SITE CHARACTERIZATION REPORT FOR THE FORMER GREENBURGH HOLDER STATION SITE

SITE NO. V00572

GREENBURGH, NEW YORK

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INTRODUCTION

1.1 SITE OVERVIEW

The Consolidated Edison Company of New York, Inc. (Con Edison) has entered into a Voluntary Cleanup Agreement (VCA Site No. V00572) with the New York State Department of Environmental Conservation (NYSDEC) to investigate, and if necessary, remediate potential impacts at former manufactured gas plant (MGP) properties. One of these facilities is the former Greenburgh Holder Station Site.

The former Greenburgh Holder Station Site (Site) is located at 469 Tarrytown Road in the Town of Greenburgh, Westchester County, New York (Figure 1). The majority of the property is currently owned by Con Edison and used as a substation, a gas regulator station, and for equipment storage. The facility currently functions as a reporting center for transformer repairs, and has 38 employees. The onsite building is used for storage and reporting center activities, and was formerly used as the exhauster/boiler house. Access to the Con Ed facility is restricted by a locked gate and limited to authorized personnel only. The remainder of the former holder station is part of a BMW auto dealership.

Historical research was previously conducted for the former Greenburgh Holder Station Site and the results of that effort are documented in the *Historical Investigation Report – Former Greenburgh Station Holder Site* (RETEC, 2003). Based on historical operations, a Site Characterization of the former Greenburgh Holder Station Site was conducted to: (1) characterize and identify potential subsurface conditions that may pose a risk to human health and the environment; and (2) to ascertain the potential need for further investigation or remediation.

The Site Characterization was conducted by Parsons and ENSR in March through May 2008. The field investigation activities and results are documented in this report as follows:

- Section 1: Introduction,
- Section 2: Site Characterization Activities,
- Section 3: Site Characterization Results,
- Section 4: Exposure Assessment,
- Section 5: Conclusions and Recommendations,
- Section 6: References,
- Appendix A: ENSR's Vapor Intrusion Assessment Report,
- Appendix B: Test Pit, Soil Boring and Monitoring Well Logs,

- Appendix C: Groundwater Sampling Logs, and
- Appendix D: Data Usability Summary Report.

1.2 ADJOINING PROPERTY DESCRIPTION

The Site is located in a mixed residential/commercial area. The Site, and properties immediately surrounding, are used for commercial purposes. Neighboring properties to the east and northeast include a dry cleaner, a Nissan dealership, a Mazda dealership, and a Dodge dealership. The BMW dealership, a portion of which is within the Site boundaries, is located to the northwest. A shopping center bounds the Site to the southwest (RETEC, 2003).

1.3 SITE HISTORY

As discussed in Section 1.1, historical research was previously conducted and documented in the *Historical Investigation Report* (RETEC, 2003). The property, which was made up of 11.7 acres and was the subject of the Site Characterization Study, was purchased by Westchester Lighting Company in 1923 from a private party. No records were available prior to 1923. The Site operated from 1924 until the mid-1950s to distribute manufactured gas for the Town of Greenburgh. It included a blower/exhauster building and a gas holder that only occupied the southern third of the property. The holder was removed in 1959, and by 1960, the Site was used as a substation and gas regulator station. A more detailed discussion of the Site history is contained in the *Historical Investigation Report*.

1.4 TOPOGRAPHY, REGIONAL GEOLOGY, AND HYDROGEOLOGY

The general topography slopes from the western portion of the property boundary towards the southeast property boundary. The overall difference in elevation is approximately 11 feet. Surface water runoff is to the southeast via sheet flow. According to the 1969 USGS topographic map of the White Plains, NY area (RETEC, 2003), the surface runoff is likely captured by storm drains in the area. An un-named creek was originally located several feet south of the Site, but was diverted to underground culverts along the southwest property boundary during construction of the shopping center. According to the EDR database search (RETEC, 2003), the Site is not located within a mapped flood zone or wetland area.

Based on information provided in the *Historical Investigation Report* (RETEC, 2003), a thin layer of low permeability glacial till material is likely to be present in the area above bedrock. The formation is comprised of silty clay with occasional boulders. The Site is located in the Manhattan Prong, which is a sub-province of the New England Upland physiographic region of New York that encompasses most of Westchester County. The local bedrock is the Fordham Gneiss of the Upper Proterozoic Age and may be at or near the ground surface. This gneiss is metamorphic and is comprised of garnet, biotite, quartz, and plagioclase feldspar.

Groundwater in the vicinity of the Site is classified as GA – fresh groundwater, with best usage as a source of potable water supply. However, this area is not classified as a primary water supply aquifer or a principal aquifer (RETEC, 2003).

1.5 OTHER INVESTIGATIONS

1.5.1 Limited Site Investigation

In May of 2002, a Limited Site Investigation (LSI) was conducted to assess potential impacts of the Site on subsurface conditions and indoor air quality within the on-site building (JWC, 2002). As part of the LSI, soil and groundwater sampling was conducted by Jacques Whitford Company Inc. (JWC). In addition, soil gas sampling and outdoor and indoor air sampling was conducted by Clayton Group Services, Inc. (Clayton). A copy of the data was previously provided in the October 2007 Site Characterization Work Plan for the Site (Parsons, 2007). A summary of analytical results obtained from the LSI is provided below.

Soil samples were collected from six locations designated SB-1 through SB-6, and from a test pit (TP-1) during the LSI. A review of the analytical data indicated the following:

- VOCs: Methylene chloride was detected at all locations with concentrations ranging from 5.3 to 39.3 parts per billion (ppb). Acetone was detected in three borings with concentrations ranging from 84.8 to 221 ppb. Toluene was detected in SB-6 at a concentration of 2.70 ppb and in SB-5 at a concentration of 5.20 ppb. Tetrachloroethene was only detected in SB-1. Only one sample, SB-1 (4'-4'6"), contained VOCs at concentrations exceeding Unrestricted Soil Cleanup Objectives (USCOs). The exceedance was for acetone which is a common laboratory contaminant.
- SVOCs were detected at all sample locations,with the greatest number of detections observed in SB-4. No SVOC concentrations exceeded USCOs.
- Metals and cyanide: Various metals were detected at concentrations ranging from 1.45 parts per million (ppm) to 22,900 ppm. Cyanide was detected in SB-5 at a concentration of 6.43 ppm and in SB-6 at a concentration of 1.92 ppm.
- PCBs: A single detection of Aroclor 1260 at 361 ppb was detected in the sample from test pit (TP-1).

Temporary groundwater monitoring well points (TW-1, TW-3, TW-5, and TW-6) were installed at soil boring locations SB-1, SB-3, SB-5 and SB-6, respectively. Temporary well points were constructed of 1-inch diameter polyvinyl chloride (PVC) casing and screen. Temporary well point TW-5 had an insufficient recharge after purging; therefore, no samples were collected from this location. A review of the groundwater analytical data indicated the following:

- VOCs: Xylene was detected at a concentration of 3.6 ppb at TW-1. Benzene was detected at 6.7 ppb and toluene at 2.4 ppb in TW-6. No VOC concentrations exceeded Class GA groundwater quality standards (GWQS) or guidance values.
- SVOCs: Naphthalene was detected above the reporting limit at TW-6 at a concentration of 0.39 ppb. No SVOC concentrations exceeded Class GA groundwater quality standards (GWQS) or guidance values.

- Metals and cyanide: Various metals were detected at concentrations ranging from 1.45 ppm to 22,900 ppm. Cyanide was detected at all locations, ranging in concentrations from 0.006 ppm in TW-3 to 5.31 ppm in TW-6.

A total of six soil gas samples were collected by Clayton on May 15 and 16, 2002 (Clayton, 2002). The samples were collected in Summa canisters using metal probing rods, tubing, and a hand pump. The sampling depths ranged from approximately 2 to 7 feet, with five of the eight samples collected at a depth of 7 feet. Several VOCs were detected in the samples at concentrations ranging from less than 1 ppb by volume (ppbv) to greater than 100 ppbv (trichlorofluoromethane in SG-6). Benzene was detected in SG-2 at a concentration of 41 ppbv. Certain chlorinated VOCs were detected in SG-4 and SG-6, with concentrations ranging up to 20 ppbv (TCE) in SG-4.

In addition to the soil gas samples, Clayton collected one outdoor and two indoor air samples on May 6, 2002. Concentrations in all three samples were generally less than 1 ppbv. For several of the compounds detected in indoor air, comparable concentrations were observed in the outdoor air sample.

SECTION 2

SITE CHARACTERIZATION ACTIVITIES

The following sections describe the field investigation activities conducted as part of the Site Characterization. Field investigation activities were conducted by Parsons and ENSR between March and May 2008 in accordance with the NYSDEC and New York State Department of Health (NYSDOH)-approved *Site Characterization Work Plan* (Parsons, 2007) and *Work Plan for Soil Vapor Intrusion Assessment* (ENSR, 2007). The scope of field investigation activities included the installation of test pits, soil borings, monitoring wells, and soil vapor points. In addition, soil, groundwater, soil vapor, ambient, and indoor air samples were collected for laboratory analysis. During all ground intrusive activities, a Community Air Monitoring Plan was implemented in accordance with the approved Site Characterization Work Plan (Appendix C, Section 6.2.1, Community Air Monitoring Plan). Sampling locations are shown on Figure 2. Table 1 provides a summary of the samples and analyses. A description of the field activities conducted by ENSR as part of the Soil Vapor Intrusion Assessment is provided in Appendix A.

2.1 SITE INSPECTION AND PRELIMINARY INVESTIGATION ACTIVITIES

A site inspection was conducted to refine the locations of the proposed investigation points and as-built diagrams were reviewed for access, feasibility, occupant health and safety, and worker health and safety. The proposed scope of work was reviewed with representatives of the Con Edison facility and BMW dealership. Proposed locations and proposed methods were altered in the field, as necessary, based on site conditions, access, utilities, and safety. The modifications to the sampling locations are further discussed below. Sampling location changes were made in consultation with Con Edison and/or the NYSDEC.

