ug/m3	3.7	7.4	9.9	3.3	6.4	4	5.4	9.9	9.9	11	3	4.3	ND (0.19)	3.6	2.4	2.2	ND (2.6)	2.5 J
Dibromochloromethane	ug/m3	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (3.6)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (9.4)	ND (1.1)
trans-1,2-Dichloroethylene	ug/m3	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	8.7	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.91)	ND (0.11)
cis-1,2-Dichloroethylene	ug/m3	0.83 J	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	5.9	523	1.6	ND (0.17)	ND (0.17)	0.75 J	3.7	1.0 J	15	ND (1.5)	ND (0.19)
cis-1,3-Dichloropropene	ug/m3	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.54)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (2.8)	ND (0.35)
m-Dichlorobenzene	ug/m3	ND (0.23)	ND (0.23)	ND (0.23)	1.9	2	ND (0.23)	ND (0.23)	1.4	ND (0.96)	ND (0.23)	ND (0.23)	1.6	ND (0.23)	ND (0.23)	ND (0.23)	4	29	13
o-Dichlorobenzene	ug/m3	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.78)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (4.1)	ND (0.52)
p-Dichlorobenzene	ug/m3	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (1.3)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (3.3)	ND (0.42)
trans-1,3-Dichloropropene	ug/m3	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.68)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (2.8)	ND (0.35)
Ethanol	ug/m3	62.9	42.6	26.9	326	128	232 E	143	163 E	135	160 E	69.9	129	56.5	36	17	271	ND (13)	24.7
Ethylbenzene	ug/m3	4.8	3.7	0.96 J	5.6	6.1	0.91 J	2.2	6.9	5.6 J	6.1	3.6	7.4	3.1	12	0.78 J	1.9	ND (2.1)	4.8
Ethyl Acetate	ug/m3	29	46.8	30	33	59.7	20	16	38.2	ND (2.2)	83.1	36.7	43.6	44.6	33	3.5	243	29	15
4-Ethyltoluene	ug/m3	3.6	1.4 J	ND (0.16)	4.6	4.9	ND (0.16)	1.6 J	4.9	5.4 J	4.3	3.1	4.7	3.4	3.2	ND (0.16)	ND (0.16)	ND (4.6)	ND (0.59)
Freon 113	ug/m3	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (1.3)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (4.1)	ND (0.52)
Freon 114	ug/m3	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (1.7)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (4.2)	ND (0.53)
Heptane	ug/m3	4.9	2.7	ND (0.16)	6.1	1.8	1.0 J	2	1.9	26	7.4	6.1	47.9	21	5.3	0.94 J	34	ND (2.3)	3.3
Hexachlorobutadiene	ug/m3	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (1.7)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (15)	ND (1.9)
Hexane	ug/m3	4.9	2.6	2.3	7	1.7	1.1 J	1.8	1.7	50.4	18	13	74.7	17	14	3.9	41.9	ND (1.2)	8.8
2-Hexanone	ug/m3	0.86 J	0.90 J	ND (0.37)	1.8	0.94 J	ND (0.37)	2.6	ND (0.37)	ND (1.5)	ND (0.37)	2.2	ND (0.37)	ND (0.37)	2.2	ND (0.37)	300	ND (4.5)	ND (0.61)
Isopropyl Alcohol	ug/m3	25.3	20	5.9	92.4	45	63.2	47.2	51.4	61.9	48.2	97.1	174	21	15	2.3	44	ND (4.9)	3.4
Methylene chloride	ug/m3	34	9.7	10	8	4.2	11	2.5	7.6	13	17	7.6	5.2	8.7	23	14	3.2	ND (1.6)	4.2
Methyl ethyl ketone	ug/m3	5	5	1.0 J	28	6.2	2	14	5	20	8	33.6	8	11	11	4.4	1,890	ND (3.8)	4.7
Methyl Isobutyl Ketone	ug/m3	1.3 J	1.4 J	ND (0.45)	3.4	2.2	ND (0.45)	1.1 J	2.4	4.9 J	2.5	7	3	2.2	1.6	ND (0.45)	2.3	ND (4.5)	ND (0.57)
Methyl Tert Butyl Ether	ug/m3	1.3 J	2.1	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.58)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	16	ND (0.14)	ND (0.14)	ND (2.2)	ND (0.28)
Methylmethacrylate	ug/m3	ND (0.33)	ND (0.33)	ND (0.33)	3.2	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (1.3)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (4.1)	ND (0.53)
Propylene	ug/m3	1.9	5.8	ND (0.11)	29.5	ND (0.11)	2.7	ND (0.11)	ND (0.11)	131	1.5 J	2.4	8.2	ND (0.11)	32.5	2.7	251	18.9 J	30.6
Styrene	ug/m3	1.7 J	0.85 J	ND (0.13)	2.9	2.7	ND (0.13)	1.1 J	2.6	ND (0.51)	2.4	1.5 J	2.7	1.1 J	1.4 J	ND (0.13)	ND (0.13)	ND (2.6)	1.9 J
1,1,1-Trichloroethane	ug/m3	ND (0.26)	1.4	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (1.0)	ND (0.26)	ND (0.26)	2	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (5.5)	ND (0.71)
1,1,2,2-Tetrachloroethane	ug/m3	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.89)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (5.9)	ND (0.76)
1,1,2-Trichloroethane	ug/m3	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (1.7)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (5.2)	ND (0.65)
1,2,4-Trichlorobenzene	ug/m3	ND (0.82)	3.1	ND (0.82)	ND (0.82)	ND (0.82)	ND (0.82)	ND (0.82)	ND (0.82)	ND (3.3)	ND (0.82)	ND (0.82)	ND (0.82)	5.1	ND (0.82)	ND (0.82)	ND (0.82)	ND (21)	ND (2.6)
1,2,4-Trimethylbenzene	ug/m3	15	6.9	3.2	17	18	2.2	5.4	19	20	16	14	21	12	13	ND (0.15)	2.4	ND (4.9)	3.2 J
1,3,5-Trimethylbenzene	ug/m3	3.5	1.9 J	ND (0.44)	4.5	4.8	ND (0.44)	1.6 J	4.9	4.9 J	4.4	3.3	5.9	3.5	4	ND (0.44)	ND (0.44)	ND (5.4)	ND (0.64)
2,2,4-Trimethylpentane	ug/m3	1.8 J	ND (0.21)	ND (0.21)	4.7	5.6	1.3 J	2.1	7	ND (0.84)	6.5	3.9	12	2.1	1.1 J	1.4 J	ND (0.21)	ND (3.2)	6.1
Tertiary Butyl Alcohol	ug/m3	25	25	ND (0.33)	7.6	3.3	ND (0.33)	1.4	3	8.5	2.4	1.8	3.6	1.7	108	ND (0.33)	109	ND (1.3)	3.6
Tetrachloroethylene	ug/m3	201	483	28	39	47	5.8	179	89.5	5,170	510	909	193	3.1	726	16	1,030	ND (6.6)	6.6
Tetrahydrofuran	ug/m3	ND (0.27)	ND (0.27)	ND (0.27)	2.3	1.1 J	ND (0.27)	ND (0.27)	1.4	ND (1.1)	1.4	0.68 J	ND (0.27)	0.56 J	ND (0.27)	ND (0.27)	4.4	ND (4.7)	ND (0.59)
Toluene	ug/m3	26	16	3.1	17	14	6	7.9	14	20	17	12	21	36	28	3.4	14	3,690	14
Trichloroethylene	ug/m3	5.4	2.3	1.9	2	0.81	0.91	1	3.7	132	8.1	1.8	3.8	0.45	21	15	21	ND (3.2)	ND (0.41)
Trichlorofluoromethane	ug/m3	3.6	2.2	28	7.3	11	7.3	4.7	14	16	6.2	2.4	4.9	ND (0.25)	2.9	1.9	1.4	ND (5.0)	2.2
Vinyl chloride	ug/m3	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.41)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	0.79	ND (1.8)	ND (0.23)
Vinyl Acetate	ug/m3	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (1.5)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (3.9)	ND (0.49)

Table 5C
Soil Gas Sample Analytical Results Summary - 2016 to 2018
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Client Sample ID:		SG-14	SG-16	SG-12	SG-9	SG-11	SG-10	SG-3R	SG-4R	SG-2R	SG-1R	SG-6R	SG-5R	SG-15	SG-13	SG-7	SG-8R	SG-17	SG-8RR
Lab Sample ID:		JC24572-19	JC24572-20	JC24572-21	JC24572-22	JC24572-23	JC24572-24	JC24572-25	JC24572-26	JC24572-27	JC24572-28	JC24572-29	JC24572-30	JC24572-17	JC24572-18	JC26160-3	JC26223-2	JC71165-1	JC71165-2
Date Sampled:		7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	7/21/2016	8/18/2016	8/19/2016	8/1/2018	8/1/2018
Matrix:		Soil Vapor Comp.	Soil Vapor Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Indoor Air Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.	Soil Vapor Comp.
GC/MS Volatiles (TO-15) - ug/m3																			
m,p-Xylene	ug/m3	16	10	3.7	22	23	3.3	8.7	24	23	23	14	28	10	34	2.6	6.1	14 J	6.9
o-Xylene	ug/m3	8.7	5.2	1.7 J	11	12	1.5 J	3.7	13	9.1	10	6.9	13	5.6	18	0.91 J	2.3	ND (2.3)	2.7 J
Xylenes (total)	ug/m3	25	15	5.2	33	35	4.8	12	37	32	33	20	42	16	52.1	3.5	8.3	14 J	10

Legend:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

µg/m3 = micrograms per cubic meter

-- = Not established

ND = Not Detected

ND (0.00019) = Not Detected followed by method detection limit (MDL)

J = Estimated concentration

TABLE 6
HISTORIC INDOOR AND AMBIENT AIR SAMPLING RESULTS - VOLATILE ORGANICS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample Location	Sample No.	Laboratory ID.#	Date Collected	Carbon tetrachloride	1,1-Dichloroethylene	1,2-Dibromoethane	cis-1,2-Dichloroethylene	Methylene chloride	1,1,1-Trichloroethane	Tetrachloroethylene	Trichloroethylene	Vinyl chloride
NYSDOH Guideline (µg/m^3)				--	--	--	--	60	--	30	2	--
NYSDOH Immediate Action Level (µg/m^3)				--	--	--	--	--	--	300	20	--
OSHA PEL (µg/m^3)				--	--	--	--	34,720	--	678,000	537,000	2,500
ACGIH TLV (µg/m^3)				--	--	--	--	--	--	169,000	269,000	--
First floor of cleaners	IA-1	JC24572-1	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	4.9	ND (0.13)	408	124	ND (0.054)
	IA-15	JC42648-1	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	2.3	ND (0.093)	19	34	ND (0.097)
	IA-15R	JC48785-1	08/10/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	239	ND (0.093)	144	32	ND (0.097)
	IA-30	JC60101-1	01/31/18	0.5	ND (0.10)	ND (0.14)	ND (0.11)	46.9	ND (0.076)	159	1.2	ND (0.077)
Basement of cleaners	IA-2	JC24572-2	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	2.6	ND (0.13)	71.9	83.3	ND (0.054)
	IA-16	JC42648-2	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	3.8	ND (0.093)	28	24	ND (0.097)
	IA-16R	JC48785-2	08/10/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	1.8	ND (0.093)	6.5	35	ND (0.097)
	IA-31	JC60101-2	01/31/18	0.5	ND (0.10)	ND (0.14)	ND (0.11)	10	ND (0.076)	167	0.86	ND (0.077)
	IA-45	JC83299-1	02/21/19	0.49	ND (0.052)	ND (0.11)	ND (0.037)	ND (0.042)	ND (0.15)	185	4	ND (0.046)
First floor of Super Smiles dentist office	IA-3	JC24572-3	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	2.1	ND (0.13)	49	20	ND (0.054)
	IA-17	JC42648-3	05/03/17	0.63	ND (0.13)	ND (0.17)	ND (0.13)	8	ND (0.093)	4.6	1.7	ND (0.097)
	IA-32	JC60101-3	01/31/18	0.48	ND (0.10)	ND (0.14)	ND (0.11)	0.83	ND (0.076)	0.81	ND (0.051)	ND (0.077)
	IA-46	JC83299-2	02/21/19	0.55	ND (0.052)	2	ND (0.037)	1.8	ND (0.15)	3.8	ND (0.081)	ND (0.046)
Basement under Super Smiles dentist office	IA-4	JC24572-4	07/21/16	0.63	ND (0.083)	ND (0.32)	ND (0.083)	1.9	ND (0.13)	29	12	ND (0.054)
	IA-18	JC42648-4	05/03/17	0.62	ND (0.13)	ND (0.17)	ND (0.13)	2.5	ND (0.093)	10	5.3	ND (0.097)
	IA-18R	JC48785-3	08/10/17	0.75	ND (0.13)	ND (0.17)	ND (0.13)	1.2	ND (0.093)	1.4	0.37	ND (0.097)
	IA-33	JC60101-4	01/31/18	0.38	ND (0.10)	ND (0.14)	ND (0.11)	0.66	ND (0.076)	0.67	ND (0.051)	ND (0.077)
	IA-47	JC83299-3	02/21/19	0.5	ND (0.052)	ND (0.11)	ND (0.037)	23	ND (0.15)	1.8	ND (0.081)	ND (0.046)
First floor of Optical Academy	IA-5	JC24572-5	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	4.9	ND (0.13)	66	43	ND (0.054)
	IA-19	JC42648-5	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	5.6	ND (0.093)	11	4.7	ND (0.097)
	IA-19R	JC50470-1	09/07/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	3.2	ND (0.093)	22	3.8	ND (0.097)
	IA-34	JC60101-5	01/31/18	0.52	ND (0.10)	ND (0.14)	ND (0.11)	2.9	ND (0.076)	6.7	ND (0.051)	ND (0.077)
	IA-48	JC83299-4	02/21/19	0.52	ND (0.052)	ND (0.11)	ND (0.037)	1.3	ND (0.15)	6.6	0.64	ND (0.046)
Basement of Optical Academy	IA-6	JC24572-6	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	3.3	ND (0.13)	68	37	ND (0.054)
	IA-20	JC42648-6	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	6.6	ND (0.093)	17	4.7	ND (0.097)
	IA-20R	JC50470-2	09/07/17	ND (0.13)	ND (0.13)	ND (0.17)	0.59 J	2.4	ND (0.093)	17	3.2	ND (0.097)
	IA-35	JC60101-6	01/31/18	0.53	ND (0.10)	ND (0.14)	ND (0.11)	1.9	ND (0.076)	2.5	ND (0.051)	ND (0.077)
	IA-49	JC83299-5	02/21/19	ND (0.12)	ND (0.052)	ND (0.11)	ND (0.037)	0.97	ND (0.15)	0.26	0.38	ND (0.046)
First floor of Rock Realty	IA-7	JC24572-7	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	1.4	ND (0.13)	12	3.5	ND (0.054)
	IA-21	JC42648-7	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	1.6	ND (0.093)	2	0.91	ND (0.097)
	IA-36	JC60101-7	01/31/18	0.55	ND (0.10)	ND (0.14)	ND (0.11)	ND (0.090)	ND (0.076)	0.33	ND (0.051)	ND (0.077)
Basement under Rock Realty	IA-8	JC24572-8	07/21/16	0.62	ND (0.083)	ND (0.32)	ND (0.083)	1.5	ND (0.13)	15	4.8	ND (0.054)
	IA-22	JC42648-8	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	1.8	ND (0.093)	6.4	3.2	ND (0.097)
	IA-22R	JC48785-4	08/10/17	0.75	ND (0.13)	ND (0.17)	ND (0.13)	1.1	ND (0.093)	1.1	0.34	ND (0.097)
	IA-37	JC60101-8	01/31/18	0.48	ND (0.10)	ND (0.14)	ND (0.11)	0.76	ND (0.076)	0.64	ND (0.051)	ND (0.077)

TABLE 6
HISTORIC INDOOR AND AMBIENT AIR SAMPLING RESULTS - VOLATILE ORGANICS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

Sample Location	Sample No.	Laboratory ID.#	Date Collected	Carbon tetrachloride	1,1-Dichloroethylene	1,2-Dibromoethane	cis-1,2-Dichloroethylene	Methylene chloride	1,1,1-Trichloroethane	Tetrachloroethylene	Trichloroethylene	Vinyl chloride
NYSDOH Guideline (µg/m^3)				--	--	--	--	60	--	30	2	--
NYSDOH Immediate Action Level (µg/m^3)				--	--	--	--	--	--	300	20	--
OSHA PEL (µg/m^3)				--	--	--	--	34,720	--	678,000	537,000	2,500
ACGIH TLV (µg/m^3)				--	--	--	--	--	--	169,000	269,000	--
Basement of supermarket	IA-9	JC24572-9	07/21/16	0.63	ND (0.083)	ND (0.32)	ND (0.083)	2	ND (0.13)	2.4	0.59	ND (0.054)
First floor of supermarket	IA-10	JC24572-10	07/21/16	0.69	ND (0.083)	ND (0.32)	ND (0.083)	1.5	ND (0.13)	1.8	0.48	ND (0.054)
First floor of MRI	IA-11	JC24572-11	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	15	ND (0.13)	10	4.5	ND (0.054)
	IA-23	JC42648-9	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	15	ND (0.093)	4.7	2.3	ND (0.097)
	IA-23R	JC48785-5	08/10/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	7.6	ND (0.093)	ND (0.11)	0.21	ND (0.097)
	IA-38	JC60101-9	01/31/18	0.49	ND (0.10)	ND (0.14)	ND (0.11)	16	ND (0.076)	4.1	ND (0.051)	ND (0.077)
Basement underneath MRI	IA-12	JC24572-12	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	6.6	ND (0.13)	11	5	ND (0.054)
	IA-24	JC42648-10	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	16	ND (0.093)	2.6	2.1	ND (0.097)
	IA-24R	JC48785-6	08/10/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	8.7	1.3	6.7	5.1	ND (0.097)
	IA-39	JC60101-10	01/31/18	0.45	ND (0.10)	ND (0.14)	ND (0.11)	3.8	ND (0.076)	4.4	ND (0.051)	ND (0.077)
	IA-50	JC83299-6	02/21/19	0.53	ND (0.052)	ND (0.11)	ND (0.037)	2.9	ND (0.15)	2.6	0.18	ND (0.046)
First floor of nail salon	IA-13	JC24572-13	07/21/16	0.57	ND (0.083)	ND (0.32)	ND (0.083)	17	ND (0.13)	3	1.2	ND (0.054)
	IA-25	JC42648-11	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	6.3	ND (0.093)	1.5	0.54	ND (0.097)
	IA-40	JC60101-11	01/31/18	0.5	ND (0.10)	ND (0.14)	ND (0.11)	2.7	ND (0.076)	1.4	ND (0.051)	ND (0.077)
Basement of nail salon	IA-14	JC24572-14	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	4.9	ND (0.13)	5.1	2.1	ND (0.054)
	IA-26	JC42648-12	05/03/17	0.45	ND (0.13)	ND (0.17)	ND (0.13)	5.9	ND (0.093)	2	0.75	ND (0.097)
	IA-41	JC60101-12	01/31/18	0.49	ND (0.10)	ND (0.14)	ND (0.11)	3.2	ND (0.076)	1.6	ND (0.051)	ND (0.077)
Front side of strip mall	AA-1	JC24572-15	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	2.4	ND (0.13)	0.41	ND (0.10)	ND (0.054)
	AA-3	JC42648-16	05/03/17	ND (0.16)	ND (0.17)	ND (0.22)	ND (0.17)	2.3	ND (0.12)	0.34 J	ND (0.081)	ND (0.13)
	AA-5	JC48785-7	08/10/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	0.94	ND (0.093)	0.59	ND (0.064)	ND (0.097)
	AA-7	JC60101-16	01/31/17	0.53	ND (0.11)	ND (0.15)	ND (0.11)	0.83	ND (0.082)	0.26	ND (0.054)	ND (0.082)
	AA-9	JC83299-7	02/21/19	1	ND (0.052)	ND (0.11)	ND (0.037)	1.4	ND (0.15)	0.75	0.2	ND (0.046)
Backside of strip mall	AA-2	JC24572-16	07/21/16	ND (0.20)	ND (0.083)	ND (0.32)	ND (0.083)	3.2	ND (0.13)	9.5	5.4	ND (0.054)
	AA-4	JC42648-17	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	1.7	ND (0.093)	0.88	ND (0.064)	ND (0.097)
	AA-6	JC48785-8	08/10/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	2.4	ND (0.093)	2	1.2	ND (0.097)
	AA-8	JC60101-17	01/31/18	0.45	ND (0.10)	ND (0.14)	0.38	2.2	1.5	1.6	ND (0.051)	ND (0.077)
	AA-10	JC83299-8	02/21/19	0.48	ND (0.052)	ND (0.11)	ND (0.037)	0.9	ND (0.15)	2.6	ND (0.081)	ND (0.046)
Basement of AT&T	IA-27	JC42648-13	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	3.4	ND (0.093)	1.2	0.4	ND (0.097)
	IA-42	JC60101-13	01/31/18	0.48	ND (0.10)	ND (0.14)	ND (0.11)	2.4	1.3	1.8	ND (0.051)	ND (0.077)
Basment of Subway	IA-28	JC42648-14	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	3.4	12	9.5	0.53	ND (0.097)
	IA-43	JC60101-14	01/31/18	0.52	ND (0.10)	ND (0.14)	ND (0.11)	2.4	8.2	1.7	ND (0.051)	ND (0.077)
Basement of JJ Gardens	IA-29	JC42648-15	05/03/17	ND (0.13)	ND (0.13)	ND (0.17)	ND (0.13)	2.6	2.6	1.8	0.31	ND (0.097)
	IA-44	JC60101-15	01/31/18	0.46	ND (0.10)	ND (0.14)	ND (0.11)	1.9	2.3	1.8	ND (0.051)	ND (0.077)

TABLE 6
HISTORIC INDOOR AND AMBIENT AIR SAMPLING RESULTS - VOLATILE ORGANICS
Jackson Heights Shopping Center
75-11 31st Avenue, Jackson Heights, New York 11370

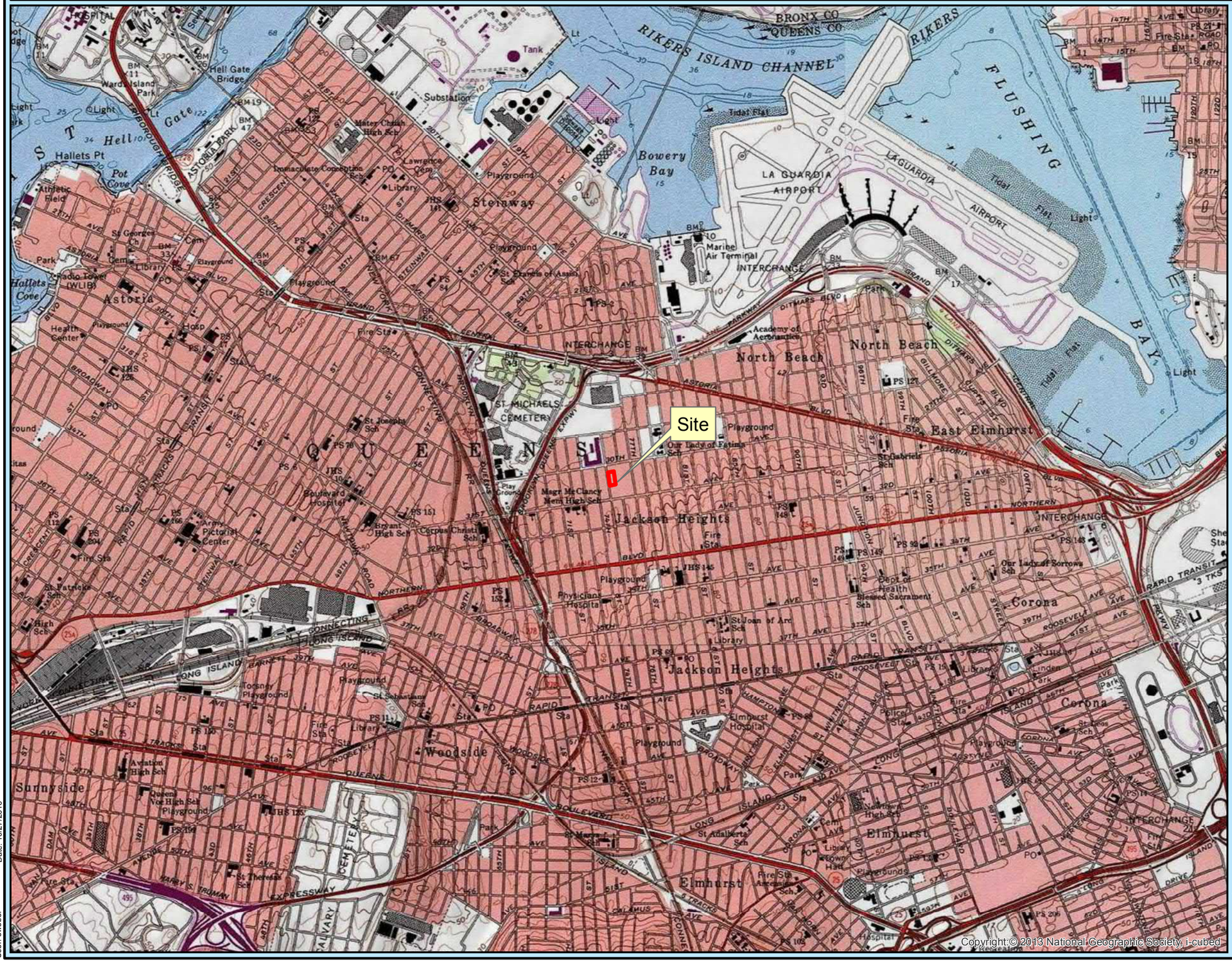
Sample Location	Sample No.	Laboratory ID.#	Date Collected	Carbon tetrachloride	1,1-Dichloroethylene	1,2-Dibromoethane	cis-1,2-Dichloroethylene	Methylene chloride	1,1,1-Trichloroethane	Tetrachloroethylene	Trichloroethylene	Vinyl chloride
NYSDOH Guideline (µg/m^3)				--	--	--	--	60	--	30	2	--
NYSDOH Immediate Action Level (µg/m^3)				--	--	--	--	--	--	300	20	--
OSHA PEL (µg/m^3)				--	--	--	--	34,720	--	678,000	537,000	2,500
ACGIH TLV (µg/m^3)				--	--	--	--	--	--	169,000	269,000	--

Legend: The nine compounds that apply to the NYSDOH Matrices and/or have NYSDOH guidelines/Immediate Action Levels are included in this table.

µg/m3:	micrograms per cubic meter
NYSDOH:	New York State Department of Health
--:	Not Established/Not Available
VOCs:	Volatile Organic Compounds
J:	Estimated Concentration
ND:	Not Detected
ND (0.00019)	Not Detected followed by method detection limit (MDL)
2.2	Concentration in excess of the NYSDOH guideline
2.2	Concentration in excess of the NYSDOH Immediate Action Level
2.2	Concentration in excess of the Occupational Safety and Health Administration Permissible Exposure Limit (OSHA PEL)
2.2	Concentration in excess of the American Conference of Governmental and Industrial Hygienists' Threshold Limit Value (ACGIH TLV)

FIGURES

Jackson Heights Shopping Center — Borough of Queens, NY



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 1
SITE LOCATION MAP

Legend

Site

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 1,000 2,000 4,000
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

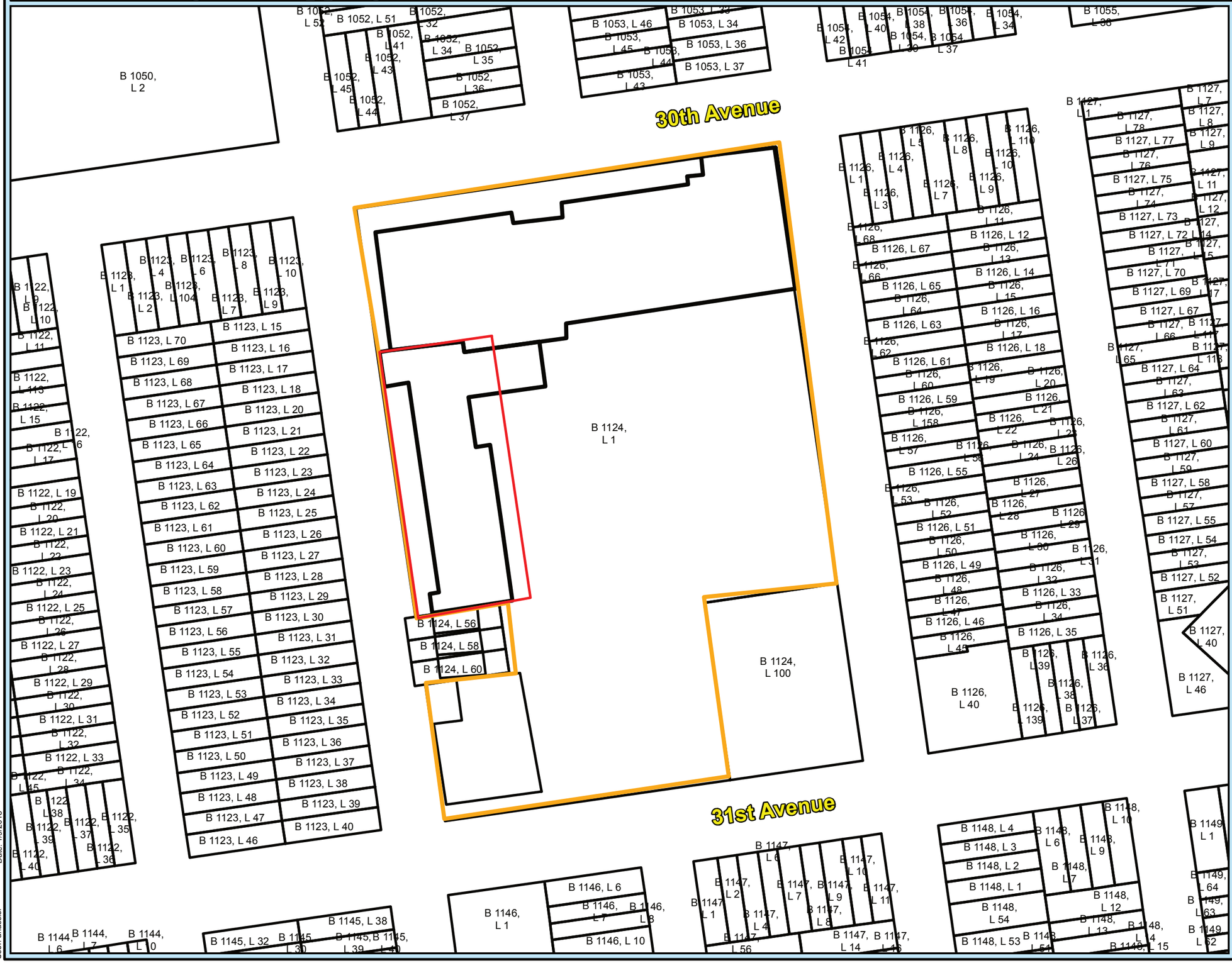
Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; and ESRI GIS-Online USA Topo Maps, 2013	DRAWN BY BPT	SCALE 1in=2,0000ft
Job No: 02790100000 File Name: 02790100000 Fig 2 Topo Map		DATE 10/20/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 2 Topo Map.mxd
User: eweber
Date: 10/27/2016

Jackson Heights Shopping Center

Borough of Queens, NY



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK 11370

FIGURE 2
TAX MAP

Legend

- BCP Site Boundary
- Property Boundary
- Queens County Parcels

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 50 100 200
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY BPT	SCALE 1 in = 100 ft
Job No: 00254100000 File Name: 00254100000 Fig 2 Tax Map		DATE 1/19/2017

File: \\pac\local\rootSolutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig X Tax Map.mxd
Date: 1/9/2018
User: anassler

Jackson Heights Shopping Center — Borough of Queens, NY

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK 11370

FIGURE 3
SITE MAP

Legend

- Property Boundary
- BCP Site Boundary
- Trench Drain
- Drain
- Storm Water Catch Basin
- Sump Pit
- Storm Water Dry Well

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 50 100 200
Feet

PSG Engineering, DPC

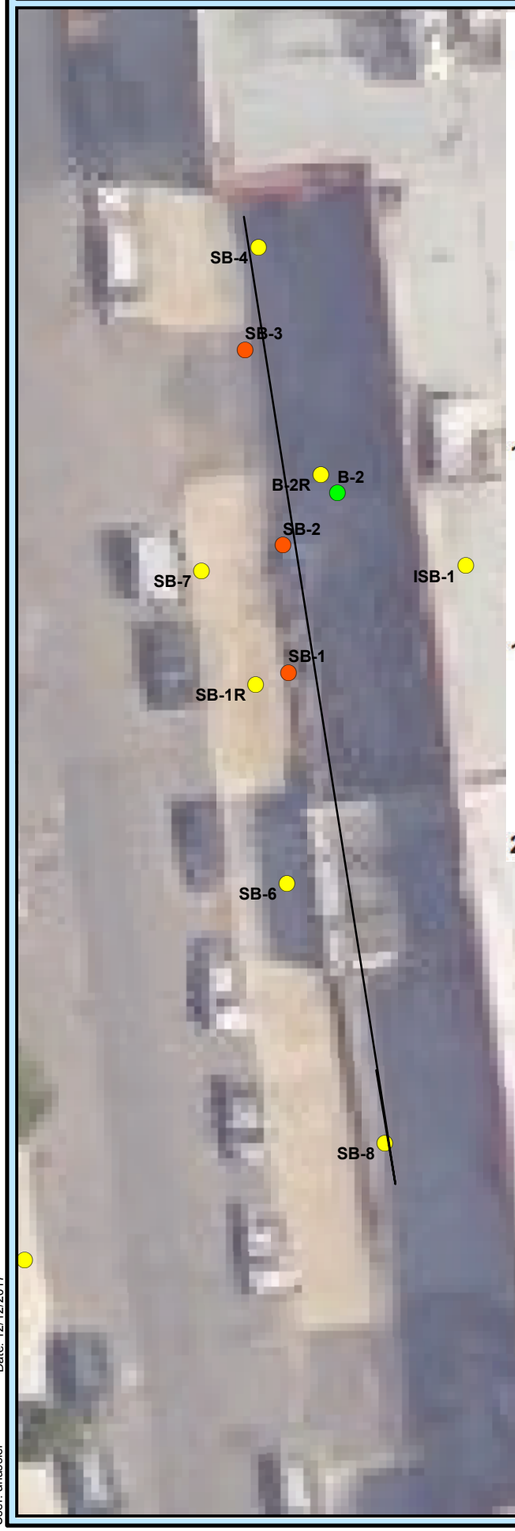
611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

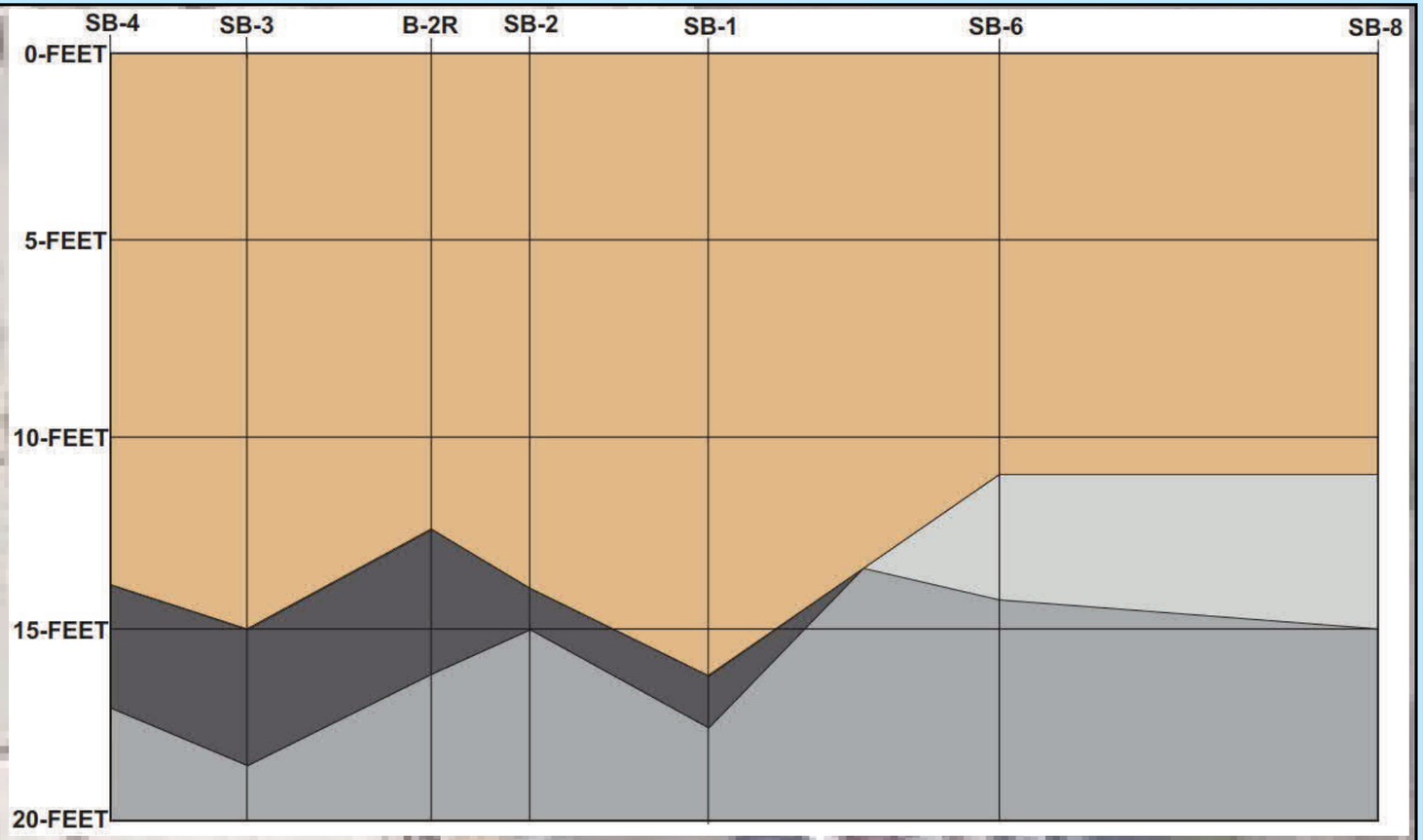
Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY BPT	SCALE 1 in = 100 ft
Job No: 00254100000 File Name: 00254100000 Fig 3 Soil Map		DATE 1/19/2017

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 1 Site Map.mxd
User: afrassler
Date: 4/24/2018

Borough of Queens, NY





JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 4A
CROSS SECTION
SB-4 to SB-8 MAP

Legend

- Soil Borings - February 2015
- Soil Borings - March 2015
- Soil Borings - July/August 2016

- Light Brown Fine-Medium SAND
- Black Silty CLAY
- Gray Fine Silty SAND
- Gray Silty CLAY

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 12.5 25 50
Feet

PSG Engineering, DPC

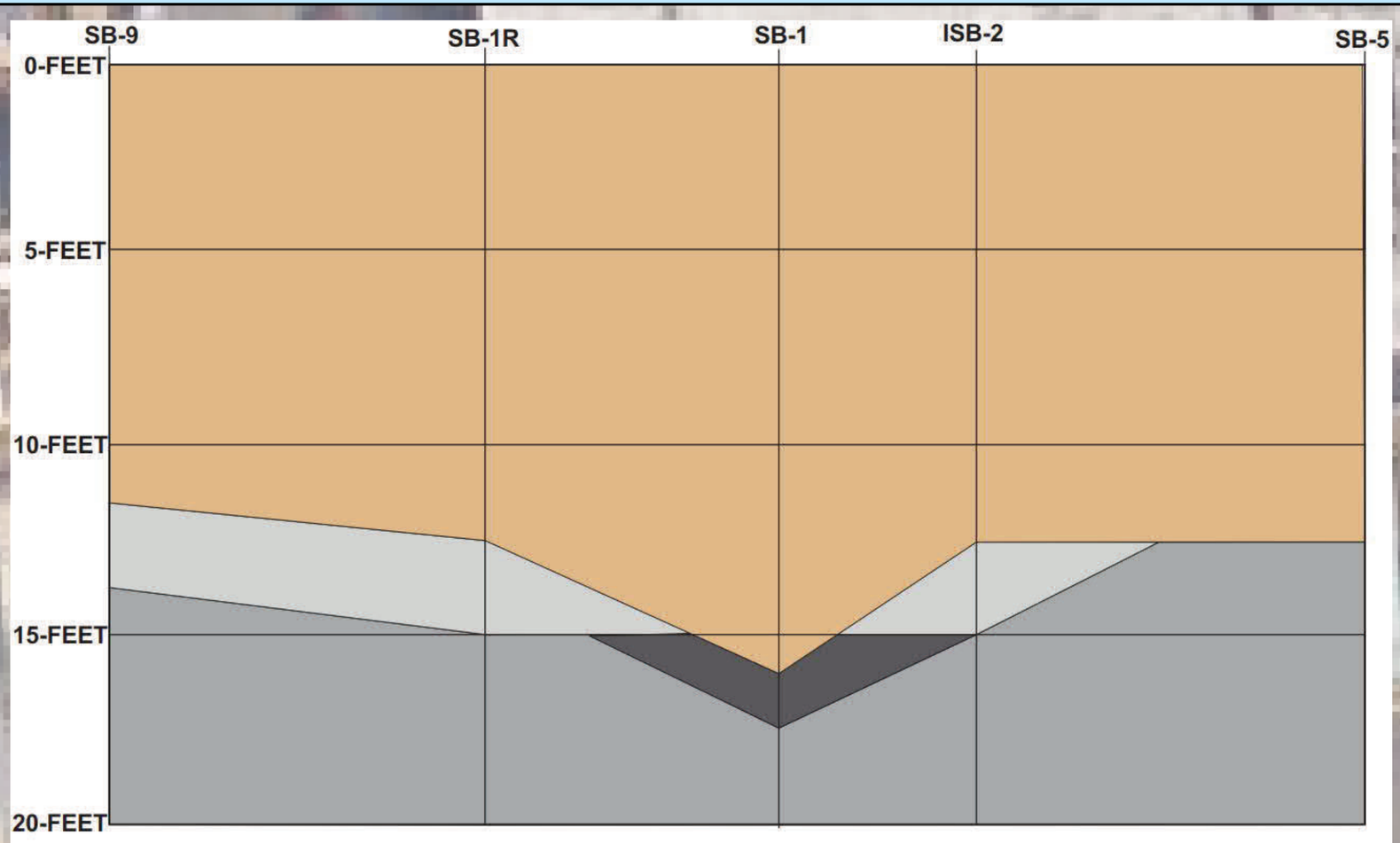
611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

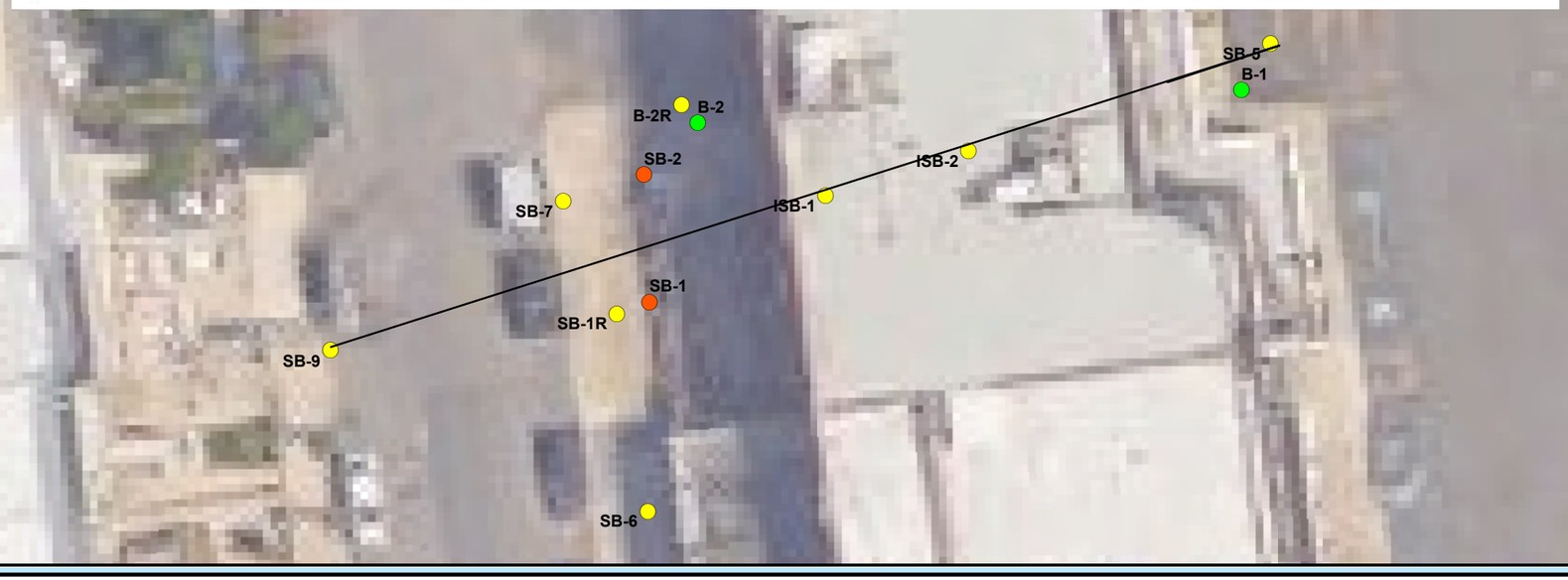
Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY ALH	SCALE 1 in = 25 ft
Job No: 00254100000 File Name: 00254100000 Cross Section SB-4 to SB-8		DATE 06/06/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Cross Section SB-4 to SB-8.mxd
User: afassler
Date: 12/12/2017

Borough of Queens, NY





JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 4B
CROSS SECTION
SB-9 TO SB-5 MAP

Legend

- Soil Borings - February 2015
- Soil Borings - March 2015
- Soil Borings - July/August 2016

- Light Brown Fine-Medium SAND
- Black Silty CLAY
- Gray Fine Silty SAND
- Gray Silty CLAY

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 12.5 25 50
Feet

PSG Engineering, DPC

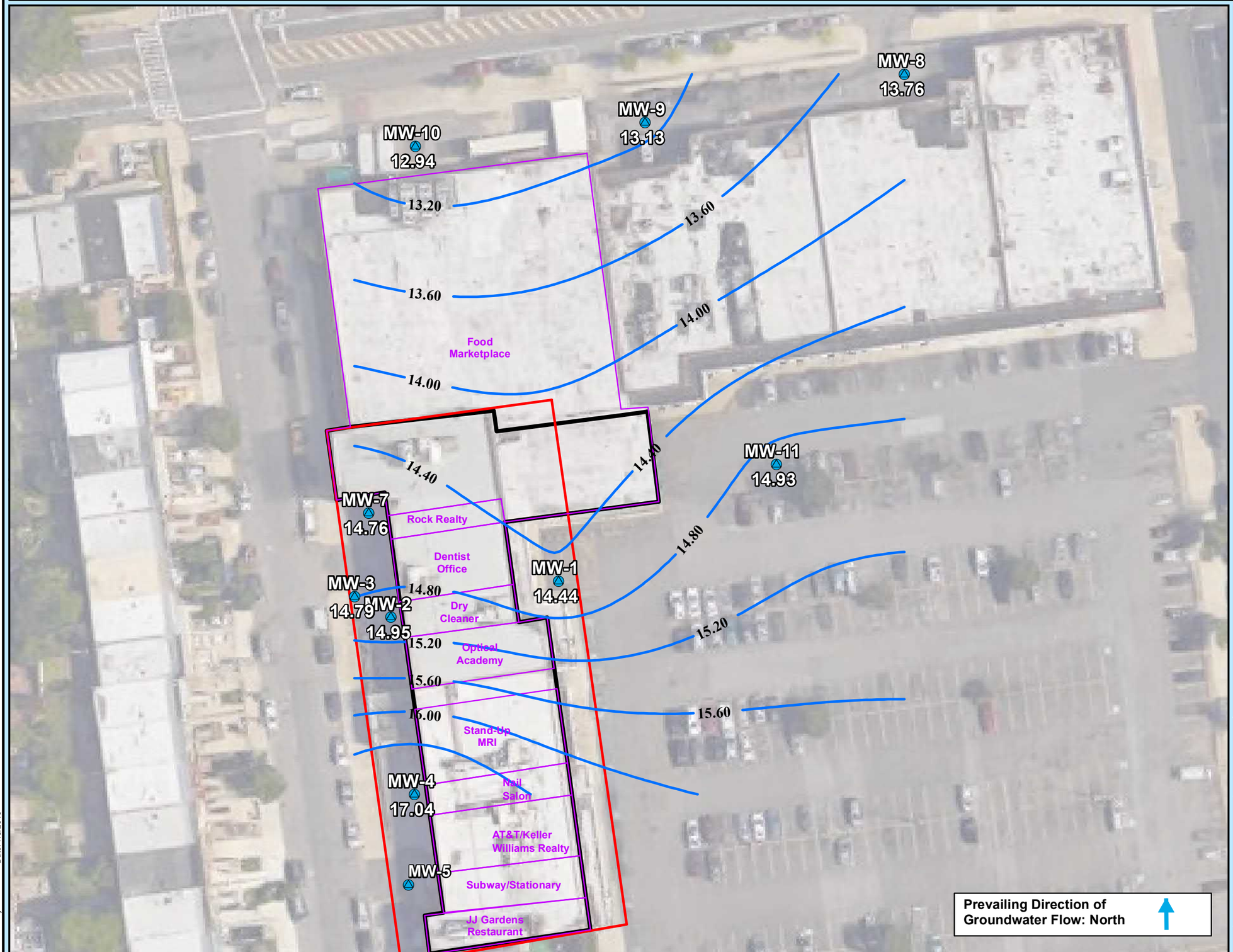
611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY ALH	SCALE 1 in = 25 ft
Job No: 00254100000 File Name: 00254100000 Cross Section SB-9 to SB-5		DATE 06/06/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Cross Section SB-9 to SB-5.mxd
Date: 12/12/2017
User: afassler

Jackson Heights Shopping Center — Borough of Queens, NY



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 5
JULY 2, 2019
GROUNDWATER CONTOUR MAP

Legend

- Site Boundary
- Tenant Spaces
- Monitoring Well Locations
- July 2, 2019 GW Contour

Note:
Monitoring Well MW-5D is not included in this groundwater contour because it's screened at a deeper interval.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 25 50 100
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land Surveying Data	DRAWN BY BPT	SCALE 1 in = 50 ft
Job No: 00254100000 File Name: Fig 5G GW Contour Map 2019-07-02		DATE 07/02/2019

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 5G GW Contour Map 2019-07-02.mxd
User: tlooney
Date: 7/3/2019

Jackson Heights Shopping Center

Borough of Queens, NY

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 6
HISTORIC SOIL SAMPLE LOCATION MAP

Legend

- Soil Borings - February 2015
- Soil Borings - March 2015
- Soil Borings - July/August 2016
- Soil Boring - August 2018
- Post Remediation Soil Sample
- Tenant Spaces
- Site Boundary

Note:
NY-UNRES = New York Unrestricted Use Criteria.

All soil boring locations without Call Out Tables had concentrations below NY-UNRES.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 12.5 25 50
Feet

PSG Engineering, DPC

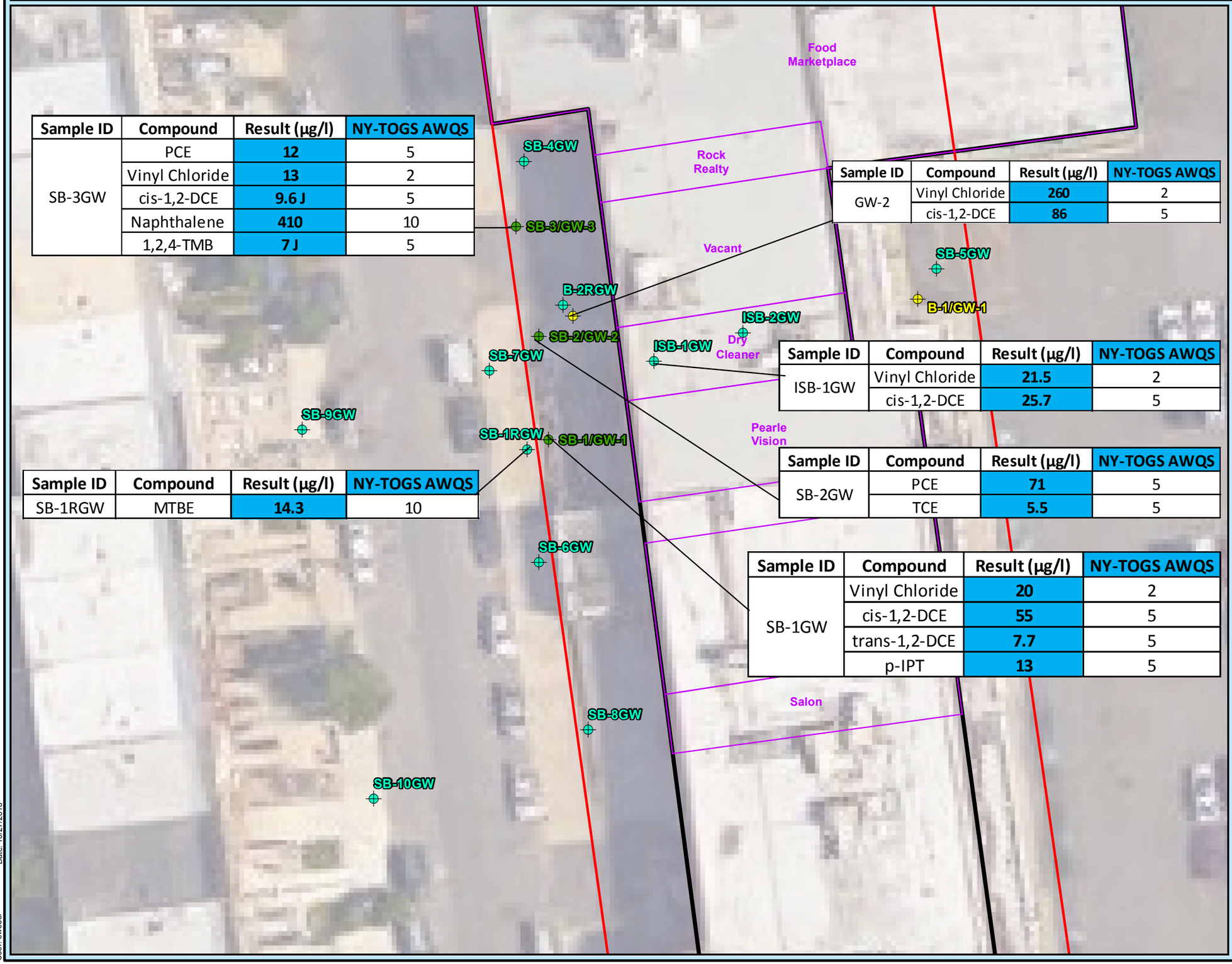
611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY ALH	SCALE 1 in = 25 ft
Job No: 00254100000 File Name: 00254100000 Fig 3 Soil Map		DATE 06/06/2016

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 3 Soil Map.mxd
User: afrassler
Date: 9/19/2019

Jackson Heights Shopping Center — Borough of Queens, NY



Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
SB-3GW	PCE	**12**	5
	Vinyl Chloride	**13**	2
	cis-1,2-DCE	**9.6 J**	5
	Naphthalene	**410**	10
	1,2,4-TMB	**7 J**	5

Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
SB-1RGW	MTBE	**14.3**	10

Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
GW-2	Vinyl Chloride	**260**	2
	cis-1,2-DCE	**86**	5

Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
ISB-1GW	Vinyl Chloride	**21.5**	2
	cis-1,2-DCE	**25.7**	5

Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
SB-2GW	PCE	**71**	5
	TCE	**5.5**	5

Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
SB-1GW	Vinyl Chloride	**20**	2
	cis-1,2-DCE	**55**	5
	trans-1,2-DCE	**7.7**	5
	p-IPT	**13**	5

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 7A
HISTORIC TEMPORARY WELL SAMPLE LOCATION MAP

Legend

- Site Boundary
- Tenant Spaces
- Temporary Well Point Locations-Feb 2015
- Temporary Well Point Locations-March 2015
- Temporary Well Point Locations-July 2016

Note:
NY-TOGS AWQS = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

All temporary well point locations without Call Out Tables had concentrations below NY-TOGS AWQS.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 12.5 25 50
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;

DRAWN BY BPT

SCALE 1 in = 25 ft

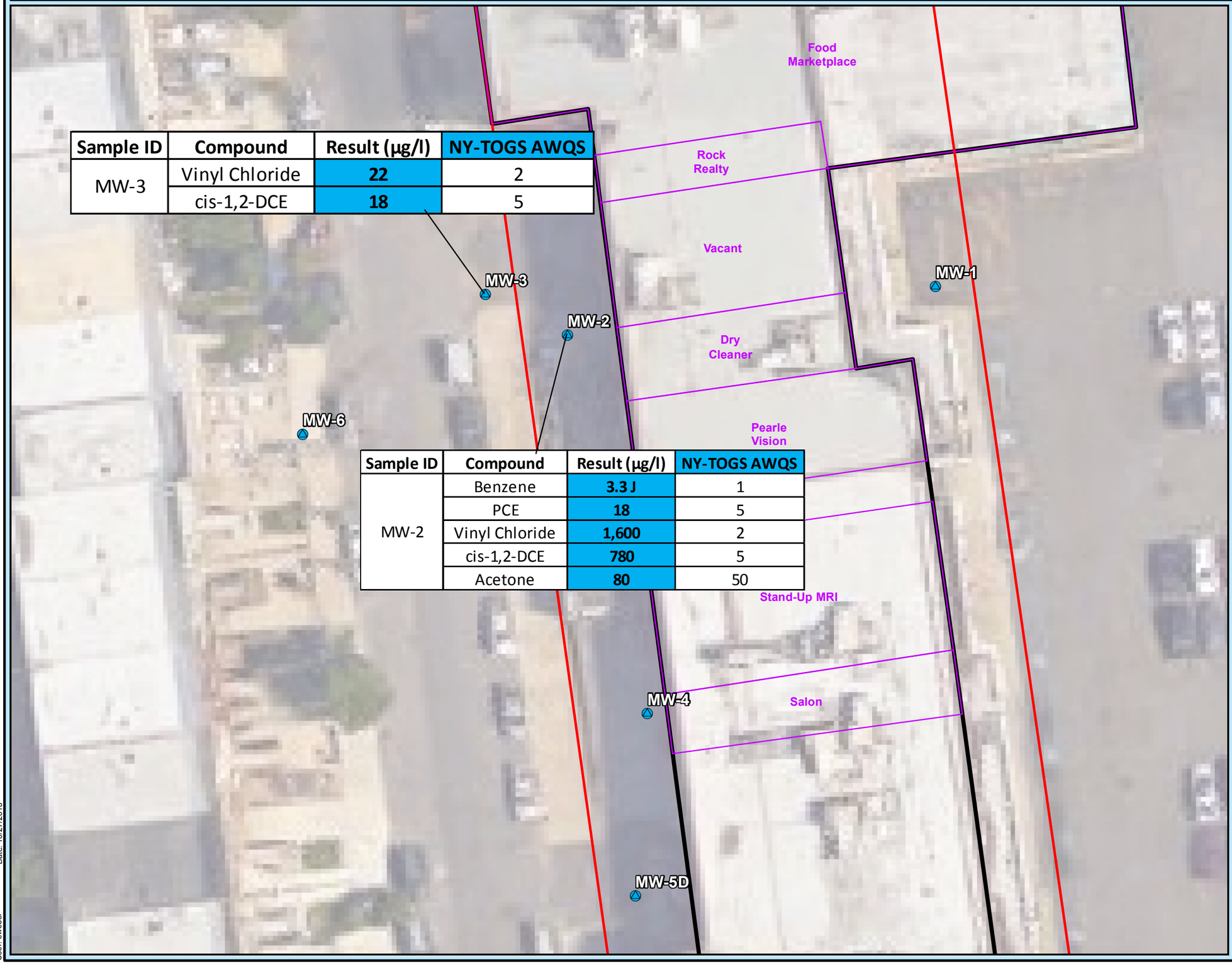
Job No: 00254100000 File Name: 00254100000 Fig 4A Historic Temporary Well Sample Location Map

DATE 10/17/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4A Historic Temporary Well Sample Location Map.mxd
User: eweber
Date: 10/27/2016

Jackson Heights Shopping Center

Borough of Queens, NY



Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
MW-3	Vinyl Chloride	**22**	2
	cis-1,2-DCE	**18**	5

Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
MW-2	Benzene	**3.3 J**	1
	PCE	**18**	5
	Vinyl Chloride	**1,600**	2
	cis-1,2-DCE	**780**	5
	Acetone	**80**	50

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 7B
MARCH 23, 2015
MONITORING WELL SAMPLE LOCATION MAP

Legend

- Site Boundary
- Tenant Spaces
- Monitoring Well Location

Note:
NY-TOGS AWQS = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

Monitoring Well MW-1 had concentrations below NY-TOGS AWQS.

Monitoring Wells MW-4, MW-5D and MW-6 were not sampled because they were not installed until July 2016,

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 12.5 25 50
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

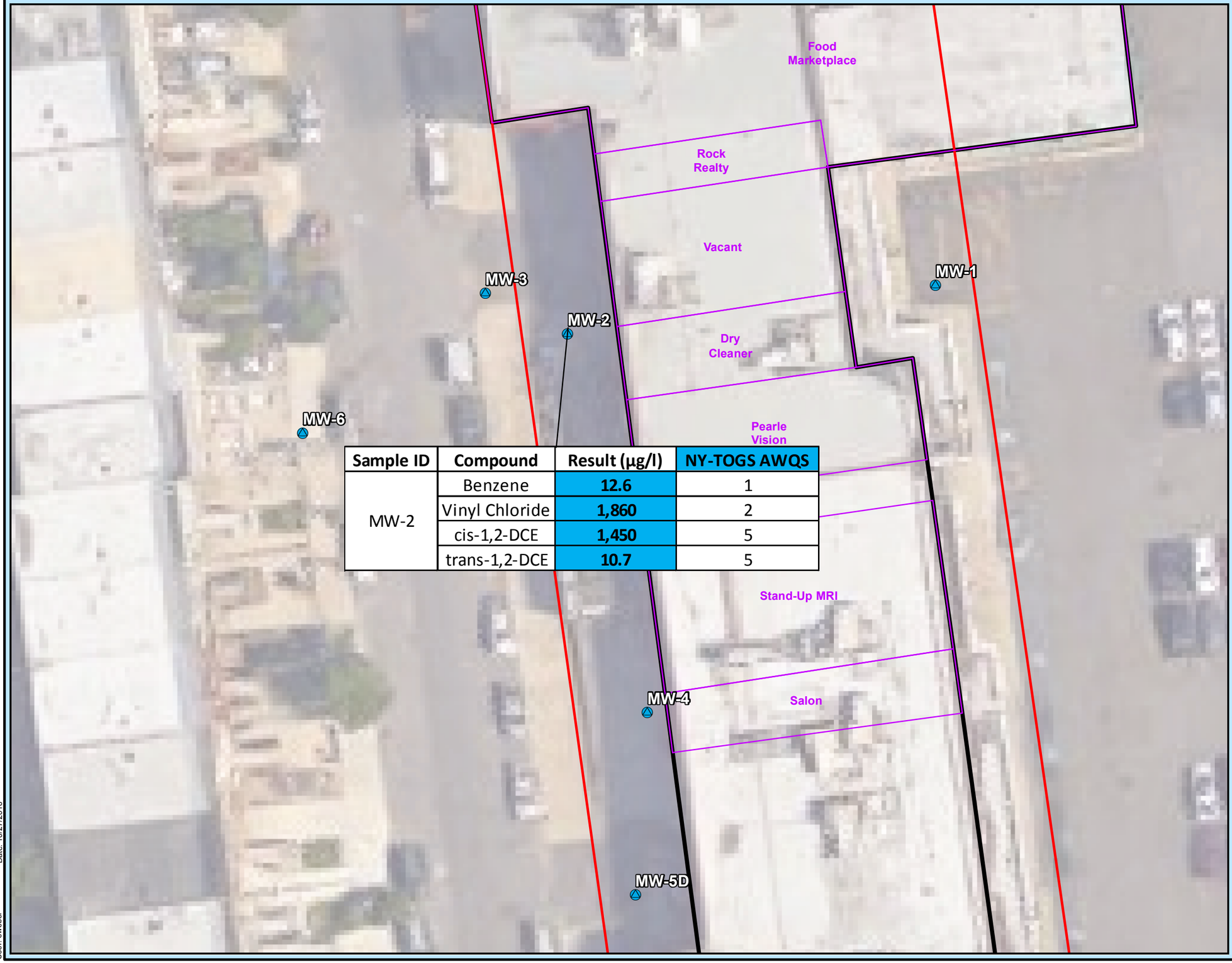
Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land SUrveying Data.	DRAWN BY BPT	SCALE 1 in = 25 ft
Job No: 00254100000 File Name: 00254100000 Fig 4B Monitoring Well Sampling Results Map		DATE 10/17/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4B Monitoring Well Sample Location Map 2015-03-23.mxd
User: ewebler
Date: 10/27/2016

Jackson Heights Shopping Center

Borough of Queens, NY



Sample ID	Compound	Result (µg/l)	NY-TOGS AWQS
MW-2	Benzene	**12.6**	1
	Vinyl Chloride	**1,860**	2
	cis-1,2-DCE	**1,450**	5
	trans-1,2-DCE	**10.7**	5

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 7C
SEPTEMBER 8, 2016
MONITORING WELL
SAMPLE LOCATION MAP

Legend

- Monitoring Well Location
- Site Boundary
- Tenant Spaces

Note:
NY-TOGS AWSQ = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

Monitoring Wells MW-1, MW-3, MW-4, MW-5D and MW-6 had concentrations below NY-TOGS AWQS.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 12.5 25 50
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land SUrveying Data.

DRAWN BY BPT

SCALE 1 in = 25 ft

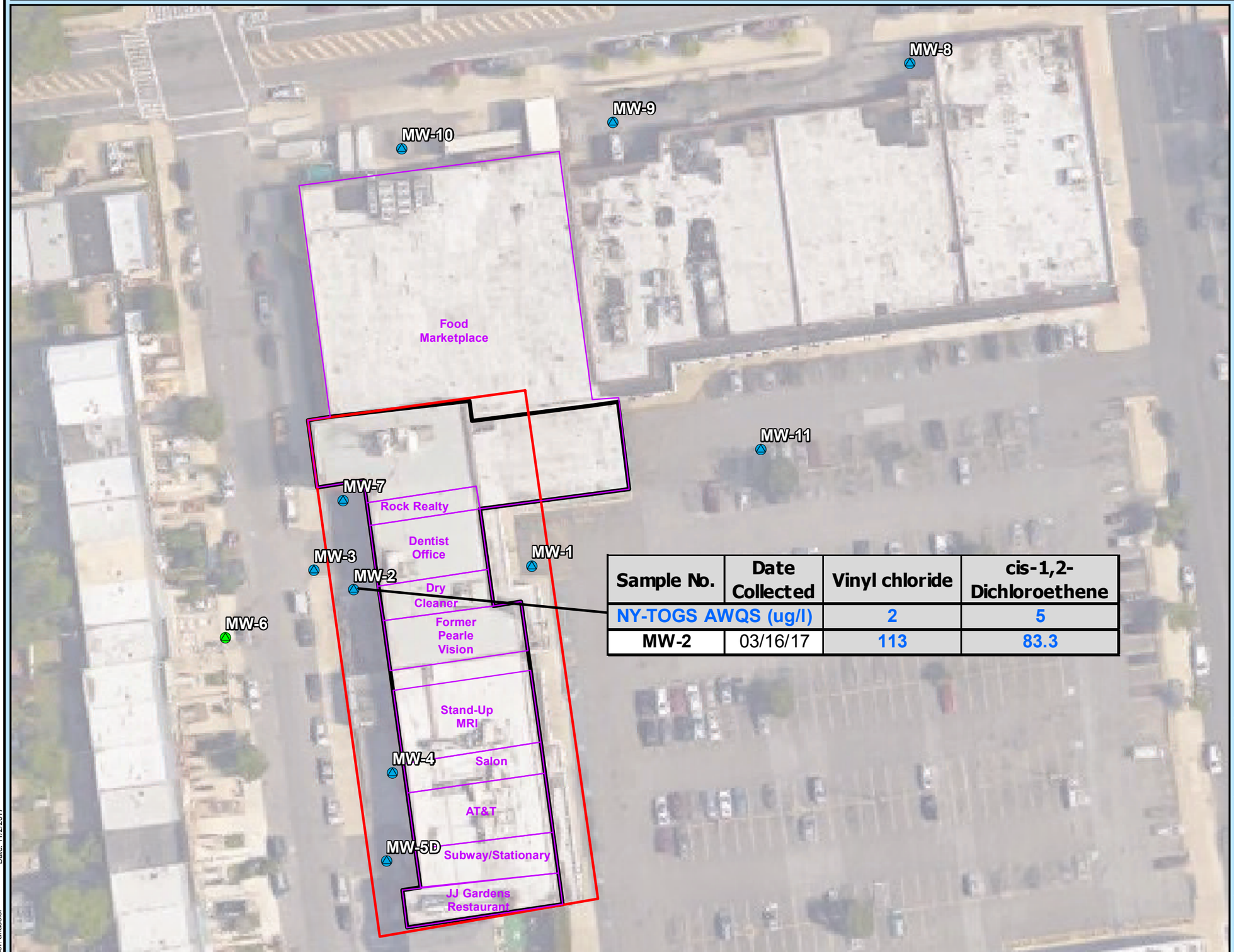
Job No: 00254100000 File Name: 00254100000 Fig 4B Monitoring Well Sampling Results Map 2016-09-08

DATE 10/17/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4C Monitoring Well Sample Location Map 2016-09-08.mxd
User: eweber
Date: 10/27/2016

Jackson Heights Shopping Center

Borough of Queens, NY



Sample No.	Date Collected	Vinyl chloride	cis-1,2-Dichloroethene
NY-TOGS AWQS (ug/l)		2	5
MW-2	03/16/17	113	83.3

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 7D
MARCH 16, 2017
MONITORING WELL SAMPLE LOCATION MAP

Legend

- Site Boundary
- Tenant Spaces
- Monitoring Well Location
- Abandoned Monitoring Well

Note:
NY-TOGS AWSQ = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 25 50 100
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land SUrveying Data.

DRAWN BY BPT

SCALE 1 in = 52 ft

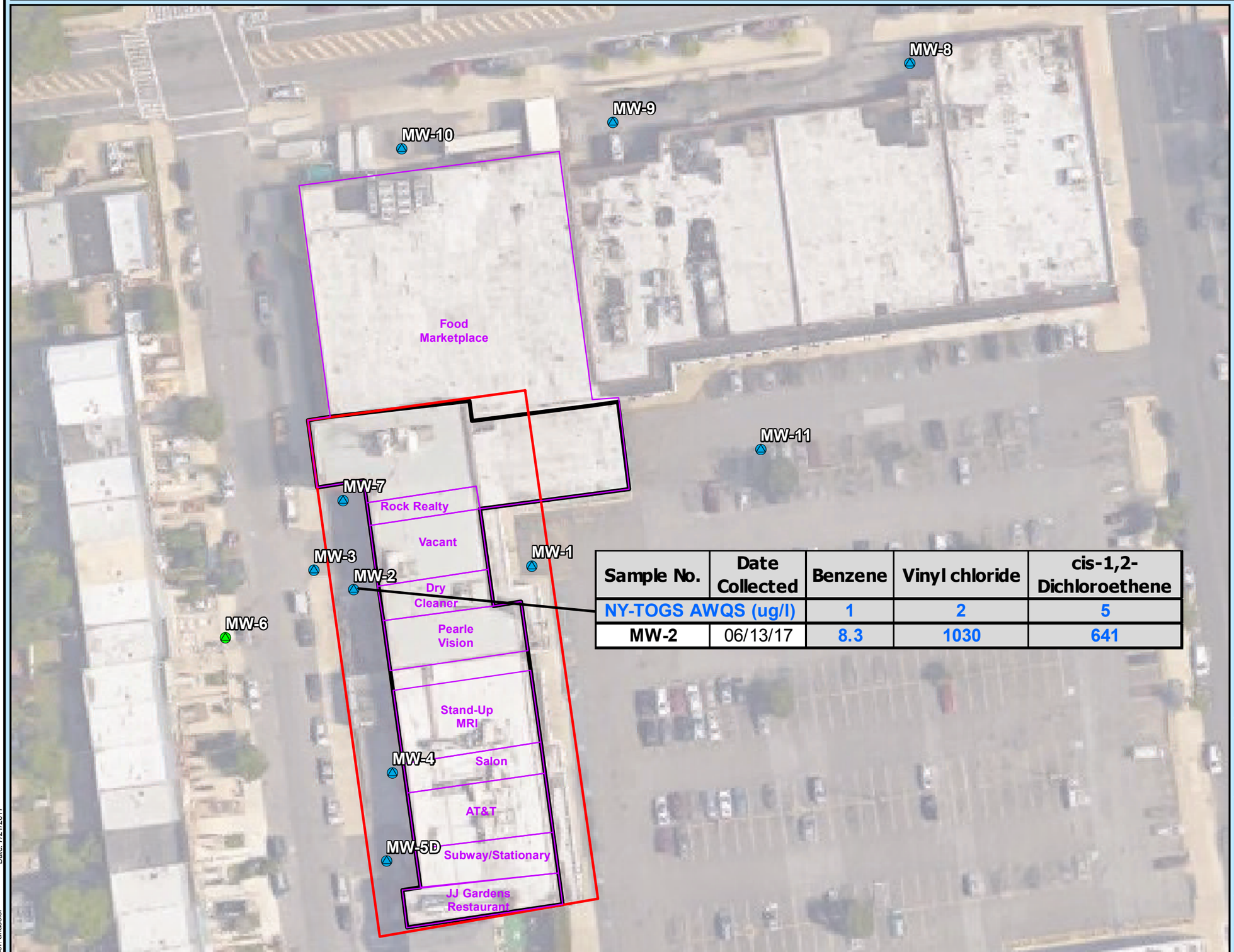
Job No: 00254100000
File Name: Fig 4D MW Sampling Results Map 2017-03-16

DATE 03/20/2017

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4D Monitoring Well Sample Location Map 2017-03-06.mxd
User: ahassler
Date: 11/2/2017

Jackson Heights Shopping Center

Borough of Queens, NY



Sample No.	Date Collected	Benzene	Vinyl chloride	cis-1,2-Dichloroethene
NY-TOGS AWQS (ug/l)		1	2	5
MW-2	06/13/17	8.3	1030	641

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 7E
JUNE 13, 2017
MONITORING WELL SAMPLE LOCATION MAP

Legend

- Site Boundary
- Tenant Spaces
- Monitoring Well Location
- Abandoned Monitoring Well

Note:
NY-TOGS AWSQ = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 25 50 100
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

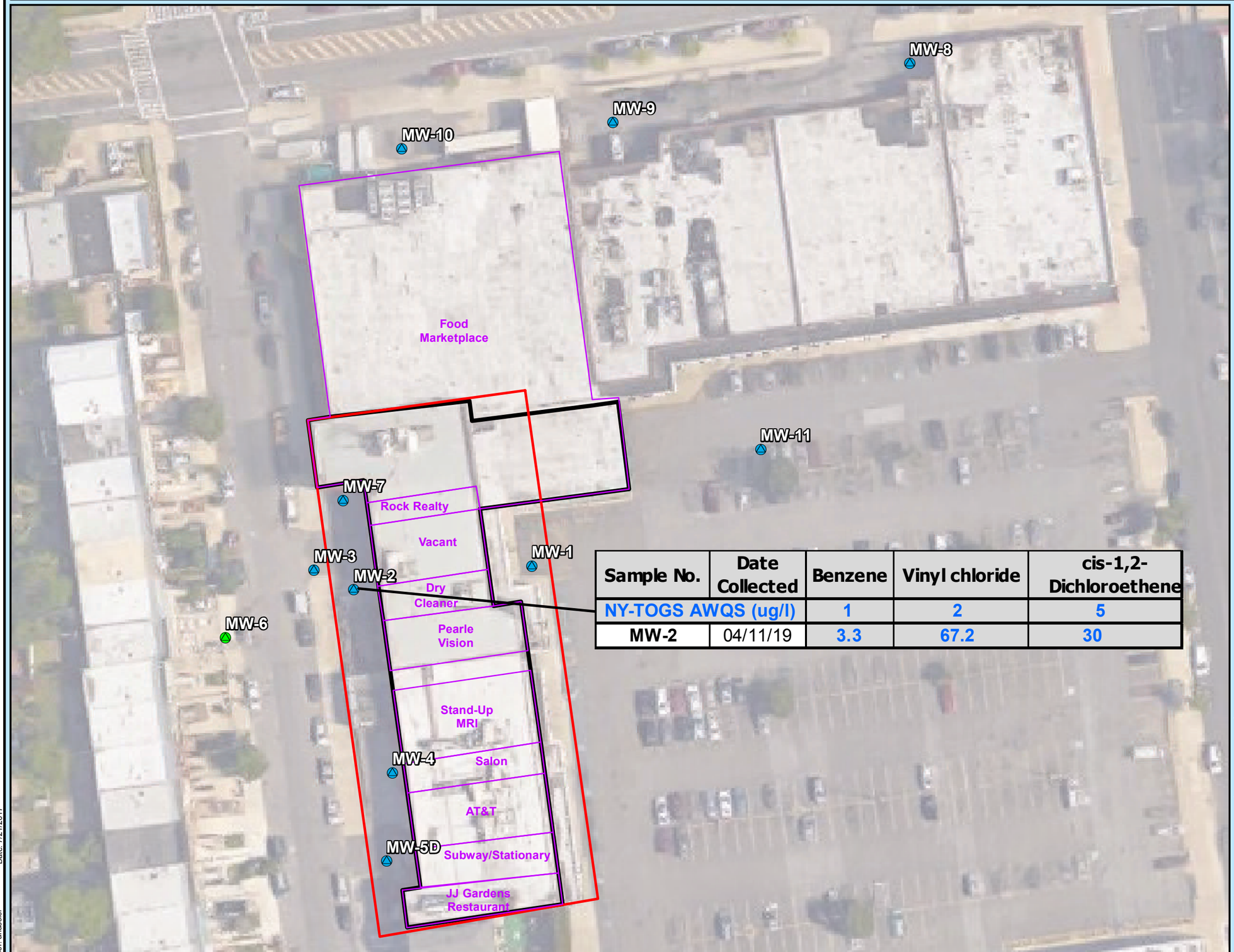
Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land SUrveying Data.	DRAWN BY BPT	SCALE 1 in = 52 ft
Job No: 00254100000 File Name: Fig 4E MW Sampling Results Map 2017-06-13		DATE 03/20/2017

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4E Monitoring Well Sample Location Map 2017-06-13.mxd
User: ahassler
Date: 7/21/2017

Jackson Heights Shopping Center

Borough of Queens, NY



Sample No.	Date Collected	Benzene	Vinyl chloride	cis-1,2-Dichloroethene
NY-TOGS AWQS (ug/l)		1	2	5
MW-2	04/11/19	3.3	67.2	30

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 7F
APRIL 11, 2019
MONITORING WELL SAMPLE LOCATION MAP

Legend

- Site Boundary
- Tenant Spaces
- Monitoring Well Location
- Abandoned Monitoring Well

Note:
NY-TOGS AWSQ = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 25 50 100
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land SUrveying Data.

DRAWN BY BPT

SCALE 1 in = 52 ft

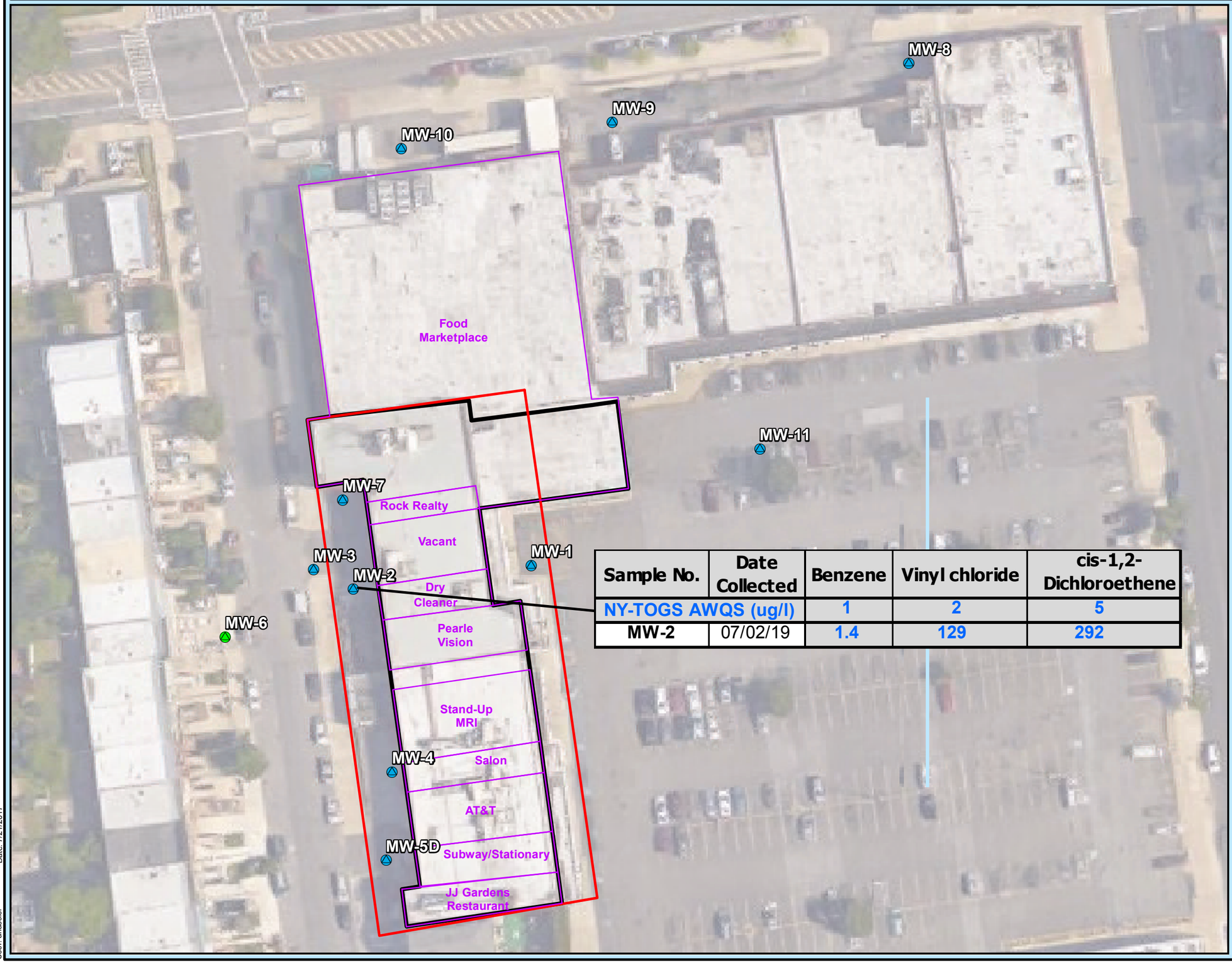
Job No: 00254100000
File Name: Fig 4E MW Sampling Results Map 2017-06-13

DATE 03/20/2017

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4E Monitoring Well Sample Location Map 2017-06-13.mxd
User: ahassler
Date: 7/21/2017

Jackson Heights Shopping Center

Borough of Queens, NY



Sample No.	Date Collected	Benzene	Vinyl chloride	cis-1,2-Dichloroethene
NY-TOGS AWQS (ug/l)		1	2	5
MW-2	07/02/19	1.4	129	292

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 7G
JULY 2, 2019
MONITORING WELL SAMPLE LOCATION MAP

Legend

- Site Boundary
- Tenant Spaces
- Monitoring Well Location
- Abandoned Monitoring Well

Note:
NY-TOGS AWSQ = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 25 50 100
Feet

PSG Engineering, DPC

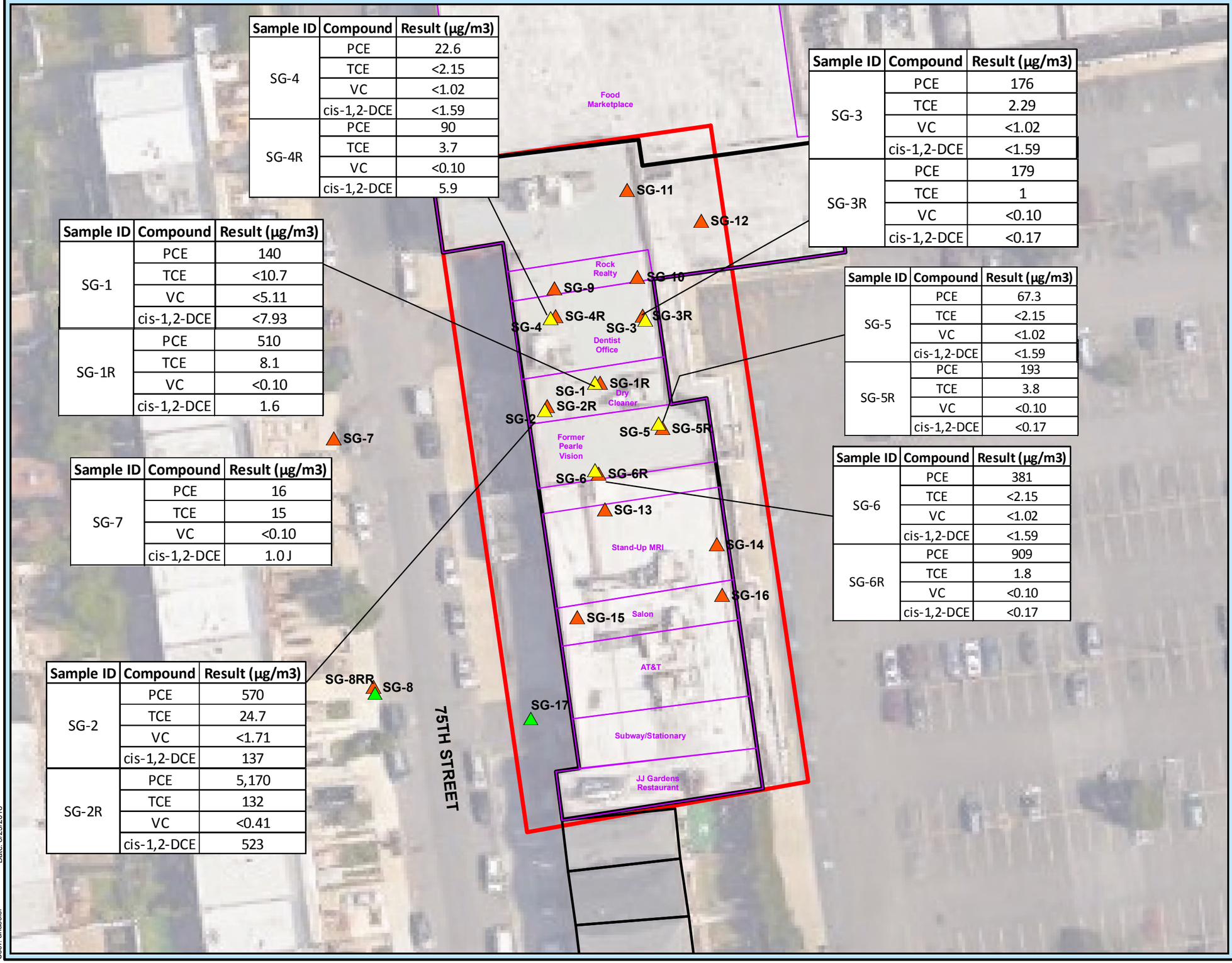
611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land SUrveying Data.	DRAWN BY BPT	SCALE 1 in = 52 ft
Job No: 00254100000 File Name: Fig 4E MW Sampling Results Map 2017-06-13		DATE 03/20/2017

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4E Monitoring Well Sample Location Map 2017-06-13.mxd
User: ahassler
Date: 7/21/2017

Jackson Heights Shopping Center — Borough of Queens, NY



Sample ID	Compound	Result (µg/m3)
SG-4	PCE	22.6
	TCE	<2.15
	VC	<1.02
	cis-1,2-DCE	<1.59
SG-4R	PCE	90
	TCE	3.7
	VC	<0.10
	cis-1,2-DCE	5.9

Sample ID	Compound	Result (µg/m3)
SG-3	PCE	176
	TCE	2.29
	VC	<1.02
	cis-1,2-DCE	<1.59
SG-3R	PCE	179
	TCE	1
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-1	PCE	140
	TCE	<10.7
	VC	<5.11
	cis-1,2-DCE	<7.93
SG-1R	PCE	510
	TCE	8.1
	VC	<0.10
	cis-1,2-DCE	1.6

Sample ID	Compound	Result (µg/m3)
SG-5	PCE	67.3
	TCE	<2.15
	VC	<1.02
	cis-1,2-DCE	<1.59
SG-5R	PCE	193
	TCE	3.8
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-7	PCE	16
	TCE	15
	VC	<0.10
	cis-1,2-DCE	1.0 J

Sample ID	Compound	Result (µg/m3)
SG-6	PCE	381
	TCE	<2.15
	VC	<1.02
	cis-1,2-DCE	<1.59
SG-6R	PCE	909
	TCE	1.8
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-2	PCE	570
	TCE	24.7
	VC	<1.71
	cis-1,2-DCE	137
SG-2R	PCE	5,170
	TCE	132
	VC	<0.41
	cis-1,2-DCE	523

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 8A
SOIL VAPOR
SAMPLE LOCATION MAP

Legend

- Soil Vapor Sample - August 2018
- Site Boundary
- Tenant Spaces
- Sub-Slab Vapor Sample - March 2015
- Sub-Slab Vapor Sample - July 2016

Note:
EPA Screening Level = Environmental Protection Agency Screening Level.

All soil vapor sampling locations without a Call Out Table are included on next figure.