2.2 UTILITY CLEARANCE

To verify the absence of subsurface utilities at each of the drilling and soil vapor locations, utility clearance test pits were excavated. Test pit excavation entailed cutting and removing surface material and hand excavating the underlying materials. The typical test pit excavation consisted of saw-cutting the surface materials, jack-hammering the concrete, and hand excavating with the aid of a vacuum truck, hand auger and or other digging tools to depths ranging from 5 to 8 feet bgs. During test pit excavation activities, soil samples were screened for VOCs using an organic vapor meter equipped with a photoionization detector (PID), their physical characteristics (e.g., soil type, grain size, color, etc.) described, and any evidence of physical impacts (staining, odor, sheen, free product, etc.) were recorded on the boring/well logs provided in Appendix A.

2.3 TEST PIT EXCAVATION

A total of eight investigation test pits were advanced at five locations (TP-4, TP 5/5A/5B, TP-6, TP-7, and TP-8/8A) to determine whether MGP structure remnants and/or impacted

subsurface materials were present. The test pit locations are shown on Figure 2. The test pits were excavated to depths ranging from 4 to 9 feet bgs using a backhoe.

During excavation, the excavated soil was temporarily placed on impervious plastic sheeting adjacent to the test pit and put back into the excavation in the reverse order from which it was removed. While the test pits remained open, the subsurface conditions were logged and photographed, test pit walls and floors were inspected for evidence of MGP-related impacts (e.g., odors, staining, sheens, NAPL, PID readings above background levels), soil samples were collected and the dimensions of any subsurface features were measured. The soil characteristics, PID, and visual/odor inspection results (including photographs taken during the excavation) are summarized in the test pit logs provided in Appendix B.

In general, soil samples were collected from the bottom and sidewalls of the test pit to confirm that the soil had not been impacted by MGP operations. The samples were submitted for laboratory analysis for Target Compound List (TCL) VOCs by EPA Method 8260, TCL SVOCs by EPA Method 8270, TAL metals by EPA Method 6000/7000 Series, and cyanide by EPA Method 9012. A summary of subsurface samples collected and analyzed can be found in Table 1.

2.4 SOIL BORING INSTALLATION

A total of five soil borings were advanced to depths ranging from 13 to 35 feet bgs during the Site Characterization activities. Soil boring locations are shown on Figure 2 and the corresponding boring logs are presented in Appendix B.

Soil samples were collected on a continuous basis using a 2-foot long, 2-inch diameter, split-spoon sampler. Each sample was screened for the presence of VOCs using a PID and logged. Physical characteristics of each sample were recorded (e.g., soil type, color, texture, moisture content, etc.), along with physical evidence of any impacted material (e.g., oil-like or tar-like NAPL, staining, sheens, odors, etc).

Soil samples were submitted to the laboratory and analyzed for TCL VOCs, TCL SVOCs, cyanide, and target analyte list (TAL) metals. A summary of the soil samples collected and analyses performed is provided in Table 1. In general, the following soil samples from the borings were selected for laboratory analysis:

- One sample was collected from the zone with the highest PID readings. If elevated PID readings were not observed, a sample was collected from the upper portion of the boring or directly above the water table (if present).
- If impacts were observed, an additional sample was collected below the impacted zone (if possible) or near the base of the boring to identify the vertical extent of apparent impacts at that location.

Non-disposable drilling and sampling equipment was decontaminated between boring locations using a tap water/Simple Green® solution. Drill cuttings and decontamination water was containerized in 55-gallon steel drums and handled as described in Section 2.9.

2.5 MONITORING WELL INSTALLATION

Three monitoring wells (MW-7, MW-8 and MW-9) were installed during the Site Characterization activities at the locations shown on Figure 2. Two of the monitoring wells, MW-8 and MW-9, were relocated from the proposed locations. Monitoring well MW-8 was shifted south in order to minimize impacts to site traffic and MW-9 was moved east due to access restrictions. The final monitoring well locations are shown on Figure 2 and the corresponding boring logs are provided in Appendix B.

The monitoring well borings were advanced to depths ranging from 13 to 31 feet bgs using 4.25-inch outside diameter hollow stem augers and a track-mounted drill rig. Soil samples were collected from monitoring well borings on a continuous basis and screened for the presence of VOCs using a PID. Soil samples were selected for analysis as described above in Section 2.4.

The monitoring wells were constructed with 2-inch ID, threaded, flush-joint, PVC casing and 10 feet of 0.02-inch slot screens. The annular space around each well screen was backfilled with a No. 2 sand filter pack extending from the bottom of the well to at least 1.5 feet above the top of the screen. The annular space around the well riser was sealed with at least 1 foot of hydrated bentonite pellets on top of the sand pack. The remainder of the boring was backfilled with cement-bentonite grout to approximately 1 foot below grade. Each of the wells was finished with a locking, flush-mount box set in concrete.

Well development was monitored approximately every 5 minutes by reviewing water quality indicator measurements (i.e., pH, turbidity, temperature, and specific conductivity). Well development continued until turbidity was less than 50 nephelometric turbidity units (NTUs) for three successive readings or until water quality indicators stabilized, whichever occurred first. The criteria for stabilization based on water quality indicators were three successive readings within 10% for pH, temperature, and specific conductivity.

Non-disposable drilling equipment was decontaminated between monitoring well locations by using a tap water/Simple Green® solution. Monitoring well drill cuttings, well development water, and decontamination water was containerized in 55-gallon steel drums and handled as described in Section 2.9.

2.6 SOIL VAPOR INTRUSION ASSESSMENT

Between March 17 and March 21, 2008, ENSR conducted a soil vapor intrusion (SVI) assessment at the site to further characterize soil vapor conditions beneath the on-site building, to determine if the sub-slab soil vapor conditions are adversely affecting indoor air quality conditions, and to assess potential off-site sources of the chlorinated solvents detected during the May 2002 Clayton SVI assessment.

As a part of the March 2008 SVI assessment, ENSR installed and sampled three soil vapor sampling points, collected two sub-slab samples, and collected two ambient air samples at strategic locations (Figure 2). The sampling techniques and rationale are detailed in ENSR's Vapor Intrusion Assessment Report which is included as Appendix A.

2.7 SURVEYING

At the completion of drilling activities, a licensed New York State land surveyor identified the horizontal and vertical locations of each new soil boring and monitoring well. Two elevation measurements were taken at each well location to identify the top of the PVC casing and the grade elevation. The survey elevations were measured to an accuracy of 0.01 feet above the National Geodetic Vertical Datum of 1988 (NGVD 1988).

2.8 GROUNDWATER SAMPLING

In April 2008, groundwater samples were collected from the three new monitoring wells (MW-7, MW-8, and MW-9) and three existing temporary well points (TW-1, TW-3, and TW-6). The existing temporary well, TW-5, could not be located during the April 2008 event; however, during field activities on May 6, 2008, TW-5 was discovered under equipment and a tarp. Although efforts were made to collect a groundwater sample, the well did not adequately recharge and thus, sufficient sample volume could not be collected for laboratory analysis.

Prior to collecting samples, the depth to groundwater was measured in the wells using an electronic oil/water interface probe attached to a measuring tape accurate to 0.01 foot. Table 2 provides a summary of the groundwater level measurements and elevations.

Prior to sampling, each well was purged using a submersible pump and by removing a minimum of three times the volume of standing water to allow for collection of a representative sample. During the purging process, water quality parameters including temperature, conductivity, pH, dissolved oxygen, oxidation reduction potential (ORP), and turbidity were measured approximately every 5 minutes. Groundwater samples were collected using a low-flow submersible pump with dedicated tubing. Water quality parameter measurements and observations recorded during sampling are documented on the groundwater sampling records provided in Appendix C.

Each well was sampled using low-flow purging and sampling techniques. Groundwater samples were collected directly into laboratory supplied sample bottles using dedicated, Teflon-lined sample tubing and a peristaltic pump. The samples were submitted to Chemtech laboratories for the following analysis: TCL VOCs, TCL SVOCs, TAL metals, total cyanide. Test America laboratories conducted one additional analysis for available cyanide. The final turbidity readings prior to sampling in monitoring wells MW-7, MW-9 and TW-6 were greater than 50 NTUs. Therefore, samples from MW-7, MW-9, and TW-6 were also submitted for dissolved metals analysis, the analysis was conducted on filtered samples. Non-dedicated sampling equipment (e.g., oil/water interface probe) was decontaminated between sampling locations. Decontamination water was placed in 55-gallon drums and handled as described in Section 2.9.

2.9 MANAGEMENT OF INVESTIGATION-DERIVED WASTE

Investigation-derived waste (IDW), which included decontamination wash and rinse water, soil cuttings, purge water, debris, and used personal protective equipment (PPE), was containerized in Department of Transportation (DOT)-approved 55-gallon drums. The drums

were sealed at the end of each work day and labeled with the date, the well or boring number(s), and the type of waste (i.e., drill cuttings, purge water, etc.). Parsons collected representative waste characterization samples of the IDW and coordinated transportation and disposal of the drums. IDW was disposed of at an offsite Con Edison-approved location according to applicable local, state, and federal regulations.

2.10 DATA VALIDATION AND REPORTING

Data validation was performed in accordance with the USEPA Region II standard operating procedures (SOPs) for organic and inorganic data review. These validation guidelines are regional modifications to the National Functional Guidelines for organic and inorganic data review (USEPA 1999 and 2004). Validation included the following:

- verification of 100% of all quality control (QC) sample results (both qualitative and quantitative);
- verification of the identification of 100% of all sample results (both positive hits and non-detects);
- recalculation of 10% of all investigative sample results; and
- preparation of a Data Usability Summary Report (DUSR).

The quality of the data has been assessed and is documented in the DUSR provided in Appendix D. In summary, the results of the data usability assessment show that the analytical data for soil and groundwater collected are valid for the intended purposes of the Site Characterization.

SECTION 3

SITE CHARACTERIZATION RESULTS

This section presents the results of the Site Characterization. Analytical results for samples collected during the Site Characterization have been summarized on Tables 3 and 4, Figures 3 and 4, and in Appendix A.

3.1 SITE GEOLOGY

The geology encountered in soil borings and test pits during the Site Characterization is summarized in the logs provided in Appendix B. The logs show that the upper 5 to 11 feet contained fill materials (generally sand, gravel and silt with cobbles, cement, wood and brick fragments). Deposits of fine to course-grained sand with some silt and gravel underlie the fill. Suspected bedrock was encountered between 13 and 35 feet bgs during the field investigation. Soil boring logs generated during the Site Characterization, as well as select boring logs from the LSI, were used to develop two representative cross sections. An east-west cross-section of the Site is shown on Figure 5 (cross section A-A') and a north-south cross-section is shown on Figure 6 (cross sections B-B').

3.2 FORMER GASHOLDER STATION STRUCTURES

The test pitting and soil boring activities conducted during the Site Characterization confirmed that below-grade MGP structure remnants are present at the site. Based on data obtained during the subsurface investigations and a review of historical site drawings, the approximate location of the former gasholder has been depicted, to the extent possible, on the cross sections provided on Figures 5 and 6 and are described below.

- Cross sections traversing the former gasholder are shown on Figures 5 and 6. This gasholder is approximately 125 feet in diameter. The bottom of the gasholder appears to be located approximately 4 to 7 feet below ground surface. The concrete bottom of this gasholder was encountered during installation of soil borings SB-8 and SB-9, test pits TP-4, TP-5, TP-5B, TP-6 and TP-8A, as well as in the monitoring well borings TW-5 and TW-6 installed by JWC as part of the LSI. Based on these borings, the holder bottom appears to be generally flat although it appears to have been encountered at a higher elevation in soil boring SB-9. No staining or sheens were observed in the vicinity of the holder. Remnants of the gasholder walls were not encountered in any of the test pits.
- Cast iron piping, believed to be associated with former MGP operations, was observed in test pits TP-7 and TP-8/8A. No staining or sheens were observed in the vicinity of the piping.
- During excavation of test pit TP-8, the corner of an iron structure was encountered. As a result, an additional test pit (TP-8A) was installed as an extension of TP-8. An approximately 450-gallon tank, containing approximately 250 gallons of water was

uncovered during installation of test pit TP-8A. It is suspected that this tank was a former drip tank associated with the gasholder. Water contained in the tank was sampled (sample DT-1) and submitted for TCL VOCs, TCL SVOCs, TAL metals, and total cyanide. The results are summarized in Table 4. Following consultation with the NYSDEC, the tank was removed, cleaned, cut and properly disposed of offsite.

3.3 SITE HYDROGEOLOGY

Groundwater was encountered beneath the Site at elevations ranging from 195.89 to 200.29 feet above mean sea level (AMSL), approximately 6 to 9 feet bgs. The depth to groundwater was gauged in the three new monitoring wells (MW-7, MW-8 and MW-9) and three existing monitoring wells (TW-1, TW-3, and TW-6) on April 23, 2008. The groundwater levels and corresponding elevations are summarized in Table 2 and on the groundwater contour map (Figure 7). The groundwater contours based on the April 2007 gauging event indicate a southeasterly groundwater flow direction which is generally consistent with the groundwater conditions noted during the LSI.

3.4 SOIL SAMPLE RESULTS

A total of 31 soil samples (including duplicates) were collected from the test pits, soil borings, and monitoring well borings completed as part of the Site Characterization. In general, soil samples were analyzed for TCL VOCs, SVOCs, TAL metals, and cyanide as described in Section 2.3. The analytical results of the soil samples are summarized in Table 3. The soil sample results have been compared to the USCOs provided by NYSDEC in 6 NYCRR Part 375 (NYSDEC, 2006). However, USCOs assume there are no imposed restrictions on the use of the site. The Former Greenburgh Holder Station Site is used for commercial purposes, a large majority of the site is paved, and access is restricted to a vast majority of the site via a fence around the Con Edison property. Therefore, comparison of soil sample results to the USCOs is conservative.

PID Readings/Visual Observations

PID readings encountered during soil boring/monitoring well/test pit installation ranged from 0.0 to 4.4 ppm above background. The highest PID reading was detected in monitoring well boring MW-9 at 7 to 9 feet bgs. No observations of NAPL or staining were noted during any of the soil boring/monitoring well installation activities conducted during the Site Characterization.

VOCs

A summary of VOC results for soil samples collected during the Site Characterization is shown on Figure 3 and presented in Table 3. VOCs were detected in only two of the soil samples collected, SB-11 (6'-8') and TP-4 (7.5'). Total concentrations of VOCs at these two locations were 0.179 and 0.0132 mg/kg, respectively. As summarized in Table 3, only one individual VOC (acetone), which is a common laboratory contaminant, exceeded its respective USCO.

SVOCs

A summary of SVOC results for soil samples collected during the Site Characterization is shown on Figure 3 and presented in Table 3. Site Characterization results indicate that a total of 21 SVOCs were detected at least once in one or more soil samples. As summarized in Table 3, only two soil samples, MW-9 (7'-9') and TP-7 (5') exhibited SVOC concentrations exceeding individual USCOs. Of the SVOCs analyzed, only PAHs were detected at concentrations that exceeded their respective USCOs. These included benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene. The highest total SVOC concentration of 22.7 mg/kg was detected in soil sample SB-7 (5').

Metals and Cyanide

Table 3 summarizes the laboratory analytical results for metals and cyanide detected in subsurface soil. Analytical results for metals in soil indicated the presence of six metals at concentrations that exceeded their individual USCOs in at least one of the boring locations. Metals detected were consistent with those typically encountered in soil used for fill in urban areas. Cyanide was detected in one sample above its respective USCO of 27 mg/kg. The detected concentration (28 mg/kg) was slightly above the USCO and was detected in a soil sample collected from TP-5 at 6' bgs.

3.5 GROUNDWATER SAMPLE RESULTS

Groundwater samples were collected on April 23 and 24, 2008 from the three new monitoring wells (MW-7, MW-8 and MW-9) and three of existing monitoring wells (TW-1, TW-3 and TW-6). Laboratory analytical results for constituents detected in the groundwater samples are summarized in Table 4 and on Figure 4. For evaluation purposes, analytical results were compared with Class GA groundwater quality standards (GWQS) and guidance values contained in NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 (NYSDEC, 1998). These GWQS and guidance values are protective of groundwater quality assuming that groundwater is used as a drinking water source. However, that assumption is not applicable to this Site because groundwater is not used as a source of drinking water. Accordingly, the use of Class GA standards and guidance values for comparison to site groundwater data is conservative.

Field Measurements

During groundwater sampling activities, each monitoring well was monitored for the presence of NAPL. Neither Light Non-Aqueous Phase Liquid (LNAPL) nor Dense Non-Aqueous Phase Liquid (DNAPL) were observed in any of the wells. No sheens were noted in any of the wells. Visual descriptions and observations made during the groundwater sampling activities are presented on the groundwater sampling records provided in Appendix C.

VOCs

A summary of VOC results for groundwater samples collected during the Site Characterization is shown on Figure 4 and presented in Table 4. Only three VOCs (acetone, 4-methyl-2-pentanone, and toluene) were detected in the groundwater samples collected as part

of the Site Characterization. No VOCs were detected above their respective GWQS or guidance values.

SVOCs

A summary of SVOC results for groundwater samples collected during the Site Characterization is shown on Figure 4 and presented in Table 4. Four SVOCs (benzaldehyde, 2-methylnaphthalene, naphthalene, and pentachlorophenol) were detected in the groundwater samples collected as part of the Site Characterization. Only one SVOC, pentachlorophenol, was detected above its respective GWQS or guidance values. Pentachlorophenol is not a typical gasholder-related compound.

Metals and Cyanide

The analytical results summarized in Table 4 indicate that a total of 21 metals, in addition to cyanide, were detected in at least one of the groundwater samples collected during the Site Characterization. Eight of these metals (antimony, chromium, iron, lead, magnesium, manganese, sodium, and thallium) were detected at concentrations exceeding the Class GA GWQS (Table 4). Metals detected were consistent with those typically encountered in groundwater in urban areas. Results from the analysis for cyanide indicated all detected concentrations were below the Class GA GWQS. Available cyanide was detected in one groundwater sample collected from MW-8. However, no NYSDEC GWQS or guidance values exist for available cyanide.

3.6 SOIL VAPOR INTRUSTION SAMPLE RESULTS

The analytical results for samples collected to assess soil vapor intrusion are summarized in Appendix A.

3.7 SUMMARY OF RESULTS

The goal of the Site Characterization was to evaluate the potential presence and extent of former gasholder station structures, residues, and/or impacts. The information gathered during the Site Characterization to achieve this goal is summarized below.

3.7.1 Gasholder Station Structures

Below-grade MGP structure remnants were noted during the Site Characterization. The bottom of the former gasholder, suspected associated piping and a tank were observed. However, no visual impacts (NAPL, coal tar, staining) were noted around these below-grade MGP structures. In addition, the tank was properly cleaned, removed, and disposed of during the Site Characterization field activities. Concentrations of MGP-related compounds were not detected above USCOs in soil samples collected near the tank.