VC: Vinyl Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
cis-1,2-DCE : cis-1,2-dichloroethene

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 20 40 80
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;

DRAWN BY BPT

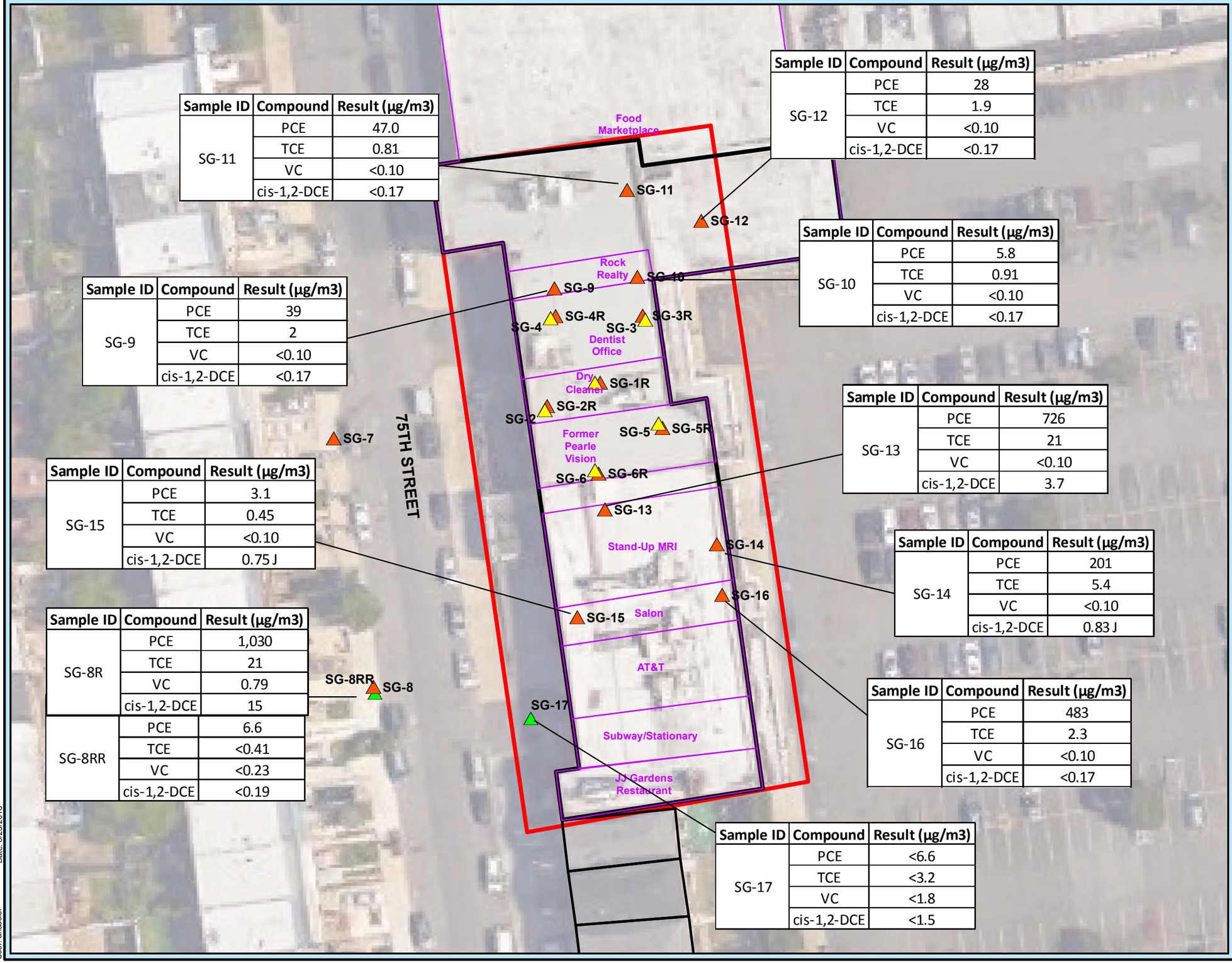
SCALE 1 in = 40 ft

Job No: 00254100000
File Name: 00254100000 Fig 6 Soil Gas Sample Location Map

DATE 10/17/2016

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 6A Soil Gas Sample Location Map.mxd
User: ahassler
Date: 9/23/2018

Jackson Heights Shopping Center — Borough of Queens, NY



Sample ID	Compound	Result (µg/m3)
SG-11	PCE	47.0
	TCE	0.81
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-12	PCE	28
	TCE	1.9
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-10	PCE	5.8
	TCE	0.91
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-9	PCE	39
	TCE	2
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-13	PCE	726
	TCE	21
	VC	<0.10
	cis-1,2-DCE	3.7

Sample ID	Compound	Result (µg/m3)
SG-15	PCE	3.1
	TCE	0.45
	VC	<0.10
	cis-1,2-DCE	0.75 J

Sample ID	Compound	Result (µg/m3)
SG-14	PCE	201
	TCE	5.4
	VC	<0.10
	cis-1,2-DCE	0.83 J

Sample ID	Compound	Result (µg/m3)
SG-8R	PCE	1,030
	TCE	21
	VC	0.79
	cis-1,2-DCE	15
SG-8RR	PCE	6.6
	TCE	<0.41
	VC	<0.23
	cis-1,2-DCE	<0.19

Sample ID	Compound	Result (µg/m3)
SG-16	PCE	483
	TCE	2.3
	VC	<0.10
	cis-1,2-DCE	<0.17

Sample ID	Compound	Result (µg/m3)
SG-17	PCE	<6.6
	TCE	<3.2
	VC	<1.8
	cis-1,2-DCE	<1.5

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 8B
SOIL VAPOR
SAMPLE LOCATION MAP (CONT.)

Legend

- Site Boundary
- Tenant Spaces
- Soil Vapor Sample - August 2018
- Sub-Slab Vapor Sample - March 2015
- Sub-Slab Vapor Sample - July 2016

Note:
EPA Screening Level = Environmental Protection Agency Screening Level.

All soil vapor sampling locations without a Call Out Table are included on previous figure.

VC: Vinyl Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
cis-1,2-DCE : cis-1,2-dichloroethene

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 20 40 80
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;

DRAWN BY BPT

SCALE 1 in = 40 ft

Job No: 00254100000
File Name: 00254100000 Fig 6 Soil Gas Sample Location Map

DATE 10/17/2016

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 6B Soil Gas Sample Location Map Continued.mxd
User: afassler
Date: 8/23/2018

Jackson Heights Shopping Center — Borough of Queens, NY

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-7	CT	ND (0.20)	--	--	200
	MC	1.4	60	--	2,600
	PCE	12	30	300	1,800
	TCE	3.5	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-1	CT	ND (0.20)	--	--	200
	MC	4.9	60	--	2,600
	PCE	408	30	300	1,800
	TCE	124	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
AA-2	CT	ND (0.20)	--	--	200
	MC	3.2	60	--	2,600
	PCE	9.5	30	300	1,800
	TCE	5.4	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

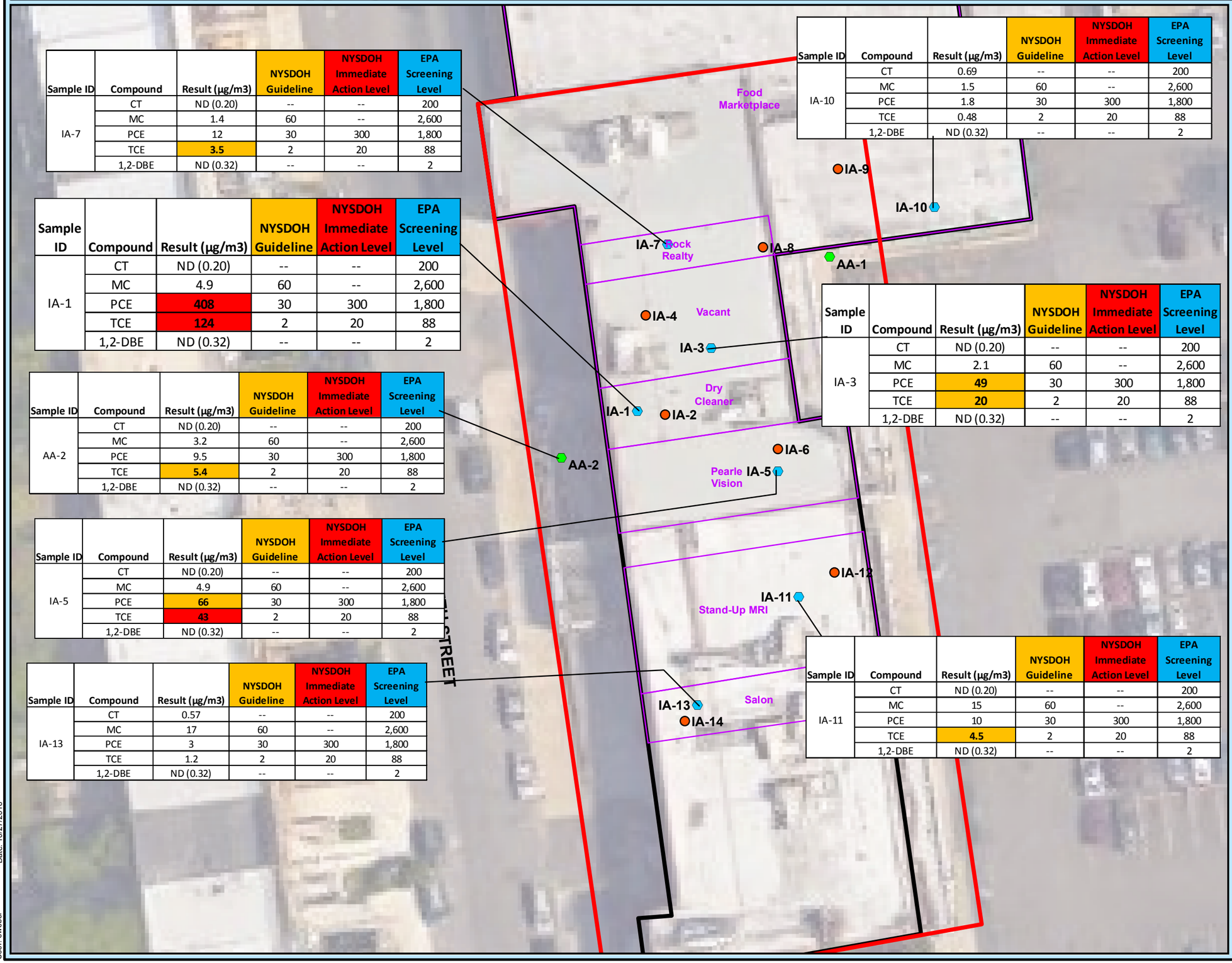
Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-5	CT	ND (0.20)	--	--	200
	MC	4.9	60	--	2,600
	PCE	66	30	300	1,800
	TCE	43	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-13	CT	0.57	--	--	200
	MC	17	60	--	2,600
	PCE	3	30	300	1,800
	TCE	1.2	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-10	CT	0.69	--	--	200
	MC	1.5	60	--	2,600
	PCE	1.8	30	300	1,800
	TCE	0.48	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-3	CT	ND (0.20)	--	--	200
	MC	2.1	60	--	2,600
	PCE	49	30	300	1,800
	TCE	20	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-11	CT	ND (0.20)	--	--	200
	MC	15	60	--	2,600
	PCE	10	30	300	1,800
	TCE	4.5	2	20	88
	1,2-DBE	ND (0.32)	--	--	2



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 9A
INDOOR AIR
SAMPLE LOCATION MAP
JULY 2016

Legend

- Site Boundary
- Tenant Spaces
- Ambient Air Sample Locations
- Indoor Air Sample Locations (1st Floor)
- Indoor Air Sample Locations (Basement)

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on next figure.

CT : Carbon Tetrachloride
MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
1,2-DBE : 1,2-dibromoethane

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;

DRAWN BY BPT

SCALE 1 in = 30 ft

Job No: 00254100000
File Name: 00254100000 Fig 7 Indoor Air Sample Location Map

DATE 10/25/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 7 Indoor Air Sample Location Map.mxd
User: eweber
Date: 10/27/2016

Jackson Heights Shopping Center — Borough of Queens, NY

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-8	CT	0.62	--	--	200
	MC	1.5	60	--	2,600
	PCE	15	30	300	1,800
	TCE	**4.8**	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-4	CT	0.63	--	--	200
	MC	1.9	60	--	2,600
	PCE	29	30	300	1,800
	TCE	**12**	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-2	CT	ND (0.20)	--	--	200
	MC	2.6	60	--	2,600
	PCE	**71.9**	30	300	1,800
	TCE	**83.3**	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

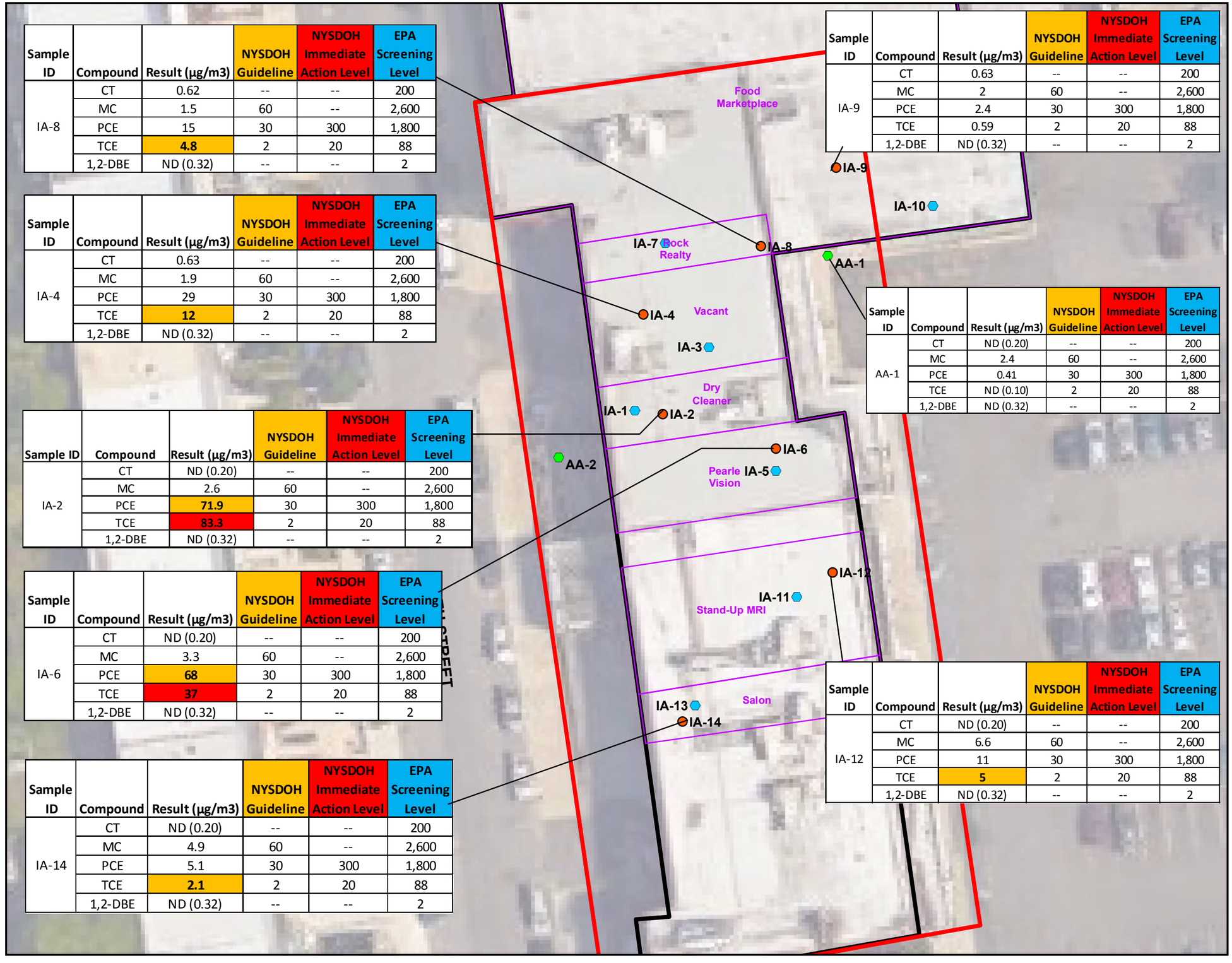
Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-6	CT	ND (0.20)	--	--	200
	MC	3.3	60	--	2,600
	PCE	**68**	30	300	1,800
	TCE	**37**	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-14	CT	ND (0.20)	--	--	200
	MC	4.9	60	--	2,600
	PCE	5.1	30	300	1,800
	TCE	**2.1**	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-9	CT	0.63	--	--	200
	MC	2	60	--	2,600
	PCE	2.4	30	300	1,800
	TCE	0.59	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
AA-1	CT	ND (0.20)	--	--	200
	MC	2.4	60	--	2,600
	PCE	0.41	30	300	1,800
	TCE	ND (0.10)	2	20	88
	1,2-DBE	ND (0.32)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-12	CT	ND (0.20)	--	--	200
	MC	6.6	60	--	2,600
	PCE	11	30	300	1,800
	TCE	**5**	2	20	88
	1,2-DBE	ND (0.32)	--	--	2



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 9B
INDOOR AIR
SAMPLE LOCATION MAP (CONT.)
JULY 2016

Legend

- Site Boundary
- Tenant Spaces
- Ambient Air Sample Locations
- Indoor Air Sample Locations (1st Floor)
- Indoor Air Sample Locations (Basement)

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on previous figure.

CT : Carbon Tetrachloride
MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
1,2-DBE : 1,2-dibromoethane

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;

DRAWN BY BPT

SCALE 1 in = 30 ft

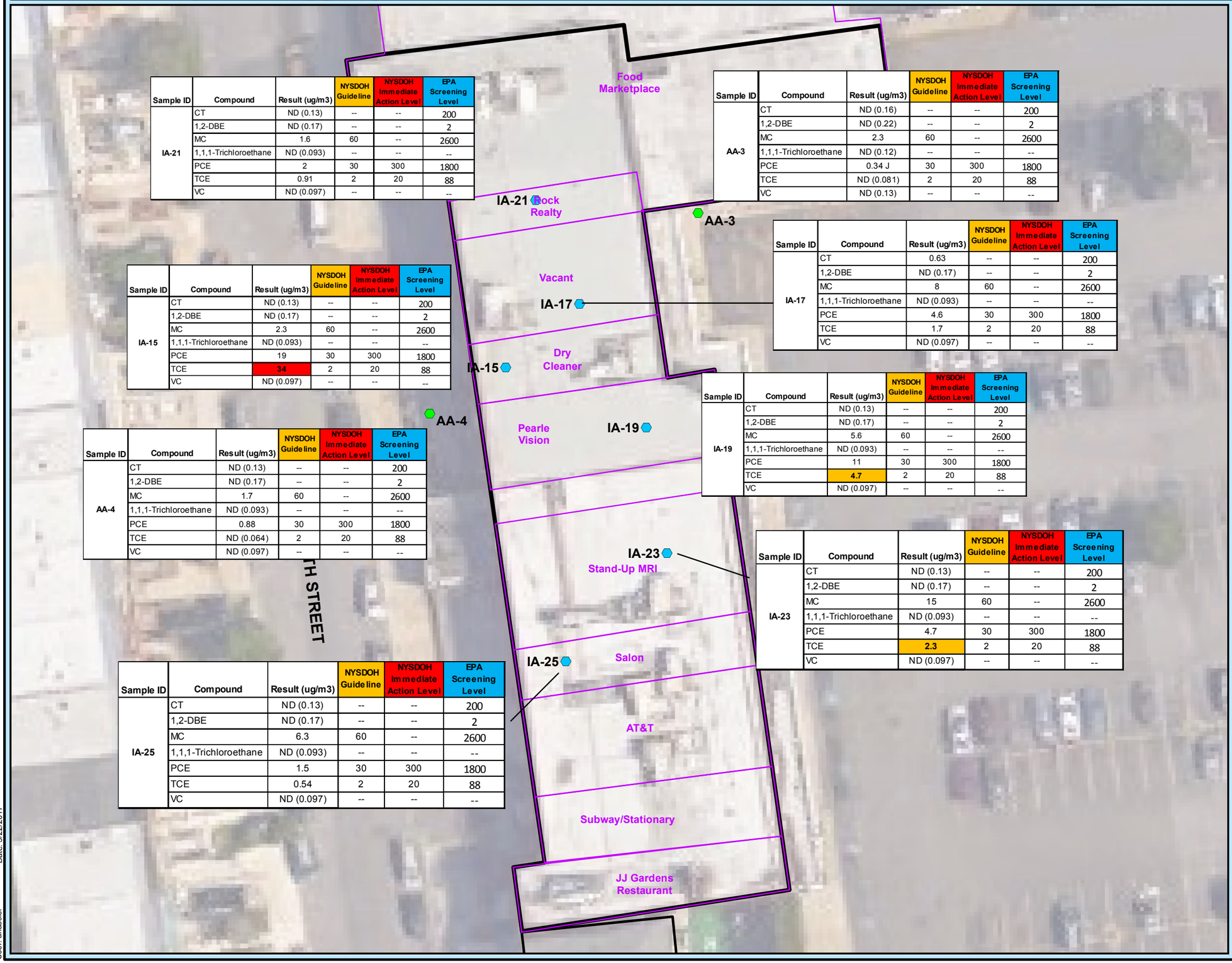
Job No: 00254100000
File Name: 00254100000 Fig 7 Indoor Air Sample Location Map

DATE 10/25/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 7 Indoor Air Sample Location Map Continued.mxd
User: eweber
Date: 12/20/2016

Jackson Heights Shopping Center

Borough of Queens, NY



Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-21	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	1.6	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	2	30	300	1800
	TCE	0.91	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
AA-3	CT	ND (0.16)	--	--	200
	1,2-DBE	ND (0.22)	--	--	2
	MC	2.3	60	--	2600
	1,1,1-Trichloroethane	ND (0.12)	--	--	--
	PCE	0.34 J	30	300	1800
	TCE	ND (0.081)	2	20	88
	VC	ND (0.13)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-15	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	2.3	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	19	30	300	1800
	TCE	34	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-17	CT	0.63	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	8	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	4.6	30	300	1800
	TCE	1.7	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
AA-4	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	1.7	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	0.88	30	300	1800
	TCE	ND (0.064)	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-19	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	5.6	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	11	30	300	1800
	TCE	4.7	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-23	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	15	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	4.7	30	300	1800
	TCE	2.3	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-25	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	6.3	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	1.5	30	300	1800
	TCE	0.54	2	20	88
	VC	ND (0.097)	--	--	--

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 10A
INDOOR AIR
SAMPLE LOCATION MAP
(May 2-3, 2017)

Legend

- Tenant Spaces
- Ambient Air Sample Locations
- Indoor Air Sample Locations (1st Floor)

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on next figure.

CT : Carbon Tetrachloride
MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
1,2-DBE : 1,2-dibromoethane
VC: Vinyl Chloride

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;

DRAWN BY BPT

SCALE 1 in = 30 ft

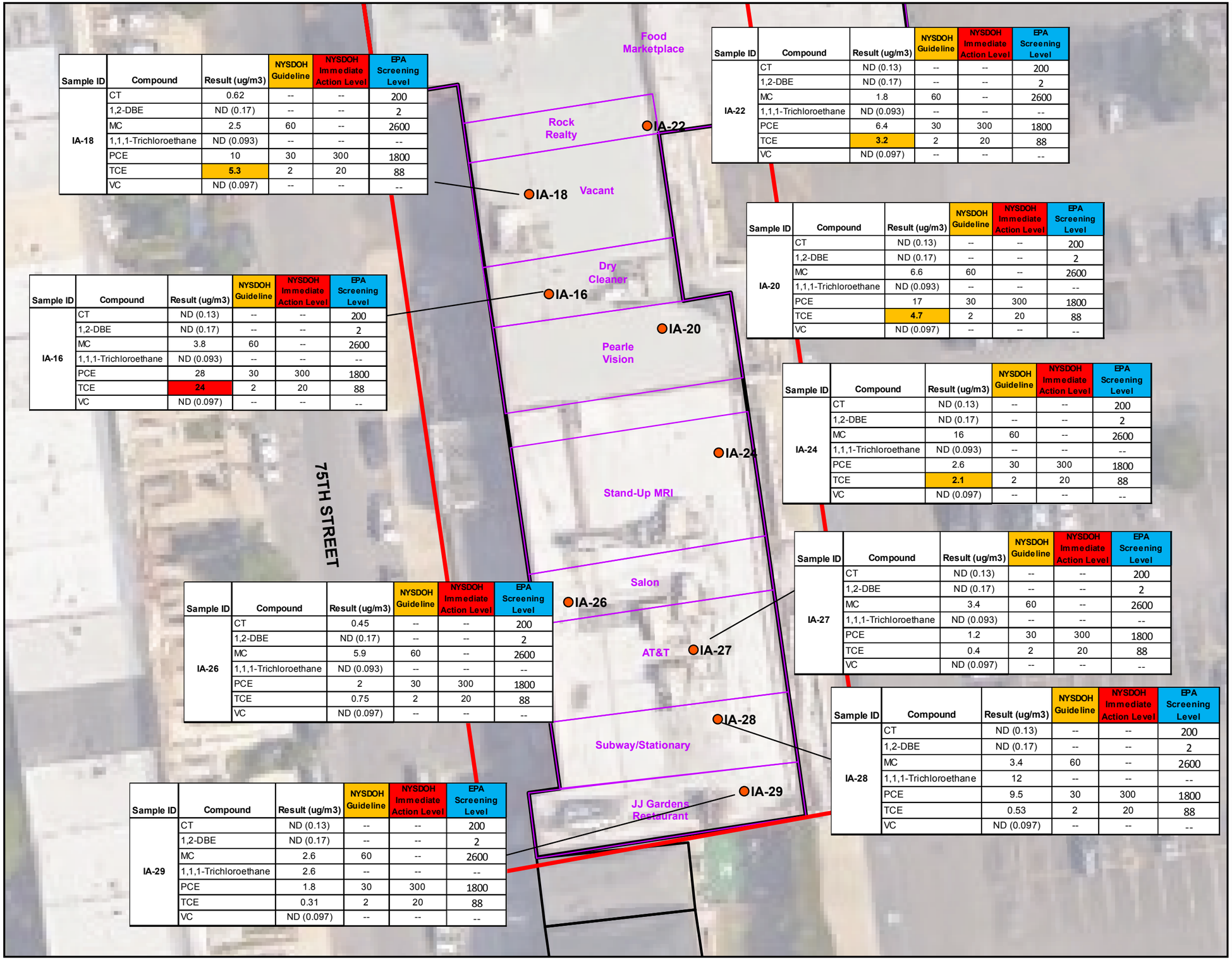
Job No: 00254100000
File Name: 00254100000 Fig 7 Indoor Air Sample Location Map

DATE 10/25/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 8A Indoor Air Sample Location Map.mxd
User: alassler
Date: 5/22/2017

Jackson Heights Shopping Center

Borough of Queens, NY



Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-18	CT	0.62	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	2.5	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	10	30	300	1800
	TCE	**5.3**	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-22	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	1.8	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	6.4	30	300	1800
	TCE	**3.2**	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-16	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	3.8	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	28	30	300	1800
	TCE	**24**	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-20	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	6.6	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	17	30	300	1800
	TCE	**4.7**	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-24	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	16	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	2.6	30	300	1800
	TCE	**2.1**	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-26	CT	0.45	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	5.9	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	2	30	300	1800
	TCE	0.75	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-27	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	3.4	60	--	2600
	1,1,1-Trichloroethane	ND (0.093)	--	--	--
	PCE	1.2	30	300	1800
	TCE	0.4	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-28	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	3.4	60	--	2600
	1,1,1-Trichloroethane	12	--	--	--
	PCE	9.5	30	300	1800
	TCE	0.53	2	20	88
	VC	ND (0.097)	--	--	--

Sample ID	Compound	Result (ug/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-29	CT	ND (0.13)	--	--	200
	1,2-DBE	ND (0.17)	--	--	2
	MC	2.6	60	--	2600
	1,1,1-Trichloroethane	2.6	--	--	--
	PCE	1.8	30	300	1800
	TCE	0.31	2	20	88
	VC	ND (0.097)	--	--	--

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 10B
INDOOR AIR
SAMPLE LOCATION MAP (CONT.)
(May 2-3, 2017)

Legend

- Site Boundary
- Indoor Air Sample Locations (Basement)
- Tenant Spaces

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on previous figure.

CT : Carbon Tetrachloride
MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
1,2-DBE : 1,2-dibromoethane
VC: Vinyl Chloride

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;

DRAWN BY BPT

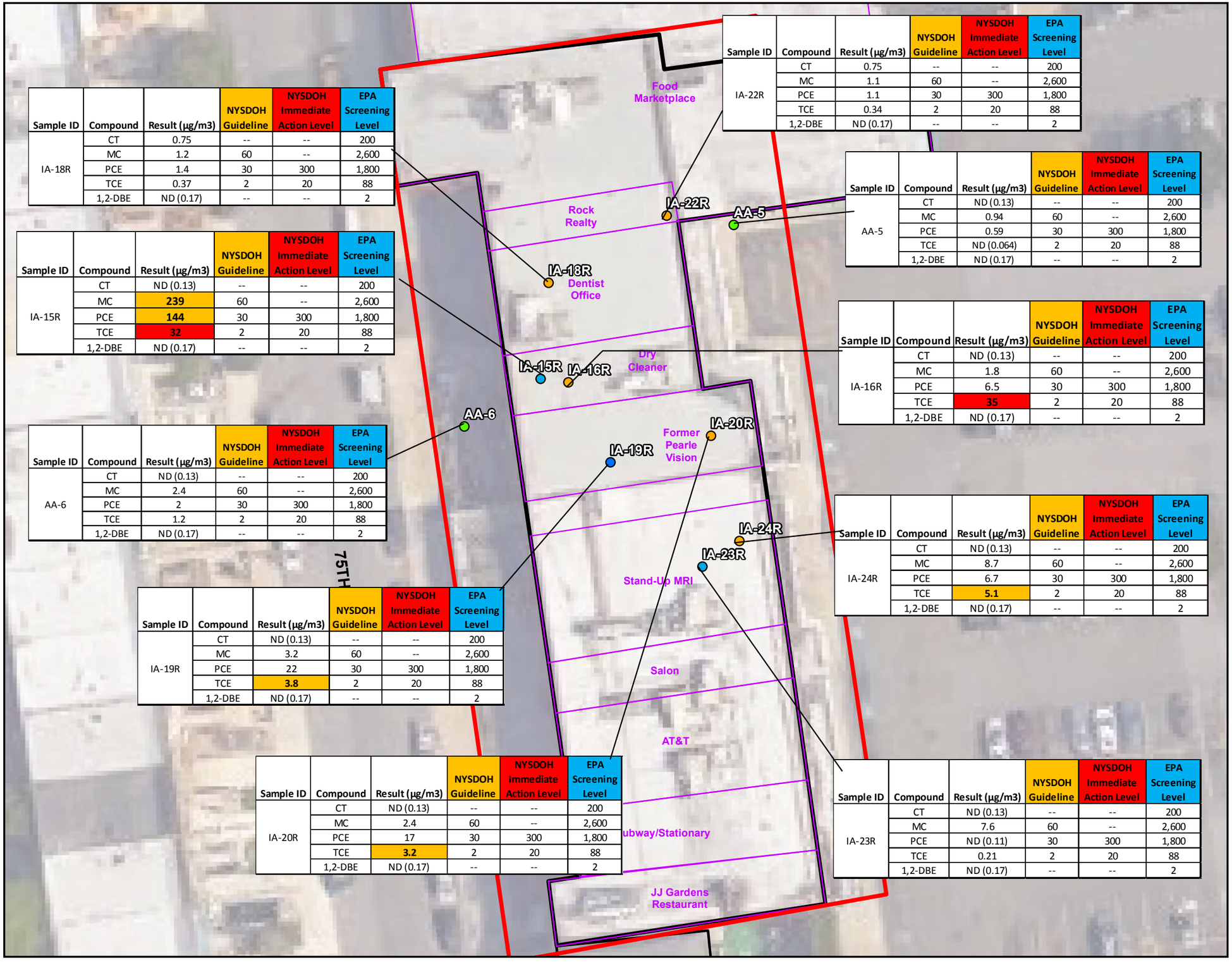
SCALE 1 in = 30 ft

Job No: 00254100000
File Name: 00254100000 Fig 7 Indoor Air Sample Location Map

DATE 10/25/2016

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 8B Indoor Air Sample Location Map Continued.mxd
User: afrassler
Date: 5/22/2017

Jackson Heights Shopping Center — Borough of Queens, NY



Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-18R	CT	0.75	--	--	200
	MC	1.2	60	--	2,600
	PCE	1.4	30	300	1,800
	TCE	0.37	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-22R	CT	0.75	--	--	200
	MC	1.1	60	--	2,600
	PCE	1.1	30	300	1,800
	TCE	0.34	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
AA-5	CT	ND (0.13)	--	--	200
	MC	0.94	60	--	2,600
	PCE	0.59	30	300	1,800
	TCE	ND (0.064)	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-15R	CT	ND (0.13)	--	--	200
	MC	**239**	60	--	2,600
	PCE	**144**	30	300	1,800
	TCE	**32**	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-16R	CT	ND (0.13)	--	--	200
	MC	1.8	60	--	2,600
	PCE	6.5	30	300	1,800
	TCE	**35**	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
AA-6	CT	ND (0.13)	--	--	200
	MC	2.4	60	--	2,600
	PCE	2	30	300	1,800
	TCE	1.2	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-19R	CT	ND (0.13)	--	--	200
	MC	3.2	60	--	2,600
	PCE	22	30	300	1,800
	TCE	**3.8**	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-24R	CT	ND (0.13)	--	--	200
	MC	8.7	60	--	2,600
	PCE	6.7	30	300	1,800
	TCE	**5.1**	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-20R	CT	ND (0.13)	--	--	200
	MC	2.4	60	--	2,600
	PCE	17	30	300	1,800
	TCE	**3.2**	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level	EPA Screening Level
IA-23R	CT	ND (0.13)	--	--	200
	MC	7.6	60	--	2,600
	PCE	ND (0.11)	30	300	1,800
	TCE	0.21	2	20	88
	1,2-DBE	ND (0.17)	--	--	2

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 11
INDOOR AIR SAMPLE LOCATION MAP
(August 9-10, 2017
September 6-7, 2017)

Legend

- Site Boundary
- Tenant Spaces
- Indoor Air Sample Location (Basement)
- Indoor Air Sample Location (1st Floor)
- Ambient Air Sample Location

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on previous figure.

CT : Carbon Tetrachloride
MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
1,2-DBE : 1,2-dibromoethane

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

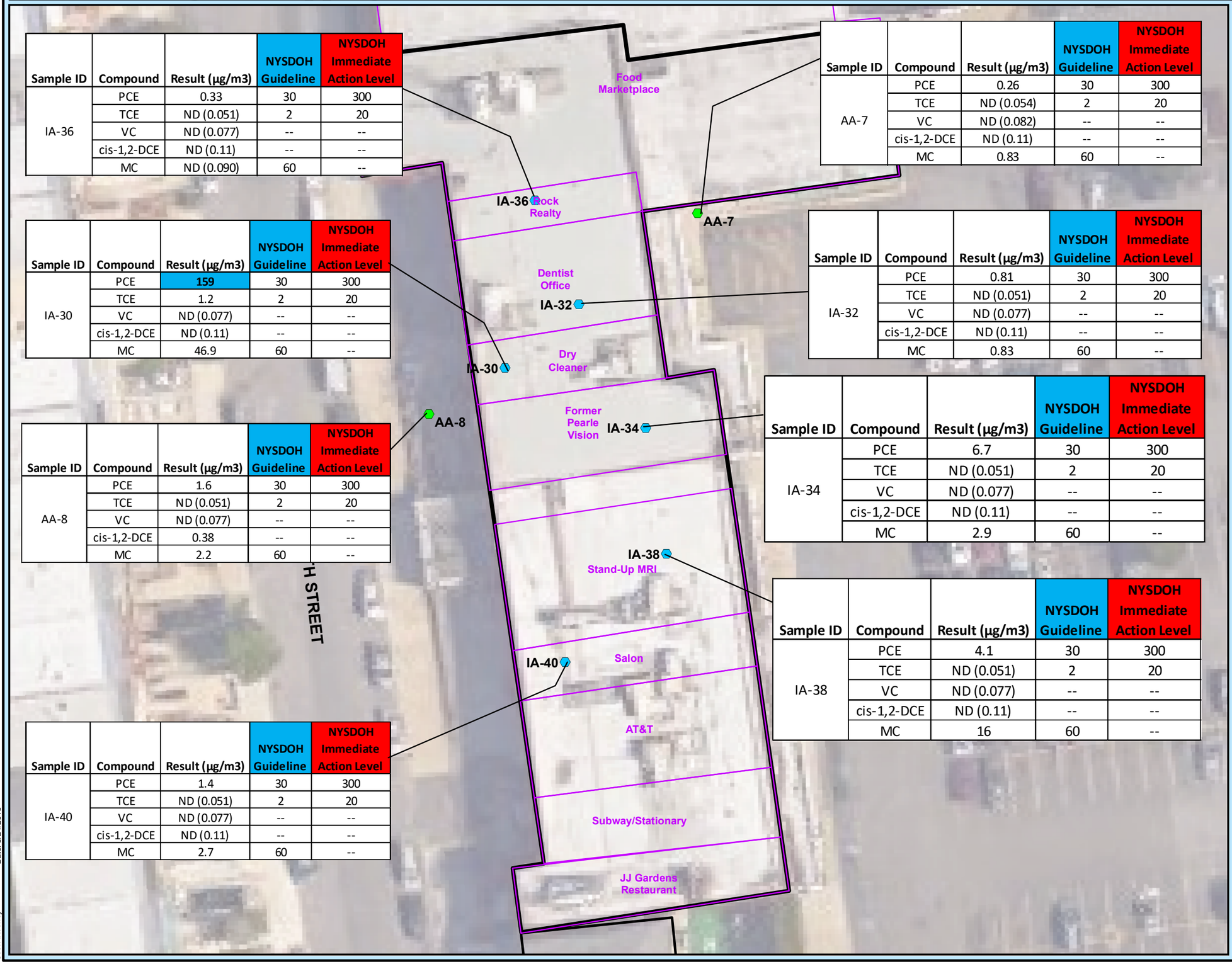
611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY RR	SCALE 1 in = 30 ft
Job No: 00254100000 File Name: 00254100000 Fig 9 Indoor Air Sample Location Map		DATE 09/21/2017

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 9 Indoor Air Sample Location Map.mxd
User: ahassler
Date: 9/26/2017

Jackson Heights Shopping Center — Borough of Queens, NY



Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-36	PCE	0.33	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	ND (0.090)	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
AA-7	PCE	0.26	30	300
	TCE	ND (0.054)	2	20
	VC	ND (0.082)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	0.83	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-30	PCE	**159**	30	300
	TCE	1.2	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	46.9	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-32	PCE	0.81	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	0.83	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
AA-8	PCE	1.6	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	0.38	--	--
	MC	2.2	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-34	PCE	6.7	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	2.9	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-38	PCE	4.1	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	16	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-40	PCE	1.4	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	2.7	60	--

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 12A
CONFIRMATION INDOOR AIR SAMPLING #3
(January 30-31 2018)

Legend

- Tenant Spaces
- Ambient Air Sample Locations
- Indoor Air Sample Locations (1st Floor)

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on next figure.

MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
cis-1,2-DCE : cis-1,2-dichloroethene
VC: Vinyl chloride

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NYC and NYS GIS Data;

DRAWN BY BPT

SCALE 1 in = 30 ft

Job No: 00254100000
File Name: Fig 10A Confirmation IA Sampling #3

DATE 08/24/2018

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 10A Indoor Air Sample Location Map.mxd
User: bloohey
Date: 8/24/2018

Jackson Heights Shopping Center — Borough of Queens, NY

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-33	PCE	0.67	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	0.66	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-37	PCE	0.64	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	0.76	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-31	PCE	**167**	30	300
	TCE	0.86	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	10	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-35	PCE	2.5	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	1.9	60	--

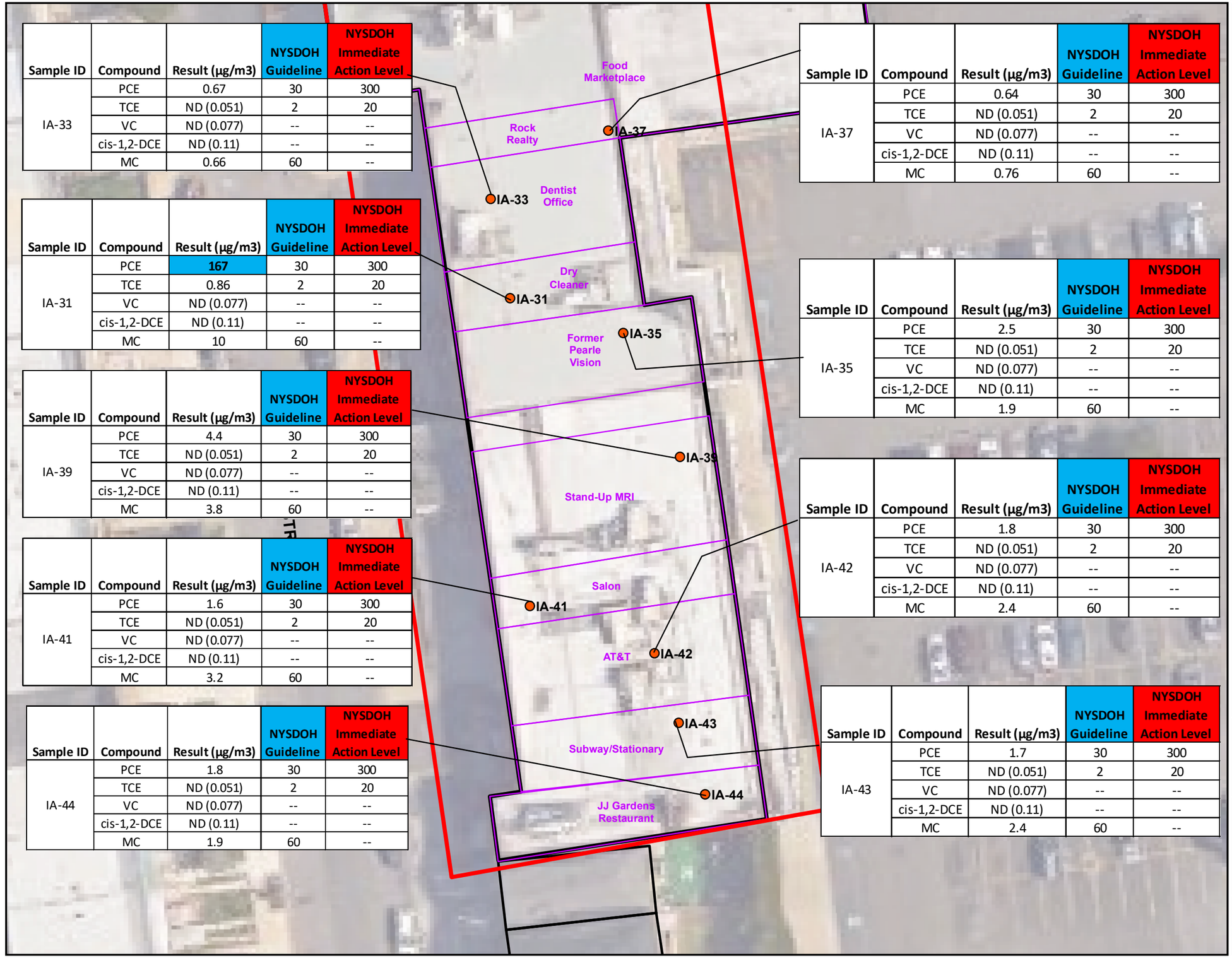
Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-39	PCE	4.4	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	3.8	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-42	PCE	1.8	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	2.4	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-41	PCE	1.6	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	3.2	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-43	PCE	1.7	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	2.4	60	--

Sample ID	Compound	Result (µg/m3)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-44	PCE	1.8	30	300
	TCE	ND (0.051)	2	20
	VC	ND (0.077)	--	--
	cis-1,2-DCE	ND (0.11)	--	--
	MC	1.9	60	--



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 12B(cont.)
CONFIRMATION INDOOR AIR SAMPLING #3
(January 30-31 2018)

Legend

- Site Boundary
- Tenant Spaces
- Indoor Air Sample Locations (Basement)

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on previous figure.

MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
cis-1,2-DCE : cis-1,2-dichloroethene
VC: Vinyl chloride

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

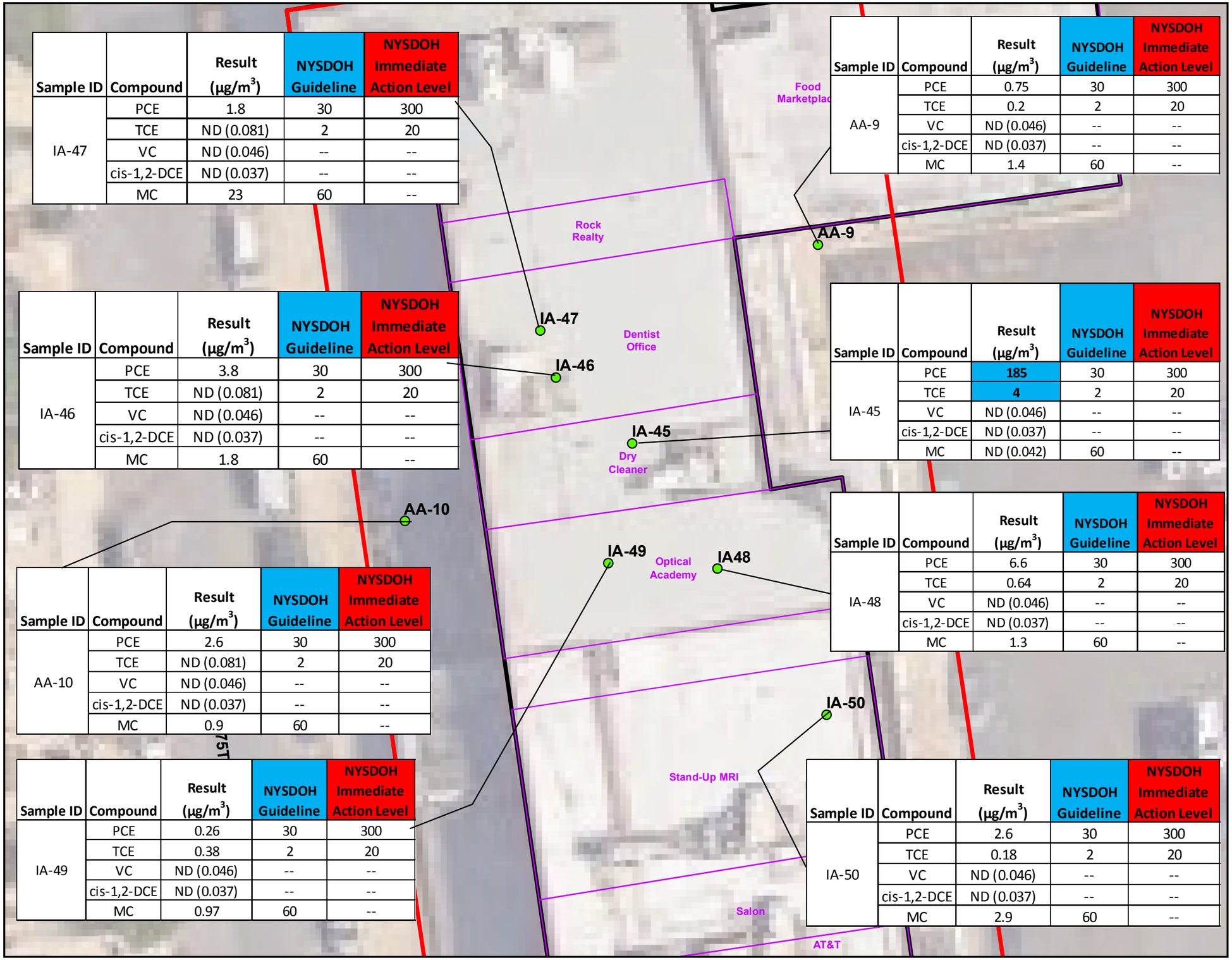
Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NYC and NYS GIS Data;	DRAWN BY BPT	SCALE 1 in = 30 ft
Job No: 00254100000 File Name: Fig 10B Confirmation IA Sampling #3		DATE 08/24/2018

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 10B Indoor Air Sample Location Map Continued.mxd
User: bboney
Date: 8/24/2018

Jackson Heights Shopping Center

Borough of Queens, NY



Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-47	PCE	1.8	30	300
	TCE	ND (0.081)	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	23	60	--

Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
AA-9	PCE	0.75	30	300
	TCE	0.2	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	1.4	60	--

Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-46	PCE	3.8	30	300
	TCE	ND (0.081)	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	1.8	60	--

Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-45	PCE	**185**	30	300
	TCE	**4**	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	ND (0.042)	60	--

Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
AA-10	PCE	2.6	30	300
	TCE	ND (0.081)	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	0.9	60	--

Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-48	PCE	6.6	30	300
	TCE	0.64	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	1.3	60	--

Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-49	PCE	0.26	30	300
	TCE	0.38	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	0.97	60	--

Sample ID	Compound	Result (µg/m³)	NYSDOH Guideline	NYSDOH Immediate Action Level
IA-50	PCE	2.6	30	300
	TCE	0.18	2	20
	VC	ND (0.046)	--	--
	cis-1,2-DCE	ND (0.037)	--	--
	MC	2.9	60	--

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 13
CONFIRMATION INDOOR AIR SAMPLING #4
(February 20-21, 2019)

Legend

- Site Boundary
- Indoor Air Sample Locations
- Tenant Spaces

Note:
NYSDOH = New York State Department of Health
EPA Screening Level = Environmental Protection Agency Screening Level.

All indoor air sampling locations without a Call Out Table are included on previous figure.

CT : Carbon Tetrachloride
MC: Methylene Chloride
PCE : Tetrachloroethene
TCE: Trichloroethene
1,2-DBE : 1,2-dibromoethane

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 10 20 40
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NYC and NYS GIS Data;

DRAWN BY BPT

SCALE 1 in = 20 ft

Job No: 00254100000
File Name: Fig 10C Confirmation IA Sampling #4

DATE 03/13/2019

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 10C Indoor Air Sample Location Map Continued.mxd
User: bfoohey
Date: 3/13/2019

Jackson Heights Shopping Center

Borough of Queens, NY

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK 11370

FIGURE 14
COMPOSITE COVER SYSTEM MAP

Legend

- BCP Site Boundary
- Property Boundary
- Concrete
- Building Conrete Slab
- Asphalt

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 20 40 80
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

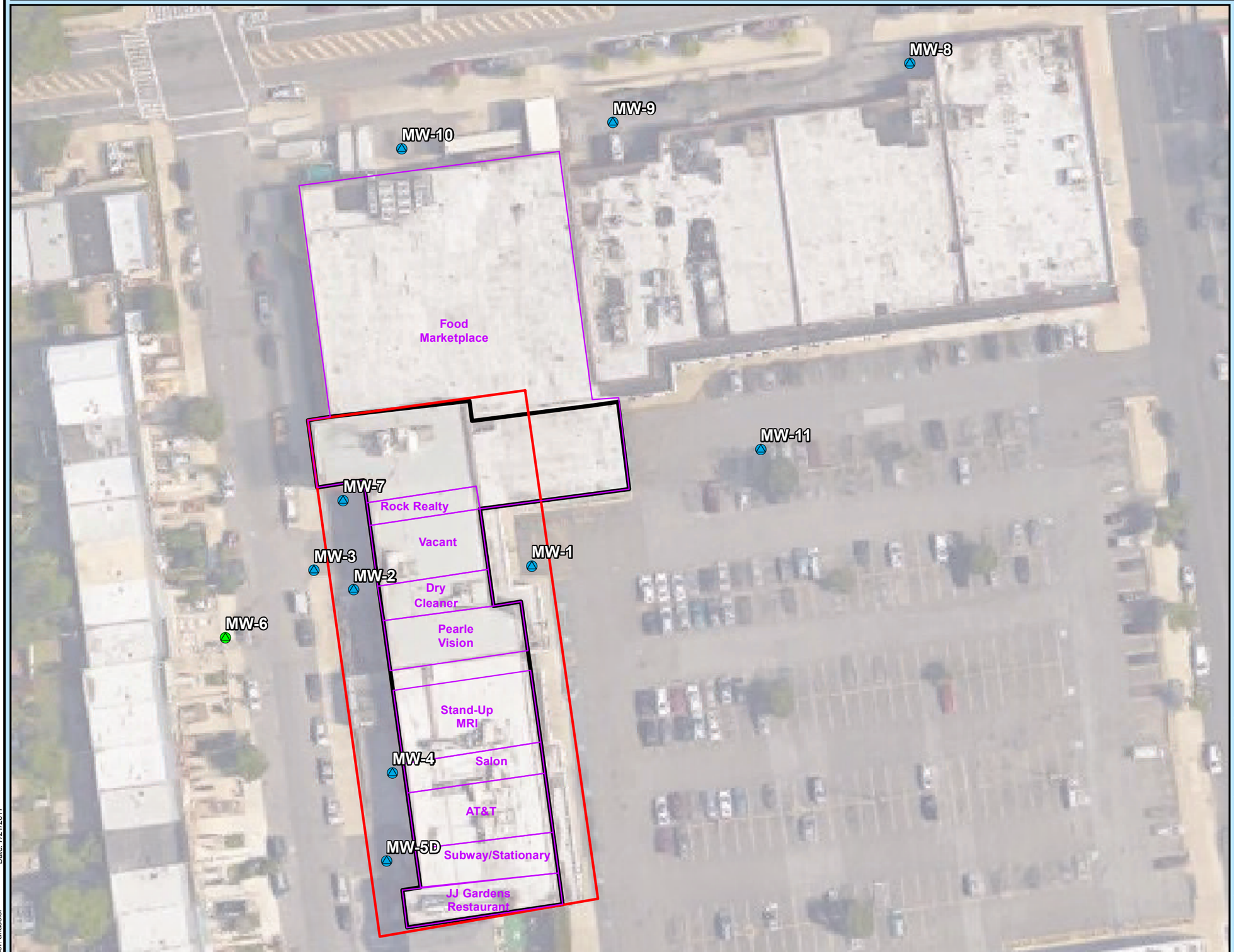
Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY ALH	SCALE 1 in = 40 ft
Job No: 00254100000 File Name: 00254100000 Fig 12 Composite Cover Sys tem		DATE 01/05/2018

File: \\pac.local\root\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig X Composite Cover Location Map.mxd
User: alassiter
Date: 1/5/2018

Jackson Heights Shopping Center

Borough of Queens, NY



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 15
MONITORING WELL NETWORK MAP

Legend

- Site Boundary
- Tenant Spaces
- Monitoring Well Location
- Abandoned Monitoring Well

Note:
NY-TOGS AWSQ = New York Technical and Operational Guidance Series Ambient Water Quality Standards.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 25 50 100
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data; DPK Land SUrveying Data.	DRAWN BY BPT	SCALE 1 in = 52 ft
Job No: 00254100000 File Name: Fig 4E MW Sampling Results Map 2017-06-13		DATE 03/20/2017

File: \\pac.localroot\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 4E Monitoring Well Sample Location Map 2017-06-13.mxd
User: ahassler
Date: 7/21/2017

Jackson Heights Shopping Center

Borough of Queens, NY

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK,11370

FIGURE 16
INJECTION LOCATION MAP

Legend

- Site Boundary
- Tenant Spaces
- Injection Area
- Proposed Injection Location
- Monitoring Well Locations
- Soil Borings - February 2015
- Soil Borings - March 2015
- Soil Borings - July/August 2016
- Soil Boring - August 2018
- Fence
- Electric Utility
- Gas Utility

Contaminant Plume

- PCE & TCE
- PCE, TCE & VC

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 2.75 5.5 11
Feet

PSG Engineering and Geology, D.P.C.

365 Fifth Avenue, Suite 501
New York, New York 10001
NY Certificate of Authorization No. 103397

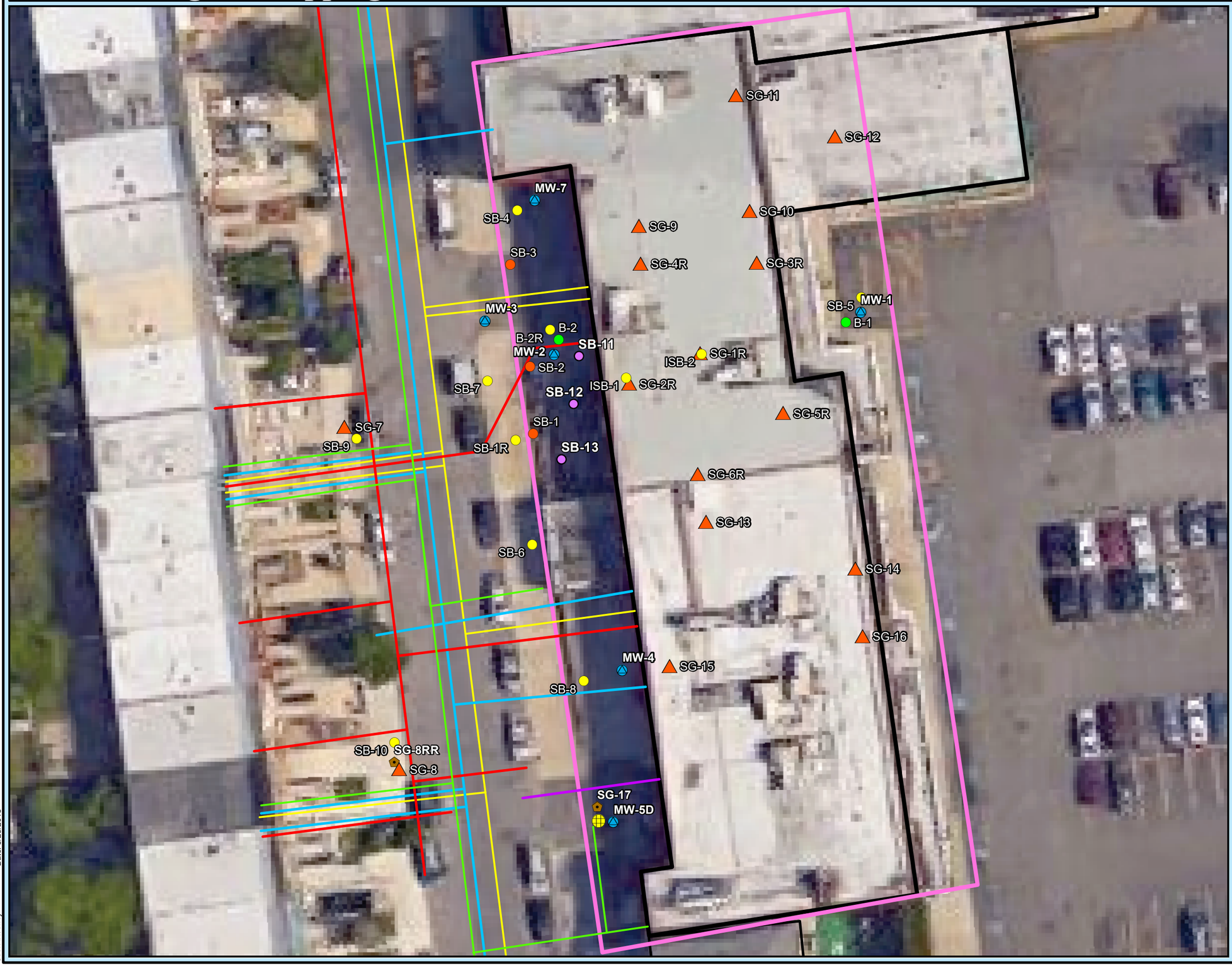
Tel.: 646.273.1290
Fax.:646.513.2381
www.partneresi.com

Sources: NYS GIS Data;	DRAWN BY ALH	SCALE 1 in = 5 ft
Job No: 00254100000 File Name: 00254100000 Fig X Injection Location Map		DATE 05/08/2019

File: \\pac.local\root\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig X Injection Location Map.mxd
User: ahassler
Date: 5/8/2019

Jackson Heights Shopping Center

Borough of Queens, NY



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK 11370

FIGURE 17
SUBSURFACE UTILITY LOCATION MAP

Legend

- Monitoring Well Location
- Soil Borings - February 2015
- Soil Borings - March 2015
- Soil Borings - July/August 2016
- Sub-Slab Vapor Sample - July 2016
- Soil Gas Sample - August 2018
- Soil Boring - August 2018
- Telephone Utility
- Sewer Utility
- Electric Utility
- Water Utility
- Gas Utility
- Drain
- Storm Water Catch Basin
- Sump Pit
- Storm Water Dry Well
- Trench Drain
- BCP Site Boundary

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 15 30 60
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NYC and NYS GIS Data;	DRAWN BY BPT	SCALE 1 in = 30 ft
Job No: 00254100000 File Name: Figure 11 Subsurface Utility Location Map		DATE 08/24/2018

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 11 Subsurface Utility Location Map.mxd
User: bcohey
Date: 8/28/2018

APPENDIX A
LIST OF SITE CONTACTS

Name	Phone/Email Address
Jeffrey Kay	[718-263-3800] [jkay@Muss.com]
PSG Engineering D.P.C.	
Jerry Ostrander	[732-380-1700] [jostrander@partneresi.com]
Cynthia King	[732-380-1700] [cking&partneresi.com]
Erik Weber	[732-380-1700] [eweber@partneresi.com]
Kristine M. MacWilliams, P.E.	[704-893-8761] [kmacwilliams@partneresi.com]
Sadique Ahmed	[518-402-9656] [Sadique.ahmed@dec.ny.gov]
John Grathwol	[518-402-9649] [john.grathwol@dec.ny.gov
Mark Kostron	[917-642-6728] [Mark@Muss.com]
Jennifer Coghlan	[646-378-7253] [jcoghlan@sprlaw.com]
Angela Martin	[518-402-7860] [angela.martin@health.ny.gov]

APPENDIX B
BORING LOGS

Boring Number:	SB-4				Page 1 of 1
Location:	Northwest of dry cleaners in loading dock area			Date Started:	7/11/2016
Site Address:	75-07 31st Avenue			Date Completed:	7/11/2016
	Jackson Heights, NY 11370			Depth to Groundwater:	13'
Project Number:	00254100000			Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT			Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore			611 Industrial Way West	
Borehole Diameter:	2 inch			Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
			N/A	Asphalt	Boring overlain by asphalt
1					
2					Hand cleared to 5.0 ft bgs. No odors or staining.
3					
4		0.0			Soil sample SB-4 (4.0-4.5) was collected at 12:25 for TCL/TAL analysis.
5	SB-4 (4.0-4.5)	0.0			
6		0.0			
7	SB-4 (6.0-6.5)	0.0			3 ft recovery; no odors or staining.
8		0.0	SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 13 ft, wet at 13 ft	Soil sample SB-4 (6.0-6.5) was collected at 12:52 for VOC analysis.
9	SB-4 (8.0-8.5)	0.0			Soil sample SB-4 (8.0-8.5) was collected at 12:57 for VOC analysis.
10		0.0			
11		1.0			
12		1.8			2 ft recovery; Impacted - odors and staining at 14.0 to 15.0 ft bgs.
13		5.1			Soil sample SB-4 (14.0-14.5) was collected at 13:03 for VOC analysis.
14		131.0			
15	SB-4 (14.0-14.5)	6.1	SM	Black silty sand, saturated	
16		0.0	SC	Dark gray silty clay, saturated	
17		0.1			5 ft recovery; no odors or staining.
18		0.4	SC	Gray silty clay, saturated	Soil sample SB-4 (19.5-20.0) was collected at 13:09 for TCL/TAL analysis.
19		0.7			
20	SB-4 (19.5-20.0)	0.1			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-4 was converted into a temporary well point, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-4GW was collected at 13:32 for VOC analysis.

Boring Number:	SB-5		Page 1 of 1
Location:	Directly east of dry cleaners	Date Started:	7/11/2016
Site Address:	75-07 31st Avenue	Date Completed:	7/11/2016
	Jackson Heights, NY 11370	Depth to Groundwater:	12'
Project Number:	00254100000	Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
			N/A	Asphalt	Boring overlain by asphalt
1					
2					Hand cleared to 5.0 ft bgs. No odors or staining.
3					
4		0.0			Soil sample SB-5 (4.0-4.5) was collected at 10:58 for TCL/TAL analysis.
5	SB-5 (4.0-4.5)	0.0			
6		0.0			
7	SB-5 (6.0-6.5)	0.0	SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist	2.5 ft recovery. No odors or staining.
8		0.0			Soil sample SB-5 (6.0-6.5) was collected at 11:03 for VOC analysis.
9	SB-5 (8.0-8.5)	0.0			Soil sample SB-5 (8.0-8.5) was collected at 11:05 for VOC analysis.
10		0.0			
11		0.0			
12		0.0			1 ft recovery. No odors or staining.
13		2.7			Soil sample SB-5 (13.0-13.5) was collected at 11:09 for VOC analysis.
14	SB-5 (13.0-13.5)	1.1	SP	Brown silty sand with some wood debris, wet	
15		0.9			
16		0.0	SC	Dark grey/black very silty clay, saturated	
17		0.0			3 ft recovery. No odors or staining.
18		0.0	SC	Grey very silty clay, saturated	Soil sample SB-5 (19.5-20.0) was collected at 11:14 for TCL/TAL analysis.
19		0.0			
20	SB-5 (19.5-20.0)	0.0			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-5 was converted into a temporary well point, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-5GW was collected at 11:28 for VOC analysis.

Boring Number:	B-2R		Page 1 of 1
Location:	Slight west of dry cleaner back door	Date Started:	7/11/2016
Site Address:	75-07 31st Avenue	Date Completed:	7/11/2016
	Jackson Heights, NY 11370	Depth to Groundwater:	13'
Project Number:	00254100000	Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
		0.0	N/A	Asphalt	Boring overlain by asphalt
1		0.0			
2		0.0			Hand cleared to 5.0 ft bgs. No odors or staining.
3		0.0			
4		0.0			
5		0.0			
6		0.0			
7		0.0	SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 13 ft, wet at 13 ft	3.5 ft recovery; no odors or staining
8		0.0			
9		0.0			
10		0.0			
11		0.0			
12		0.0			4.5 ft recovery; no odors or staining
13		2.2			
14		0.3	SM	Dark gray/black silty sand, saturated	
15		0.2			
16		0.0			
17		0.0			4.5 ft recovery; no odors or staining
18		0.0			
19		0.0			Soil sample B-2R (19.5-20.0) was collected at 13:23 for VOC analysis.
20	B-2R (19.5-20.0)	0.0			
21		0.0			
22		0.0			4.5 ft recovery; no odors or staining
23		0.0			
24		0.0	SC	Very silty gray clay, saturated	Soil sample B-2R (24.5-25.0) was collected at 13:27 for VOC analysis.
25	B-2R (24.5-25.0)	0.0			
26		0.0			
27	B-2R (26.5-27.0)	0.0			5.0 ft recovery; no odors or staining
28		0.0			
29		0.0			Soil sample B-2R (26.5-27.0) was collected at 13:32 for VOC analysis.
30		0.0			
				Boring was terminated at 30.0 ft bgs	Soil boring B-2R was converted into a temporary well point, screened from 10.0 to 30.0 ft bgs. Groundwater sample B-2RGW was collected at 13:58 for VOC analysis.

Boring Number:	SB-6				Page 1 of 1
Location:	Southwest of dry cleaners in sidewalk			Date Started:	8/18/2016
Site Address:	75-07 31st Avenue			Date Completed:	8/19/2016
	Jackson Heights, NY 11370			Depth to Groundwater:	13'
Project Number:	00254100000			Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT			Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore			611 Industrial Way West	
Borehole Diameter:	2 inch			Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1			N/A	Concrete	Boring overlain by concrete
2					
3					Hand cleared to 5.0 ft bgs. No odors or staining.
4		0.0			Soil sample SB-6 (4.0-4.5) was collected at 14:37 for TCL/TAL analysis.
5	SB-6 (4.0-4.5)	0.0			
6		0.0			
7	SB-6 (6.0-6.5)	0.0	SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 13 ft, wet at 13 ft	3.0 ft recovery; no odors or staining.
8		0.0			Soil sample SB-6 (6.0-6.5) was collected at 09:35 for VOC analysis.
9	SB-6 (8.0-8.5)	0.0			Soil sample SB-6 (8.0-8.5) was collected at 09:38 for VOC analysis.
10		0.0			
11		0.0			
12		0.0			3.0 ft recovery; no odors or staining.
13		0.0			Soil sample SB-6 (13.0-13.5) was collected at 09:41 for VOC analysis.
14	SB-6 (13.0-13.5)	0.0	SM	Gray fine silty sand, saturated	
15		0.0			
16		0.0			
17		0.0			4.0 ft recovery; no odors or staining.
18		0.0	SC	Very fine silty gray clay, saturated	Soil sample SB-6 (19.5-20.0) was collected at 09:36 for TCL/TAL analysis.
19		0.0			
20	SB-6 (19.5-20.0)	0.0			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-6 was converted into a temporary well point, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-6GW was collected at 10:07 for VOC analysis.

Boring Number:	SB-7			Page 1 of 1	
Location:	West of dry cleaners in sidewalk (tree box)			Date Started:	8/18/2016
Site Address:	75-07 31st Avenue			Date Completed:	8/19/2016
	Jackson Heights, NY 11370			Depth to Groundwater:	13'
Project Number:	00254100000			Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT			Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore			611 Industrial Way West	
Borehole Diameter:	2 inch			Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
			N/A	Mulch	Boring overlain by mulch
1			SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 13 ft, wet at 13 ft	Hand cleared to 5.0 ft bgs. No odors or staining. Soil sample SB-7 (4.0-4.5) was collected at 13:41 for TCL/TAL analysis.
2					
3					
4		0.0			
5	SB-7 (4.0-4.5)	0.0			
6		0.0			3.5 ft recovery; no odors or staining. Soil sample SB-7 (6.0-6.5) was collected at 13:45 for VOC analysis. Soil sample SB-7 (8.0-8.5) was collected at 10:39 for VOC analysis.
7	SB-7 (6.0-6.5)	0.0			
8		0.0			
9	SB-7 (8.0-8.5)	0.0			
10		0.0			
11		0.0			2.5 ft recovery; no odors or staining. Soil sample SB-7 (13.0-13.5) was collected at 10:43 for VOC analysis.
12		0.0			
13		0.0			
14	SB-7 (13.0-13.5)	0.0			
15		0.0	SM	Black silty sand, saturated	
16		0.0	SC	Dark gray silty clay, saturated	5 ft recovery; no odors or staining. Soil sample SB-7 (19.5-20.0) was collected at 10:46 for TCL/TAL analysis.
17		0.0	SC	Gray silty clay, saturated	
18		0.0			
19		0.0			
20	SB-7 (19.5-20.0)	0.0			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-7 was converted into a temporary well point, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-7GW was collected at 11:10 for VOC analysis.

Boring Number:	SB-8		Page 1 of 1
Location:	Southwest of dry cleaners in second loading dock area	Date Started:	7/12/2016
Site Address:	75-07 31st Avenue	Date Completed:	7/12/2016
	Jackson Heights, NY 11370	Depth to Groundwater:	13'
Project Number:	00254100000	Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1			N/A	Concrete	Boring overlain by concrete
2					
3					Hand cleared to 5.0 ft bgs. No odors or staining.
4		0.0			Soil sample SB-8 (4.0-4.5) was collected at 09:15 for TCL/TAL analysis.
5	SB-8 (4.0-4.5)	0.0			
6		0.0			
7	SB-8 (6.0-6.5)	0.0	SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 13 ft, wet at 13 ft	1.0 ft recovery; no odors or staining.
8		0.0			Soil sample SB-8 (6.0-6.5) was collected at 09:28 for VOC analysis.
9	SB-8 (8.0-8.5)	0.0			Soil sample SB-8 (8.0-8.5) was collected at 09:31 for VOC analysis.
10		0.0			
11		0.0			
12		0.0			1.5 ft recovery; no odors or staining.
13		0.0			Soil sample SB-8 (13.0-13.5) was collected at 09:33 for VOC analysis.
14	SB-8 (13.0-13.5)	0.0	SM	Gray fine silty sand, saturated	
15		0.0			
16		0.0			
17		0.0			4.0 ft recovery; no odors or staining.
18		0.0	SC	Very fine silty gray clay, saturated	Soil sample SB-8 (19.5-20.0) was collected at 09:36 for TCL/TAL analysis.
19		0.0			
20	SB-8 (19.5-20.0)	0.0			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-8 was converted into a temporary well point, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-8GW was collected at 10:40 for VOC analysis.

Boring Number:	SB-9		Page 1 of 1
Location:	West side of 75th Street in sidewalk	Date Started:	8/19/2016
Site Address:	75-07 31st Avenue	Date Completed:	8/19/2016
	Jackson Heights, NY 11370	Depth to Groundwater:	9'
Project Number:	00254100000	Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1			N/A	Concrete	Boring overlain by concrete
2					
3					Hand cleared to 5.0 ft bgs. No odors or staining.
4		0.0			Soil sample SB-9 (4.0-4.5) was collected at 12:19 for TCL/TAL analysis.
5	SB-9 (4.0-4.5)	0.0		Light brown fine to medium sand with some gravel; moist at 9 ft	
6		0.0			
7	SB-9 (6.0-6.5)	0.0	SP		3.0 ft recovery; no odors or staining.
8		0.0			Soil sample SB-9 (6.0-6.5) was collected at11:56 for VOC analysis.
9	SB-9 (8.0-8.5)	0.0			Soil sample SB-9 (8.0-8.5) was collected at 11:59 for VOC analysis.
10		0.0			
11		0.0		Light brown fine to medium sand with some gravel; dry	
12		0.0			3.5 ft recovery; no odors or staining.
13		0.0	SM	Gray fine silty sand, saturated	Soil sample SB-9 (13.0-13.5) was collected at 12:02 for VOC analysis.
14	SB-9 (13.0-13.5)	0.0			
15		0.0			
16		0.0			
17		0.0	SC	Very fine silty gray clay, saturated	4.0 ft recovery; no odors or staining.
18		0.0			Soil sample SB-9 (19.5-20.0) was collected at 12:05 for TCL/TAL analysis.
19		0.0			
20	SB-9 (19.5-20.0)	0.0			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-9 was converted into a temporary well point and permanent monitoring well, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-9GW was collected at 14:35 for VOC analysis.

Boring Number:	SB-10				Page 1 of 1
Location:	West side of 75th Street in sidewalk			Date Started:	8/19/2016
Site Address:	75-07 31st Avenue			Date Completed:	8/19/2016
	Jackson Heights, NY 11370			Depth to Groundwater:	9.5'
Project Number:	00254100000			Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT			Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore			611 Industrial Way West	
Borehole Diameter:	2 inch			Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1			N/A	Concrete	Boring overlain by concrete
2				Light brown fine to medium sand with some gravel; moist at 9 ft	Hand cleared to 5.0 ft bgs. No odors or staining. Soil sample SB-10 (4.0-4.5) was collected at 09:56 for VOC analysis.
3					
4		0.0			
5	SB-10 (4.0-4.5)	0.0			
6		0.0			3.5 ft recovery; no odors or staining. Soil sample SB-10 (6.0-6.5) was collected at 11:26 for VOC analysis. Soil sample SB-10 (8.0-8.5) was collected at 11:29 for VOC analysis.
7	SB-10 (6.0-6.5)	0.0	SP		
8		0.0			
9	SB-10 (8.0-8.5)	0.0			
10		0.0		Light brown fine to medium sand with some gravel; dry	4 ft recovery; no odors or staining. Soil sample SB-10 (13.0-13.5) was collected at 11:32 for VOC analysis.
11		0.0			
12		0.0			
13		0.0	SM	Gray fine silty sand, saturated	
14	SB-10 (13.0-13.5)	0.0			
15		0.0	SC	Very fine silty gray clay, saturated	4.5 ft recovery; no odors or staining. Soil sample SB-10 (19.5-20.0) was collected at 11:36 for TCL/TAL analysis.
16		0.0			
17		0.0			
18		0.0			
19		0.0			
20	SB-10 (19.5-20.0)	0.0			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-10 was converted into a temporary well point, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-10GW was collected at 13:05 for VOC analysis.

Boring Number:	SB-1R		Page 1 of 1
Location:	West of dry cleaners in sidewalk, resample of SB-1	Date Started:	8/18/2016
Site Address:	75-07 31st Avenue	Date Completed:	8/19/2016
	Jackson Heights, NY 11370	Depth to Groundwater:	13'
Project Number:	00254100000	Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1			N/A	Concrete	Boring overlain by concrete
2					
3					Hand cleared to 8.0 ft bgs. No odors or staining.
4					
5					
6					
7			SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 13 ft, wet at 13 ft	1.5 ft recovery; no odors or staining.
8		0.0			
9		0.0			
10		0.0			
11		0.0			
12		0.0			3.5 ft recovery; no odors or staining.
13		0.0			Soil sample SB-1R (13.0-13.5) was collected at 08:43 for VOC analysis.
14	SB-1R (13.0-13.5)	0.0	SM	Gray fine silty sand, saturated	
15		0.0			
16		0.0			
17		0.0			4.0 ft recovery; no odors or staining.
18		0.0	SC	Very fine silty gray clay, saturated	Soil sample SB-1R (18.0-18.5) was collected at 08:47 for VOC analysis.
19	SB-1R (18.0-18.5)	0.0			Soil sample SB-1R (19.5-20.0) was collected at 08:51 for VOC analysis.
20	SB-1R (19.5-20.0)	0.0			
				Boring was terminated at 20.0 ft bgs	Soil boring SB-1R was converted into a temporary well point, screened from 10.0 to 20.0 ft bgs. Groundwater sample SB-1RGW was collected at 10:35 for VOC analysis.

Boring Number:	ISB-1		Page 1 of 1
Location:	In dry cleaner basement steam room	Date Started:	7/13/2016
Site Address:	75-07 31st Avenue	Date Completed:	7/13/2016
	Jackson Heights, NY 11370	Depth to Groundwater:	4.5'
Project Number:	00254100000	Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	N/A	Concrete	Boring overlain by concrete
2		0.0	SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 4.5 ft, wet at 4.5 ft	1.5 ft recovery; no odors or staining
3	ISB-1 (2.0-2.5)	0.0			Soil sample ISB-1 (2.0-2.5) was collected at 12:21 for TCL/TAL analysis.
4		0.0			Soil sample ISB-1 (4.0-4.5) was collected at 12:24 for VOC analysis.
5	ISB-1 (4.0-4.5)	0.2	SM	Dark gray silty sand, saturated	
6		1.8			2.5 ft recovery; no odors or staining.
7		2.0	SC	Very fine silty gray clay, saturated	Soil sample ISB-1 (7.5-8.0) was collected at 12:27 for TCL/TAL analysis.
8	ISB-1 (7.5-8.0)	2.7			
				Boring was terminated at 8.0 ft bgs	Soil boring ISB-1 was converted into a temporary well point, screened from 3.0 to 8.0 ft bgs. Groundwater sample ISB-1GW was collected at 12:59 for VOC analysis. Please note that ISB-1 was collected from the basement. The basement floor rested at 10 feet bgs. The soil boring was advanced through the basement floor starting at 10 feet bgs.

Boring Number:	ISB-2					Page 1 of 1
Location:	In dry cleaner basement main room near clothes rack				Date Started:	7/13/2016
Site Address:	75-07 31st Avenue				Date Completed:	7/13/2016
	Jackson Heights, NY 11370				Depth to Groundwater:	4.5'
Project Number:	00254100000				Field Technician:	EW
Drill Rig Type:	Geoprobe 6620DT				Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore				611 Industrial Way West	
Borehole Diameter:	2 inch				Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
		0.0	N/A	Concrete	Boring overlain by concrete
1		0.0	SP	Light brown fine to medium sand with fill material (brick fragments and rock/cobble fragments [schist], and gravel); slightly moist to 4.5 ft, wet at 4.5 ft	2.0 ft recovery; no odors or staining
2					
3	ISB-2 (2.0-2.5)	0.1			Soil sample ISB-2 (2.0-2.5) was collected at 11:40 for TCL/TAL analysis.
4		0.0			Soil sample ISB-2 (4.0-4.5) was collected at 11:43 for VOC analysis.
5	ISB-2 (4.0-4.5)	0.1	SM	Dark gray silty sand, saturated	
6		0.2	SC	Very fine silty gray clay, saturated	3.0 ft recovery; no odors or staining.
7	ISB-2 (6.0-6.5)	0.1			Soil sample ISB-2 (6.0-6.5) was collected at 11:46 for TCL/TAL analysis.
8		0.1			Soil sample ISB-2 (8.5-9.0) was collected at 11:58 for VOC analysis.
9	ISB-2 (8.5-9.0)	0.0			
				Boring was terminated at 9.0 ft bgs	Soil boring ISB-2 was converted into a temporary well point, screened from 3.0 to 9.0 ft bgs. Groundwater sample ISB-2GW was collected at 12:53 for VOC analysis. Please note that ISB-2 was collected from the basement. The basement floor rested at 10 feet bgs. The soil boring was advanced through the basement floor starting at 10 feet bgs.

Boring Number:	SB-11		Page 1 of 1
Location:		Date Started:	8/2/2018
Site Address:	75-07 31st Avenue	Date Completed:	8/2/2018
	Jackson Heights, NY 11370	Depth to Groundwater:	13.0'
Project Number:	00254100000	Field Technician:	PC
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1				Hand Cleared to 5.0 ft.	No odors or staining.
2					
3					
4					
5					
6				Cleared previous day.	
7					
8					
9					
10					
11		0.0			
12		0.0 0.0 0.0	SW	Light brown medium to fine sand with fill material	1.5 ft recovery; no odors or staining.
13	SB-11 (12.5-13.0)	0.0 0.0			
14		0.6 0.3	Pt	Dark peat layer	
15	SB-11 (14.5-15.0)	34.9 71.1			
16				Refusal at 15.0 ft.	SB-11 (12.5-13.0) collected at 9:20 and SB-11 (14.5-15.0) collected at 9:30 were analyzed for VOCs.
17					
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	SB-12		Page 1 of 1
Location:		Date Started:	8/2/2018
Site Address:	75-07 31st Avenue	Date Completed:	8/2/2018
	Jackson Heights, NY 11370	Depth to Groundwater:	13.0'
Project Number:	00254100000	Field Technician:	PC
Drill Rig Type:	Geoprobe 6620DT	Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore	611 Industrial Way West	
Borehole Diameter:	2 inch	Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1			NA	Hand cleared to 5.0 ft.	No odors or staining
2					
3					
4					
5					
6		0.0	SM	Light brown fine to medium silty sand.	2.5 ft recovery; no odors or staining.
7		0.0			
8		0.0			
9		0.0			
10		0.0			
11		0.0			2.0 ft recovery; no odors or staining
12		0.0			
13	SB-12 (12.5-13.0)	0.0			
14		0.0			
15		0.0	SC	Gray silty clay; wet.	1.0 ft recovery; no odors or staining
16		0.0			
17		0.0			
18		0.0			
19		0.0			
20	SB-12 (19.5-20.0)	0.0			
21				Boring terminated at 20.0 ft bgs.	SB-12 (9.5-10.0) collected at 10:05 and SB-12 (19.5-20.0) collected at 10:10 were analyzed for VOCs.
22					
23					
24					
25					

Boring Number:	SB-13			Page 1 of 1	
Location:				Date Started:	8/2/2018
Site Address:	75-07 31st Avenue			Date Completed:	8/2/2018
	Jackson Heights, NY 11370			Depth to Groundwater:	10.0'
Project Number:	00254100000			Field Technician:	PC
Drill Rig Type:	Geoprobe 6620DT			Partner Engineering and Science, Inc.	
Sampling Equipment:	5 foot MacroCore			611 Industrial Way West	
Borehole Diameter:	2 inch			Eatontown, NJ 07724	

Depth	Sample	PID	USCS	Description	Notes
1–5			NA	Hand cleared to 5.0 ft.	No odos or staining.
6–9		0.0	SM	Light brown fine to medium silty sand;wet at 10.0 ft.	2.0 ft recovery; no odors or staining.
10	SB-13 (9.5-10.0)	0.0	SM	Light brown fine to medium silty sand;wet at 10.0 ft.	2.0 ft recovery; no odors or staining.
11–15		0.0	SM	Light brown fine to medium silty sand;wet at 10.0 ft.	1.0 ft recovery; no odors or staining.
16–20	SB-13 (19.5-20.0)	0.0	SC	Gray silty clay; wet.	4.0 ft recovery; no odors or staining.
21–22				Boring terminated at 20.0 ft bgs.	SB-13 (9.5-10.0) collected at 11:05 and SB-12 (19.5-20.0) collected at 11:10 were analyzed for VOCs.
23–25					

Boring Number:	PR-1			Page 1 of 1	
Location:	Injection Area			Date Started:	9/10/2019
Site Address:	75-07 31st Avenue			Date Completed:	9/10/2019
	Jackson Heights, NY 11370			Depth to Groundwater:	15.0 ft bgs
Project Number:	00254100000			Field Technician:	AH
Drill Rig Type:	Truck-mounted 6610 GeoProbe			PSG Engineering and Geology, D.P.C	
Sampling Equipment:	5 foot dual tube			362 5th Avenue, Suite 501	
Borehole Diameter:	1 inch			New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
		0.0	N/A	Concrete	Boring overlain by concrete
1		0.0		Boring hand cleared to 5.0 ft bgs; brown fine-medium sands with clay and silt; slightly moist	Boring hand cleared to 5.0 ft bgs
		0.0			
2		0.0			
		0.0			
3		0.0			
		0.0			
4		0.0			
		0.0			
5		0.0			
		0.0		Brown fine-medium sand with clayey sands; slightly moist	3.5 ft recovery; no odors or staining
6		0.0			
		0.0			
7		0.0	SC		
		0.0			
8		0.0			
	PR-1	0.0			Soil sample PR-1 collected from 8.0-8.5 ft bgs
9		0.0			
		0.0			
10		0.0			
		0.0			3.0 ft recovery; no odors or staining
11		0.0			
		0.0			
12		0.0			
		0.0			
13		0.0			
	PR-1A	0.0			Soil sample PR-1A collected from 13.0-13.5 ft bgs
14		0.0			
		0.0			
15		0.0	PT	Black peat; slightly moist	
		0.0			
16		0.0			
		0.0			
17		0.0			
		0.0			4.5 ft recovery; no odors or staining
18		0.0			
		0.0	CL	Gray silty clay; wet	
19		0.0			
		0.0			
20	PR-1B	0.0			Soil sample PR-1B collected from 19.5-20.0 ft bgs
				Boring terminated at 20.0 ft bgs	

Boring Number:	PR-2				Page 1 of 1	
Location:	Injection Area			Date Started:	9/10/2019	
Site Address:	75-07 31st Avenue			Date Completed:	9/10/2019	
	Jackson Heights, NY 11370			Depth to Groundwater:	15.0 ft bgs	
Project Number:	00254100000			Field Technician:	AH	
Drill Rig Type:	Truck-mounted 6610 GeoProbe			PSG Engineering and Geology, D.P.C		
Sampling Equipment:	5 foot dual tube			362 5th Avenue, Suite 501		
Borehole Diameter:	1 inch			New York, New York 10001		

Depth	Sample	PID	USCS	Description	Notes
		0.0	N/A	Asphalt	Boring overlain by asphalt
1		0.0	SC	Boring hand cleared to 5.0 ft bgs; brown fine-medium sands with clay and silt; slightly moist	Boring hand cleared to 5.0 ft bgs
		0.0			
2		0.0			
		0.0			
3		0.0			
		0.0			
4		0.0			
		0.0			
5		0.0			
		0.2	CL	Dark brown silty clay; slightly moist	1.5 ft recovery; no odors or staining
6		0.2			
	PR-2	0.2			Soil sample PR-2 collected from 6.0-6.5 ft bgs
7		0.2			
		0.2	SM	Brown silty fine sand; slightly moist	
8		0.2			
		0.2			
9		0.2			
		0.2			
10		0.2			
		0.1			
11		0.1			
		0.2			0.5 ft recovery; no odors or staining
12		0.2			
		0.1			
13		0.1			
		0.1			
14		0.1			
		0.1	PT	Black peat; slightly moist	
15	PR-2A	0.1			Soil sample PR-2A collected from 14.5-15.0 ft bgs
		0.0		Black peat; wet	
16		0.0			
		0.0	CL	Gray soft silty clay; wet	4.5 ft recovery; no odors or staining
17		0.0			
		0.0			
18		0.0			
		0.0			
19		0.0			
		0.0			
20	PR-2B	0.0			Soil sample PR-2B collected from 19.5-20.0 ft bgs
				Boring terminated at 20.0 ft bgs	

Boring Number:	PR-3				Page 1 of 1	
Location:	Injection Area			Date Started:	9/10/2019	
Site Address:	75-07 31st Avenue			Date Completed:	9/10/2019	
	Jackson Heights, NY 11370			Depth to Groundwater:	15.0 ft bgs	
Project Number:	00254100000			Field Technician:	AH	
Drill Rig Type:	Truck-mounted 6610 GeoProbe			PSG Engineering and Geology, D.P.C		
Sampling Equipment:	5 foot dual tube			362 5th Avenue, Suite 501		
Borehole Diameter:	1 inch			New York, New York 10001		

Depth	Sample	PID	USCS	Description	Notes
		0.0	N/A	Asphalt	Boring overlain by asphalt
1		0.0	SC	Boring hand cleared to 5.0 ft bgs; brown fine-medium sands with clay and silt; slightly moist	Boring hand cleared to 5.0 ft bgs
		0.0			
2		0.0			
		0.0			
3		0.0			
		0.0			
4		0.0			
		0.0			
5		0.0			
		10.0	SM	Brown fine sand with silt; slightly moist	2.0 ft recovery; slight odors
6		12.0			
		15.0			
7		15.0			
		20.0			
8		20.0			
	PR-3	28.0			Soil sample PR-3 collected from 8.0-8.5 ft bgs
9		18.0			
		15.0			
10		10.0			
		2.0			1.0 ft recovery; no odors or staining
11		1.5			
		1.0			
12		1.0			
		1.0			
13		1.0			
		0.8			
14		0.7			
		0.1	CL	Gray silty clay; slightly moist	
15	PR-3A	0.2			Soil sample PR-3A collected from 14.5-15.0 ft bgs
		0.0		Gray soft silty clay; wet	4.0 ft recovery; no odors or staining
16		0.0			
		0.0			
17		0.0			
		0.0			
18		0.0			
		0.0			
19		0.0			
		0.0			
20	PR-3B	0.0			Soil sample PR-3B collected from 19.5-20.0 ft bgs
				Boring terminated at 20.0 ft bgs	

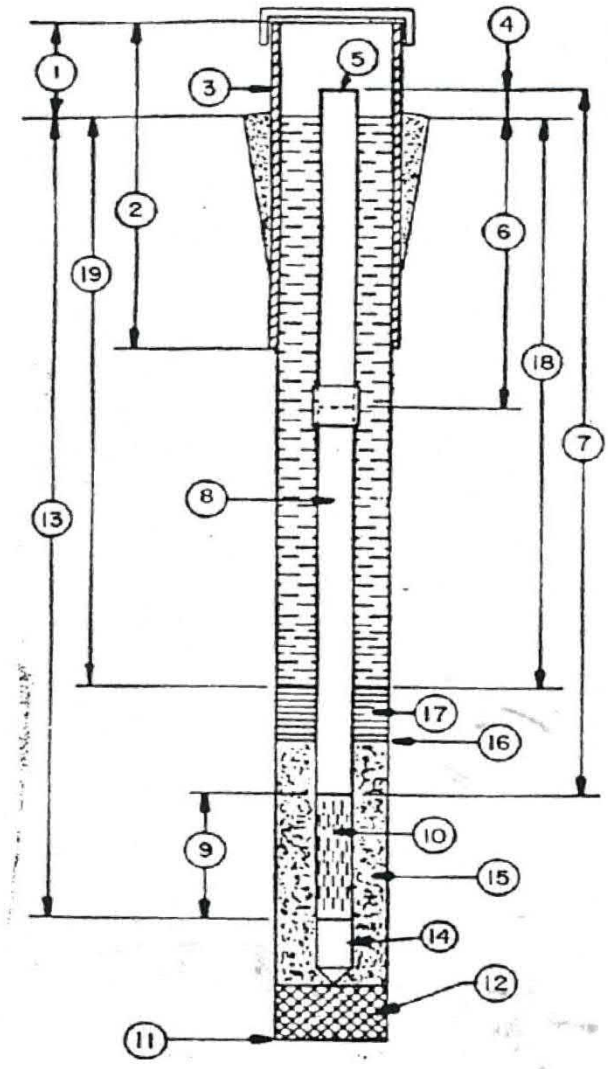
Boring Number:	PR-4			Page 1 of 1	
Location:	Injection Area			Date Started:	9/10/2019
Site Address:	75-07 31st Avenue			Date Completed:	9/10/2019
	Jackson Heights, NY 11370			Depth to Groundwater:	14.0 ft bgs
Project Number:	00254100000			Field Technician:	AH
Drill Rig Type:	Truck-mounted 6610 GeoProbe			PSG Engineering and Geology, D.P.C	
Sampling Equipment:	5 foot dual tube			362 5th Avenue, Suite 501	
Borehole Diameter:	1 inch			New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
		0.0	N/A	Asphalt	Boring overlain by asphalt
1		0.0	SC	Boring hand cleared to 5.0 ft bgs; brown fine-medium sands with clay and silt; slightly moist	Boring hand cleared to 5.0 ft bgs
		0.0			
2		0.0			
		0.0			
3		0.0			
		0.0			
4		0.0			
		0.0			
5		0.1			
		0.2	SM	Brown silty sands; slightly moist	1.0 ft recovery; no odors or staining
6		0.2			
		0.2			
7		0.4			
		0.5			
8		0.5			
	PR-4	0.6			Soil sample PR-4 collected from 8.0-8.5 ft bgs
9		0.4			
		0.2			
10		0.2			
		0.0		Brown silty sand with gravel; slightly moist	1.5 ft recovery; no odors or staining
11		0			
		0.0			
12		0.0			
		0.0			
13		0.0			
	PR-4A	0.2			Soil sample PR-4A collected from 13.0-13.5 ft bgs
14		0.2			
		0.1	PT	Black peat; wet	
15		0.1			
		0.0			
16		0.0	CL	Gray soft silty clay; wet	3.5 ft recovery; no odors or staining
		0.0			
17		0.0			
		0.1			
18	PR-4B	0.1			Soil sample PR-4B collected from 17.5-18.0 ft bgs
		0.1			
19		0.0			
		0.0			
20	PR-4C	0.0			Soil sample PR-4C collected from 19.5-20.0 ft bgs
				Boring terminated at 20.0 ft bgs	

APPENDIX C
MONITORING WELL LOGS

Monitoring Well ID: MW-4
Location: SW of dry cleaners in second loading dock area
Date of Installation: 7/12/2016
Ground Surface Elevation: N/A
Logger: E. Weber

Job No.: 00254100000
Time Start: 11:00 AM
Drilling Firm: GES Probe Services



PARTNER
Engineering and Science, Inc.