3.7.2 Soil

During the Site Characterization, the only individual VOC that exceeded an USCO was acetone, which is a common laboratory contaminant. The highest total VOC concentration detected during the Site Characterization was 0.179 mg/kg. Only 2 of the 31 soil samples

collected during the Site Characterization contained SVOC concentrations exceeding individual soil cleanup objectives. These two samples are located within the restricted Con Edison facility. Therefore, use of the USCOs for comparison to soil data is conservative. If compared to commercial or industrial restricted use soil cleanup objectives, only one SVOC (benzo(a)pyrene) slightly exceeds the objectives at concentrations of 1.3 and 1.6 mg/kg, compared to the commercial and industrial objectives of 1.0 and 1.1 mg/kg, respectively. Metals were detected at the Site in soil at concentrations exceeding the NYSDEC USCOs. However, the exceedances were consistent with analytes typically found in urban fill materials.

3.7.3 Groundwater

Potential gasholder-related impacts were not encountered in the six monitoring wells sampled during the Site Characterization. Only pentachlorophenol was detected at a concentration exceeding the Class GA standards. Pentachlorophenol is not a typical gasholder-related compound.

3.7.4 Ambient Air, Indoor Air, Sub-Slab and Soil Vapor

As documented in Appendix A, ambient air samples indicated typical low concentrations of VOCs. VOCs within the category of Possibly MGP Related or Other Sources, were detected in indoor air and sub-slab vapor samples at concentrations within the 90th percentile of background indoor air. Two VOCs within the category of Possibly MGP Related or Other Sources were detected at concentrations above the 90th percentile in the deeper soil vapor samples. Indoor air, sub-slab vapor and deeper soil vapor samples indicated four Non-MGP compounds were detected above the 90th percentile for each type of sample. Indan, indene and thiophene, which are often associated with MGP tar vapors, were not detected in any of the air or vapor samples collected.

SECTION 4

EXPOSURE ASSESSMENT

Information collected during the Site Characterization has been used to qualitatively assess potential exposure pathways for gasholder-related compounds detected in site soils, groundwater and soil vapor. The Former Greenburgh Holder Station Site is located in a highly urbanized area, and the site is zoned for commercial use. A substation, gas regulator station, and BMW dealership occupy the area over the former gasholder station. Accordingly, the current surface at the Site is largely covered by concrete, asphalt, and buildings.

Below-grade MGP structure remnants are still present at the Site. However, no visual impacts (NAPL, coal tar, staining) were noted at any of the sampling locations at the Site. Results from subsurface soil samples indicate the presence of one VOC and five PAHs at concentrations above the individual USCOs. However, the highest total VOC and SVOC concentrations noted during the Site Characterization or LSI were 0.266 mg/kg and 8.28 mg/kg, respectively. The individual exceedances of the USCOs were detected at depths ranging from 5 to 9 feet bgs. Each of the three sampling locations where the exceedances were detected are located in paved parking areas. Therefore, these materials may be encountered during maintenance activities (e.g. utility work). However, it is unlikely that these materials would be encountered during day-to-day operations at the site.

No VOCs were detected in groundwater samples collected during the Site Characterization or LSI at concentrations exceeding the Class GA GWQS and guidance values. Only one SVOC (pentachlorophenol) was detected at a concentration exceeding its Class GA GWQS. Pentachlorophenol is not a typical gasholder-related compound. Groundwater at the Site is currently not used for a potable water source and there are not plans for future use of potable or commercial/industrial groundwater at the Site.

As documented in Appendix B, the absence of indan, indene, and thiophene, which are often associated with MGP tar vapors, supports the conclusion that vapor intrusion of MGP-related VOCs is not evident. VOCs detected above the 90th percentile of background indoor air may be due to the use/presence of various common pesticides, products noted during the chemical inventory in the storage room at the Con Edison facility, painting of one of the rooms, or the nearby dry cleaning operation. Based on NYSDOH Guidance (NYSDOH, 2006) the sub-slab and indoor air concentrations of PCE detected during the Site Characterization warrant no further action.

Surface water and sediment are not present at the site. The un-named creek that runs along the southwest property boundary is conveyed through culverts, under a paved area, and does not appear have contact with site soils or groundwater.

SECTION 5

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions have been made based on the results of the Site Characterization presented herein:

- Remnants of the former gasholder structure and associated equipment are present on the Con Edison property. However, no gasholder-related impacts associated with these structures were identified.
- Potential gasholder-related impacts were not encountered in groundwater during the Site Characterization or the previous LSI.
- Potential gasholder-related VOCs were not encountered in site soil at concentrations exceeding USCOs during the Site Characterization or the LSI. In fact, VOCs were detected in only two of the 31 soil samples collected.
- SVOCs were detected in two soil samples at concentrations exceeding USCOs. However, total SVOC concentrations in these samples were low and the samples were collected from depths of 5 to 9 feet below a paved parking lot in a restricted portion of the Site. As discussed in Section 3.7.2, these exceedances are below, or only slightly exceed, the restricted use soil cleanup objectives.

As stated in Section 1, the purpose of the Site Characterization was to: (1) characterize and identify potential subsurface conditions that may pose a risk to human health and the environment; and (2) to ascertain the potential need for further investigation or remediation. The Site Characterization Study was successful in indentifying and characterizing subsurface conditions at the site. In addition, potential exposure pathways were assessed in Section 4 for gasholder-related compounds detected in site soils, groundwater, and soil vapor. No risks to human health and the environment were identified. Therefore, no further investigation or remedial measures are warranted at the former Greenburgh Holder Station Site.

SECTION 6

REFERENCES

Clayton, 2002. May 2002 and June 2002 reports on soil gas and outdoor/indoor air sampling.

JWC, 2002. *Limited Site Investigation*. Jacques Whitford Company, Inc. May 2002.

NYSDOH, 2006. *New York State Department of Health Guidance for Evaluating Soil Vapor Intrusion in the State of New York.* October, 2006.

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

NYSDEC, 2006. 6 NYCRR Part 375 Environmental Remediation Programs, New York State Department of Environmental Conservation, December 14, 2006.

Parsons, 2007. *Site Characterization Work Plan for the Former Greenburgh Holder Tank Site.* October 2007.

RETEC, 2003. (RETEC), 2003. *Historical Investigation Report – Former Greenburgh Station Holder Site (Site # V00572),* The RETEC Group, Inc. February 3, 2003.

USEPA, 1999. *United Stated Environmental Protection Agency CLP National Functional Guidelines for Organic Data Review,* USEPA, October 1999.

USEPA, 2004. *United Stated Environmental Protection Agency CLP National Functional Guidelines for Inorganic Data Review,* USEPA, October 2004.

TABLES

TABLE 1
SUMMARY OF SAMPLES
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Location	Sample ID	Sampling Depth (feet)	TCL VOCs	TCL SVOCs	Inorganics	Dissolved Metals
Soil Samples						
MW-7	MW-7 (11-13)	11-13	X	X	X	--
	MW-7 (19-21)	19-21	X	X	X	--
MW-8	MW-8 (7-9)	7-9	X	X	X	--
	MW-8 (11-13)	11-13	X	X	X	--
MW-9	MW-9 (7-9)	7-9	X	X	X	--
	MW-9 (29-31)	29-31	X	X	X	--
SB-7	SB-7 (7-9)	7-9	X	X	X	--
	SB-7 (21-23)	21-23	X	X	X	--
	SB-7 (210-230)[(1)]	21-23	X	X	X	--
SB-8	SB-8 (9-11)	9-11	X	X	X	--
	SB-8 (11-13)	11-13	X	X	X	--
SB-9	SB-9 (14-16)	14-16	X	X	X	--
	SB-9 (20-22)	20-22	X	X	X	--
SB-10	SB-10 (7-9)	7-9	X	X	X	--
	SB-10 (15-17)	15-17	X	X	X	--
SB-11	SB-11 (6-8)	6-8	X	X	X	--
	SB-11 (10-12)	10-12	X	X	X	--
	SB-11 (35-37)	35-37	X	X	X	--
TP-4	TP-4 (3)	3	X	X	X	--
	TP-4 (7.5)	7.5	X	X	X	--
TP-5	TP-5 (3)	3	X	X	X	--
	TP-5 (6)	6	X	X	X	--
TP-5B	TP- 5B (5)	5	X	X	X	--
	TP- 5B (6.5)	6.5	X	X	X	--
	TP-50B (6.5)[(1)]	6.5	X	X	X	--
TP-6	TP-6 (3)	3	X	X	X	--
TP-7	TP-7 (5)	5	X	X	X	--
TP-8	TP-8 (3)	3	X	X	X	--
	TP-8 (5)	5	X	X	X	--
TP-8A	TP- 8A(2-4)	2-4	X	X	X	--
	TP- 8A(8.5)B	8.5	X	X	X	--
Groundwater Samples						
TW-1	TW-1	--	X	X	X	--
TW-3	TW-3	--	X	X	X	--
TW-6	TW-6	--	X	X	X	X
	TW-600[(1)]	--	X	X	X	X
MW-7	MW-7	--	X	X	X	X
MW-8	MW-8	--	X	X	X	--
MW-9	MW-9	--	X	X	X	X
DT-1	DT-1	--	X	X	X	--

Notes
X: Analyzed
--: Not Analyzed
[(1)] Indicates a duplicate sample

TABLE 2
GROUNDWATER ELEVATION DATA
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Location	Measurement Date	Top of Casing	Depth to Water	Groundwater Elevation
TW-1	23-Apr-08	204.44	8.55	195.89
TW-3	23-Apr-08	206.30	7.43	198.87
TW-6	23-Apr-08	204.76	7.52	197.24
MW-7	23-Apr-08	209.13	8.84	200.29
MW-8	23-Apr-08	204.44	7.67	196.77
MW-9	23-Apr-08	204.52	5.70	198.82

Notes:

1) All results reported in feet above mean sea level.