1: Height of Protective Casing Above Ground: N/A

2: Total Length of Protective Casing: 6 inches

3: Type of Protective Casing: steel

4: Height of Well Standpipe Above Ground: N/A

5: Type of Standing Pipe Cap: Locking j-plug

6: Depth of First Joint: 10 feet
Interval: 10 feet

7: Total Length of Blank Pipe: 10 feet

8: Type of Blank Pipe: PVC

9: Length of Screen: 10 feet

10: Type of Screen: 20 Slot

11: Total Depth of Boring: 20 feet

12: Type of Material: Sand/loose silty clay

13: Depth to Bottom of Screen: 20 feet

14: Well Point Length: 2 inches

15: Type of Screen Filter Pack: No. 2 sand
Quantity Used: 10 bags

16: Depth to Top of Filter Pack: 8 feet

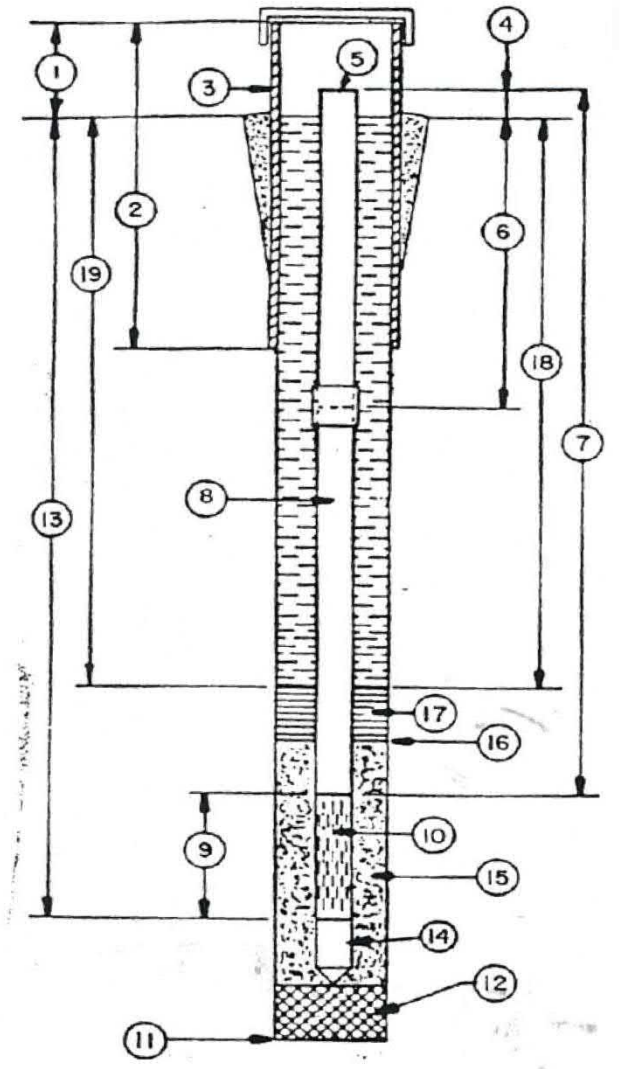
17: Type of Screen Seal: Bentonite

18: Depth to Top of Seal: 0.5 feet

19: Depth of Concrete Grout: 8 feet
Type of Grout Mixture: Portland

Monitoring Well ID: MW-5D
Location: SSW of cleaners behind Asian restaurant
Date of Installation: 7/12/2016
Ground Surface Elevation: N/A
Logger: E. Weber

Job No.: 00254100000
Time Start: 9:00 AM
Drilling Firm: GES Probe Services

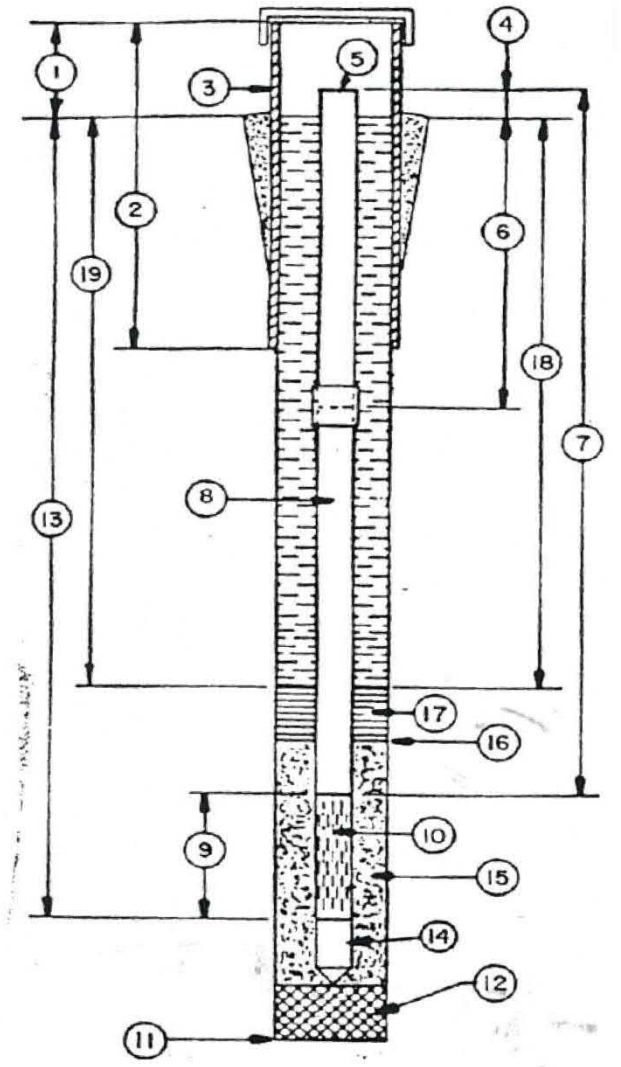


PARTNER
Engineering and Science, Inc.

1: Height of Protective Casing Above Ground: N/A
2: Total Length of Protective Casing: 6 inches
3: Type of Protective Casing: steel
4: Height of Well Standpipe Above Ground: N/A
5: Type of Standing Pipe Cap: Locking j-plug
6: Depth of First Joint: 10 feet
Interval: 10 feet
7: Total Length of Blank Pipe: 30 feet
8: Type of Blank Pipe: PVC
9: Length of Screen: 5 feet
10: Type of Screen: 20 Slot
11: Total Depth of Boring: 35 feet
12: Type of Material: Sand/loose silty clay
13: Depth to Bottom of Screen: 35 feet
14: Well Point Length: 2 inches
15: Type of Screen Filter Pack: No. 2 sand
Quantity Used: 6 bags
16: Depth to Top of Filter Pack: 28 feet
17: Type of Screen Seal: Bentonite
18: Depth to Top of Seal: 0.5 feet
19: Depth of Concrete Grout: 28 feet
Type of Grout Mixture: Portland

Monitoring Well ID: MW-6
Location: Western side of 75th Street in sidewalk
Date of Installation: 8/19/2016
Ground Surface Elevation: N/A
Logger: E. Weber

Job No.: 00254100000
Time Start: 12:30 PM
Drilling Firm: GES Probe Services



1: Height of Protective Casing Above Ground: N/A
2: Total Length of Protective Casing: 6 inches
3: Type of Protective Casing: steel
4: Height of Well Standpipe Above Ground: N/A
5: Type of Standing Pipe Cap: Locking j-plug
6: Depth of First Joint: 10 feet
Interval: 10 feet
7: Total Length of Blank Pipe: 10 feet
8: Type of Blank Pipe: PVC
9: Length of Screen: 10 feet
10: Type of Screen: 20 Slot
11: Total Depth of Boring: 20 feet
12: Type of Material: Sand/loose silty clay
13: Depth to Bottom of Screen: 20 feet
14: Well Point Length: 2 inches
15: Type of Screen Filter Pack: No. 2 sand
Quantity Used: 10 bags
16: Depth to Top of Filter Pack: 8 feet
17: Type of Screen Seal: Bentonite
18: Depth to Top of Seal: 0.5 feet
19: Depth of Concrete Grout: 8 feet
Type of Grout Mixture: Portland

PARTNER
Engineering and Science, Inc.

Monitoring Well ID: MW-7

Location: West of Rock Realty in dumpster area (onsite)

Date of Installation: 2/22/2017

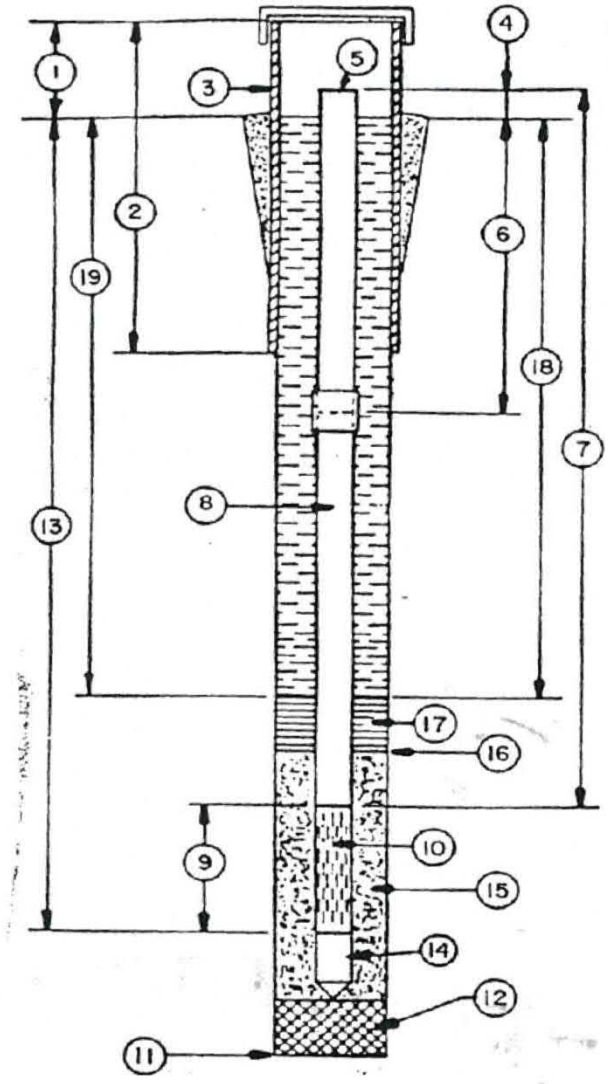
Ground Surface Elevation: N/A

Logger: E. Weber

Job No.: 00254100000

Time Start: 11:00 AM

Drilling Firm: GES Probe Services



PARTNER
Engineering and Science, Inc.

1: Height of Protective Casing Above Ground: N/A

2: Total Length of Protective Casing: 6 inches

3: Type of Protective Casing: steel

4: Height of Well Standpipe Above Ground: N/A

5: Type of Standing Pipe Cap: Locking j-plug

6: Depth of First Joint: 10 feet

Interval: 10 feet

7: Total Length of Blank Pipe: 10 feet

8: Type of Blank Pipe: PVC

9: Length of Screen: 10 feet

10: Type of Screen: 20 Slot

11: Total Depth of Boring: 20 feet

12: Type of Material: Sand/loose silty clay

13: Depth to Bottom of Screen: 20 feet

14: Well Point Length: 2 inches

15: Type of Screen Filter Pack: No. 2 sand

Quantity Used: 8 bags

16: Depth to Top of Filter Pack: 8 feet

17: Type of Screen Seal: Bentonite

18: Depth to Top of Seal: 0.5 feet

19: Depth of Concrete Grout: 8 feet

Type of Grout Mixture: Portland

Monitoring Well ID: MW-8

Location: Behind Rite Aid in loading dock area (onsite)

Date of Installation: 2/21/2017

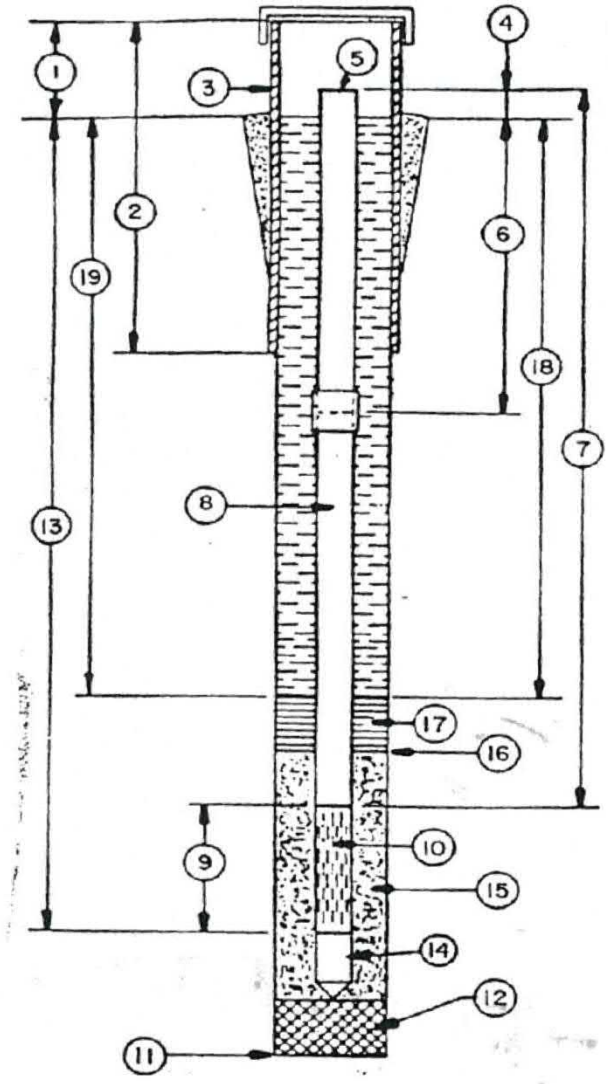
Ground Surface Elevation: N/A

Logger: E. Weber

Job No.: 00254100000

Time Start: 9:00 AM

Drilling Firm: GES Probe Services



1: Height of Protective Casing Above Ground: N/A

2: Total Length of Protective Casing: 6 inches

3: Type of Protective Casing: steel

4: Height of Well Standpipe Above Ground: N/A

5: Type of Standing Pipe Cap: Locking j-plug

6: Depth of First Joint: 10 feet

Interval: 10 feet

7: Total Length of Blank Pipe: 10 feet

8: Type of Blank Pipe: PVC

9: Length of Screen: 10 feet

10: Type of Screen: 20 Slot

11: Total Depth of Boring: 20 feet

12: Type of Material: Sand/loose silty clay

13: Depth to Bottom of Screen: 20 feet

14: Well Point Length: 2 inches

15: Type of Screen Filter Pack: No. 2 sand

Quantity Used: 9 bags

16: Depth to Top of Filter Pack: 8 feet

17: Type of Screen Seal: Bentonite

18: Depth to Top of Seal: 0.5 feet

19: Depth of Concrete Grout: 8 feet

Type of Grout Mixture: Portland

PARTNER
Engineering and Science, Inc.

Monitoring Well ID: MW-9

Location: Behind Greek restaurant in loading dock area (onsite)

Date of Installation: 2/21/2017

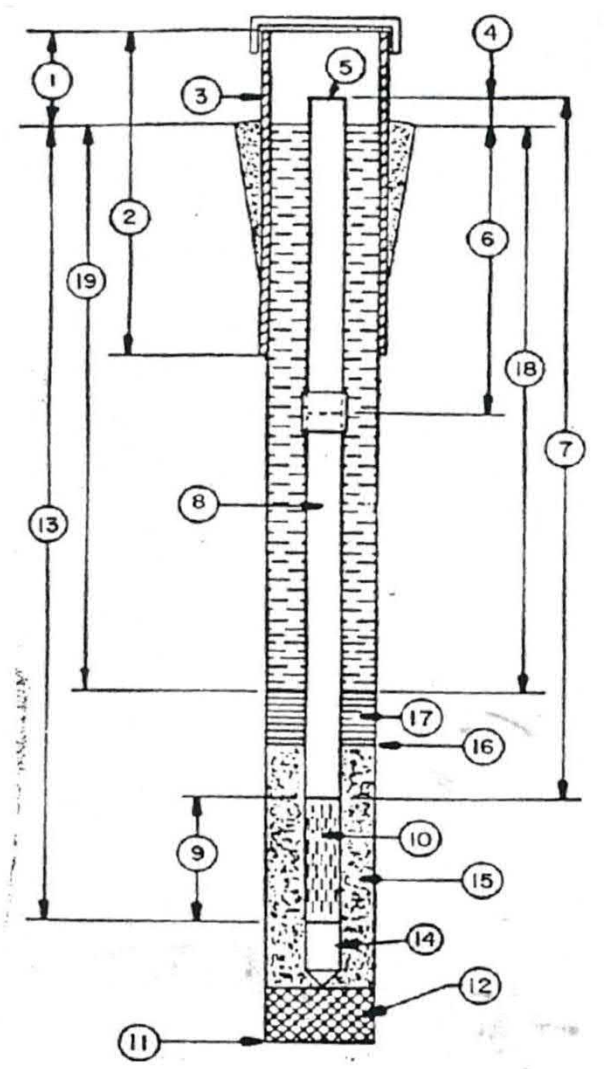
Ground Surface Elevation: N/A

Logger: E. Weber

Job No.: 00254100000

Time Start: 11:30 AM

Drilling Firm: GES Probe Services



PARTNER
Engineering and Science, Inc.

1: Height of Protective Casing Above Ground: N/A

2: Total Length of Protective Casing: 6 inches

3: Type of Protective Casing: steel

4: Height of Well Standpipe Above Ground: N/A

5: Type of Standing Pipe Cap: Locking j-plug

6: Depth of First Joint: 10 feet

Interval: 10 feet

7: Total Length of Blank Pipe: 10 feet

8: Type of Blank Pipe: PVC

9: Length of Screen: 10 feet

10: Type of Screen: 20 Slot

11: Total Depth of Boring: 20 feet

12: Type of Material: Sand/loose silty clay

13: Depth to Bottom of Screen: 20 feet

14: Well Point Length: 2 inches

15: Type of Screen Filter Pack: No. 2 sand

Quantity Used: 10 bags

16: Depth to Top of Filter Pack: 8 feet

17: Type of Screen Seal: Bentonite

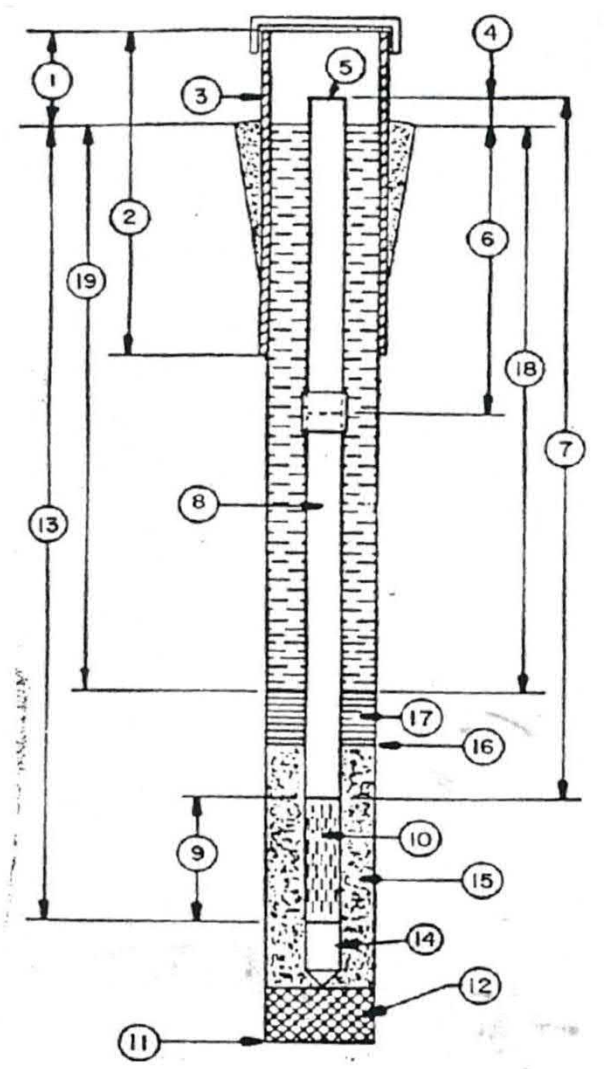
18: Depth to Top of Seal: 0.5 feet

19: Depth of Concrete Grout: 8 feet

Type of Grout Mixture: Portland

Monitoring Well ID: MW-10
Location: Behind supermarket in loading dock area (onsite)
Date of Installation: 2/27/2017
Ground Surface Elevation: N/A
Logger: E. Weber

Job No.: 00254100000
Time Start: 10:30 AM
Drilling Firm: GES Probe Services



PARTNER
Engineering and Science, Inc.

1: Height of Protective Casing Above Ground: N/A

2: Total Length of Protective Casing: 6 inches

3: Type of Protective Casing: steel

4: Height of Well Standpipe Above Ground: N/A

5: Type of Standing Pipe Cap: Locking j-plug

6: Depth of First Joint: 10 feet
Interval: 10 feet

7: Total Length of Blank Pipe: 10 feet

8: Type of Blank Pipe: PVC

9: Length of Screen: 10 feet

10: Type of Screen: 20 Slot

11: Total Depth of Boring: 20 feet

12: Type of Material: Sand/loose silty clay

13: Depth to Bottom of Screen: 20 feet

14: Well Point Length: 2 inches

15: Type of Screen Filter Pack: No. 2 sand
Quantity Used: 9 bags

16: Depth to Top of Filter Pack: 8 feet

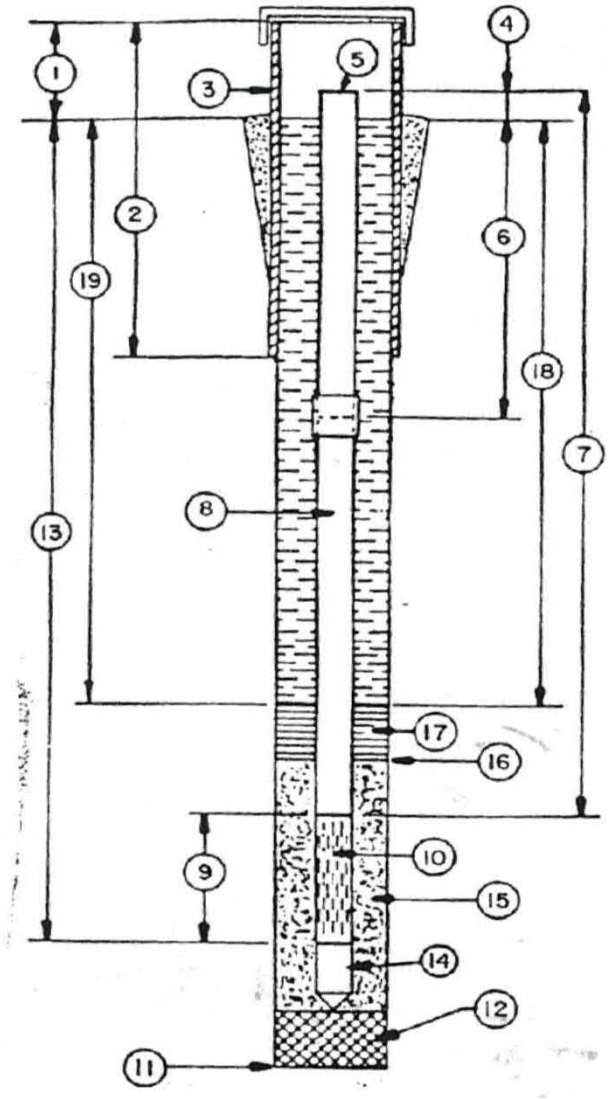
17: Type of Screen Seal: Bentonite

18: Depth to Top of Seal: 0.5 feet

19: Depth of Concrete Grout: 8 feet
Type of Grout Mixture: Portland

Monitoring Well ID: MW-11
Location: In main parking lot in front of pizza place
Date of Installation: 2/27/2017
Ground Surface Elevation: N/A
Logger: E. Weber

Job No.: 00254100000
Time Start: 15:30:00 PM
Drilling Firm: GES Probe Services



1: Height of Protective Casing Above Ground: N/A

2: Total Length of Protective Casing: 6 inches

3: Type of Protective Casing: steel

4: Height of Well Standpipe Above Ground: N/A

5: Type of Standing Pipe Cap: Locking j-plug

6: Depth of First Joint: 10 feet
Interval: 10 feet

7: Total Length of Blank Pipe: 10 feet

8: Type of Blank Pipe: PVC

9: Length of Screen: 10 feet

10: Type of Screen: 20 Slot

11: Total Depth of Boring: 20 feet

12: Type of Material: Sand/loose silty clay

13: Depth to Bottom of Screen: 20 feet

14: Well Point Length: 2 inches

15: Type of Screen Filter Pack: No. 2 sand
Quantity Used: 10 bags

16: Depth to Top of Filter Pack: 8 feet

17: Type of Screen Seal: Bentonite

18: Depth to Top of Seal: 0.5 feet

19: Depth of Concrete Grout: 8 feet
Type of Grout Mixture: Portland

PARTNER
Engineering and Science, Inc.

APPENDIX D
EXCAVATION WORK PLAN (EWP)

1.0 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the NYSDEC. Table 1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix A.

Table 1: Notifications*

Sadique Ahmed	[518-402-9656] [Sadique.ahmed@dec.ny.gov]
John Grathwol	[518-402-9649] [john.grathwol@dec.ny.gov]
Angela Martin	[518-402-7860] [angela.martin@health.ny.gov]

* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix H of this SMP;

- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

2.0 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Section 6.0 of this Appendix.

3.0 SOIL STAGING METHODS

Excavated soil from suspected areas of contamination (e.g., hot spots, USTs, drains, etc.) will be stockpiled separately and will be segregated from clean soil and construction materials. Stockpiles will be used only when necessary and will be removed as soon as practicable. Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

4.0 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other

materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

5.0 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

A truck transport route will be established once work scope is developed. All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; (g) community input.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site to minimize off-site disturbance. Off-site queuing will be prohibited.

6.0 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of material from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

7.0 MATERIALS REUSE ON-SITE

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

8.0 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

9.0 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the RAWP. The existing cover system is comprised of a minimum of 12 inches of concrete building, 6-inches of concrete sidewalk, and 4-inches of asphalt pavement. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in an updated SMP.

10.0 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 3. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

11.0 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

12.0 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC’s Project Manager. Reportable quantities of petroleum product will also be

reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

13.0 COMMUNITY AIR MONITORING PLAN

Purpose: This CAMP will be implemented during excavation and removal of soils from the proximity of the Site. The purpose of the CAMP is to provide a measure of protection for the downwind community, more specifically off-site receptors including residents and workers, from potential airborne contaminant releases as a result of remedial work activities performed at the Site.

Particulate Air Monitoring: Particulate monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance for Site Investigation and Remediation (Appendix D-2). Dust and particulate monitoring will be conducted near the approximate upwind and downwind perimeters of the exclusion zone, when possible, or where dust generating operations are apparent. Dust monitoring may be suspended during periods of precipitation and snow cover.

Particulate air monitoring will be conducted with a Dusttrak (or equivalent device). This instrument is equipped with an audible alarm (indication of exceedance) and is capable of measuring particulate matter less than 10 micrometers in size (PM-10). It will continually record emissions (calculating 15-minute running average concentrations) generated during field activities. The dust monitoring devices will be checked and recorded periodically throughout the day of intrusive activities to assess emissions and the need for corrective action.

Particulate monitoring response and action levels include:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (µg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind

PM-10 particulate levels do not exceed 150 µg/m3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 µg/m3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 µg/m3 of the upwind level and in preventing visible dust migration.

Volatile Organic Compound Air Monitoring: Volatile organic compound (VOC) air monitoring will be conducted in conjunction with the dust monitoring program. VOC air monitoring will be conducted using a RAE Systems MiniRAE 2000 VOC instrument (or a similar photoionization detector device) to provide real-time recordable air monitoring data. VOC monitoring will be conducted for ground intrusive (continuous monitoring) and non-intrusive activities (periodic monitoring).

VOCs will be monitored and recorded at the downwind perimeter of the immediate work area. Upwind concentrations will be measured before field activities commence and periodically throughout the day to establish background conditions. The downwind VOC monitoring device will also be checked periodically throughout the day to assess emissions and the need for corrective action.

VOC monitoring response and action levels include:

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If the organic vapor level remains sustained above 5 ppm at the perimeter of the work area, activities must cease and work will be re-evaluated.

Weather conditions, including the prevailing wind direction, will be observed and recorded for each day of site activities. As work and weather conditions change throughout the day, the locations where the VOC monitoring devices are set up may be adjusted accordingly.

Documentation and Calibration: The volatile organic compound (VOC) air monitoring device, such as a PID, shall be calibrated daily according to manufacturer's instructions and standard industrial hygiene practices, prior to the commencement of onsite intrusive activities. Calibration measurements will be recorded on the daily field log. Field measurements will be logged daily and available for State (NYSDEC and NYSDOH) personnel to review. The particulate monitoring device is factory calibrated on an annual basis.

Meteorological Data: Wind direction is the only relevant meteorological data that may affect CAMP administration. To evaluate wind direction, a wind vane, or similar wind-direction determining instrument, will be utilized onsite. Wind direction will be established at the beginning of the work day and may be reestablished throughout the day as deemed necessary, if shifts in wind direction are observed. Wind direction will be utilized to determine placement of upwind and downwind CAMP stations, and will be noted on the daily field logs.

A figure showing the location of air sampling stations based on generally prevailing wind conditions will be provided with the FER. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

14.0 ODOR CONTROL PLAN

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using

foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

15.0 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

16.0 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

Appendix D-1
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix D-2
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

APPENDIX E

RESPONSIBILITIES OF OWNER/REMEDIAL PARTY

Responsibilities

The responsibilities for implementing the Site Management Plan ("SMP") for the Jackson Heights Shopping Center site (the "site"), number C241176, as pertaining to the owner/responsible party, are as defined below. The owner(s) is/are currently listed as: Allied Jackson Heights, LLC (the "owner").

Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out, the term Remedial Party ("RP") refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation ("NYSDEC") is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf. The RP (and owner) is:

Jeffrey Kay
Allied Jackson Heights, LLC
118-35 Queens Boulevard
Forest Hills, New York 11375

Nothing on this page shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the site.
While, currently, The Owner and the RP for this Site are analogous, should the status of these entities change in the future, the following responsibilities shall be assigned to the Owner and RP:

Site Owner's Responsibilities:

1) The owner shall follow the provisions of the SMP as they relate to future construction and excavation at the site.

2) In accordance with a periodic time frame determined by the NYSDEC, the owner shall periodically certify, in writing, that all Institutional Controls set forth in a(n)

Environmental Easement remain in place and continue to be complied with. The owner shall provide a written certification to the RP, upon the RP's request, in order to allow the RP to include the certification in the site's Periodic Review Report (PRR) certification to the NYSDEC.

3) In the event the site is delisted, the owner remains bound by the Environmental Easement and shall submit, upon request by the NYSDEC, a written certification that the Environmental Easement is still in place and has been complied with.

4) The owner shall grant access to the site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.

5) The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. In the event that damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Appendix A - Notifications.

6) In the event some action or inaction by the owner adversely impacts the site, the owner must notify the site's RP and the NYSDEC in accordance with the time frame indicated in Appendix A - Notifications and (ii) coordinate the performance of necessary corrective actions with the RP.

7) The owner must notify the RP and the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the site property. 6 NYCRR Part 375 contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 2.4 of the SMP. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html.

8) Until such time as the NYSDEC deems the vapor mitigation system unnecessary, the owner shall operate the system, pay for the utilities for the system's operation, and report any maintenance issues to the RP and the NYSDEC.

9) In accordance with the tenant notification law, within 15 days of receipt, the owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or OSHA guidelines on the site, whether produced by the NYSDEC, RP, or owner, to the tenants on the property. The owner

must otherwise comply with the tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

Remedial Party Responsibilities

1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the site.

2) The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.

3) Before accessing the site property to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the site visit and/or any final report produced.

4) If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the RP shall submit a copy of the approved SMP to the owner(s).

5) The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html.

6) The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Appendix A - Notifications of the SMP.

7) The RP is responsible for the proper maintenance of any installed vapor intrusion mitigation systems associated with the site, as required in Appendix J (Operation, Monitoring and Maintenance Manual) of the SMP.

8) Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the RP shall submit to the NYSDEC for approval an amended SMP.

9) Any change in use, change in ownership, change in site classification (*e.g.*, delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the SMP and/or updated legal documents. The RP shall contact the Department to discuss the need to update such documents.

Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future site owners and RPs and their successors and assigns are required to carry out the activities set forth above.

APPENDIX F
FIELD SAMPLING PLAN

Soil samples will be collected from the Site using the following methodology:

Soil borings will be advanced with a direct-push, truck-mounted Geoprobe drill rig. Drilling rods and sampling equipment are to be decontaminated between samples and borings to prevent cross-contamination. Soil cores from the borings will be collected using a 5-foot long by 1.0-inch diameter MacroCore sampler with a 5-foot long acetate liner, which will be advanced by the direct-push drill rig using 5-foot long by 1-inch diameter drill rods. The sampler will be driven into the subsurface to allow undisturbed soil to enter the open MacroCore barrel and be retrieved in 5-foot intervals to recover the soil-filled liners. A lengthwise section of each acetate liner will be removed with a splitting tool to expose the soil. The soil column will be visually inspected for discoloration, monitored for odors, and classified in accordance with the Unified Soil Classification System (USCS). Additionally, the soil column will be field-screened with a PID calibrated to isobutylene.

Groundwater samples will be collected from the monitoring wells using the following methodology:

- A headspace reading will be collected using a PID;
- Depth to water will be measured using a water level indicator;
- Water column will be purged using low-flow procedures;
- Field parameters including pH, oxidation-reduction potential (ORP), specific conductivity, dissolved oxygen, temperature, and depth to water will be collected for approximately 30 to 60 minutes or until field parameters stabilize;
- Upon stabilization of field parameters, dedicated tubing will be used to obtain each groundwater sample; and,
- Sample containers will be placed into a chilled cooler and maintained at low temperature (below 4-degrees Celsius) for transport to the laboratory.

Indoor air samples will be collected from the tenant spaces using the following methodology:

All indoor/ambient air sampling will be conducted in accordance with the NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” dated October 2006. Indoor and ambient air samples will be collected using

6-liter, stainless-steel, cylindrical SUMMA™ canisters. The sampling containers will be provided by SGS Accutest Laboratories (Accutest), of Dayton, New Jersey which subject each canister to a rigorous cleaning process using a combination of dilution, heat, and high vacuum. After cleaning, the canisters are batch certified to be free of target contaminants to a specified reporting limit via gas chromatography/mass spectroscopy prior to delivery. The indoor and ambient air canisters will be set for a 24-hour sampling period.

APPENDIX G
QUALITY ASSURANCE PROJECT PLAN

Quality Assurance Project Plan

Site Identification:
Jackson Heights Shopping Center
75-11 31st Avenue
Jackson Heights, New York 11370

The scope and objective of this project has been and will continue to be delineation and remediation of soil, groundwater, and vapor/air above the applicable standards and/or criteria previously identified onsite.

The people responsible for the coordination and oversight of this project are as follows:

Role	Personnel	Phone Number
Overall Project Coordination	Jerry Ostrander	732-380-1700
Sampling Activities	Partner Field Representatives	732-380-1700
Laboratory Activities	SGS Accutest	732-329-0200

SGS Accutest has and will continue to analyze the soil, groundwater, and vapor/air samples collected from the site. The analytical laboratory is responsible for providing analytical services, including laboratory quality assurance and quality control activities. The laboratory is capable of analyzing the samples and producing a data report in a manner consistent with the guidelines and requirements of the New York State Department of Environmental Conservation's *DER-10/Technical Guidance for Site Investigation and Remediation*. The soil, groundwater, and vapor/air samples have been and will be analyzed for the parameters listed in Table 1 of this report, as required. Table 1 also includes the method name, number, and source for each analysis to be performed.

SGS Accutest (NY NELAP Certificate Number 10983) is located in the City of Dayton, New Jersey.

Sampling Methodology

All sample collection activities will be conducted so as to obtain reliable information regarding subsurface conditions and representative soil and groundwater samples for analysis. A qualified field representative will implement all sampling at the site.

Prior to sampling, the field representative will collect site plans, directions to the site, and keys for wells/site; meet with the project manager and discuss the work required: number of wells/soil borings to be sampled, groundwater/soil sampling sequence/order, sampling parameters, equipment, disposal of purged water, QA/QC samples, safety guidelines; and contact the lab to order the jars, prepare and send the work order, check holding/handling time and arrange for the pickup of the samples.

After the sample has been collected, the sample jar will be sealed with a screw cap. Blank sample labels will be supplied by the analytical laboratory and affixed to the exterior of the sample container. Sample labels will be completed using permanent markers or ink. The labels will be filled out at the time of sample collection by the field sampling personnel. The following identifying sample

information will be included on the label: Client/Site; sample identification alpha-numeric code; sample collector's initials; date and time of sample collection; analytical method; and laboratory analysis to be performed.

Immediately following its collection, the sample will be placed in a cooler and kept at 4^{o}C until its arrival at the laboratory. The procedure will then be repeated at each sample location.

Each monitoring well to be sampled will be purged of three to five times its initial water volume using a submersible pump and dedicated Teflon polyethylene plastic tubing. While purging, specific measurements (water levels, pH, conductivity, temperature, and dissolved oxygen) will be made. The depth to water and discharge rate will be monitored and adjusted during the purging process to prevent complete evacuation of water from the well. The well will be allowed to recharge to as close to the initial static water level as possible or for a maximum of two hours prior to sampling.

Groundwater samples will be collected with disposable dedicated Teflon single check valve bailers fitted with Teflon flow-control sample extractors to allow for easy placement of the collected water sample into the appropriate sample container and to limit the amount of sample agitation.

Soil samples were collected with new, dedicated plastic scoops or EnCore coring devices to avoid cross-contamination. Groundwater samples were collected with new, disposable bailers to avoid cross-contamination.

A field log book of soil/groundwater-sampling details will be kept each time soil/groundwater-sampling activities are conducted. The field logbook will document the date and weather conditions on the day of sampling, objective of site visit, name of sample collector(s), time of arrival and departure at the site, field observations of sampling event, initial measurements from all monitoring wells/soil borings (organic vapors, depth to water, thickness of product, if present, pH, DO, temperature, conductivity, turbidity), total depth of each well/soil boring, estimated water volume in well, start and end time of purging, total volume purged, well sampling sequence and time of sample collection, sampling parameters, and any field instrument calibration performed.

All aqueous sampling equipment will be cleaned, wrapped and dedicated prior to the sampling event.

The following steps will be followed for the field decontamination of non-aqueous sampling equipment: laboratory grade glassware detergent and tap water scrub to remove visual contamination, generous tap water rinse, and distilled and deionized water rinse.

All soil gas and indoor/ambient air sampling was conducted in accordance with the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006. To facilitate the collection of soil gas samples from beneath the subject property, soil gas sample points were advanced beneath the surface to a depth of two inches below the basement floor slab. All soil gas points and tubing extended no further than two inches into the sub-slab material. A new section of ¼-inch diameter polyethylene tubing was inserted into the borehole to the desired sampling depth. Sand was poured into the boring annulus to form a sand pack around the tubing. Granular bentonite was placed atop the sand pack and the remainder of the borehole was backfilled with hydrated bentonite to the ground surface to form a seal. Prior to sampling, a tracer gas was used in accordance with NYSDOH protocols to serve as a QA/QC device to verify the integrity of the soil vapor probe seal. Helium was used as the tracer gas and a shroud was used to keep it in contact with the probe during testing. A portable monitoring device

was used to analyze a sample of soil vapor for the tracer prior to sampling. If the tracer sample results showed a significant presence of the tracer, the probe seals were adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring was performed a second time to confirm the integrity of the probe seals.

Soil gas samples were collected using 1-liter, stainless-steel, cylindrical SUMMA™ canisters. Indoor and ambient air samples were collected using 6-liter, stainless-steel, cylindrical SUMMA™ canisters. The SUMMA™ canisters were fitted with stainless-steel flow controllers, which SGS Accutest calibrated to maintain constant flow (not exceeding 0.2 liters per minute) for approximately two hours of sampling time. The indoor and ambient air canisters were set for a 24-hour sampling period. The sampling end of the tubing was fitted to the sampling canister and the port valve was opened, causing air to enter the sample container due to the pressure differential. PSG closed the valves after the canister was evacuated to approximately 1-5 inches of mercury, with pertinent data (e.g., time, canister vacuum) recorded at the start and end of sampling. A sample log sheet was maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody protocols.

All field analytical instrumentation will be calibrated prior to use in the field each day. Each instrument will be calibrated and maintained according to the manufacturer's instructions. A calibration log will be kept for each instrument. In the event that an instrument must be re-calibrated in the field, this re-calibration will be performed only by personnel who have been trained in these calibration procedures.

Chain of Custody Procedures

A COC Record will be maintained and will accompany the laboratory shuttle from the moment of the containers dedication until the time of the analyses. A laboratory's delivery of a sample container shuttle to the sampler; therefore, requires that a COC be initiated by the authorized laboratory representative relinquishing the shuttle, and time and date of the transfer be documented.

COC forms will be placed in waterproof plastic bags and taped to the underside of the cooler lids.

After their collection and storage, the necessary field and quality assurance samples will be preserved in the shuttle until their transfer to the lab for analysis. The transfer will be accompanied by the same COC Record, which will be completed to identify the ID numbers, quantities and physical description of the samples, and the particular analyses requested. The name of the sampler who relinquished the shuttle, the time and date of the transfer, and the laboratory representative assuming responsibility for transporting the shuttle to the lab will be recorded.

Sample Storage Procedures

Immediately upon collection, samples will be placed in a cooler and maintained at $4^{o}C$ until delivery to the laboratory. Samples will be submitted to the laboratory no later than 24 hours after sample collection for a one day sampling event or 48 hours if an overnight carrier is required or if the sampling event exceeds one day. The documentation for supporting the sample handling, preservation, packaging and shipping will consist of chain-of-custody records, shipping records, and laboratory reports.