TABLE 3
VALIDATED SUBSURFACE SOIL ANALYTICAL DATA - DETECTED COMPOUND SUMMARY
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Consolidated Edison Greenburgh, NY Validated Soil Analytical Data Detected Compound Summary		6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	MW-7 (11-13) Z2315-05 11-13' Chemtech Z2315 SOIL 4/8/2008 6/6/2008	MW-7 (19-21) Z2315-06 19-21' Chemtech Z2315 SOIL 4/8/2008 6/6/2008	MW-8 (7-9) Z2370-02 7-9' Chemtech Z2370 SOIL 4/9/2008 6/16/2008	MW-8 (11-13) Z2370-03 11-13' Chemtech Z2370 SOIL 4/9/2008 6/16/2008	MW-9 (7-9) Z2302-03 7-9' Chemtech Z2302 SOIL 4/7/2008 6/6/2008	MW-9 (29-31) Z2302-04 29-31' Chemtech Z2302 SOIL 4/7/2008 6/6/2008	SB-7 (7-9) Z2370-04 7-9' Chemtech Z2370 SOIL 4/9/2008 6/16/2008	SB-7 (21-23) Z2370-05 21-23' Chemtech Z2370 SOIL 4/9/2008 6/16/2008	Dup of SB-7 (7-9) SB-7 (210-230) Z2370-06 21-23' Chemtech Z2370 SOIL 4/9/2008 6/16/2008
CAS NO.	COMPOUND											
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon Disulfide	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	--	mg/Kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES											
100-52-7	Benzaldehyde	--	mg/Kg	ND	ND	ND	ND	0.39 J	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	--	mg/Kg	ND	ND	0.048 J	0.082 J	ND	ND	0.05 J	ND	ND
86-74-8	Carbazole	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	ND	ND	1.9 J	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	ND	ND	2.3	ND	ND	ND	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	ND	0.94 J	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	0.69 J	ND	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	ND	ND	1.7 J	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	ND	ND	ND	3.6	ND	ND	ND	ND
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	0.92 J	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	0.043 J	ND	1.6 J	ND	ND	ND	ND
129-00-0	Pyrene	100	mg/Kg	ND	ND	ND	ND	3.1	ND	ND	ND	ND
	Total PAHs	**--**	**mg/Kg**	**ND**	**ND**	**0.043**	**ND**	**18.37**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**--**	**mg/Kg**	**ND**	**ND**	**0.091**	**0.082**	**18.76**	**ND**	**0.05**	**ND**	**ND**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) R indicates a rejected value.
(6) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.

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GREENBURGH, NEW YORK

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CAS NO.	COMPOUND											
	INORGANICS											
7429-90-5	Aluminum	--	mg/Kg	6300	4970	5840	3540	5650	6710	8150	5490	5760
7440-36-0	Antimony	--	mg/Kg	0.885 J	0.752 J	ND	ND	1.7 J	1.58 J	ND	ND	ND
7440-38-2	Arsenic	13	mg/Kg	0.869	1.03	2.5	ND	1.69	ND	1.07	ND	0.547 J
7440-39-3	Barium	350	mg/Kg	68.5	46.8	43	31	48.4	78.5	57.3	60.8	56.9
7440-41-7	Beryllium	7.2	mg/Kg	ND	ND	0.145 J	0.09 J	ND	ND	0.277	0.158 J	0.166 J
7440-43-9	Cadmium	2.5	mg/Kg	ND	ND	0.496	0.231 J	ND	ND	0.434	0.331 J	0.38 J
7440-70-2	Calcium	--	mg/Kg	28100 J	18800 J	2610	211000	24100 J	27800 J	24700	30800	20900
7440-47-3	Chromium	--	mg/Kg	ND	ND	16.3	6.19	10.4	13.5	11.7	10.1	12.8
7440-48-4	Cobalt	--	mg/Kg	5.55	4.52	5.52	2.18	5.98 J	6.77 J	6.56	6.14	6.52
7440-50-8	Copper	50	mg/Kg	14.7	21.2	22.5	4.53	12.2	14.7	11.3	10.1	12
7439-89-6	Iron	--	mg/Kg	9590	7760	20700	5930	10900 J	11900 J	13700	10600	12400
7439-92-1	Lead	63	mg/Kg	2.97	2.37	13.2	3.67	4.07	2.86	6.85	3.3	3.63
7439-95-4	Magnesium	--	mg/Kg	16500 J	10700 J	3670	24300	10800 J	17000 J	17900	16600	13700
7439-96-5	Manganese	1600	mg/Kg	140	144	97.2	88	143	126	214	201	170
7439-97-6	Mercury	0.18	mg/Kg	ND	ND	0.008 J	ND	0.009 J	ND	0.012	ND	ND
7440-02-0	Nickel	30	mg/Kg	11.1	8.06	9.86	3.48	11.1 J	11.9 J	10.3	8.89	10.7
7440-09-7	Potassium	--	mg/Kg	3290 J	1820 J	1890	1740	1810 J	3420 J	1720	2650	2360
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	--	mg/Kg	115 J	204 J	112	65.8 J	154 J	158	89.5	329	120
7440-62-2	Vanadium	--	mg/Kg	16.6	15.2	24.3	9.05	15.4	19.7	18.6	15.4	18.3
7440-66-6	Zinc	109	mg/Kg	29.7	22.8	34.7 J	11.6 J	31.3 J	33 J	28.4 J	28.2 J	27.7 J
57-12-5	Cyanide	27	mg/Kg	ND	ND	1.11	ND	ND	ND	ND	ND	ND

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
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(4) J indicates an estimated concentration.
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CAS NO.	COMPOUND		UNITS:					
	VOLATILES							
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND
75-15-0	Carbon Disulfide	--	mg/Kg	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND
	Total VOCs	--	mg/Kg	**ND**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES							
100-52-7	Benzaldehyde	--	mg/Kg	ND	R	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	--	mg/Kg	ND	0.045 J	ND	ND	ND
86-74-8	Carbazole	--	mg/Kg	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	--	mg/Kg	ND	ND	ND	ND	ND
	PAHs							
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	ND	ND	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	ND	ND	ND	ND
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	--	mg/Kg	ND	ND	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	ND	ND	ND
129-00-0	Pyrene	100	mg/Kg	ND	ND	ND	ND	ND
	Total PAHs	**--**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**--**	**mg/Kg**	**ND**	**0.045**	**ND**	**ND**	**ND**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
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GREENBURGH, NEW YORK

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CAS NO.	COMPOUND							
	INORGANICS							
7429-90-5	Aluminum	--	mg/Kg	2770	5660	5890	15900	4190
7440-36-0	Antimony	--	mg/Kg	ND	ND	ND	1.98	0.278 J
7440-38-2	Arsenic	13	mg/Kg	ND	0.739 J	ND	ND	0.326 J
7440-39-3	Barium	350	mg/Kg	40.3	59.3	66.9	168	42.2
7440-41-7	Beryllium	7.2	mg/Kg	0.065 J	0.152 J	ND	ND	ND
7440-43-9	Cadmium	2.5	mg/Kg	0.159 J	0.391	0.334	1.63	ND
7440-70-2	Calcium	--	mg/Kg	5330	62800	99000 J	41100 J	28900 J
7440-47-3	Chromium	--	mg/Kg	7.27	13	11.2	33	ND
7440-48-4	Cobalt	--	mg/Kg	3.36	5.9	4.04	17.6	3.75
7440-50-8	Copper	50	mg/Kg	6.13	12.4	13 J	48.6 J	9.36
7439-89-6	Iron	--	mg/Kg	6680	13000	10300	27400	7190
7439-92-1	Lead	63	mg/Kg	1.76	3.2	3.11	4.47	2.87
7439-95-4	Magnesium	--	mg/Kg	3190	14400	43800 J	21400 J	18300 J
7439-96-5	Manganese	1600	mg/Kg	58.8	131	244	438	124
7439-97-6	Mercury	0.18	mg/Kg	ND	ND	ND	ND	ND
7440-02-0	Nickel	30	mg/Kg	4.93	9.06	8.29	32	7.83
7440-09-7	Potassium	--	mg/Kg	1590	2480	2750 J	7410 J	2090 J
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	ND	ND	ND
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND
7440-23-5	Sodium	--	mg/Kg	65.8 J	148	ND	ND	83.6 J
7440-62-2	Vanadium	--	mg/Kg	11.5	20.1	17.2	63.4	11.9
7440-66-6	Zinc	109	mg/Kg	13.7 J	21.4 J	21.2	66.2	20.8
57-12-5	Cyanide	27	mg/Kg	ND	ND	ND	ND	ND

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) R indicates a rejected value.
(6) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.

TABLE 3
VALIDATED SUBSURFACE SOIL ANALYTICAL DATA - DETECTED COMPOUND SUMMARY
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Consolidated Edison Greenburgh, NY Validated Soil Analytical Data Detected Compound Summary		6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	SB-10 (15-17) Z2315-04 15-17' Chemtech Z2315 SOIL 4/8/2008 6/6/2008	SB-11 (6-8) Z2702-06 6-8' Chemtech Z2702 SOIL 5/4/2008 6/19/2008	SB-11 (10-12) Z2702-07 10-12' Chemtech Z2702 SOIL 5/4/2008 6/19/2008	SB-11 (35-37) Z2702-08 35-37' Chemtech Z2702 SOIL 5/4/2008 6/19/2008	TP-4 (3) Z2129-02 3' Chemtech Z2129 SOIL 3/24/2008 6/6/2008	TP-4 (7.5) Z2129-01 7.5' Chemtech Z2129 SOIL 3/24/2008 6/6/2008	TP-5 (3) Z2129-04 3' Chemtech Z2129 SOIL 3/25/2008 6/6/2008	TP-5 (6) Z2129-03 6' Chemtech Z2129 SOIL 3/25/2008 6/6/2008
CAS NO.	COMPOUND										
	VOLATILES										
67-64-1	Acetone	0.05	mg/Kg	ND	0.12 J	ND	ND	ND	ND	ND	ND
75-15-0	Carbon Disulfide	--	mg/Kg	ND	0.02 J	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	0.007 J	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	0.02 J	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	0.019 J	ND	ND	0.0062 J	ND	ND	ND
	Total VOCs	--	mg/Kg	**ND**	**0.179**	**ND**	**ND**	**0.0132**	**ND**	**ND**	**ND**
	SEMIVOLATILES										
100-52-7	Benzaldehyde	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs										
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	0.04 J	ND	ND	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	0.067 J	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	0.064 J	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	0.081 J	ND	ND	ND	ND	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	0.041 J	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	0.063 J	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	0.41 J	0.17 J	ND	ND	ND	ND	ND
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	--	mg/Kg	ND	ND	0.049 J	ND	ND	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	0.04 J	ND	ND	ND	ND	0.079 J
85-01-8	Phenanthrene	100	mg/Kg	ND	0.5 J	0.14 J	ND	ND	ND	ND	ND
129-00-0	Pyrene	100	mg/Kg	ND	ND	0.12 J	ND	ND	ND	ND	ND
	Total PAHs	--	**mg/Kg**	**ND**	**0.91**	**0.875**	**ND**	**ND**	**ND**	**ND**	**0.079**
	Total SVOCs	--	**mg/Kg**	**ND**	**0.91**	**0.875**	**ND**	**ND**	**ND**	**ND**	**0.079**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) R indicates a rejected value.
(6) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.