TABLE 1

Quality Assurance Summary

Analytical Parameter	Sample Matrix	Method Name	Method Number	Container Type and Volume*	Preservation Method	Sample Holding Time
TCL VOC's + TICs	Soil	GC/MS for Volatiles/VOA Library Search	SW846 Method 8260B	3, 5-gram Encore coring devices and one, 4 - oz. glass jar (percent moisture)	Cool, 4°C	48 hours to extraction, 14 days to analysis
	Water		SW 846 8260	G, Teflon Septum, 3(40ml)	Cool, 4°C, HCl to pH < 2	14 days
	Vapor/ Air		EPA TO-15	1-liter, 6-liter stainless-steel, cylindrical SUMMA™ canisters	Ambient temperature; near atmospheric pressure	30 days
TCL-SVOCs + TICs	Soil	GC/MS for Semivolatiles/SVOA Library Search	SW846 Method 8270D	G, Teflon Cap, 4-oz jar	Cool, 4°C	14 days for extraction, 40 days analysis
	Water		SW846 Method 8270D	G, Teflon Cap, 1-L jar	Cool, 4°C	14 days for extraction, 40 days analysis
PCBs	Soil	Pesticides/PCBs	SW846 Method 8082A	G, Teflon Cap, 4-oz jar	Cool, 4°C	14 days extract, 40 days analysis
	Water	Pesticides/PCBs	SW846 Method 8082A	G, Teflon Cap, 1-L jar	Cool, 4°C	40 days
TAL Metals	Soil	Metals	SW846 Method 6010B	G, Teflon Cap, 2-oz jar	Cool, 4°C	180 days (Mercury 28 days)
	Water	Metals	SW846 Method 6010B	P, Teflon Cap 1(250ml)	HNO3, Cool, 4°C	180 days (Mercury 28 days)

Notes: * Volume is in milliliters, includes number of bottles (i.e. 3 (40) = 3 x 40-mLvials).
BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
G = Glass
GC/MS = Gas chromatography/mass spectrometry
HCl = Hydrochloric acid
HNO3 = Nitric acid
mL = Milliliters
MTBE = Methyl *tert*-Butyl Ether
P = Plastic
TBA = *tert*-Butyl Alcohol
TCL = Target Compound List
VOC = Volatile Organic Compounds
SVOC = Semi-Volatile Organic Compounds
TICs = Tentatively Identified Compounds
PCBs = Polychlorinated Biphenyls
TAL = Total Analyte List

TABLE 2

Quality Assurance/Quality Control Samples
Number and Type Collected

Analytical Parameters	Sample Matrix	Quality Assurance / Quality Control Samples	
		Field Blanks	Trip Blanks
TCL VOC's + TICs, TBA	Soil	NR	NR
TCL SVOC's + TICs	Soil	NR	NR
TAL Metals	Soil	NR	NR
PCBs	Soil	NR	NR
TCL VOC's + TICs, TBA	Groundwater	NR	1 per day
TCL SVOC's + TICs	Groundwater	NR	NR
TAL Metals	Groundwater	NR	NR

Notes: NR = Not Required.

APPENDIX H
HEALTH AND SAFETY PLAN

Partner Site-Specific Health and Safety Plan

Introduction

Partner Assessment Corporation (Partner) has been retained by Muss Development to conduct site investigation activities at the subject property. This Health and Safety Plan (HASP) document identifies the Health and Safety procedures that are intended to guide the field activities at the site. The details of this plan apply to employees of Partner and its subcontractors. Regulatory agencies are expected to observe the safety rules and regulations established by their respective organizations in addition to the requirements of this document.

This plan must be reviewed and acknowledged by all personnel prior to entering the exclusion zone. In general, a "Tailgate Safety Meeting" is conducted at the initiation of on-site activities and at the beginning of each day thereafter until the completion of the project. However, the actual briefing may be conducted off-site (e.g., in the office) if conditions preclude or render impractical its completion on-site.

This HASP will be a living document in that it will be continually updated and/or revised as the site conditions and knowledge of the operations develops further. The development and preparation of the HASP has been based on past experiences and site specific information at the time of preparation. If actual site conditions or operations vary from the data used to prepare this HASP, amendments shall be made to reflect those changes.

This HASP has been developed with consideration to current safety standards, health effects, and standards for known contaminants and procedures designed to account for potential hazards from known and/or suspected substances. In preparing this document, Partner has specifically reviewed Occupational Safety & Health Administration (OSHA) Title 29 Code of Federal Regulations (CFR) 1910 & 1926, California Occupational Safety & Health Administration (Cal/OSHA) Title 8 California Code of Regulations (CCR) 5192, the National Institute of Occupational Safety & Health (NIOSH)/OSHA/United States Coast Guard (USCG)/Environmental Protection Agency (EPA) Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH Pocket Guide to Chemical Hazards, and the American Conference of Governmental Industrial Hygienists, Inc. (ACGIH) Threshold Limit Values for Chemical Substances and Chemical Agents.

Project Information

Project Type:	Remedial Investigation
Site Name:	Jackson Heights Shopping Center
Address:	7507 31st Avenue Jackson Heights, New York 11370
Partner Project Number:	15-132294.2

Project Scope of Work

Sampling procedures will generally conform to the requirements of the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (EPA). A state-certified laboratory will analyze the samples and the project will be performed under the responsible charge of a qualified Partner representative. Laboratory results will be compared to NYSDEC soil and groundwater comparison standards, and (if necessary), USEPA Vapor Intrusions Screening Levels (VISL) and New York State Department of Health (NYSDOH) vapor criteria.

Partner will perform the following tasks for the Remedial Investigation at the dry cleaner tenant space:

- Notify Dig Safely New York a minimum of 48 hours prior to drilling activities to clear public utilities;
- To further clear boring and monitoring well locations, perform a geophysical survey on the subject property, with boring/well placement modified as necessary based on the geophysical survey results;
- Hand-clear each soil boring/monitoring well location to five feet prior to advancing drilling equipment;
- Advance soil borings and install monitoring wells through exterior portions of the subject property;
- Field-screen each soil sample using a photoionization detector (PID);
- Collect sub slab soil gas and indoor/ambient air samples from properties surrounding the subject property;
- Prepare soil, groundwater, and soil gas/indoor air samples for laboratory analysis;
- Prepare a report detailing field activities, methods, and findings

Utility Clearance

Have necessary underground utility notifications for subsurface work been made? ☒ Yes ☐ Not Applicable

Specify clearance dates, ticket confirmation number, and other relevant information:

- Notify Dig Safely New York's One Call service a minimum of 48 hours prior to drilling activities to clear public utilities;

Site Safety Officers

The Site Safety Officer (SSO) is the individual who is capable of identifying existing and predictable hazards in surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. The SSO is designated on a site-by-site basis based on the site conditions, scope-of-work, and the individual's ability to recognize site-specific hazards and take appropriate corrective actions. It is the responsibility of all employees to work in a manner that will prevent injury and exposure to themselves and to other employees. Every employee is responsible for obeying safety rules and regulations, and reporting unsafe conditions or acts to their supervisors.

Partner Contact

SSO: Carrie Berry
Practice Leader – Site Mitigation
Telephone: (732) 380-1700

Responsible Personnel: Summer Gell
Regional Manager
Telephone: (214) 666-6800

Project Contact Information

Responsible Party: Holliday Fenoglio Fowler, LP
One Post Office Square, Suite 3500
Boston, Massachusetts 02109

Oversight Agency: NYSDEC
625 Broadway
Albany, New York

List of Potential Hazardous Materials

According to preliminary site information including evaluation of the hazards at the site and Partner's experience, the following potential hazardous materials may be present at the subject property:

- Volatile Organic Compounds (VOCs)

Please refer to the Chemical Hazards Section for more information related to the above listed materials, including chemical information, potential health effects, and exposure limits.

EMERGENCY CONTINGENCY INFORMATION

Evacuation Routes and Procedures

In case of evacuation, all vehicles/equipment should be turned off and personnel should immediately leave the work area. Personnel should reconnoiter at the specified meeting area located upwind of the affected area, such as the building exterior, site field office, property boundary, or other pre-designated location, where all personnel will be accounted for.

IF AN EMERGENCY ARISES, THE DESIGNATED RECONNOITER LOCATION FOR THIS PROJECT IS THE GRASS AREA LOCATED ON THE CORNER OF THE SUBJECT PROPERTY, AT THE PARTNER FIELD OFFICE (VEHICLE).

This location is located up-wind of the subject property, but is subject to change if prevailing weather conditions alter typical wind direction. Personnel should not reenter the work area following evacuation until 1.) the condition causing the emergency has been corrected, 2.) all hazards have been assessed, 3.) the HASP has been reviewed, and 4.) personnel have been oriented on any changes in the HASP. All emergencies should be promptly reported to the SSO.

Emergency Response Facilities

Fire Station: FDNY Engine 307/Ladder 154
81-17 Northern Blvd.
Jackson Heights, New York
Telephone: **911** or (718) 999-2000

Police: NYPD 115th Precinct Police
92-15 Northern Blvd.
Jackson Heights, New York
Telephone: **911** or (718) 533-2002

Ambulance: New York Hospital Queens
56-45 Main Street
Flushing, New York
Telephone: **911** or (800) 282-6684

Hospital: New York Hospital Queens
56-45 Main Street
Flushing, New York
Telephone: **911** or (800) 282-6684

Poison Control: New York Hospital Queens
56-45 Main Street
Flushing, New York
Telephone: **911** or (800) 282-6684

DIRECTIONS TO HOSPITAL EMERGENCY ROOM ATTACHED IN APPENDIX A

Air Monitoring

Air quality in the breathing zone will be monitored continuously with a MiniRae2000 photoionization detector (PID) calibrated to isobutylene. Work will proceed in Level D while PID readings are between 0 and 10 parts per million (ppm). In the event that breathing zone readings exceed 100 ppm, all personnel will discontinue work at the location and withdraw from the work area. The appropriate vapor control measures will be implemented (e.g., application of vapor suppression), the necessary emergency response authorities will be notified, and/or the work area will be re-sampled until vapor levels are within acceptable levels prior to reentering the work zone.

Please refer to the table below for the Operational Action Levels.

Contaminants	Action Level	Action to Take
VOCs (PID)	**1 to 10 PPM** Above background at the breathing zone and sustained for 5 minutes	Level D, continuous air monitoring
	10 to 100 PPM Above background at the breathing zone and sustained for 5 minutes	Upgrade to Level C, continuous air monitoring and ventilate space
	100 to 300 PPM Above background at the breathing zone and sustained for 1 minute	Upgrade to Level B, continuous air monitoring and ventilate space, or stop work and ventilate
	>300 PPM Above background at the breathing zone and sustained for 1 minute	Stop work, Evacuate work zones
Combustible Gas in Air (LEL meter)	Less than 10% lower explosive limit (LEL)	Continue with caution and air monitoring (combustible gas monitoring)
	Greater than 10% LEL	Stop work, immediately withdrawal personnel, and ventilate space with manhole blower
Oxygen in Air (O2 Meter)	Less than 19.5%	Stop work and ventilate or upgrade to Level B
	19.5 to 21.5%	Level D, continue work with air monitoring
	Greater than 21.5%	Stop work, immediately withdrawal personnel, and evaluate

The PID will be calibrated daily by Partner personnel prior to use. Calibration will be performed in accordance with the manufacturer specifications and recorded in a log book kept with the instrument. Ambient breathing space measurements should be collected every 15 minutes.

Personal Protection Equipment

Based on the preliminary site information including evaluation of the hazards at the site and Partner's experience, personal protective equipment (PPE) will be required for all personnel and visitors entering the controlled portion of the site. PPE for each potential level of protection is described below. Both Level C and D PPE should be available on-site during all phases of the project, as conditions may change and require additional PPE. Work should be conducted in Level D and no breathing protection will be required as long as monitored breathing zone vapor concentrations remain in the nominal operation action level.

If on-site personnel find that breathing zone concentrations remain above nominal operation action level for more than 5 minutes, then the SSO or PM will make a determination if breathing protection is needed. At this time, all work in the affected area should be suspended until a decision is made. Implementation of Level C PPE will be required if work continues during elevated breathing zone concentrations. Donning and use of respirators shall be performed in accordance with manufacturer specifications. Replacement of respirator cartridges shall be performed in accordance with manufacturer specifications. All respirators and cartridges shall be stored in air tight bags while not in use.

Please refer to the PPE Levels of Protection for a detailed description of the equipment associated for each level of PPE.

PPE Levels of Protection

Level D (to be used at all times) is as follows:

- Full-length pants and shirt;
- Sturdy steel-toe work boots;
- Hard hat;
- Safety glasses.

Modified Level D (used as appropriate) is as follows:

- Regular Tyvek coveralls;
- Outer gloves: leather, cotton, or nitrile;
- Inner gloves: latex or nitrile;
- Sturdy steel-toe work boots;
- Hard hat;

- Safety glasses.

Level C (used as appropriate) is as follows:

- Half-face air purifying, canister equipped respirator (NIOSH-approved) equipped with Organic Vapor/HEPA cartridges/filters;
- Regular Tyvek coveralls;
- Outer gloves: leather, cotton, or nitrile;
- Inner gloves: latex or nitrile;
- Sturdy steel-toe work boots;
- Hard hat;
- Safety glasses.

Level B (used as appropriate) is as follows:

- Positive-pressure, full-face piece, self-contained breathing apparatus (SCBA) or positive-pressure supplied air respirator with escape SCBA (NIOSH-approved);
- Disposable chemical-resistant coveralls (Polycoated Tyvek);
- Outer gloves: neoprene or nitrile;
- Inner gloves: latex or nitrile;
- Sturdy steel-toe work boots;
- Petroleum-resistant covers over work boots;
- Hard hat.

Decontamination Procedures

Drilling and sampling equipment will arrive decontaminated and clean. All downhole soil and groundwater sampling equipment (e.g., sampling tubes, split spoons, hand augers, Hydropunch, etc.), tools, purge pumps, water level indicators, etc. will be decontaminated before, between, and after use with Alconox or an equivalent phosphate-free detergent solution to reduce the risk of cross-contamination. Decontamination of all sampling equipment will consist of submerging the equipment in a detergent solution bath and scrubbing it with dedicated brushes. The equipment will then be placed in a rinse bath and agitated. A second rinse bath should occur if needed. All drilling equipment such as augers and drilling rods should be thoroughly steam cleaned and rinsed.

Nitrile outer gloves will be worn whenever handling samples, equipment, or any other potentially contaminated items. Skin exposed to direct contact with contaminants of concern will be immediately flushed with water.

Work Zone Delineation

A 15-foot exclusion zone will be delineated with caution cones as necessary to denote the work zone and area restricted to authorized project personnel.

Traffic Control

Traffic control is not anticipated to be required for this project.

Adverse Weather

The work area will be secured and all personnel will discontinue work at the location and withdraw from the work area in the event that adverse weather is encountered (e.g., heavy rain, lightning).

Emergency Equipment

A first aid kit and fire extinguisher will be located in the work vehicle in a location that is easily accessible and highly visible. The SSO will be responsible for knowing the location of and accessing the emergency equipment as needed.

Hazard Assessment

(☒ = Applies, or required item(s) available. ☐ = Not Applicable.)

Hazard Assessment: Physical Hazards and Related Concerns

☐ **Confined Space Entry (CSE)**. Confined space entry means the potentially hazardous entry into any space which, by design, has limited openings for entry and exit and unfavorable natural ventilation that could contain or produce dangerous air contaminants and is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, storage tanks, compartments of ships, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults, and pipelines. Other environments which must be treated as confined spaces include test pits, basements, garages, warehouses, and other indoor areas where mechanical (i.e., diesel, propane, gasoline or similarly powered) equipment must be operated for drilling or excavation purposes. Confined space entry should be allowed only when absolutely necessary.

☒ **Construction Hazards, Drill Rigs, Backhoes, etc.** The use of drill rigs, backhoes, and other heavy equipment represent potentially serious construction hazards. Whenever such equipment is used, personnel in the vicinity should be limited to those who must be there to complete their assigned duties. All personnel must avoid standing within the turning radius of the equipment or below any suspended load. Job sites must be kept as clean, orderly, and sanitary as possible. When water is used, care must be taken to avoid creating muddy or slippery conditions. If slippery conditions are unavoidable, barriers and warning signs must be used to warn of these dangers.

Never turn your back to operating machinery. Never wear loose clothing jewelry, hair, or other personal items around rotating equipment or other equipment that could catch or ensnare personal items. Always stand far enough away from operating machinery to prevent accidental contact, which may result from mechanical or human error.

Additionally, the following basic personal protective measures must be observed: **Hardhats** must be worn to protect against bumps or falling objects. **Safety glasses** must be worn by all workers in the vicinity of drill rigs or other sources of flying objects. **Goggles,** face shields, or other forms of eye protection must be worn when necessary to protect against chemicals or other hazards. **Steel-toed safety shoes or boots** are also required. The shoes must be chemically resistant or protected with appropriately selected boots/coverings where necessary. Unless otherwise specified, normal **work clothes** must be worn. Long sleeves and gloves are also required whenever necessary to protect against hazardous contact, cuts, abrasions or other possible skin hazards.

☒ **Electrical**. OSHA regulations require that employees who may be exposed to electrical equipment be trained to recognize the associated hazards and the appropriate control methods. All **extension cords** used for portable tools or other equipment must be designed for hard or extra usage and be (three-wire) grounded. All 120-volt, single-phase 15- and 20-ampere receptacle outlets on construction sites and other locations where moisture/water contact may occur must be equipped with **ground-fault circuit interrupters (GFCI)** units. GFCI units must be attached directly to or as close as possible to the receptacle. GFCI located away from the receptacle will not protect any wiring between the receptacle and the GFCI unit. Only the wiring plugged into the GFCI and outward will be protected by the GFCI. All **(temporary lighting)** lamps for general illumination must be protected from accidental breakage. Metal case sockets must be grounded. Portable lighting in wet or conductive locations should be 12 volts or less.

☒ **Drums and Buried Drums**. As a precautionary measure, personnel must assume that labeled and unlabeled drums encountered during field activities contain hazardous materials until their contents can be confirmed and characterized. Personnel should recognize that drums are frequently mislabeled, particularly drums that are reused.

Only trained and authorized personnel should be allowed to perform drum handling. Prior to any handling, drums must be visually inspected to gain as much information as possible about their contents. Trained field personnel must look for signs of deterioration such as corrosion, rust or leaks, and for signs that the drum is under pressure such as swelling or bulging. Drum-type and drumhead configuration may provide the observer with information about the type of material inside (e.g., a removable lid is designed to contain solids, while the presence of a bung indicates liquid storage).

Although not usually anticipated, buried drums can be encountered when digging test pits. Therefore, the following provisions must be observed if drums are encountered: Machine excavation (e.g., backhoe) should cease immediately anytime a drum is encountered. The appropriate management personnel should be notified immediately. All personnel should be instructed to immediately leave the work area.

Even authorized personnel must not enter an excavation where drums have been uncovered, even for monitoring purposes, unless all provisions of OSHA's trenching and excavation standard have been met and the appropriate level of PPE is utilized. Sampling of unknown drums usually requires Level B protection. Buried drums must not be moved unless it can be accomplished in a safe manner and overpack drums are available.

☒ **Fire and Explosion**. The possibility of flammable materials being encountered during field activities must be recognized and the appropriate steps necessary to minimize fire and explosion must be observed. This includes situations where excessive organic vapors or free product are encountered. When this occurs, monitoring with a combustible gas indicator (CGI) is required.

Excessive organic vapors, for the purposes of initiating the use of a CGI, are defined as sustained readings (i.e., continuous for at least 5 minutes) at or above 250 units or as an instantaneous reading at or above 1,000 units on the PID or FID, in close proximity (within 1 foot or less) of the borehole, test pit, sampling location, or other area of potential exposure.

In situations where hexane and/or methanol are needed for field activities, the following precautions must be observed: Keep flammable and combustible materials away from heat, sparks and open flames; do not smoke around flammable or combustible materials; and keep all flammable and combustible liquids in approved and properly labeled safety containers.

☐ **Landfill/Methane Hazards**. Fire and explosion should be regarded as one of, if not the, most significant potential hazards associated with drilling operations and other intrusive work conducted at a landfill. Accordingly, all sources of ignition must be fully controlled. Failure to control ignition sources could result in fire, explosion, and pose a serious threat to life and health. Control methods may include forced ventilation and/or filling the borehole with enough water to inhibit the release of methane and other gases that would otherwise escape through the top of the borehole.

If forced (mechanical) ventilation is to be used, all such equipment must be approved for Class I, Division I hazardous atmospheres. The blower must be positioned to blow across the top of the borehole so that gases and vapors may be diluted as they exit the borehole. Do not attempt to suck out the gases or vapors. Blowers, all other mechanical equipment, and tools taht could release sparks or static electricity must be bonded and grounded.

Regardless of the gas/vapor control method used, the atmosphere surrounding the borehole must be frequently monitored using direct reading instruments approved for Class I, Division I hazardous atmospheres. Monitoring should be conducted within 1 to 2 feet of the top of the borehole. Do not insert sampling devices into the borehole. Never approach the auger or drill shaft while it is in operation.

Regardless of actual instrument readings, if all sources of ignition cannot be controlled, operations should be immediately shut down and the area evacuated if readings equal or exceed 10% of LEL until ignition sources have been eliminated. Ignition sources include, but are not limited to, smoking, static electricity, lighting, open flames, spontaneously ignitable substances, frictional heat or sparks, hot surfaces, radiant heat, electrical sparks, stray currents, cutting and welding, ovens, furnaces, and heating equipment.

☒ **Heat and Cold Stress**. Overexposure to temperature extremes can represent significant risks to personnel if simple precautions are not observed. Typical control measures designed to prevent **heat stress** include dressing properly, drinking plenty of the right fluids, and establishing an appropriate work/break regimen. Typical control measures designed to prevent **cold stress** also include dressing properly, and establishing an appropriate work/break regimen.

☒ **Moving Vehicles, Traffic Safety**. All vehicular traffic routes that could impact worker safety must be identified and communicated. Whenever necessary, barriers or other methods must be established to prevent injury from moving vehicles. This is particularly important when field activities are conducted in parking lots, driveways, ramps or roadways. OSHA 1926.201 specifies that when signs, signals or barricades do not provide adequate protection from highway or street traffic, flagmen must be utilized. Flagmen must wear red or orange garments. Garments worn at night must be reflective.

☒ **Noise**. Noise exposure can be affected by many factors including the number and types of noise sources (continuous vs. intermittent or impact) and the proximity to noise intensifying structures (e.g., walls or buildings) that cause noise to bounce back or echo. The single most important factor effecting total noise exposure is distance from the source. The closer one is to the source, the louder the noise. The operation of a drill rig, backhoe, or other mechanical equipment can be sources of significant noise exposure. In order to reduce the exposure to this noise, personnel working in areas of excessive noise must use hearing protectors (e.g., ear plugs, ear muffs).

Rule-of-Thumb: Wherever actual data from sound level meters or noise dosimeters is unavailable and it is necessary to raise one's voice above a normal conversational level to communicate with others within 3 to 5 feet away, hearing protection should be worn.

☒ **Overhead Utilities and Hazards**. Overhead hazards can include low hanging structures that can cause injury due to bumping into them. Other overhead hazards include falling objects, suspended loads, swinging loads, and rotating equipment. Hardhats must be worn by personnel in areas were these types of physical hazards may be encountered. Barriers or other methods must also be used to exclude personnel from these areas where appropriate. Electrical wires are another significant overhead hazard. According to OSHA (29 CFR 1926.550), the minimum clearance that must be maintained from overhead electrical wires is 10 feet from an electrical source rated $\leq$ 50 kV. Sources rated > 50 kV require a minimum clearance of 10 feet plus 0.4 inch per kV above 50 kV.

☒ **Pedestrian Traffic**. The uncontrolled presence of pedestrians on a drilling or excavation site can be hazardous to both pedestrians and site workers. Prior to the initiation of site activities, the site should be surveyed to determine if, when, and where pedestrian may gain access. This includes walkways, parking lots, gates, and doorways. Barriers or caution tape should be used to exclude all pedestrian traffic. Exclusion of pedestrian traffic is intended to prevent injury to the pedestrians and eliminate distractions that could cause injury to Partner personnel or other site workers.

☒ **Test Pit and/or other Excavations**. All provisions of the OSHA trenching and excavation standard (29 CFR 1926.650-652) must be followed during excavation activities. This includes all test pit excavation and sampling activities. The estimated location of utility installations such as sewer, telephone, electric, water lines, and other underground installations that may reasonably be expected to be encountered during excavation work, must be determined prior to opening an excavation.

Excavations in contaminated or potentially contaminated areas must be tested for confined spaces atmospheric hazards prior to entry. Excavations should not be entered if other means are available to perform the task requiring entry. If entry into an excavation is required, the atmosphere within the space must be monitored by a trained person to assure that oxygen concentrations are at greater than or equal to 19.5 percent, that combustible gas levels are less than 10 percent, and that vapor levels are within applicable safe exposure (PEL and TLV) limits.

A ladder or similar means of egress must be located in excavations greater than 4 feet in depth so as to require no more than 25 feet of lateral travel for employees. No person should be allowed to enter an excavation greater than 5 feet in depth unless the walls of the excavation have been protected using an approved shield (trench box), an approved shoring system, or the walls have been sloped back an appropriate angle, the excavation is free of accumulated water, and the excavation has been tested for hazardous atmospheres as noted previously. If personnel enter an excavation, the spoils pile and all materials must be placed at least 2 feet from the edge of the excavation to prevent the materials from rolling into the excavation. Personnel must remain at least 2 feet away from the edge of the excavation at all times. Upon completion of a test pit exploration, the excavation should be backfilled and graded. Excavations should never be left open unless absolutely necessary, and then only with proper barricading and controls to prevent accidental injury.

☒ **Underground Utilities and Hazards**. The identification of underground storage tanks (USTs), pipes, utilities, and other underground hazards is critically important prior to all drilling, excavating and other intrusive activities. In accordance with OSHA 29 CFR 1926.650, the estimated location of utility installations, such as sewer, telephone, electric, water lines and other underground installations that may reasonably be expected to be encountered during excavation work, must be determined prior to opening an excavation. The same requirements apply to drilling operations and the use of soil-gas probes. Where public utilities may exist, the utility agencies or operators must be contacted directly or through a utility-sponsored service such as Dig-Safe. Where other underground hazards may exist, reasonable attempts must be made to identify their locations as well. Failure to identify underground hazards can lead to fire, explosion, flooding, electrocution, or other life threatening accidents.

☐ **Water Hazards and Boat Sampling**. The collection of water or sediment samples on or immediately adjacent to a body of water can pose significant hazards. In addition to the slip, trip, and fall hazards associated with wet surfaces, the potential for drowning accidents must be recognized. These hazards can be intensified by the use of some PPE, particularly if respiratory protection is worn. OSHA 29 CFR 1926.106 requires that all employees working over or near water, where the danger of drowning exists, must wear a U.S. Coast Guard-approved life jacket or buoyant work vest. Ring buoys and emergency standby personnel must also be in place.

Hazard Assessment: Chemical Hazards and Related Concerns

☒ **Chemicals Subject to OSHA Hazard Communication**. All chemicals used in field activities such as solvents, reagents, decontamination solutions, or any other hazardous chemical must be accompanied by the required labels, Material Safety Data Sheets (MSDS), and employee training documentation (OSHA 1910.1200).

☐ **Asbestos**. Disturbance of building materials in buildings built prior to 1980 must be evaluated for the presence of asbestos-containing materials by an accredited Partner inspector. The inspection and/or removal of asbestos-based or asbestos-containing building materials is regulated by some major cities and several states. Regulations require individuals who conduct building inspections for the presence of asbestos or collect samples of asbestos containing materials to be licensed or certified. Partner employees must determine the applicability of these regulations prior to any activities involving asbestos. The primary health effects of asbestos exposure include asbestosis (a scarring of the lungs), lung cancer, mesothelioma, and other forms of cancer. Exposure to asbestos is regulated by a comprehensive OSHA standard (29 CFR 1910.1001).

☒ **BTEX Compounds**. Exposure to the vapors of **benzene, ethyl benzene, toluene,** and **xylenes** above their respective permissible exposure limits (PELs), as defined by OSHA, may produce irritation of the mucous membranes of the upper respiratory tract, nose, and mouth. Overexposure may also result in the depression of the central nervous system. Symptoms of such exposure include drowsiness, headache, fatigue, and drunken-like behavior. Benzene has been determined to be carcinogenic, targeting blood-forming organs and bone marrow. The odor threshold for benzene is higher than the PEL and employees may be overexposed to benzene without sensing its presence; therefore, detector tubes must be utilized to evaluate airborne concentrations.

The vapor pressures of these compounds are high enough to generate significant quantities of airborne vapor. On sites where high concentrations of these compounds are present, a potential inhalation hazard to the field team during subsurface investigations can result. However, if the site is open and the anticipated quantities of BTEX contamination are small (e.g., part per million concentrations in the soil or groundwater), overexposure potential will also be small.

☐ **Carbon Monoxide**. Carbon monoxide (CO) is a gas usually formed by the incomplete combustion of various fuels. Welding, cutting, and the operation of internal combustion engines can produce significant quantities of CO. Amounts of CO can quickly rise to hazardous levels in poorly ventilated areas. CO is odorless and colorless. It cannot be detected without appropriate monitoring equipment. LEL/O_2 meters and H-Nu/PID are <u>not</u> appropriate for the detection of CO. A direct reading instrument, calibrated for CO, should be used. Common symptoms of overexposure include pounding of the heart, a dull headache, flashes before the eyes, dizziness, ringing in the ears, and nausea. These symptoms must not be relied upon in place of an appropriately calibrated monitoring instrument. Exposures should not exceed 15 ppm. Exposures above 15 ppm require the use of supplied air respirators. Air purifying respirators are not approved for protection against CO.

☒ **Chlorinated Organic Compounds**. Exposure to the vapors of many chlorinated organic compounds such as vinyl chloride; tetrachloroethene; 1,1,1-trichloroethane; trichloroethene; and 1,2-dichloroethene above their respective PELs will result in similar symptoms. The actual PELs as set by OSHA vary depending on the specific compound.

Overexposure to the vapor of these compounds can cause irritation of the eyes, nose, and throat. The liquid, if splashed in the eyes, may cause burning irritation and damage. Repeated or prolonged skin contact with the liquid may cause dermatitis. Acute overexposure to chlorinated hydrocarbons depresses the central nervous system exhibiting such symptoms as drowsiness, dizziness, headache, blurred vision, in-coordination, mental confusion, flushed skin, tremors, nausea, vomiting, fatigue, and cardiac arrhythmia. Alcohol may make symptoms of overexposure worse. If alcohol has been consumed, the overexposed worker may become flushed. Some of these compounds are considered to be potential human carcinogens. Exposure to vinyl chloride is regulated by a comprehensive OSHA standard (29 CFR 1910.1017).

☐ **Chromium Compounds**. Hexavalent chromium compounds, upon contact with the skin, can cause ulceration and possibly an allergic reaction. Inhalation of hexavalent chromium dusts is irritating and corrosive to the mucous membranes of the upper respiratory tract. Chrome ulcers and chrome dermatitis are common occupational health effects from prolonged and repeated exposure to hexavalent chromium compounds. Acute exposures to hexavalent chromium dusts may cause coughing or wheezing, pain on deep inspiration, tearing, inflammation of the conjunctiva, nasal itch, and soreness or ulceration of the nasal septum. Certain forms of hexavalent chromium have been found to cause increased respiratory cancer among workers.

Trivalent chromium compounds (chromic oxide) are generally considered to be of lower toxicity, although dermatitis may occur as a result of direct handling.

☐ **Cutting Oils**. Cutting oils may produce a condition known as "cutting oil acne," a specific dermatosis associated with prolonged and repeated direct contact. Other problems associated with continued occupational exposure to cutting fluids include allergic skin sensitization, folliculitis, and squamous cell carcinoma due to the presence of nitrosamines.

☐ **Fuel Oil**. See Petroleum Hydrocarbons (PHC)

☐ **Gasoline**. See BTEX Compounds, and Tetraethyl and Tetramethyl Lead.

☐ **Herbicides**. Some of the commonly used herbicides present a low toxicity to man. However, other herbicides pose more serious problems. Organophosphorus and carbamate herbicides, if inhaled or ingested, can interfere with the functioning of the central nervous system. Many herbicides can be readily absorbed through the skin to cause systemic effects. In addition to being absorbed through the skin, many herbicides, upon contact with the skin, may cause discoloring, skin irritation, or dermatitis. Contaminants of commercial preparations of chlorinated phenoxy herbicides such as 2,4,5-T include 2,3,7,8-tetrachlorodibenzo-p-dioxin (dioxin). Dioxin is a known mutagen and a suspect carcinogen.

☐ **Hydrogen Sulfide (H_2S)**. H_2S, characterized by its "rotten egg" odor, is produced by the decomposition of sulfur-containing organic matter. It is found in many of the same areas where methane is found such as landfills, swamps, sewers, and sewer treatment facilities. An important characteristic of H_2S is its ability to cause a decrease in one's ability to detect its presence by smell. So although one may no longer be able to smell it, it could still be present in harmful concentrations.

The symptoms of overexposure include headache, dizziness, staggering, and nausea. Severe overexposure can cause respiratory failure, coma, and death. The current OSHA PEL is 10 ppm as an 8-hour time-weighted average (TWA). The ACGIH TLV is the same.

☐ **Lead Paint**. The inspection and/or removal, sanding, grinding, etc. of lead-based or lead-containing paints is now strictly regulated by OSHA. States may require individuals who conduct lead paint inspections or collect samples of lead paint to be licensed or certified. Partner employees must determine the applicability of these regulations prior to any activities involving lead paint. For additional health information, see Metal Compounds.

☐ **Metal Compounds**. Overexposure to metal compounds has been associated with a variety of local and systemic health hazards, both acute and chronic in nature, with chronic effects being most significant. Direct contact with the dusts of some metal compounds can result in contact or allergic dermatitis. Repeated contact with arsenic compounds may result in hyperpigmentation. Cases of skin cancer due to the trivalent inorganic arsenic compounds have been documented. The moist mucous membranes, particularly the conjunctivae, are most sensitive to the irritating effects of arsenic. Copper particles embedded in the eye result in a pronounced foreign body reaction with a characteristic discoloration of eye tissue.

Inhalation of copper and zinc dusts and fumes above their established PELs may result in flu-like symptoms known as "metal fume fever." Prolonged and repeated inhalation of the dusts of inorganic arsenic compounds above the established PEL may result in weakness, loss of appetite, a sense of heaviness in the stomach, and vomiting. Respiratory problems such as cough, hoarseness, and chest pain usually precede the gastrointestinal problems. Chronic overexposure to the dusts of inorganic arsenic may result in lung cancer.

The early symptoms of lead poisoning are usually nonspecific. Symptoms include sleep disturbances, decreased physical fitness, headache, decreased appetite, and abdominal pains. Chronic overexposure may result in severe colic and severe abdominal cramping. The central nervous system (CNS) may also be adversely effected when lead is either inhaled or ingested in large quantities for extended periods of time. The peripheral nerve is usually affected. "Wrist drop" is peculiar to such CNS damage. Lead has also been characterized

as a male and female reproductive toxin as well as a fetotoxin. Exposure to lead (Pb) is regulated by a comprehensive OSHA standard (29 CFR 1910.1025).

☐ **Methane**. Methane is an odorless, colorless, tasteless, gas that cannot be detected by an H-Nu/PID. When present in high concentrations in air, methane acts primarily as a simple asphyxiant without other significant physiologic effects. Simple asphyxiants dilute or displace oxygen below that required to maintain blood levels sufficient for normal tissue respiration.

Methane has a LEL of 5 percent and an upper explosive limit (UEL) of 15 percent. The LEL of a substance is the minimum concentration of gas or vapor in air below which the substance will not burn when exposed to a source of ignition. This concentration is expressed in percent by volume. Below this concentration, the mixture is "too lean" to burn or explode. The UEL of a substance is the maximum concentration of gas or vapor in air above which the substance will not burn when exposed to a source of ignition. Above this concentration, the mixture is "too rich" to burn or explode. The explosive range is the range of concentrations between the LEL and UEL where the gas-air mixture will support combustion. For methane this range is 5 to 15 percent.

☐ **Pesticides**. Pesticides can be grouped into three major categories: organophosphates, carbamate, and organochlorates. The actual PELs as set by the OSHA vary depending on the specific compound. Organophosphates, including diazinon, malathion and parathion, are quickly absorbed into the body by inhalation, ingestion, and direct skin contact. The symptoms of exposure include headache, fatigue, dizziness, blurred vision, sweating, cramps, nausea, and vomiting. More severe symptoms can include tightness of the chest, muscle spasms, seizures, and unconsciousness. It should also be noted that the malathion and parathion PELs both carry the Skin notation, indicating that these compounds adversely affect or penetrate the skin. OSHA specifies that skin exposure to substances carrying this designation should be prevented or reduced through the use of the appropriate PPE.

Organochlorates such as chlordane, DDT and heptachlor can cause dizziness, nausea, abdominal pain, and vomiting. The more severe symptoms include epileptic-like seizures, rapid heartbeat, coma, and death. These compounds also carry the OSHA Skin notation. The symptoms of exposure to carbamate such carbaryl (also known as sevin) is similar to those described for the organophosphates. However, the OSHA exposure limit for carbaryl does not carry the Skin notation.

☐ **Petroleum Hydrocarbons (PHCs)**. Petroleum hydrocarbons such as fuel oil are generally considered to be of low toxicity. Recommended airborne exposure limits have not been established for these vapors. However, inhalation of low concentrations of the vapor may cause mucous membrane irritation. Inhalation of high concentrations of the vapor may cause pulmonary edema. Repeated or prolonged direct skin contact with the oil may produce skin irritation as a result of defatting. Protective measures, such as the wearing of chemically resistant gloves, to minimize contact are addressed elsewhere in this plan. Because of the relatively low vapor pressures associated with PHCs, an inhalation hazard in the outdoor environment is not likely.

☒ **Polychlorinated Biphenyls (PCBs)**. Prolonged skin contact with PCBs may cause the formation of comedones, sebaceous cysts, and/or pustules (a condition known as chloracne). PCBs are considered to be suspect carcinogens and may also cause reproductive damage.

The OSHA PELs for PCBs are as follows:

Compound	*PEL (8-hour TWA)*
Chlorodiphenyl (42% Chlorine)	1 mg/m^3-Skin
Chlorodiphenyl (54% Chlorine)	0.5 mg/m^3 -Skin

It should be noted that PCBs have extremely low vapor pressures (0.001 millimeters of mercury (mm Hg) at 42% Chlorine and 0.00008 mm Hg at 54% Chlorine). This makes it unlikely that any significant vapor concentration (i.e., exposures above the OSHA PEL) will be created in the ambient environment. This minimizes the potential for any health hazards to arise due to inhalation unless the source is heated or generates an airborne mist. If generated, vapor or mists above the PEL may cause irritation of the eyes, nose, and throat. The exposure limits noted above are considered low enough to prevent systemic effects, but it is not known if these levels will prevent local effects. It should also be noted that both PELs carry the Skin notation, indicating that these compounds adversely affect or penetrate the skin. OSHA specifies that skin exposure to substances carrying this designation be prevented or reduced through the use of the appropriate PPE.

☒ **Polycyclic Aromatic Hydrocarbons (PAHs)**. Due to the relatively low vapor pressure of PAH compounds, vapor hazards at ambient temperatures are not expected to occur. However, if site conditions are dry, the generation of contaminated dusts may pose a potential inhalation hazard. Therefore, dust levels should be controlled with wetting, if necessary. Repeated contact with certain PAH compounds has been associated with the development of skin cancer. Contact of PAH compounds with the skin may cause photosensitization of the skin, producing skin burns after subsequent exposure to ultraviolet radiation. Protective measures, such as the wearing of chemically resistant gloves, are appropriate when handling PAH-contaminated materials.

☐ **Tetraethyl and Tetramethyl Lead**. Both compounds are used as anti-knock ingredients in gasoline. The inhalation of tetraethyl lead dusts may result in irritation of the respiratory tract. This dust, when in contact with moist skin or eye membranes, may cause itching, burning, and transient redness.

The direct absorption of a sufficient quantity of tetraethyl lead, whether briefly at a high rate, or for prolonged periods at a low rate, may cause acute intoxication of the central nervous system. Mild degrees of intoxication may cause headache, anxiety, insomnia, nervous excitation, and minor gastrointestinal disturbances.

☒ **Volatile Organic Compounds (VOCs)**. See BTEX compounds and Chlorinated Organic Compounds.

☐ **Waste Oil**. See Petroleum Hydrocarbons (PHCs) and Cutting Oil.

Hazard Assessment: Biological Hazards and Related Concerns

☒ **Insects**. Insects represent significant sources (vectors) of disease transmission. Therefore, precautions to avoid or minimize potential contact should be considered prior to all field activities. Disease or harmful effects can be transmitted through bites, stings, direct contact with insects, or ingestion of foods contaminated by certain insects. Examples of diseases transmitted by insect bites include encephalitis and malaria from contaminated mosquitoes and Lyme disease and spotted fever from contaminated ticks. Stinging insects, such as bees and wasps, are prevalent throughout the country, particularly during the warmer months. The stings of these insects can be painful and cause serious allergic reactions to some individuals.

☐ **Lyme Disease**. Lyme disease is an infection caused by the bite of certain ticks, primarily deer, dog and wood ticks. The symptoms of Lyme disease usually start out as a skin rash then progress to more serious symptoms. The more serious symptoms can include lesions, headaches, arthritis, and permanent damage to the neurological system. If detected early, the disease can be treated successfully with antibiotics. The following steps are recommended for prevention of Lyme disease and other diseases transmitted by ticks: a) Beware of tall grass, bushes, woods, and other areas where ticks may live; b) Wear good shoes, long pants tucked into socks, a shirt with a snug collar, good cuffs around the wrists, and tails tucked into the pants. Insect/tick repellents may also be useful; c) Carefully monitor for the presence of ticks. Carefully inspect clothes and skin when undressing. If a tick is attached to the skin, it should be removed with fine-tipped tweezers. You should be alert for early symptoms over the next month or so. If you suspect that you have been bitten by a tick, you should contact a physician for medical advice.

☐ **Medical Wastes and Bloodborne Diseases**. Any field activity where exposure to medical wastes or other sources of bloodborne pathogens can be reasonably anticipated must be conducted in accordance with the OSHA (29 CFR 1910.1030) Bloodborne Pathogens standard. According to the OSHA definition, Bloodborne Pathogens mean pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV). Wherever there is a potential for employee skin, eye, mucous membrane, or parenteral (skin or membrane piercing) contact with blood or other potentially infectious sources, employers must develop a Written Exposure Control Plan.

☐ **Poisonous Plants**. The possible presence of poisonous plants should be anticipated for field activities in wooded or heavily vegetated areas. Poison ivy is a climbing plant with alternate green to red leaves (arranged in threes) and white berries. Poison oak is similar to poison ivy and sumac, but its leaves are oak-like in form. The leaves of these poisonous plants produce irritating oil that causes an intensely itching skin rash and characteristic blister-like lesions. Contact with these plants should be avoided.

☒ **Rats, Snakes and Other Vermin**. Certain animals, particularly those that feed on garbage and other wastes, can represent significant sources (vectors) of disease transmission. Therefore, precautions to avoid or minimize potential contact with (biting) animals (such as rats) or animal waste (such as pigeon droppings) should be considered prior to all field activities. Rats, snakes, and other wild animals can inflict painful bites. The bites can poisonous (as in the case of some snakes) or disease causing (as in the case of rabid animals). Avoidance of these animals is the best protection.

☐ **Waste Water and Sewage**. Sewage and waste water contaminated with raw, untreated sewage can represent significant sources of bacterial, viral, or fungal contamination. Adverse effects due to contact can range from mild skin reactions or rashes to life threatening diseases. Diseases are easily transmitted by accidental ingestion or through skin contact, particularly if the skin is broken. Avoidance of direct contact and good personal hygiene are the best protection from these hazards.

SITE INSPECTION LOG/HASP SIGNATURE PAGE

PROJECT NAME: Jackson Heights Shopping Center	**LOCATION: 7507 31st Avenue, Jackson Heights, New York 11370**
PROJECT NUMBER: 15-132294.2	**DATE: 2/5/15**
PROJECT MANAGER: Andres Simonson	**COMPLETED BY: MG**
SITE DESCRIPTION AND NATURE OF WORK: Phase Ii Subsurface Investigation	

HAZARD COMMUNICATION
[ ]Chemical hazards identified
[ ]All containers properly labeled
[ ]MSDS/workplace notebook on-site
[ ]Site safety briefing completed and documented

ACCIDENTS/EMERGENCY INFO
[ ]First aid personnel identified
[ ]Hospital location identified
[ ]Police/fire/ambulance phone numbers available
[ ]Fire extinguisher present

STORAGE
[ ]Tools/drill equipment/supplies safely stacked to prevent rolling or collapse
[ ]Work areas and passage ways kept clear

UNDERGROUND HAZARDS
[ ]All underground hazards identified and communicated to workers on-site
[ ]Utility/USA clearance confirmed
[ ]Clearance dates: _____
[ ]Clearance ID#: _____

OVERHEAD HAZARDS
[ ]15-foot minimum clearance maintained
[ ]All sources of falling objects/swinging loads/ rotating equipment identified
[ ]Barriers or other methods in place to prevent injury due to overhead hazards

EXCAVATIONS and TRENCHES
[ ]All personnel and storage at least 2 feet from top edge of excavation
[ ]Ladder in place
[ ]Guarding/barriers in place

VEHICULAR TRAFFIC
[ ]All vehicular traffic routes which could impact worker safety identified and communicated
[ ]Barriers or other methods established to prevent injury from moving vehicles

PEDESTRIAN TRAFFIC/SITE CONTROL
[ ]All walkways which could be impacted by site activities identified and communicated
[ ]Barriers or other methods established to prevent pedestrian injury from site activities

AIR MONITORING
[ ]PID on-site for air monitoring of work breathing space
[ ]PID calibrated daily and recorded in log book
[ ]Operational action levels communicated and PPE present for use, if required

COMMENTS/OTHER HAZARDS_____
_____
_____
_____
_____
_____
_____

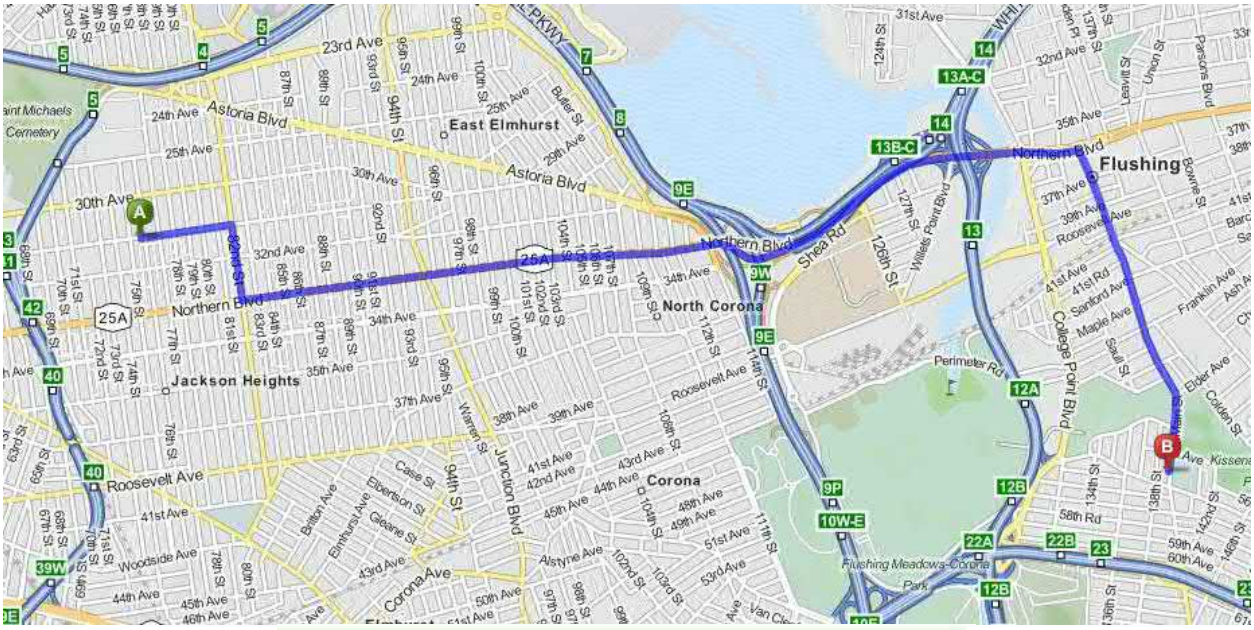
x = OK *NA = Not Applicable*

Signing below indicates that the individual understands the hazards involved with the project and the necessary procedures in the event of an emergency.