TABLE 3
VALIDATED SUBSURFACE SOIL ANALYTICAL DATA - DETECTED COMPOUND SUMMARY
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Consolidated Edison Greenburgh, NY Validated Soil Analytical Data Detected Compound Summary		6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	SB-10 (15-17) Z2315-04 15-17' Chemtech Z2315 SOIL 4/8/2008 6/6/2008	SB-11 (6-8) Z2702-06 6-8' Chemtech Z2702 SOIL 5/4/2008 6/19/2008	SB-11 (10-12) Z2702-07 10-12' Chemtech Z2702 SOIL 5/4/2008 6/19/2008	SB-11 (35-37) Z2702-08 35-37' Chemtech Z2702 SOIL 5/4/2008 6/19/2008	TP-4 (3) Z2129-02 3' Chemtech Z2129 SOIL 3/24/2008 6/6/2008	TP-4 (7.5) Z2129-01 7.5' Chemtech Z2129 SOIL 3/24/2008 6/6/2008	TP-5 (3) Z2129-04 3' Chemtech Z2129 SOIL 3/25/2008 6/6/2008	TP-5 (6) Z2129-03 6' Chemtech Z2129 SOIL 3/25/2008 6/6/2008
CAS NO.	COMPOUND										
	INORGANICS										
7429-90-5	Aluminum	--	mg/Kg	5700	8530	6810	7320	7460 J	10000 J	19200 J	17300 J
7440-36-0	Antimony	--	mg/Kg	1.4 J	ND	ND	ND	ND	1.3 J	2.4	7.5
7440-38-2	Arsenic	13	mg/Kg	0.24 J	1.47	0.385 J	ND	0.51 J	2.2	1.7	1.4
7440-39-3	Barium	350	mg/Kg	63.1	67.1	58.5	76.3	32.3	63.8	169	144
7440-41-7	Beryllium	7.2	mg/Kg	ND	ND	ND	ND	0.29	0.38	0.56	0.58
7440-43-9	Cadmium	2.5	mg/Kg	ND	0.488	0.196 J	0.535	ND	1.1	0.75	1.2
7440-70-2	Calcium	--	mg/Kg	34200 J	8320 J	1310 J	24100 J	991	5030	20600	34300
7440-47-3	Chromium	--	mg/Kg	ND	14.6	12	18	11.7	13.9	31.9	30.3
7440-48-4	Cobalt	--	mg/Kg	4.98	6.49	5.02	8.27	5.3	6.6	20.1	17.9
7440-50-8	Copper	50	mg/Kg	22.5	21.6 J	10.2 J	21.8 J	11.5	20.9	35.9	39.6
7439-89-6	Iron	--	mg/Kg	8620	11400	9470	14400	11000 J	14900 J	26700 J	25200 J
7439-92-1	Lead	63	mg/Kg	8.07	40.4	3.28	3.34	14.6	475	22.5	122
7439-95-4	Magnesium	--	mg/Kg	20500 J	4290 J	2510 J	16000 J	2080	4270	16300	25100
7439-96-5	Manganese	1600	mg/Kg	159	125	78.5	163	74	114	416	304
7439-97-6	Mercury	0.18	mg/Kg	0.01 J	0.008 J	ND	ND	0.023	0.108	0.078	0.19
7440-02-0	Nickel	30	mg/Kg	9.74	11.9	10.4	14.5	8.9	10.6	26.4	20.5
7440-09-7	Potassium	--	mg/Kg	2960 J	1390 J	1470 J	4200 J	1120	1250	7590	7930
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	ND	ND	1.4	2.3	2.1	1.9
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	--	mg/Kg	215 J	85.7 J	ND	ND	ND	73.7 J	ND	391
7440-62-2	Vanadium	--	mg/Kg	15.4	21.5	17.9	24.6	19.2	22.5	60.5	52.6
7440-66-6	Zinc	109	mg/Kg	27.7	75.9	27.8	35.5	35	218	73.1	143
57-12-5	Cyanide	27	mg/Kg	ND	1.79	2.4	ND	ND	2.1	ND	28

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) R indicates a rejected value.
(6) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.

TABLE 3
VALIDATED SUBSURFACE SOIL ANALYTICAL DATA - DETECTED COMPOUND SUMMARY
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Consolidated Edison Greenburgh, NY Validated Soil Analytical Data Detected Compound Summary		6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	TP- 5B (5) Z2639-04 5' Chemtech Z2639 SOIL 4/29/2008 6/17/2008	TP- 5B (6.5) Z2639-03 6.5' Chemtech Z2639 SOIL 4/29/2008 6/17/2008	Dup of TP-5B (6.5) TP-50B (6.5) Z2639-05 6.5' Chemtech Z2639 SOIL 4/29/2008 6/17/2008	TP-6 (3) Z2075-04 3' Chemtech Z2075 SOIL 3/20/2008 6/6/2008	TP-7 (5) Z2075-01 5' Chemtech Z2075 SOIL 3/18/2008 6/6/2008	TP-8 (3) Z2075-03 3' Chemtech Z2075 SOIL 3/20/2008 6/6/2008	TP-8 (5) Z2075-02 5' Chemtech Z2075 SOIL 3/20/2008 6/6/2008	TP- 8A(2-4) Z2751-01 2-4' Chemtech Z2751 SOIL 5/7/2008 6/18/2008	TP- 8A(8.5)B Z2751-02 8.5' Chemtech Z2751 SOIL 5/7/2008 6/18/2008
CAS NO.	COMPOUND											
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon Disulfide	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	--	mg/Kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES											
100-52-7	Benzaldehyde	--	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	--	mg/Kg	0.079 J	ND	ND	ND	ND	0.079 J	ND	ND	0.063 J
86-74-8	Carbazole	--	mg/Kg	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND
132-64-9	Dibenzofuran	--	mg/Kg	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	0.48 J	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	0.057 J	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	0.86	0.052 J	0.12 J	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	ND	0.049 J	1.8 J	0.2 J	0.21 J	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	ND	0.059 J	1.6	0.19 J	0.19 J	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	ND	0.069 J	2.1	0.26 J	0.22 J	0.046 J	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	0.041 J	0.99	0.12 J	0.09 J	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	0.67	0.077 J	0.09 J	0.041 J	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	ND	0.069 J	1.6	0.21 J	0.22 J	0.048 J	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	ND	ND	0.12 J	4.3	0.47	0.63	ND	ND
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	0.43	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	1	0.1 J	0.093 J	ND	ND
91-57-6	2-Methylnaphthalene	--	mg/Kg	ND	ND	ND	ND	0.095 J	ND	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	0.047 J	0.18 J	ND	ND	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	ND	0.081 J	2.8 J	0.17 J	0.41	ND	ND
129-00-0	Pyrene	100	mg/Kg	ND	ND	ND	0.095 J	3 J	0.28 J	0.35 J	ND	ND
	Total PAHs	**--**	**mg/Kg**	**ND**	**ND**	**ND**	**0.63**	**22.212**	**2.129**	**2.623**	**0.135**	**ND**
	Total SVOCs	**--**	**mg/Kg**	**0.079**	**ND**	**ND**	**0.63**	**22.692**	**2.208**	**2.623**	**0.135**	**0.063**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) R indicates a rejected value.
(6) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.

TABLE 3
VALIDATED SUBSURFACE SOIL ANALYTICAL DATA - DETECTED COMPOUND SUMMARY
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Consolidated Edison Greenburgh, NY Validated Soil Analytical Data Detected Compound Summary		6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	TP- 5B (5) Z2639-04 5' Chemtech Z2639 SOIL 4/29/2008 6/17/2008	TP- 5B (6.5) Z2639-03 6.5' Chemtech Z2639 SOIL 4/29/2008 6/17/2008	Dup of TP-5B (6.5) TP-50B (6.5) Z2639-05 6.5' Chemtech Z2639 SOIL 4/29/2008 6/17/2008	TP-6 (3) Z2075-04 3' Chemtech Z2075 SOIL 3/20/2008 6/6/2008	TP-7 (5) Z2075-01 5' Chemtech Z2075 SOIL 3/18/2008 6/6/2008	TP-8 (3) Z2075-03 3' Chemtech Z2075 SOIL 3/20/2008 6/6/2008	TP-8 (5) Z2075-02 5' Chemtech Z2075 SOIL 3/20/2008 6/6/2008	TP- 8A(2-4) Z2751-01 2-4' Chemtech Z2751 SOIL 5/7/2008 6/18/2008	TP- 8A(8.5)B Z2751-02 8.5' Chemtech Z2751 SOIL 5/7/2008 6/18/2008
CAS NO.	COMPOUND											
	INORGANICS											
7429-90-5	Aluminum	--	mg/Kg	8260	12000	10700	13700	10600	9320	8670	7960	8420
7440-36-0	Antimony	--	mg/Kg	ND	0.854 J	0.598 J	ND	ND	ND	ND	0.679 J	2.7
7440-38-2	Arsenic	13	mg/Kg	2.22	1.03	1.41	2.98	3.62	2.32	2.27	4.2	2.34
7440-39-3	Barium	350	mg/Kg	46.5	67.5	60.1	89.7	106	73.1	52.8	42.6	56.8
7440-41-7	Beryllium	7.2	mg/Kg	ND	ND	ND	0.507	0.413	0.318	0.303	ND	ND
7440-43-9	Cadmium	2.5	mg/Kg	1.27	2.85	2.35	0.375 J	1.87	0.685 J	0.222 J	0.998	0.909
7440-70-2	Calcium	--	mg/Kg	970	2290	2080	18400	1590	1050	1040	2010 J	3000 J
7440-47-3	Chromium	--	mg/Kg	11.4	15	13.4	19.8	16.7	14.8	11.5	13.4 J	15.4 J
7440-48-4	Cobalt	--	mg/Kg	6.32	9.7	8.03	8.53	6.36	7.09	5.64	4.65	6.56
7440-50-8	Copper	50	mg/Kg	17.7	23	18.8	27.7	63.6	18	15.1	48.3	16.8
7439-89-6	Iron	--	mg/Kg	11000	13900	11700	17700 J	15100 J	15400 J	12500 J	11400 J	14600 J
7439-92-1	Lead	63	mg/Kg	20.8 J	52.8 J	59.8 J	300 J	864 J	111 J	90.8 J	207 J	29.1 J
7439-95-4	Magnesium	--	mg/Kg	2690	3990	3530	18600	3420	3610	2810	3150 J	3610 J
7439-96-5	Manganese	1600	mg/Kg	90.8 J	137 J	119 J	257 J	107 J	170 J	80.3 J	74.7 J	132 J
7439-97-6	Mercury	0.18	mg/Kg	0.043	0.012	0.03	0.033	0.735 J	0.287	0.133	0.112	0.014
7440-02-0	Nickel	30	mg/Kg	12.8	16.2	14.1	15.2	12.4	12.8	10.8	11.9	12.6
7440-09-7	Potassium	--	mg/Kg	1200 J	1530 J	1310 J	2740	1190	1860	1340	1160 J	2270 J
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	ND	ND	0.24 J	0.256 J	ND	ND	ND
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.719	ND
7440-23-5	Sodium	--	mg/Kg	157 J	281 J	335 J	268	307	160	150 J	496	238
7440-62-2	Vanadium	--	mg/Kg	17.3	22	18.8	30.5	20.6	19.7	18	18.4 J	23.4 J
7440-66-6	Zinc	109	mg/Kg	84.9	236	212	275 J	527 J	141 J	173 J	380 J	54.4 J
57-12-5	Cyanide	27	mg/Kg	ND	ND	1.12 J	3.03	ND	ND	ND	1.56 J	ND

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available.
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) R indicates a rejected value.
(6) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.

TABLE 4
VALIDATED GROUNDWATER ANALYTICAL DATA - DETECTED COMPOUND SUMMARY
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Consolidated Edison Greenburgh, NY Validated Groundwater Analytical Data Detected Compound Summary		NYSDEC Class GA Groundwater Standards/Guidance Values [1]	Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated: UNITS:	MW-7 Z2566-04 Chemtech/TAL Z2522/C8D250346 WATER 4/24/2008 6/17/2008	MW-8 Z2566-01 Chemtech/TAL Z2522/C8D250346 WATER 4/24/2008 6/17/2008	MW-9 Z2566-05 Chemtech/TAL Z2522/C8D250346 WATER 4/24/2008 6/17/2008	TW-1 Z2522-03 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	TW-3 Z2522-04 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	TW-6 Z2522-01 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	Dup of TW-6 TW-600 Z2522-02 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	DT-1 Z2566-06 Chemtech Z2566 WATER 4/24/2008 6/17/2008
CAS NO.	COMPOUND										
	VOLATILES										
67-64-1	Acetone	50 (G)	ug/L	ND	ND	34	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-Pentanone	--	ug/L	ND	ND	ND	ND	21 J	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	3.4 J	ND	ND	ND	ND	ND
	Total VOCs	**--**	**ug/L**	**ND**	**ND**	**37.4**	**ND**	**21**	**ND**	**ND**	**ND**
	SEMIVOLATILES										
100-52-7	Benzaldehyde	--	ug/L	ND	ND	4.9 J	R	R	R	R	4.8 J
91-57-6	2-Methylnaphthalene	--	ug/L	ND	ND	3.7 J	ND	ND	ND	ND	ND
91-20-3	Naphthalene	10 (G)	ug/L	ND	ND	1.7 J	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	1	ug/L	R	R	5.1 J	R	ND	ND	ND	ND
	Total SVOCs	**--**	**ug/L**	**ND**	**ND**	**15.4**	**ND**	**ND**	**ND**	**ND**	**4.8**

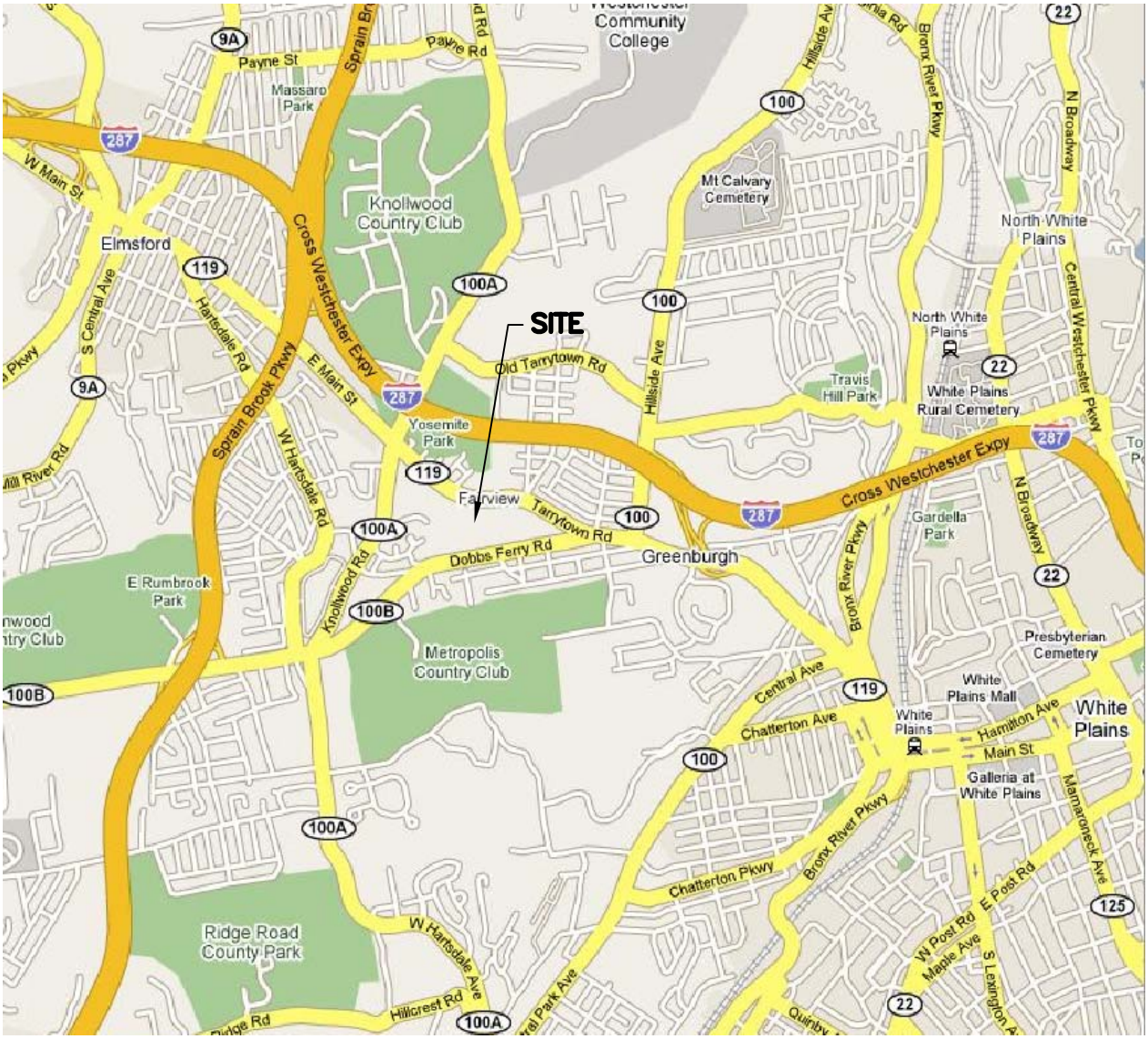
Notes:
(1) NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values (October 1998).
(2) -- indicates no standard or guidance value is available.
(3) (G) indicates guidance value.
(4) NA indicates compound was not analyzed for.
(5) ND indicates compound was not detected.
(6) J indicates an estimated concentration.
(7) R indicates result was rejected based on validation.
(8) Shaded values exceed NYSDEC Class GA Groundwater Standards and Guidance Values.