Name	Signature	Company	Date

APPENDIX A

HOSPITAL EMERGENCY ROOM MAP & DIRECTIONS



1. Start out going **east** on **31st Ave** toward **76th St**. — 0.3 mi

Zoom to this Step — 0.3 mi

82nd St is just past 81st St
If you reach 83rd St you've gone a little too far

3. Take the 2nd **left** onto **Northern Blvd/NY-25A**. — 2.9 mi

Northern Blvd is 0.1 miles past 32nd Ave
Northern Blvd Florist is on the corner
If you reach 34th Ave you've gone about 0.1 miles too far

4. Turn **right** onto **Main St**. — 1.1 mi

Main St is just past Prince St
Kennedy Fried Chicken & Pizza is on the corner
If you reach Union St you've gone about 0.2 miles too far

5. **5645 MAIN ST** is on the **left**.

Your destination is just past 56th Ave
If you reach Booth Memorial Ave you've gone a little too far

APPENDIX B

MATERIAL SAFETY DATA SHEETS

APPENDIX I
SITE MANAGEMENT FORMS

CAP Site Inspection Report

General Information			
Site Address			
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Last Asphalt Sealing/Repaving Event			
Last Concrete Sealing Event			
Inspector's Qualifications			

Type of Inspection:
❑ Regular ❑ Pre-storm event ❑ During storm event ❑ Post-storm even ❑ Post Other event

Weather Information

Has there been a storm event since the last inspection? ❑Yes ❑No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds
❑ Other: Temperature:

	Concrete/Asphalt Area	Defect/Distress Detected?	Maintenance Required?	Corrective Action Needed and Notes
1		❑Yes ❑No	❑Yes ❑No	
2		❑Yes ❑No	❑Yes ❑No	
3		❑Yes ❑No	❑Yes ❑No	
4		❑Yes ❑No	❑Yes ❑No	
5		❑Yes ❑No	❑Yes ❑No	
6		❑Yes ❑No	❑Yes ❑No	
7		❑Yes ❑No	❑Yes ❑No	
8		❑Yes ❑No	❑Yes ❑No	
9		❑Yes ❑No	❑Yes ❑No	
10		❑Yes ❑No	❑Yes ❑No	
11		❑Yes ❑No	❑Yes ❑No	
12		❑Yes ❑No	❑Yes ❑No	
13		❑Yes ❑No	❑Yes ❑No	
14		❑Yes ❑No	❑Yes ❑No	
15		❑Yes ❑No	❑Yes ❑No	
16		❑Yes ❑No	❑Yes ❑No	
17		❑Yes ❑No	❑Yes ❑No	
18		❑Yes ❑No	❑Yes ❑No	
19		❑Yes ❑No	❑Yes ❑No	
20		❑Yes ❑No	❑Yes ❑No	

Other Recommendations & Issues

Describe any recommendations or issues not described above:

System #	Vacuum ("w.c.)	
	Commissioning	
System #1	-15	
System #2	-28	
System #3	-7	
System #4	-6	
System #5	-6	

Suction Point #	Vacuum ("w.c.)	
	Commissioning	
SP1-1	-14.1	
SP1-2	-14.2	
SP2-1	-27.2	
SP2-2	-26.1	
SP2-3	-26.3	
SP2-4	-24.2	
SP3-1	-6.0	
SP3-2	-6.5	
SP3-3	-5.1	
SP3-4	-5.0	
SP4-1	-3.6	
SP4-2	-2.5	
SP4-3	-2.5	
SP4-4	-5.0	
SP5-1	-4.5	
SP5-2	-2.8	
SP5-3	-3.7	
SP5-4	-3.1	

Test Port #	Vacuum ("w.c.)	
	Commissioning	
T-1	-0.0139	
T-2	-0.0129	
T-3	-0.0083	
T-4	-0.1683	
T-5	-0.0064	
T-6	-0.0209	
T-7	-0.0082	
T-8	-0.0058	
T-9	-0.0086	
T-10	-0.0123	
T-11	-0.0464	
T-12	-0.0252	
T-13	-0.0087	
T-14	-0.0251	

Summary of Green Remediation Metrics for Site Management

Site Name: _____ Site Code: _____
Address: _____ City: _____
State: _____ Zip Code: _____ County: _____

Initial Report Period (Start Date of period covered by the Initial Report submittal)
Start Date: _____

Current Reporting Period
Reporting Period From: _____ To: _____

Contact Information
Preparer's Name: _____ Phone No.: _____
Preparer's Affiliation: _____

I. Energy Usage: Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting Period	**Total to Date**
Fuel Type 1 (e.g. natural gas (cf))		
Fuel Type 2 (e.g. fuel oil, propane (gals))		
Electricity (kWh)		
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)		
Other energy sources (e.g. geothermal, solar thermal (Btu))		

Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	**Total to Date (tons)**
Total waste generated on-site		
OM&M generated waste		
Of that total amount, provide quantity:		
Transported off-site to landfills		
Transported off-site to other disposal facilities		
Transported off-site for recycling/reuse		
Reused on-site		

Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles)	**Total to Date (miles)**
Standby Engineer/Contractor		
Laboratory Courier/Delivery Service		
Waste Removal/Hauling		

Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site		
Of that total amount, provide quantity:		
Public potable water supply usage		
Surface water usage		
On-site groundwater usage		
Collected or diverted storm water usage		

Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	**Total to Date (acres)**
Land disturbed		
Land restored		

Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.

Description of green remediation programs reported above (Attach additional sheets if needed)
Energy Usage:
Waste Generation:
Transportation/Shipping:
Water usage:
Land Use and Ecosystems:
Other:

CERTIFICATION BY CONTRACTOR
I, _____ (**Name**) do hereby certify that I am _____ (**Title**) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief, all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including that last day of the period covered by this application. _____ **Date** **Contractor**

APPENDIX J

O&M MANUAL (FOR EACH ACTIVE EC)

CAP OPERATION AND MAINTENANCE PLAN

JACKSON HEIGHTS SHOPPING CENTER
7507 31st Avenue
Queens, NY 11237

Prepared for:
Allied Jackson Heights, LLC
118-35 Queens Boulevard
Forest Hills, New York 11370

TABLE OF CONTENTS

ATTACHMENTS

FIGURES

APPENDICES

1. INTRODUCTION

This report will serve as instructions on how to operate and maintain the engineering controls for the site located at 7507 31st Avenue in Jackson Heights, Queens County, New York (herein referred to as the Site). The Site Map is depicted on ***Figure 1***.

Engineering controls, in the form of a building slab, concrete sidewalks/driveways, and paved parking areas, are in place to prevent contact by workers or visitors/patrons with contaminated subsurface materials. These engineering controls must be inspected and maintained to ensure their integrity and the continued protection of human health and the environment.

1.1. Site Description

The site is located within Block 1124, Lot 1, and includes approximately 0.72 acres of the 5.8-acre Jackson Heights Shopping Center, which is currently developed with three buildings; one large contiguous "L-shaped" retail building (mostly occupied by various commercial, offices and retail tenants including a dry cleaner), one two-story commercial building (currently being renovated to be occupied by Petco and various office tenants) and a one-story, single-occupancy structure (currently occupied by Modell's Sporting Goods). The BCP site is located within the "L-shaped" building and is comprised of ten tenant spaces. Uses consist of typical commercial, retail, dry cleaning, and maintenance activities. In addition to the current structures, the BCP site is also improved with sidewalks and asphalt-paved parking areas.

Refer to ***Figure 1*** for a map of the Site location and the surrounding properties.

1.2. Site History

Ongoing dry cleaning operations at the Site led to contamination of the subsurface with chlorinated compounds. To mitigate vapor intrusion issues, a sub-slab depressurization system was recently installed in the building. Soil and groundwater contamination has been delineated to underneath the building slab of the dry cleaners and to the rear of the dry cleaners beneath an asphalt-paved parking area and concrete sidewalk. The site has an impervious cap in the form of building slab, paved parking area, and concrete sidewalks/driveways that would prevent the exposure of onsite personnel or visitors to the subsurface contamination.

2. ENGINEERING CONTROLS

2.1. Engineering Control Description

Engineering controls currently exist onsite in the form of a building slab, concrete sidewalks/driveways, and paved parking areas. The building slab consists of approximately 6-inch thick concrete that covers the majority of the Site. The remainder of the Site is covered with approximately 4-inches of pavement and 6-inches of concrete. Refer to ***Figure 2*** for a map of the composite cover system.

3. INSPECTION SCHEDULE

Concrete and asphalt pavement will deteriorate over time. Concrete can crack and settle, and the surface can erode and become more pervious over time. Asphalt can also crack and settle, as well as break off and erode with wear and tear. To ensure that the engineering controls remain protective of human health and the environment, inspections should be conducted annually to check the conditions of both, the concrete, and asphalt caps.

3.1. Concrete

Inspections of the concrete cap should encompass all areas of the slab, including around sumps, in areas generally used for storage where the slab may not be generally exposed, around sinks and drains, in utility closets, and underneath carpets and rugs.

Inspections of the concrete slab (exterior portions not covered by the building slab) should also be conducted after periods of extreme heat or cold and after periods of heavy rain/major storms by onsite personnel.

Inspections should be recorded on an inspection form, such as the one provided in Appendix A, and kept on file. Inspections should look for cracking, and settling such as:

- Crazing
- Disintegration
- Cracks
- Scaling

- Delamination
- Spalling

Because this property has the potential to develop a vapor intrusion pathway with the subsurface that may affect human health, all cracks and/or defects should be repaired immediately.

3.2. Pavement Areas

Inspections of the asphalt and concrete pavement areas should encompass the entire paved area to include parking spots, driveways, under parked vehicles, under storage tanks/dumpsters/roll-offs, around manholes and utility poles, and around fencing and where pavement is tacked to a different surface such as concrete.

Inspections of the paved areas (exterior portions of the cap) should be conducted after heavy snow storms where plowing is necessary; in periods of extreme heat or cold as there is a higher potential of cracking; and during times of heavy trafficked use of the lot, or when used by heavier vehicles such as tractor trailers.

Inspection should be recorded on an inspection form, such as the one provided in **Appendix A**, and kept on file. Inspections should look for cracking, settling, or erosion such as:

- Fatigue (Alligator) cracking
- Block Cracking
- Edge Cracks
- Longitudinal and Transverse Cracking
- Reflection Cracking
- Slippage Cracks
- Corrugation & Shoving
- Rutting
- Settlement/Grade Depressions
- Upheavals or Swells
- Pot Holes

- Polished Aggregate

Any distress or defects that may pose as a conduit to the subsurface should be repaired immediately.

4. MAINTENANCE

Timely maintenance is important in keeping the integrity of the cap and protect human health and the environment. The following actions should be taken as deemed necessary by the results of the inspections.

4.1. Concrete

Any cracks in the slab should be repaired immediately with crack sealant. Any other signs of concrete distress or damage should be addressed immediately by a concrete specialist. Spalling and other surface damage should be repaired with concrete resurfacer.

The slab should be resealed on a regular basis as recommended by a masonry expert or as indicated through the inspection process.

4.2. Asphalt & Concrete Pavement

Any cracks observed in the asphalt or concrete pavement should be repaired immediately with patching material and sealed. If bigger areas need repair, such as pot holes, tack coat should be applied to the edges where the new material meets the old material. Any areas that are larger than what can be fixed via a patch, must be paved by a paving contractor to general industry specifications. A minimum of 4-inches of asphalt and 6-inches of concrete should be maintained at any time. Asphalt pavement should be sealed on a regular basis or as recommended by a paving professional or as indicated through the inspection process.

If asphalt areas are in need of more extensive repairs and milling of the existing asphalt is required, milling should not penetrate the entire asphalt layer. Only the top 2-inches should be removed during any milling process. Milling and subsequent asphalt installation should only be completed by a paving specialist. Tack coat should be applied to all areas where the asphalt will meet another surface.

All maintenance records should be filed for future reference and available for NYSDEC review upon request until the cap is no longer necessary.

5. DEVIATIONS

Any trenching or other invasive activities that would require the penetration of the cap will be done in accordance with the SMP and EWP.

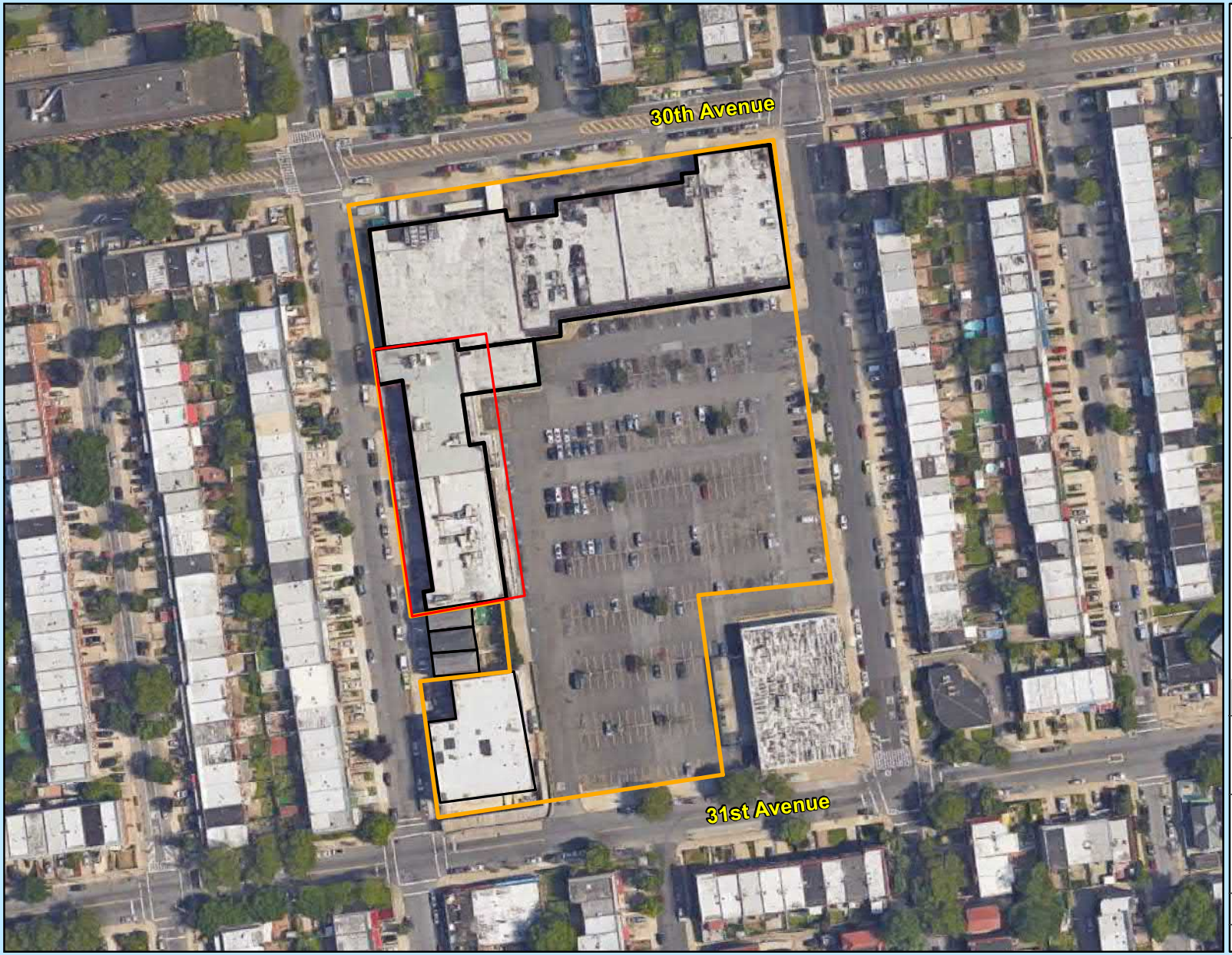
Any damage to the cap that could generate a pathway to the subsurface should be immediately repaired.

Any questions about cap integrity should be discussed with the appropriate pavement or masonry professional and discussed with the NYSDEC.

FIGURES

Jackson Heights Shopping Center

Borough of Queens, NY



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK 11370

FIGURE 1
SITE MAP

Legend

- BCP Site Boundary
- Property Boundary

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 50 100 200
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY BPT	SCALE 1 in = 100 ft
Job No: 00254100000 File Name: 00254100000 Fig 1 Site Map		DATE 1/19/2017

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 1 Site Map.mxd
User: ahassler
Date: 1/19/2017

Jackson Heights Shopping Center

Borough of Queens, NY

JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK 11370

FIGURE 2
COMPOSITE COVER SYSTEM MAP

Legend

- BCP Site Boundary
- Property Boundary
- Concrete
- Building Conrete Slab
- Asphalt

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 20 40 80
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY ALH	SCALE 1 in = 40 ft
Job No: 00254100000 File Name: 00254100000 Fig 12 Composite Cover Sys		DATE 01/05/2018

File: \\pac.local\root\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig X Composite Cover Location Map.mxd
User: ahassler
Date: 1/5/2018

Appendix A:

INSPECTION FORM

CAP Site Inspection Report

General Information			
Site Address			
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Last Asphalt Sealing/Repaving Event			
Last Concrete Sealing Event			
Inspector's Qualifications			

Type of Inspection:
❑ Regular ❑ Pre-storm event ❑ During storm event ❑ Post-storm even ❑ Post Other event

Weather Information

Has there been a storm event since the last inspection? ❑Yes ❑No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds
❑ Other: Temperature:

	Concrete/Asphalt Area	Defect/Distress Detected?	Maintenance Required?	Corrective Action Needed and Notes
1		❑Yes ❑No	❑Yes ❑No	
2		❑Yes ❑No	❑Yes ❑No	
3		❑Yes ❑No	❑Yes ❑No	
4		❑Yes ❑No	❑Yes ❑No	
5		❑Yes ❑No	❑Yes ❑No	
6		❑Yes ❑No	❑Yes ❑No	
7		❑Yes ❑No	❑Yes ❑No	
8		❑Yes ❑No	❑Yes ❑No	
9		❑Yes ❑No	❑Yes ❑No	
10		❑Yes ❑No	❑Yes ❑No	
11		❑Yes ❑No	❑Yes ❑No	
12		❑Yes ❑No	❑Yes ❑No	
13		❑Yes ❑No	❑Yes ❑No	
14		❑Yes ❑No	❑Yes ❑No	
15		❑Yes ❑No	❑Yes ❑No	
16		❑Yes ❑No	❑Yes ❑No	
17		❑Yes ❑No	❑Yes ❑No	
18		❑Yes ❑No	❑Yes ❑No	
19		❑Yes ❑No	❑Yes ❑No	
20		❑Yes ❑No	❑Yes ❑No	

Other Recommendations & Issues

Describe any recommendations or issues not described above:

SUB SLAB DEPRESSURIZATION SYSTEM OPERATION AND MAINTENANCE PLAN

JACKSON HEIGHTS SHOPPING CENTER
7507 31st Avenue
Queens, NY 11237

Prepared for:
Allied Jackson Heights, LLC
118-35 Queens Boulevard
Forest Hills, New York 11370

TABLE OF CONTENTS

ATTACHMENTS

FIGURES

APPENDICES

1. INTRODUCTION

This report will serve as instructions on how to operate and maintain the engineering controls for the site located at 7507 31st Avenue in Jackson Heights, Queens County, New York (herein referred to as the Site). The Site location is depicted on ***Figure 1***.

Engineering controls, in the form of a sub-slab depressurization system (SSDS), are in place to prevent exposure of workers or visitors/patrons to contaminated soil vapors entering through the basement's slab. These engineering controls must be inspected and maintained to ensure their integrity and the continued protection of human health and the environment.

1.1. Site Description

The site is located within Block 1124, Lot 1, and includes approximately 0.72 acres of the 5.8-acre Jackson Heights Shopping Center, which is currently developed with three buildings; one large contiguous "L-shaped" retail building (mostly occupied by various commercial, offices and retail tenants including a dry cleaner), one two-story commercial building (currently being renovated to be occupied by Petco and various office tenants) and a one-story, single-occupancy structure (currently occupied by Modell's Sporting Goods). The BCP site is located within the "L-shaped" building and is comprised of ten tenant spaces. Uses consist of typical commercial, retail, dry cleaning, and maintenance activities. In addition to the current structures, the BCP site is also improved with sidewalks and asphalt-paved parking areas.

Refer to ***Figure 1*** for a map of the Site location and the surrounding properties.

1.2. Site History

Ongoing dry cleaning operations at the Site led to contamination of the subsurface with chlorinated compounds. To mitigate vapor intrusion issues, a sub-slab depressurization system was recently installed in the building. Soil and groundwater contamination has been delineated to underneath the building slab of the dry cleaners and to the rear of the dry cleaners beneath an asphalt-paved parking area and concrete sidewalk.

2. ENGINEERING CONTROLS

2.1. Engineering Control Description

Engineering controls currently exist onsite in the form of a SSDS. The SSDS covers a portion of the two-story strip mall building, which contains a full basement that extends beneath the strip mall. The basement measures approximately 23,000 square feet and is divided into two main sections by a firewall. A supermarket occupies the northern-most tenant space and a Chinese restaurant occupies the southern-most space. Refer to ***Figure 2*** for a map showing the SSDS layout. Chlorinated compounds located in the soil are drawn into the building by negative pressure in the building relative to the surrounding soil. In soil vapor form, the chlorinated compounds enter the structure through cracks and openings and can migrate through the concrete floor and walls. By making use of a fan, a SSDS, which is a system that depressurizes the soil under the slab, can be used to remedy this process. By creating a vacuum beneath the slab, the soil gases are drawn into the system where they can be discharged to a safe location, above the roof line.

OBAR installed five mitigation systems and 18 suction points to depressurize the building area of concern. The five systems were designed to depressurize and encompass the following tenant spaces: the Chinese restaurant, the Subway restaurant, the stationary store, the former hair/nail salon, the Stand-Up MRI, the Optical Academy, the dry cleaner, the former Radio Shack (now vacant), and Rock Realty. Blowers were installed on the exterior rear (western) wall (8 feet above grade using wall mounts) of the building for the system. The blowers' exhausts run vertically up the wall and terminate 12 inches above the roofline and 10 feet from all doors, windows, intakes and passive relief vents. System #1 services the Chinese restaurant, System #2 services the contractor storage space and nail salon, System #3 services the contractor workshop beneath the Stand-Up MRI tenant space, System #4 services the dry cleaner, and System #5 services the dentist's office tenant space. The systems were commissioned on March 28, 2017. The SSDS is currently operating as designed, meeting the defining criteria for a successful mitigation system with all sub slab pressure differentials in the area of concern above the original design target of -0.004" water column (w.c.). Refer to ***Appendix A*** for an as-built drawing of the SSDS and ***Appendix B*** for the cut sheets on mechanical equipment used for the SSDS.

3. INSPECTION SCHEDULE

The SSDS will be checked semiannually for the first year (2017-2018) and annually thereafter. Refer to ***Appendix C*** for an Inspection Form template.

4. MAINTENANCE

Timely maintenance is important in keeping the integrity of the SSDS and to protect human health and the environment. The following metrics will be inspected and recorded:

- Visual inspection of all system components
- Record vacuum gauge readings on control panels in basement
- Record sub slab vacuum at permanent test port locations
- Record riser vacuum for all five systems

The system is equipped with two audible and visual alarm panels. One two-gauge panel for Systems #4 and #5 is located in the gas and meter room. A second three-gauge alarm panel is located in the contractor's workshop and services Systems #1, #2, and #3. In the event of a system failure, the red light will illuminate and the audible alarm will sound. PSG Engineering will then be notified by the property manager.

In the event of a blower malfunction, the system can be manually restarted by de-energizing the blower (via the circuit breaker or the fan switch) for approximately 1 minute and then restarting the blower. If a manual restart does not work, the blower motor may require replacement.

5. DEVIATIONS

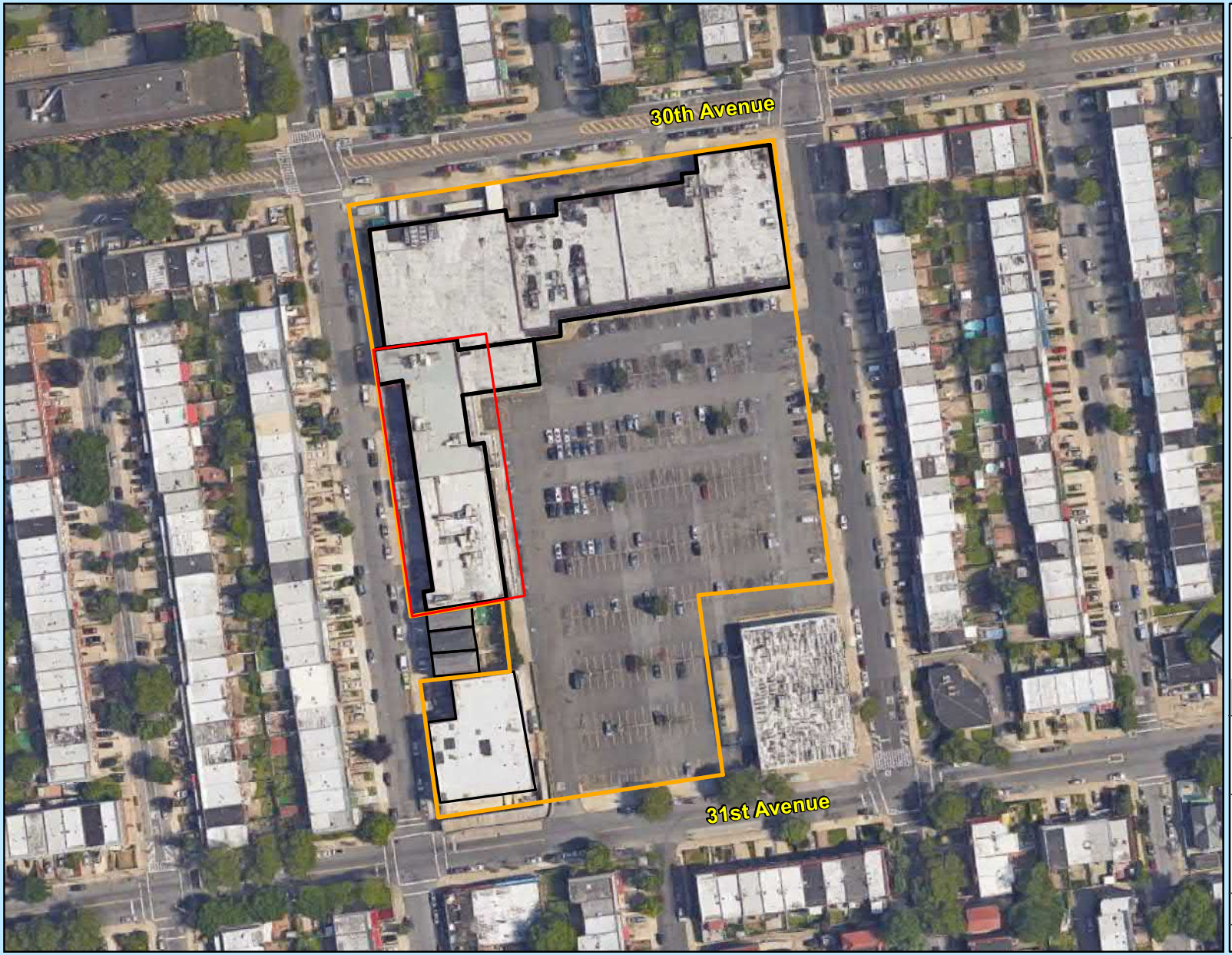
Any trenching or other invasive activities that would require the penetration of the basement floor in which the SSDS is servicing or to the rear exterior wall of the building where the system risers are located would be required to be done in accordance with the SMP and EWP.

Any damage to the concrete floor in which the SSDS is servicing should be immediately repaired.

FIGURES

Jackson Heights Shopping Center

Borough of Queens, NY



JACKSON HEIGHTS SHOPPING CENTER

75-07 31ST AVENUE
JACKSON HEIGHTS, NEW YORK 11370

FIGURE 1
SITE MAP

Legend

- BCP Site Boundary
- Property Boundary

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
Projection: Transverse Mercator
False Easting: 492,125.0000
False Northing: 0.0000
Central Meridian: -74.5000
Scale Factor: 0.9999
Latitude Of Origin: 38.8333
Units: Foot US

0 50 100 200
Feet

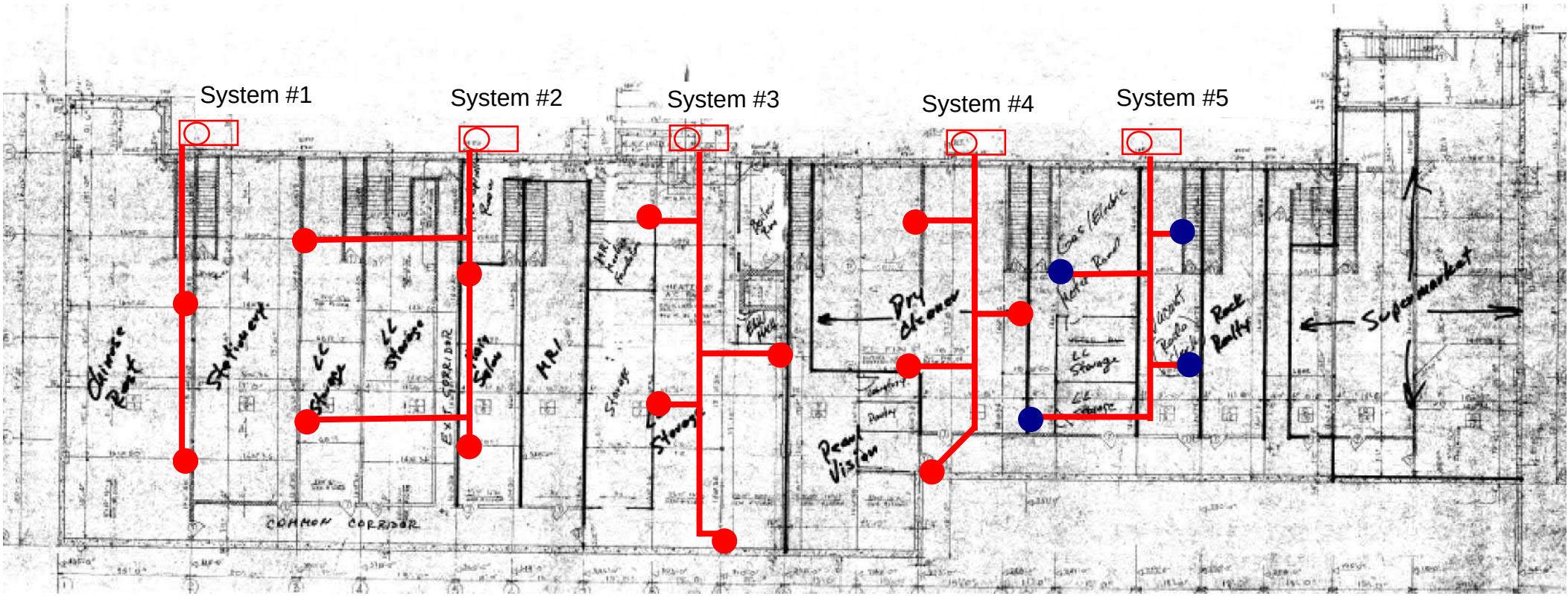
PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources: NJDEP and NJGIN GIS Data;	DRAWN BY BPT	SCALE 1 in = 100 ft
Job No: 00254100000 File Name: 00254100000 Fig 1 Site Map		DATE 1/19/2017

File: R:\Solutions\Jobs\Muss Development LLC\00254100000\GIS\00254100000 Fig 1 Site Map.mxd
User: ahassler
Date: 1/19/2017



2" Suction Point
3" Suction Point
Overhead Conveyance Pipe
Mitigation Blower

25 ft

OBAR Systems Inc. 2696 Rt. 23 South Newfoundland, NJ 07435 OBAR SYSTEMS, INC.	Mitigation Specialist Gunnar Barr NJDEP MIS 10056	SITE ADDRESS: Jackson Heights Shopping Center 75-11 31st Ave, East Elmhurst, New York	SHEET NAME: Vapor Intrusion Mitigation System Design Drawing	DATE: 11/23/2016	DRAWING NO: 2 of 2 Figure 2

Appendix A:

AS-BUILT DRAWING

Borough: QUEENS	Sheet 1 of 2
DOB Ref. No.:	DOT Ref. No.:

NEW YORK CITY
DEPARTMENT OF BUILDINGS

JACKSON HEIGHTS SHOPPING CENTER

PROJECT DATA

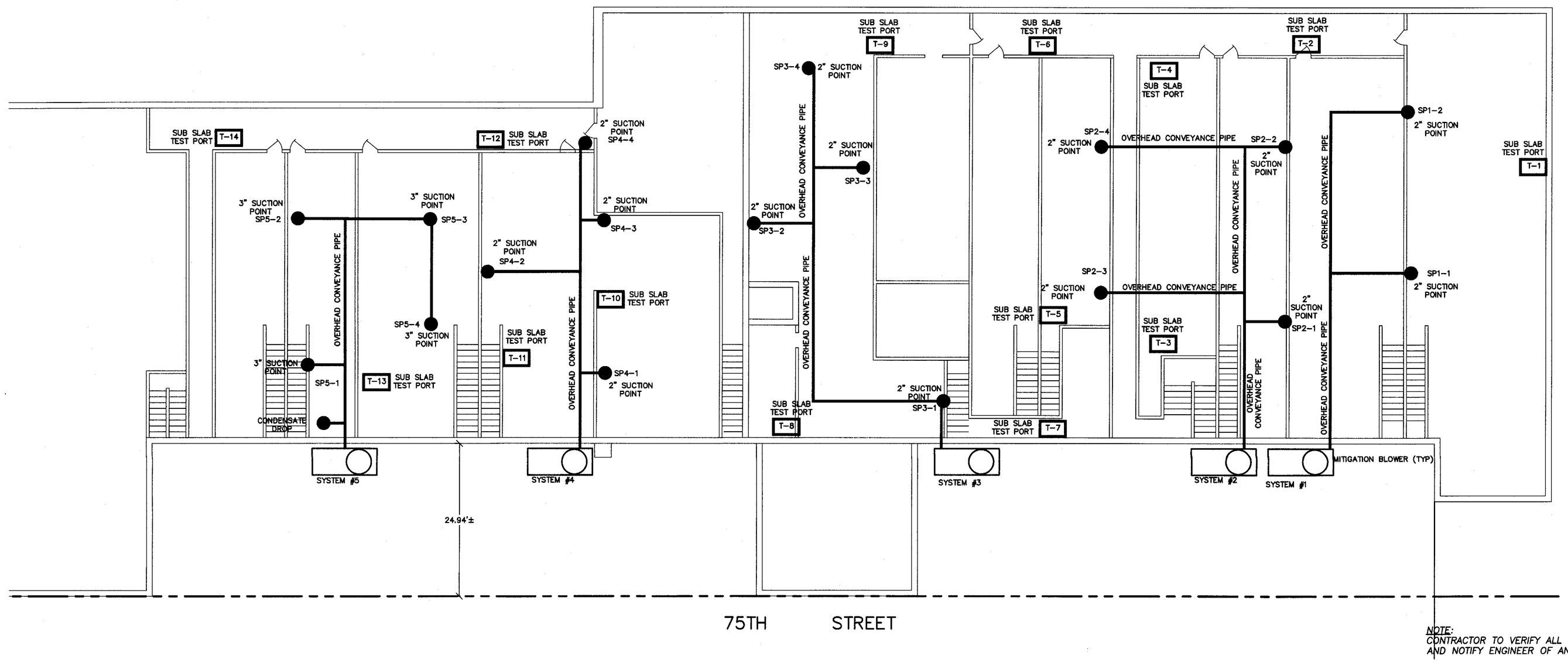
Block: 1124 Lot(s): 1
Zoning: R4/C1-2 Zoning Map No.: 9d
Use Group: 6 Occupancy Group: C (Mercantile)
Street Address: 75-07 31st Ave, East Elmhurst, New York 11370
Certificate of Occupancy: #Q179469
Construction Class: ID
Special Inspections: Mechanical, Fire Stop

AMENDED APPLICATION

WAIVERS

DOT requirement waived	As per/Date
1)	
2)	
3)	

Accepted for City Agency Professional Certification QUEENS Date: AUG 17 2017

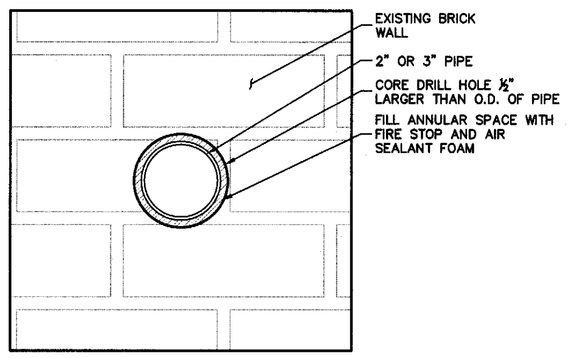


NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD AND NOTIFY ENGINEER OF ANY DISCREPANCIES

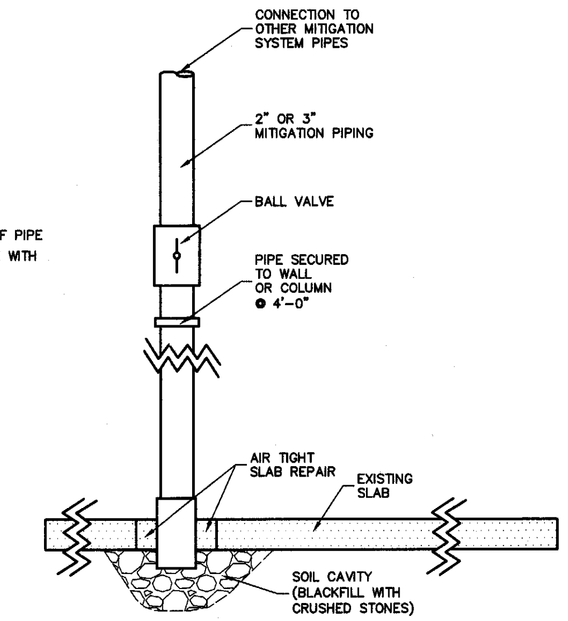
PARTIAL FIRST FLOOR PLAN–SUCTIONS POINTS AND FAN LOCATIONS

3/32"=1'–0"

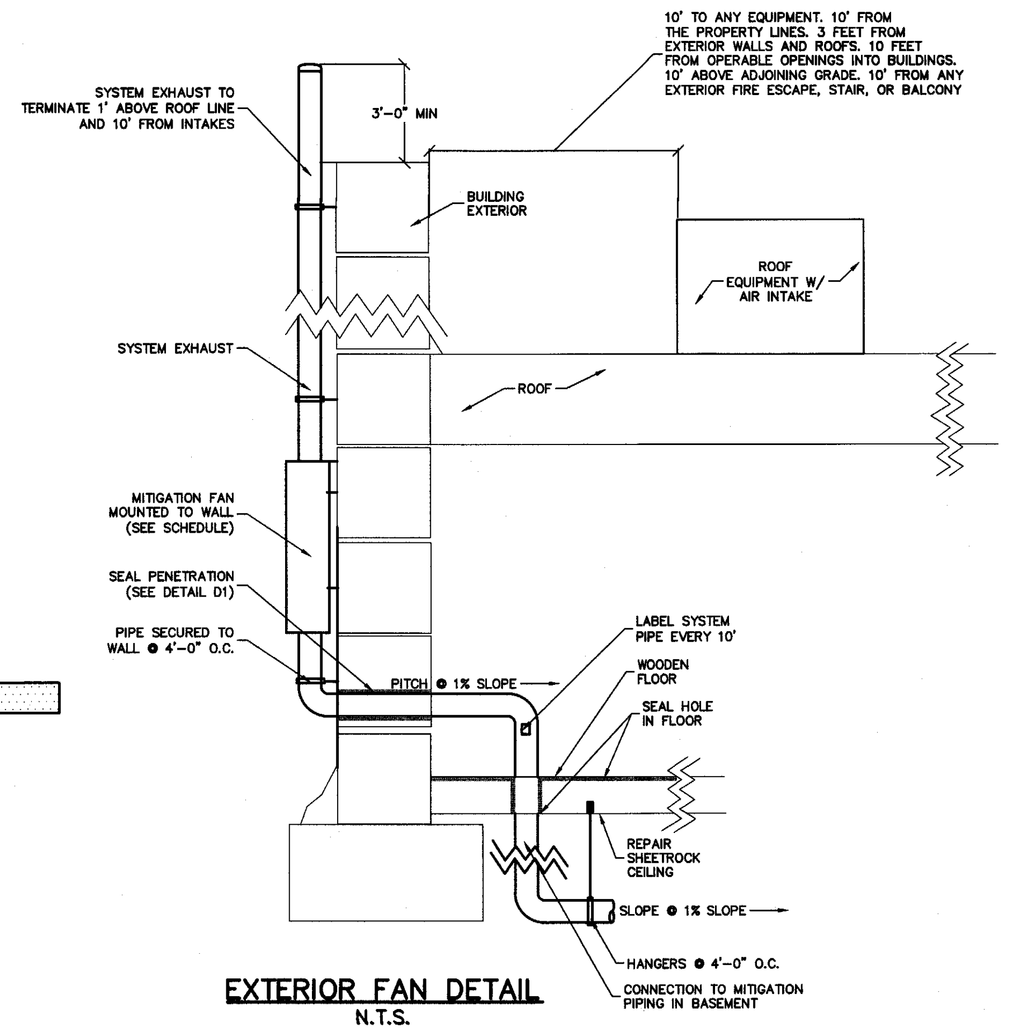
MECHANICAL EQUIPMENT SCHEDULE	
SYSTEM #	*FAN*
1	*GBR76–SOE*
2	*GBR76–UD*
3	*GBR76–UD*
4	*GBR76–UD*
5	*GBR89*



WALL PENETRATION SEALING DETAIL–D1
N.T.S.



SUCTION POINT–DETAIL
N.T.S.



EXTERIOR FAN DETAIL
N.T.S.

NYC BC SECTION MC 512
SUB–SLAB SOIL EXHAUST SYSTEMS

GENERAL. WHEN A SUB–SLAB SOIL EXHAUST SYSTEM IS PROVIDED, THE DUCT SHALL CONFORM TO THE REQUIREMENTS OF THIS SECTION.

MATERIALS. SUB–SLAB SOIL EXHAUST SYSTEM DUCT MATERIAL SHALL BE AIR DUCT MATERIAL LISTED AND LABELED TO THE REQUIREMENTS OF UL 181 FOR CLASS 0 AIR DUCTS, OR ANY OF THE FOLLOWING PIPING MATERIALS THAT COMPLY WITH THE NEW YORK CITY PLUMBING CODE AS BUILDING SANITARY DRAINAGE AND VENT PIPE: CAST IRON; GALVANIZED STEEL; BRASS OR COPPER PIPE; COPPER TUBE OF A WEIGHT NOT LESS THAN THAT OF COPPER DRAINAGE TUBE, TYPE DWV; AND PLASTIC PIPING.

GRADE. EXHAUST SYSTEM DUCTS SHALL NOT BE TRAPPED AND SHALL HAVE A MINIMUM SLOPE OF ONE–EIGHTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (1–PERCENT SLOPE).

TERMINATION. SUB–SLAB SOIL EXHAUST SYSTEM DUCTS SHALL EXTEND THROUGH THE ROOF AND TERMINATE AT LEAST 6 INCHES (152 MM) ABOVE THE ROOF AND AT LEAST 10 FEET (3048 MM) FROM ANY OPERABLE OPENINGS OR AIR INTAKE.

IDENTIFICATION.SUBSLAB SOIL EXHAUST DUCTS SHALL BE PERMANENTLY IDENTIFIED WITHIN EACH FLOOR LEVEL BY MEANS OF A TAG, STENCIL OR OTHER APPROVED MARKING

NOTES:
1. BROOKER ENGINEERING AND BRIAN BROOKER ARE NOT RESPONSIBLE FOR SYSTEM FUNCTIONALITY. BROOKER ENGINEERING IS ONLY RESPONSIBLE FOR CONSTRUCTION PLANS IN ACCORDANCE WITH NYC BUILDING CODE. SYSTEM DESIGN & FUNCTION TO REMAIN THE RESPONSIBILITY OF OBAR, INC AND PARTNER ENGINEERING AND SCIENCE, INC. IF REQUIRED SYSTEM DESIGN AND FUNCTIONALITY TO BE SIGNED AND SEAL BY A NYS LICENSED ENGINEER.
2. PLAN IS BASE ON A REPORT ENTITLED "DIAGNOSTIC REPORT AND SYSTEM DESIGN" DATED JANUARY 6, 2017 BY OBAR SYSTEMS, INC.

1	AS-BUILT CONDITION	6/1/17
REV.	DESCRIPTION	DATE
	ORIGINAL DATE:	

DEPT BLOCK 421394538 Job Number
SC140905023 Scan Code

BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357–4411 Fax: (845) 357–1896

SUB–SLAB SOIL EXHAUST

SYSTEM DESIGN

PROPOSED FOR:
75-21 31st AVE
BOROUGH OF QUEENS, NEW YORK

MECHANICAL PLAN
AS–BUILT CONDITION

STATE OF NEW YORK BRIAN A. BROOKER LICENSED PROFESSIONAL ENGINEER 60229

DATE:	2-1-2017
PROJECT NO:	17017
DRAWN BY:	JO
CHECKED BY:	BB
DRAWING NO:	M-002.01
SCALE: AS NOTED	SHEET NO: 2 OF 2
NYC DOB NUMBER:	

BRIAN BROOKER P.E.
N.Y.S. Lic. No. 60229

FILE #

P:\FILE\17\17017_Dwg\Rev 1\Jackson Heights Shopping.dwg, 8/8/2017 3:39:53 PM, MBusch

Borough: QUEENS | Sheet 1 of 2
DOB Ref. No.: | DOT Ref. No.:

NEW YORK CITY
DEPARTMENT OF BUILDINGS

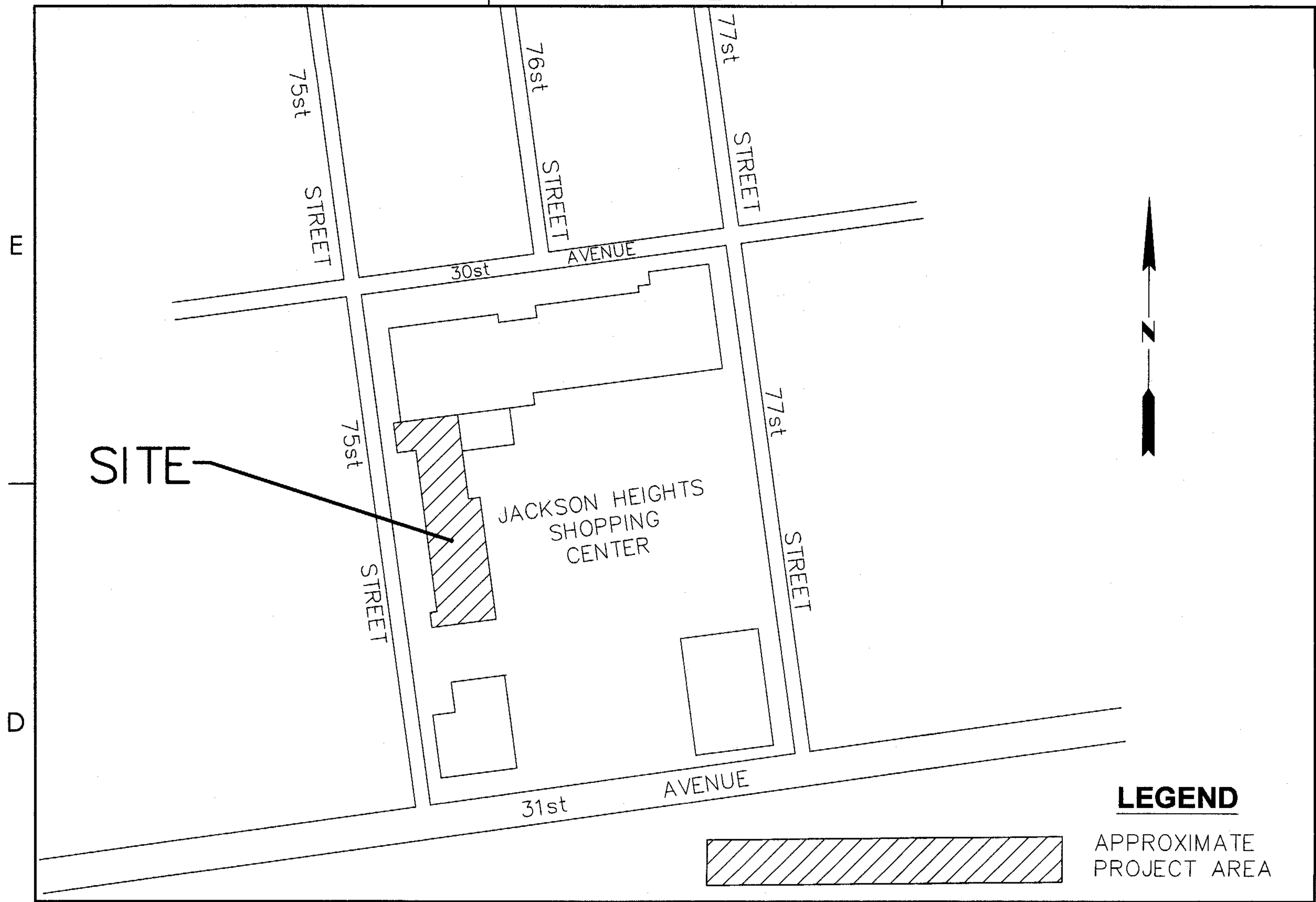
JACKSON HEIGHTS SHOPPING CENTER

PROJECT DATA

Block: 1124 Lot(s): 1
Zoning: R4/C1-2 Zoning Map No.: 9d
Use Group: 6 Occupancy Group: C (Mercantile)
Street Address: 75-21 31st Ave, Queens, New York 11370
Certificate of Occupancy: # Q179469
Construction Class: ID
Special Inspections: Mechanical, Fire Stop

WAIVERS

DOT requirement waived — As per/Date
1)
2)
3)



SITE PLAN
N.T.S.

KEY PLAN
N.T.S.

Accepted for OPEN #... Professional Certification QUEENS
Date: AUG 17 2017

AMENDED APPLICATION

NEW YORK CITY ENERGY CODE COMPLIANCE:
TO THE BEST OF MY KNOWLEDGE, BELIEVES AND PROFESSIONAL JUDGEMENT, ALL WORK UNDER THIS APPLICATION IS IN COMPLIANCE WITH THE NYCECC.

ENERGY ANALYSIS

CLIMATE ZONE 4 – NYCECC COMMERCIAL OCCUPANCY

NOTE: THE WORK OF THIS PERMIT INVOLVES INSTALLING A TEMPORARY SUB-SLAB EXHAUST SYSTEM TO REMEDIATE ENVIRONMENTAL CONDITION IN THE SOIL BELOW THE BASEMENT SLAB AND EXHAUST TO ABOVE THE ROOF. THERE ARE NO CHANGES TO THE BUILDING ENERGY ENVELOPE. THE HOLE FOR THE EXHAUST PIPE WILL BE SEALED TO PREVENT AIR MOVEMENT INTO THE CONDITIONED SPACE

NYCECC CITATION	PROVISION	ITEM DESCRIPTION	PROPOSED DESIGN VALUE	CODE PRESCRIPTIVE VALUE	SUPPORT DOCUMENTATION
C503.1	GENERAL ALTERATION	MINOR WALL PENETRATION FOR NEW SUB-SLAB SOIL EXHAUST INSTALLATION	LESS THANN .40 CFM/SF	LESS THANN .40 CFM/SF	DRAWING M-002.00

REV.	DESCRIPTION	DATE
1	AS-BUILT CONDITION	6/1/17

ORIGINAL DATE:

DEPT. BLDGS. 421394538 Job Number
SC140905008 Scan Code

BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

SUB-SLAB SOIL EXHAUST SYSTEM DESIGN

PROPOSED FOR:
75-21 31st Ave
BOROUGH OF QUEENS, NEW YORK

TITLE PAGE

STATE OF NEW YORK — BRIAN A. BROOKER — LICENSED PROFESSIONAL ENGINEER — 60229

DATE:	2-1-2017
PROJECT NO:	17017
DRAWN BY:	JO
CHECKED BY:	BB
DRAWING NO:	M-001.01

BRIAN BROOKER P.E.
N.Y.S. Lic. No. 60229

SCALE: AS NOTED | SHEET NO: 1 OF 2
NYC DOB NUMBER:

FILE #

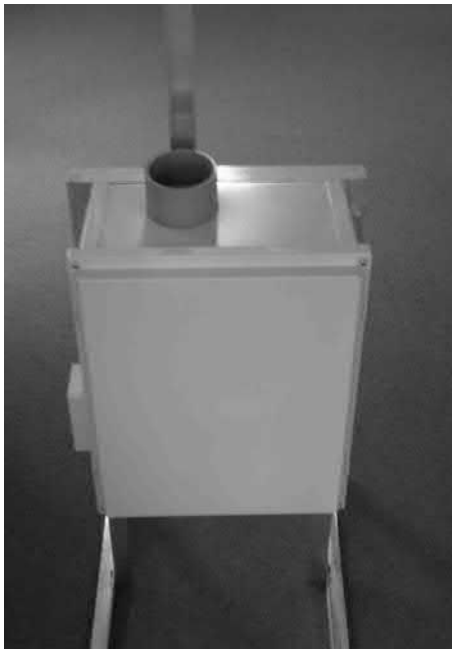
P:\RBE\17\17017_Dwg\Rev 1\Jackson Heights Shopping.dwg, 8/8/2017 3:38:53 PM, MBusch

Appendix B:

CUT SHEETS FOR MECHANICAL EQUIPMENT

THE OBAR GBR76
COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.



GBR76 WITH ROOF MOUNT

PERFORMANCE

- GBR76 SOE 16” WC @ 0 Max flow 155 CFM.
- GBR76 UD 40” WC @ 0 Max flow 195 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 16”x 14”x 8” weighing only 18 lbs.
- 3” schedule 40 inlet and exhaust.
- Universal Drive accepts voltage from 120-240V without alteration

GBR76 SOE	0”	2”	4”	6”	8”	10”	12”	16”	Wattage
SOE 16	150	140	129	118	105	90	75	35	150-320
SOE 12	125	115	100	83	62	39	0		110-200
SOE 8	105	90	70	42	0				60-120
SOE 4	75	50	0						37-50

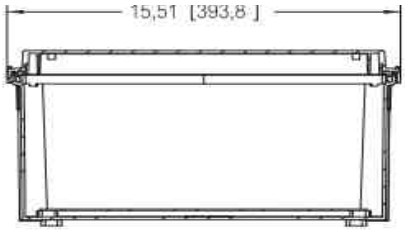
GBR SOE performance using built in potentiometer set at sealed vacuums of 16, 12, 8, and 4” WC

GBR76 UD	0”	10”	20”	30”	37”	Wattage
110V	195	158	118	63	20	700-870
220V	197	162	130	89	50	800-1100

Blower Specifications

Notes:

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz, single phase.
- **Input Current:** 6 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** PWM (Pulse Width Modulation) (1 kHz to 10 kHz)
  0 to 10 VDC speed control.
  Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
- **Approximate Weight:** 4.8 Lbs. / 2.2 Kg
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
  POWER CONNECTION: Blower connector, AMP Universal MATE-N-LOK, part no. 1-350943-0.
  SPEED CONNECTION: Blower connector, Molex Mini-Fit Jr., part no. 39-30-3056.
  Mating harnesses available upon request.



Screw cover

Enclosure Specifications

Rating:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

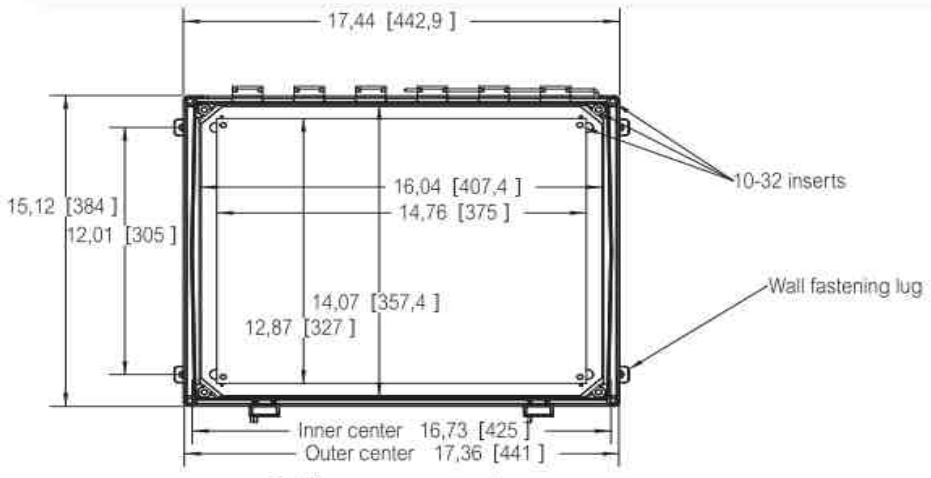
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

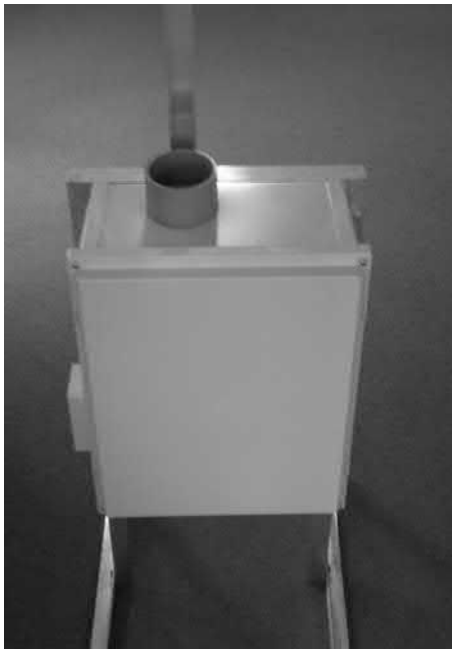
Certificates: Underwriters Laboratories



Top View - cover removed

THE OBAR GBR89
COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.



GBR89 WITH ROOF MOUNT

PERFORMANCE

- GBR89 HA 14" WC at 100CFM max flow 500 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 18 month warranty 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 18"x 16"x 10" weighing only 18 lbs.
- 4" schedule 40 inlet and 6" schedule 40 exhaust.

Cost GBR 89 HO 1789.00 (plus shipping * price can change without notice)

Enclosure Specifications
Rating:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

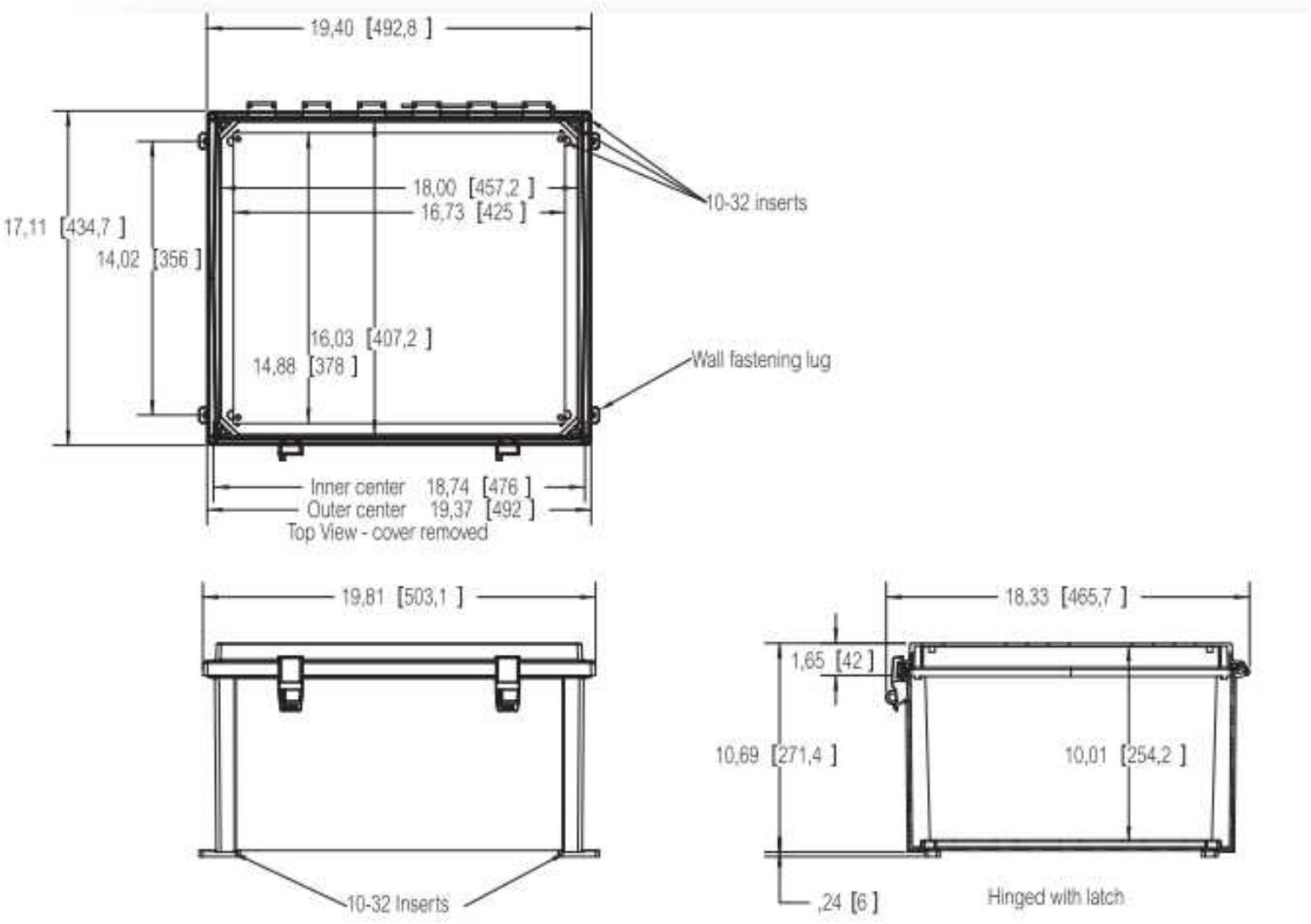
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



CHARLOTTE
PIPE AND FOUNDRY COMPANY

Cast Iron Soil Pipe Suggested Short Form Specification

Hubless Cast Iron Soil Pipe and Fittings:

Hubless Cast Iron pipe and fittings shall be manufactured from gray cast iron and shall conform to ASTM A 888 and CISPI Standard 301. All pipe and fittings shall be marked with the collective trademark of the Cast Iron Soil Pipe Institute ® and listed by NSF® International. Hubless Couplings shall conform to CISPI Standard 310 and be certified by NSF® International. Heavy Duty couplings shall conform to ASTM C 1540 and shall be used if indicated. Gaskets shall conform to ASTM C 564. All pipe and fittings to be produced by a single manufacturer and are to be installed in accordance with manufacturer's recommendations and applicable code requirements. Couplings shall be installed in accordance with the manufacturer's band tightening sequence and torque recommendations. Tighten bands with a properly calibrated torque limiting device. The system shall be hydrostatically tested after installation to 10 ft. of head (4.3 psi maximum). **WARNING!** Never test with or transport/store compressed air or gas in Cast Iron pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

Hub and Spigot Cast Iron Soil Pipe and Fittings:

Hub and Spigot Cast Iron pipe and fittings shall be manufactured from gray cast iron and shall conform to ASTM A 74. All pipe and fittings shall be marked with the collective trademark of the Cast Iron Soil Pipe Institute ® and listed by NSF® International.

Pipe and fittings to be [pick one or both]:

- □ Service (SV) or
- □ Extra Heavy (XH)

Joints can be made using a compression gasket manufactured from an elastomer meeting the requirements of ASTM C 564 or lead and oakum. All pipe and fittings to be produced by a single manufacturer and are to be installed in accordance with manufacturer's recommendations and applicable code requirements. The system shall be hydrostatically tested after installation to 10 ft. of head (4.3 psi maximum). **WARNING!** Never test with or transport/store compressed air or gas in Cast Iron pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

SPEC-SF-CI (611)

PO Box 35430 Charlotte, NC 28235 USA 704/372-5030 800/438-6091 FAX 800/553-1605
www.charlottepipe.com

PVC Ball Valves

One-Piece Molded PVC Body • Threaded or Socket Ends

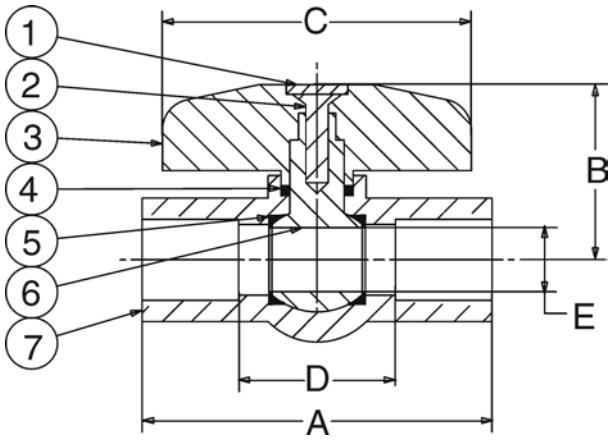
150 PSI/10.3 Bar Non-Shock Cold Working Pressure to 73° F/23° C
NSF Listed to NSF/ANSI 14

4660-S
Socket Weld

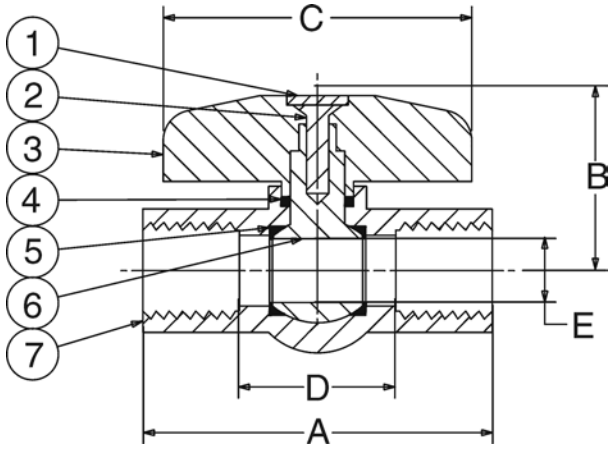
4660-T
Threaded
(not shown)

MATERIAL LIST

PART	SPECIFICATION
1. Handle Cap	ABS
2. Screw	Zinc Plated Steel
3. Handle	ABS
4. O-Ring	EPDM
5. Seat Seal	PTFE, EPDM
6. Ball	PVC
7. Body	PVC



4660-S
Socket x Socket



4660-T
Threaded x Threaded

DIMENSIONS—WEIGHTS

Size		Dimensions A		B		C		D		E		4660-S		4660-T	
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.
½	15	3.27	83	1.69	42	2.76	70	1.52	39	0.55	14	0.17	0.08	0.18	0.08
¾	20	3.74	95	2.13	54	3.46	88	1.74	44	0.79	20	0.30	0.14	0.32	0.14
1	25	4.17	106	2.56	65	3.94	100	1.92	49	0.98	25	0.47	0.21	0.51	0.23
1¼	32	4.49	114	2.64	67	3.94	100	1.99	50	1.18	30	0.58	0.26	0.63	0.29
1½	40	5.12	130	3.07	78	4.29	109	2.37	61	1.42	36	0.91	0.41	0.97	0.44
2	50	5.79	147	3.50	89	5.28	134	2.79	71	1.83	46	1.50	0.68	1.60	0.73
2½	65	8.03	204	4.13	105	7.01	178	4.53	115	2.36	60	2.78	1.26	2.93	1.33
3	80	9.01	229	4.88	124	8.82	224	5.27	134	3.03	77	4.05	1.84	4.33	1.97
4	100	11.81	300	5.83	148	10.87	276	7.31	197	3.98	101	8.18	3.92	8.44	3.84

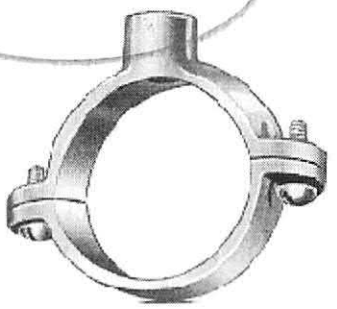
Note: Socket ends per ASTM D 2466
Thread ends per ANSI B1.20.1

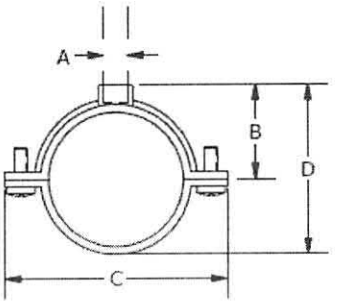
*** DO NOT USE OR TEST THE PLASTIC VALVES LISTED IN THIS CATALOG WITH COMPRESSED AIR OR OTHER GASSES.**

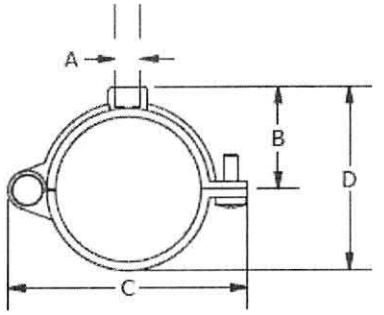
NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227
TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455
www.nibco.com

FIG. 100

SPLIT RING EXTENSION HANGER







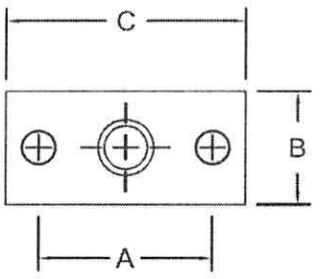
MATERIAL: Malleable iron, stainless steel.
FINISH: Black or electro galvanized.
SERVICE: For suspension of non-insulated stationary pipe lines.
ORDERING: Specify pipe size, figure number and finish.
APPROVALS: Complies with Federal Specification WW-H-171E Type 25 and Manufacturers' Standardization Society SP-58 & SP-69 Type 12.

PIPE SIZE	A	B	WEIGHT/C APPROX.	MAX REC. LOAD, LB.
3/8*	3/8	11/16	16	180
1/2	3/8	13/16	17	180
3/4	3/8	15/16	20	180
1	3/8	1 1/16	21	180
1 1/4	3/8	1 1/4	29	180
1 1/2	3/8	1 5/16	31	180
2	3/8	1 5/8	35	180
2 1/2*	1/2	1 15/16	57	300
3*	1/2	2 3/8	72	300
4*	1/2	2 7/8	116	300

*Sizes 3/8, 2 1/2, 3 and 4 are hinged style

FIG. 105

HANGER FLANGE



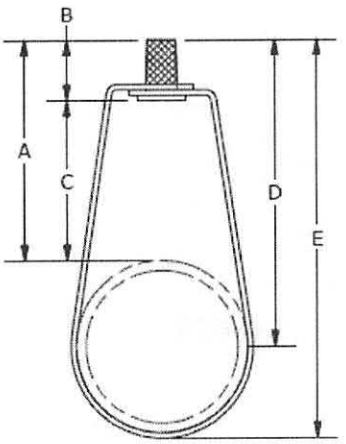
MATERIAL: Malleable iron, stainless steel.
FINISH: Black or electro-galvanized.
SERVICE: For attachment to wood beams, ceilings or floors.
ORDERING: Specify tap size, figure number and finish.

BOLT TAP	A	B	C	WEIGHT (APPROX.) PER 100
3/8	1 15/16	1 15/16	2 3/4	18
1/2	1 15/16	1 15/16	2 3/4	17

FIG. 110

ADJUSTABLE SWIVEL RING HANGER, STD. & NFPA

MATERIAL: Carbon steel.
FINISH: Electro-galvanized.
SERVICE: Recommended for suspension of non-insulated, stationary pipe lines and conduit. Approved for use without additional locking nuts normally required with pipe hangers.
ORDERING: Specify pipe size and figure number.
APPROVALS: Underwriter's Laboratories Listed for ¾"-2" and Factory Mutual Approved for ¾"-4". Complies with Federal Specification WW-H-171E Type 10 and Manufacturers' Standardization Society SP-58 & SP-69 Type 10.

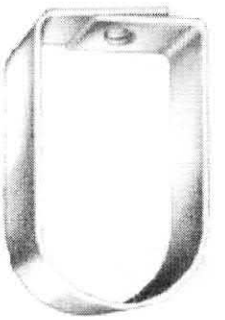


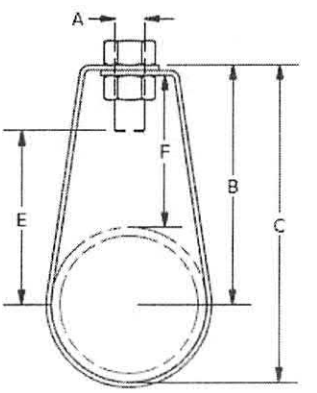
PIPE SIZE	WEIGHT PER 100	MAX. REC. LOAD LB.	DIMENSIONS					MATERIAL SIZE	ROD SIZE	NFPA ROD SIZE
			A	B	C	D	E			
½	11	400	2¼	⅞	1½	2⅝	3 3/16	16ga x ⅝	⅜	⅜
¾	11	400	2 1/16	⅞	1¼	2½	3 3/16	16ga x ⅝	⅜	⅜
1	12	600	2	⅞	1⅜	2⅝	3⅜	16ga x ⅝	⅜	⅜
1¼	13	600	2	⅞	1⅜	2¾	3¾	16ga x ⅝	⅜	⅜
1½	14	600	1⅞	⅞	1⅜	2⅞	4	16ga x ⅝	⅜	⅜
2	15	600	2⅛	⅞	1¼	3¼	4⅝	16ga x ⅝	⅜	⅜
2½	32	600	2½	1⅛	1⅜	3¾	5⅝	13ga x ¾	½	⅜
3	34	600	2⅞	1⅛	2⅞	4½	6¼	13ga x ¾	½	⅜
3½	37	600	3	1⅛	1¾	5	7	13ga x ¾	½	⅜
4	78	1250	2¾	1⅛	1¾	5	7⅜	11ga x 1	⅝	⅜
5	94	1250	3¼	1⅛	1⅞	6	9⅛	11ga x 1	⅝	½
6	120	1250	3¾	1½	2½	7¼	10⅝	11ga x 1	¾	½
8	145	1250	4½	1½	3⅛	8⅞	13⅛	11ga x 1	¾	½

FIG. 115

ADJUSTABLE BAND HANGER

MATERIAL: Carbon steel.
FINISH: Black, electro-galvanized.
SERVICE: For suspension of non-insulated, stationary pipe lines and conduit.
ORDERING: Specify pipe size, figure number and finish.
APPROVALS: Complies with Federal Specification WW-H-171E Type 7 and Manufacturers' Standardization Society SP-58 & SP-69 Type 7.

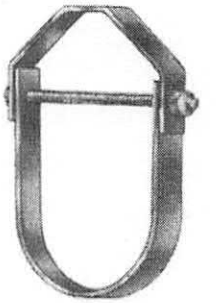




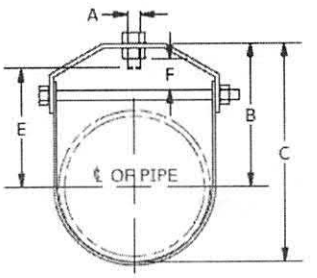
PIPE SIZE	MATERIAL SIZE	MAX. REC. LOAD LB.	A	B	C	E	F	WEIGHT PER 100
⅜	16ga x ⅞	610	⅜	2 3/16	2⅝	1 9/16	1⅜	11
½	16ga x ⅞	610	⅜	2 3/16	2⅝	1 7/16	1¼	11
¾	16ga x ⅞	610	⅜	2 1/16	2⅝	1 5/16	1	12
1	16ga x ⅞	610	⅜	2 1/16	2 11/16	1 5/16	1 5/16	12
1¼	16ga x ⅞	610	⅜	2 9/16	3 7/16	1 13/16	1¼	14
1½	16ga x ⅞	610	⅜	2¾	3 11/16	2	1 3/16	16
2	16ga x ⅞	610	⅜	3	4 3/16	2¼	1 3/16	23
2½	14ga x 1	970	½	3 7/16	4⅞	2 7/16	1¼	28
3	13ga x 1	970	½	4¼	6	3¼	1⅝	41
3½	13ga x 1	970	½	4⅛	6⅛	3⅛	1⅜	44
4	11ga x 1	1250	½	4½	6¾	3¼	1⅜	87
5	11ga x 1	1250	½	5	7¾	4¾	1¼	100
6	11ga x 1½	1600	¾	6 11/16	10	5 3/16	2⅛	160
8	11ga x 1½	1800	¾	7 9/16	11⅞	6 13/16	2	260

FIG. 200

ADJUSTABLE CLEVIS HANGER



MATERIAL: Carbon steel and 304/316 stainless steel.
FINISH: Black, electro or hot-dipped galvanized.
SERVICE: For the suspension of non-insulated, stationary pipe lines.
ORDERING: Specify pipe size, figure number and finish.
APPROVALS: Underwriters Laboratories Listed and Factory Mutual Approve ¾"-8". Complies with Federal Specification WW-H-171E Type 1 and Manufacturers' Standardization Society SP-58 & SP-69 Type 1.

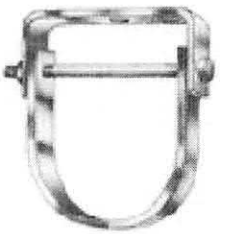


PIPE SIZE	SIZE OF STEEL		A	B	C	E	F	WGT. PER 100	MAX. REC. LOAD, LBS.
	UPPER	LOWER							
½	13ga x ⅞	13ga x ⅞	⅜	1 11/16	2 1/16	1 5/16	7/16	18	610
¾	13ga x ⅞	13ga x ⅞	⅜	1 11/16	2 3/16	1 5/16	7/16	18	610
1	13ga x ⅞	13ga x ⅞	⅜	2 1/16	2 11/16	1 5/8	5/8	22	610
1¼	13ga x ⅞	13ga x ⅞	⅜	2½	3 3/16	2 1/16	⅞	26	610
1½	12ga x ⅞	12ga x ⅞	⅜	2⅞	3 11/16	2 7/16	1 1/16	34	610
2	12ga x ⅞	12ga x ⅞	⅜	3 5/16	4 7/16	2 7/8	1¼	38	610
2½	9ga x 1 3/16	10ga x 1 3/16	½	4½	5 7/8	3 7/8	1 15/16	86	1130
3	9ga x 1 3/16	10ga x 1 3/16	½	4¾	6½	4 3/16	1¾	96	1130
3½	8ga x 1 3/16	10ga x 1 3/16	½	5⅞	7 15/16	5 5/16	2 9/16	114	1130
4	8ga x 1 3/16	10ga x 1 3/16	⅝	5 15/16	8 3/16	5 3/16	2⅛	126	1430
5	4ga x 1¼	8ga x 1¼	⅝	5 11/16	8 7/16	4 15/16	1 7/16	220	1430
6	3ga x 1½	8ga x 1½	¾	6 13/16	10⅛	5 15/16	1¾	300	1940
7	3ga x 1½	8ga x 1½	¾	7 13/16	11⅝	6 15/16	2	420	2000
8	3ga x 1¾	8ga x 1¾	¾	8 1/16	12 7/16	7⅛	1⅞	450	2000
10	⅜ x 1¾	3ga x 1¾	⅞	10	15 7/16	8⅞	2¼	806	3600
12	⅜ x 2	3ga x 2	⅞	11 9/16	18	10 7/16	2 13/16	1100	3800
14	½ x 2	¼ x 2	1	12 9/16	19 9/16	10 9/16	2 9/16	1480	4200
16	½ x 2½	¼ x 2½	1	13 15/16	21 15/16	11 15/16	2 13/16	2100	4600
18	½ x 2½	¼ x 2½	1	16	25	13⅞	3¾	2440	4800
20	⅝ x 3	⅜ x 3	1¼	17½	27½	15⅛	3¾	4700	4800
24	⅝ x 3	⅜ x 3	1¼	19¾	31¾	17⅜	4	5400	4800
30	¾ x 3	⅜ x 3	1¼	24⅛	39⅛	21½	4¾	6950	6000

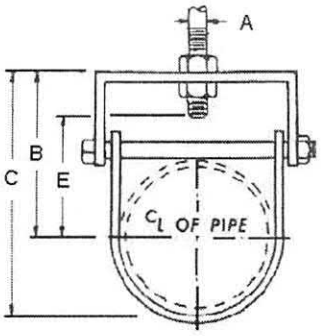
NOTE: CLEVIS HANGERS FOR 20" PIPE AND LARGER ARE FURNISHED WITH PIPE SPACER ON CROSS BOLTS

FIG. 205

FLAT TOP CLEVIS HANGER



MATERIAL: Carbon steel.
FINISH: Black, electro or hot-dipped galvanized.
SERVICE: General piping, where space does not permit installation of standard figure 200 clevis hanger.
ORDERING: Specify pipe size, figure number and finish.



PIPE SIZE	SIZE OF STEEL		A	B	C	E	MAX. REC. LOAD, LBS.	WGT. PER 100
	UPPER YOKE	LOWER STRAP						
2	8ga x 1	12ga x ⅞	⅜	2½	3 11/16	2 1/16	300	46
2½	8ga x 1¼	10ga x 1 3/16	½	2⅞	4 3/16	2 5/16	500	78
3	8ga x 1¼	10ga x 1 3/16	½	3⅜	5⅜	3 1/16	500	98
3½	8ga x 1¼	10ga x 1 3/16	½	4 1/16	6 1/16	3 7/16	500	136
4	4ga x 1¼	10ga x 1 3/16	⅝	4 1/16	6 5/16	3 5/16	700	138
5	4ga x 1¼	8ga x 1¼	⅝	4⅞	7⅝	4⅛	700	208
6	3ga x 1½	8ga x 1½	¾	5½	8⅞	4⅝	900	282
8	3ga x 1¾	8ga x 1¾	⅞	6⅜	10⅞	5½	1000	434

Appendix C:

INSPECTION FORM

System #	Vacuum ("w.c.)	
	Commissioning	
System #1	-15	
System #2	-28	
System #3	-7	
System #4	-6	
System #5	-6	

Suction Point #	Vacuum ("w.c.)	
	Commissioning	
SP1-1	-14.1	
SP1-2	-14.2	
SP2-1	-27.2	
SP2-2	-26.1	
SP2-3	-26.3	
SP2-4	-24.2	
SP3-1	-6.0	
SP3-2	-6.5	
SP3-3	-5.1	
SP3-4	-5.0	
SP4-1	-3.6	
SP4-2	-2.5	
SP4-3	-2.5	
SP4-4	-5.0	
SP5-1	-4.5	
SP5-2	-2.8	
SP5-3	-3.7	
SP5-4	-3.1	

Test Port #	Vacuum ("w.c.)	
	Commissioning	
T-1	-0.0139	
T-2	-0.0129	
T-3	-0.0083	
T-4	-0.1683	
T-5	-0.0064	
T-6	-0.0209	
T-7	-0.0082	
T-8	-0.0058	
T-9	-0.0086	
T-10	-0.0123	
T-11	-0.0464	
T-12	-0.0252	
T-13	-0.0087	
T-14	-0.0251	

APPENDIX K

PERMITS AND/OR PERMIT EQUIVALENT

NYC™ Buildings

Work Permit Department of Buildings

Permit Number: *421394538-01-EW-MH*

Issued: *03/15/2017* Expires: *03/15/2018*

Issued to: KEN KONFONG

Address: *QUEENS 75-21 31 AVE*

Business: ALLIED MD CONSTRUCTION LL

Contractor No: GC-610309

Description of Work:

ALTERATION TYPE 2 - MECH/HVAC INSTALL NEW SUB-SLAB DEPRESSURIZATION SYSTEM. NO CHANGE OF USE, EGRESS, OCCUPANCY UNDER THIS APPLICATION.

Review is requested under Building Code: 2014

SITE FILL: NOT APPLICABLE

To see a Zoning Diagram (ZD1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at www.nyc.gov/buildings.

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment or both.

01 03/16/2017

OP-35A (5/10)

NYC™ Buildings

Work Permit Department of Buildings

Permit Number: *421394538-01-EW-OT*

Issued: *03/15/2017* Expires: *03/15/2018*

Address: *QUEENS 75-21 31 AVE*

Issued to: KEN KONFONG

Business: ALLIED MD CONSTRUCTION LL

Contractor No: GC-610309

Description of Work: **CONCRETE WORK NOT AUTHORIZED - CONCRETE PLACEMENT, FORMWORK, STEEL REINFORCING NOT PERMITTED.**

ALTERATION TYPE 2 - GEN. CONSTR. INSTALL NEW SUB-SLAB DEPRESSURIZATION SYSTEM. NO CHANGE OF USE, EGRESS, OCCUPANCY UNDER THIS APPLICATION.

Review is requested under Building Code: 2014

SITE FILL: NOT APPLICABLE

To see a Zoning Diagram (ZD1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at www.nyc.gov/buildings.

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings: Rick Chandler

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment or both.

01 03/16/2017

OP-35A (5/10)

APPENDIX L

COPY OF RECORDED ENVIRONMENTAL EASEMENT

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument.The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.

2019101701022001001EDE97

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 10**

Document ID: 2019101701022001 Document Date: 10-03-2019 Preparation Date: 10-17-2019
Document Type: EASEMENT
Document Page Count: 9

PRESENTER:
ROYAL REGISTERED PROPERTY REPORTS(182833)
125 PARK AVENUE, SUITE 1610
NEW YORK, NY 10017
212-376-0900
MBASALATAN@ROYALABSTRACT.COM

RETURN TO:
ROYAL REGISTERED PROPERTY REPORTS(182833)
125 PARK AVENUE, SUITE 1610
NEW YORK, NY 10017
212-376-0900
MBASALATAN@ROYALABSTRACT.COM

PROPERTY DATA

Borough	Block	Lot	Unit	Address
QUEENS	1124	1	Entire Lot	75-11 31ST AVENUE

Property Type: COMMERCIAL REAL ESTATE

CROSS REFERENCE DATA

CRFN_____ *or* DocumentID_____ *or* _____ Year_____ Reel____ Page_____ *or* File Number_____

PARTIES

GRANTOR/SELLER:
ALLIED JACKSON HEIGHTS, LLC
118-35 QUEENS BLVD
FOREST HILLS, NY 11375

GRANTEE/BUYER:
PEOPLE OF THE STATE OF NEW YORK
THE COMMISSIONER OF THE NEW YORK STATE DEPARTMENT, OF ENVIRONMENTAL CONSERVATION, 625 BROADWAY
ALBANY, NY 12233

FEES AND TAXES

Mortgage :

Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	82.00
Affidavit Fee:	$	0.00

Filing Fee: $ 250.00

NYC Real Property Transfer Tax: $ 0.00

NYS Real Estate Transfer Tax: $ 0.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK
Recorded/Filed 10-22-2019 15:55
City Register File No.(CRFN): **2019000343953**

City Register Official Signature

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 2nd day of October, 2019, between Owner(s) Allied Jackson Heights, LLC, having an office at 118-35 Queens Boulevard, Forest Hills, New York 11375, County of Queens, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 75-11 31st Street in the City of New York, County of Queens and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 1124 Lot 1, being a portion of the property conveyed to Grantor by deed dated April 5, 2005 and recorded in the City Register of the City of New York as CRFN # 2005000451770. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.7260 +/- acres, and is hereinafter more fully described in the Land Title Survey dated December 2, 2017 prepared by Saeid Jalilvand, L.L.S. of Montrose Surveying Co., LLP, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is

extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C241176-10-15, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining

contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation

pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C241176
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and

communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. Consistency with the SMP. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Allied Jackson Heights, LLC:

By: _____

Print Name: Joshua L Muss

Title: Manager Date: 9/25/19

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF Queens)

On the 25 day of September, in the year 2019, before me, the undersigned, personally appeared Joshua L Muss, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Lori M. Mishali
Notary Public - State of New York

LORI M. MISHALI
Notary Public, State of New York
NO. 01MI4855556
Qualified in Nassau County
Commission Expires August 25, 2022

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Michael J. Ryan, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 2nd day of October in the year 2019 before me, the undersigned, personally appeared Michael J. Ryan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2022

SCHEDULE "A" PROPERTY DESCRIPTION

ALL that certain plot piece or parcel of land situate lying and being in the Borough and County of Queens, City and Stole of New York bounded end described as follows:

BEGINNING at a point on the easterly side of 75th Street (70 feet wide) distance 160.63 feet southerly from the corner formed by the intersection of the easterly side 75th Street with the southerly side of 30th Avenue (80 feet wide);

RUNNING THENCE easterly at right angles to the easterly side of 75th Street, 115.27 feet to a point;

RUNNING THENCE southerly at right angles to the last mentioned course, 274.37 feet to a point;

RUNNING THENCE westerly at right angles to the lost mentioned course, 115. 27 feet to the easterly side of 75th Street;

RUNNING THENCE northerly along the easterly side of 75th Street, 274.37 feet to the point or place of BEGINNING.

The above described parcel has on area of 31,627 square feet or 0.7260 acre.