TABLE 4
VALIDATED GROUNDWATER ANALYTICAL DATA - DETECTED COMPOUND SUMMARY
FORMER GREENBURGH HOLDER STATION SITE
GREENBURGH, NEW YORK

Consolidated Edison Greenburgh, NY Validated Groundwater Analytical Data Detected Compound Summary		NYSDEC Class GA Groundwater Standards/Guidance Values [1]	Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated: UNITS:	MW-7 Z2566-04 Chemtech/TAL Z2522/C8D250346 WATER 4/24/2008 6/17/2008	MW-8 Z2566-01 Chemtech/TAL Z2522/C8D250346 WATER 4/24/2008 6/17/2008	MW-9 Z2566-05 Chemtech/TAL Z2522/C8D250346 WATER 4/24/2008 6/17/2008	TW-1 Z2522-03 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	TW-3 Z2522-04 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	TW-6 Z2522-01 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	Dup of TW-6 TW-600 Z2522-02 Chemtech/TAL Z2522/C8D250346 WATER 4/23/2008 6/16/2008	DT-1 Z2566-06 Chemtech Z2566 WATER 4/24/2008 6/17/2008
CAS NO.	COMPOUND										
	INORGANICS										
7429-90-5	Aluminum	--	ug/L	1550	ND	159	419	40700	41900	37400	266
7440-36-0	Antimony	3	ug/L	ND	ND	ND	ND	14.8 J	13.5 J	ND	ND
7440-38-2	Arsenic	25	ug/L	ND	ND	ND	ND	ND	11.9	13.4	ND
7440-39-3	Barium	1000	ug/L	72.2	267	282	304	460	659	604	644
7440-43-9	Cadmium	5	ug/L	ND	ND	ND	ND	ND	4.42 J	3.57 J	ND
7440-70-2	Calcium	--	ug/L	111000	91000	352000	180000	517000	236000	215000	37900
7440-47-3	Chromium	50	ug/L	3.42 J	ND	6.54	ND	54.8	214	193	1.52 J
7440-48-4	Cobalt	--	ug/L	ND	ND	ND	ND	29.8	68.2	62.8	3.06 J
7440-50-8	Copper	200	ug/L	5.72 J	ND	6.71 J	ND	70.1	149	135	8.67 J
7439-89-6	Iron	300	ug/L	2390	48.9 J	1480	1780	41700	76600	68900	6430
7439-92-1	Lead	25	ug/L	ND	ND	ND	ND	14.6	531	478	109
7439-95-4	Magnesium	35000 (G)	ug/L	40200	29100	16900	37400	94200	80000	73500	12000
7439-96-5	Manganese	300	ug/L	1420	1590	1080	2320	2960	5050	4810	23.6
7439-97-6	Mercury	0.7	ug/L	ND	ND	ND	ND	ND	0.34 J	0.27 J	ND
7440-02-0	Nickel	100	ug/L	ND	ND	7.16 J	ND	52.1	88.5	80.2	ND
7440-09-7	Potassium	--	ug/L	4690 J	5040 J	17300 J	7690 J	18000 J	26000 J	23700 J	1670 J
7440-22-4	Silver	50	ug/L	2.28 J	2.09 J	ND	ND	ND	ND	ND	2.01 J
7440-23-5	Sodium	20000	ug/L	167000	23300	63000	57900 J	31700 J	31400 J	31500 J	5960
7440-28-0	Thallium	0.5	ug/L	7.52 J	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	--	ug/L	ND	ND	ND	ND	76.9	116	104	ND
7440-66-6	Zinc	2000 (G)	ug/L	93.8	28.3	34	26.2	131	459	424	132
57-12-5	Cyanide	200	ug/L	ND	103	12	ND	ND	40 J	37 J	467
57-12-5A	Available Cyanide	--	ug/L	ND	22	ND	ND	ND	ND	ND	NA
	DISSOLVED METALS										
7429-90-5	Aluminum	--	ug/L	211	NA	ND	NA	NA	1010	1130	NA
7440-39-3	Barium	1000	ug/L	65.4	NA	174	NA	NA	113	115	NA
7440-70-2	Calcium	--	ug/L	120000	NA	214000	NA	NA	86300	87200	NA
7440-47-3	Chromium	50	ug/L	2.58 J	NA	ND	NA	NA	6.2	7.05	NA
7440-50-8	Copper	200	ug/L	3.81 J	NA	4.6 J	NA	NA	10.5	11.6	NA
7439-89-6	Iron	300	ug/L	431	NA	ND	NA	NA	1830	2080	NA
7439-92-1	Lead	25	ug/L	ND	NA	ND	NA	NA	18.2	18.3	NA
7439-95-4	Magnesium	35000 (G)	ug/L	41000	NA	ND	NA	NA	31700	32100	NA
7439-96-5	Manganese	300	ug/L	1390	NA	ND	NA	NA	223	241	NA
7439-97-6	Mercury	0.7	ug/L	ND	NA	ND	NA	NA	ND	0.07 J	NA
7440-09-7	Potassium	--	ug/L	4550 J	NA	15100 J	NA	NA	5820 J	5690 J	NA
7440-22-4	Silver	50	ug/L	3.91 J	NA	ND	NA	NA	3.88 J	3.82 J	NA
7440-23-5	Sodium	20000	ug/L	174000	NA	58500	NA	NA	31400 J	30800 J	NA
7440-62-2	Vanadium	--	ug/L	ND	NA	ND	NA	NA	ND	5.06 J	NA
7440-66-6	Zinc	2000 (G)	ug/L	97.7	NA	52.6	NA	NA	48.7	44	NA

Notes:
(1) NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values (October 1998).
(2) -- indicates no standard or guidance value is available.
(3) (G) indicates guidance value.
(4) NA indicates compound was not analyzed for.
(5) ND indicates compound was not detected.
(6) J indicates an estimated concentration.
(7) R indicates result was rejected based on validation.
(8) Shaded values exceed NYSDEC Class GA Groundwater Standards and Guidance Values.

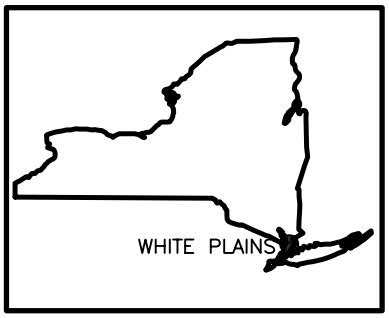
FIGURES



N

350 175 0 350 700

APPROX. SCALE: 1"=350'



QUADRANGLE LOCATION
NEW YORK

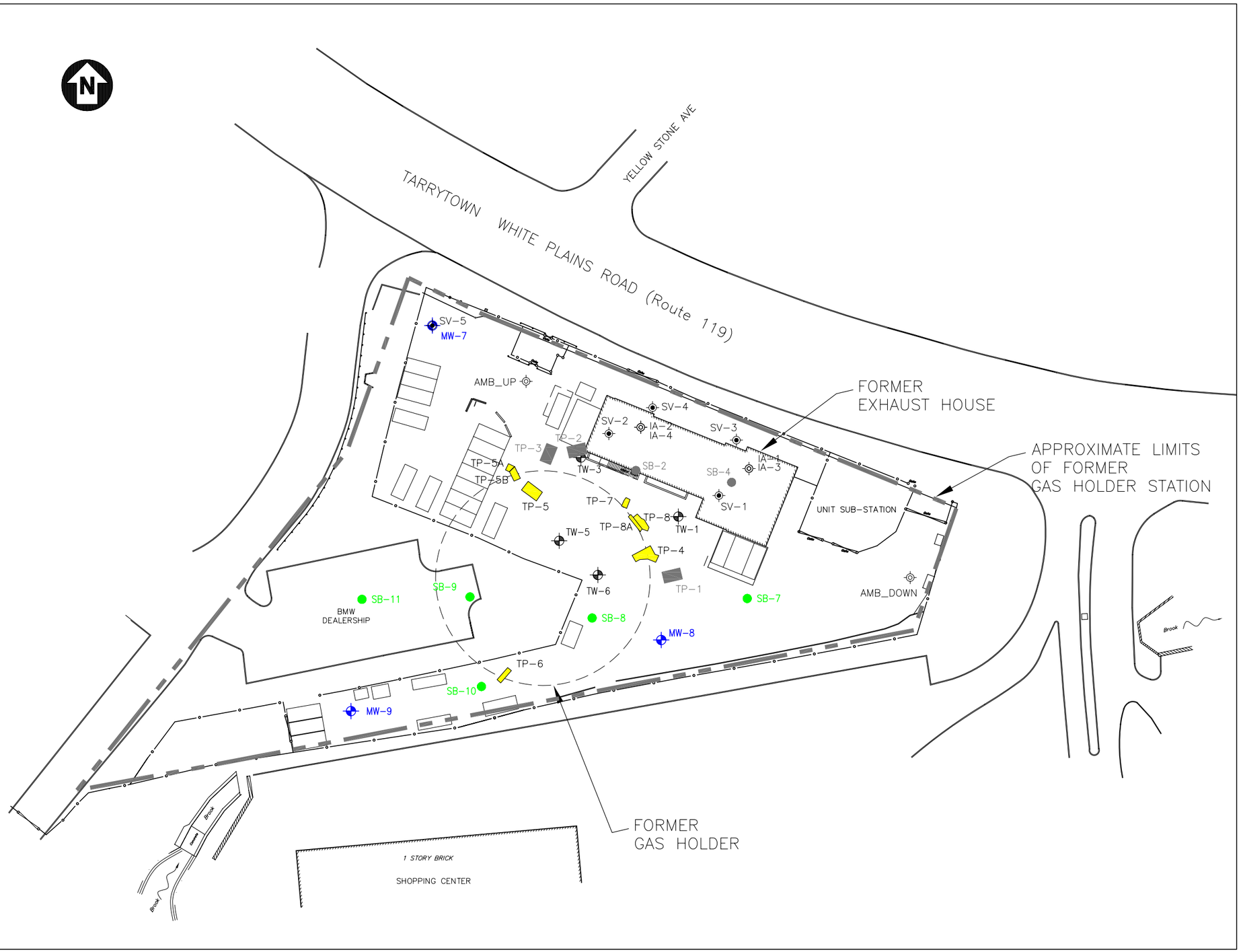
FIGURE 1

CONSOLIDATED EDISON COMPANY OF NEW YORK
TOWN OF GREENBURGH, NEW YORK
HOLDER STATION SITE

SITE LOCATION MAP

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\...CON_ED\443562\CAD\443562C001.DWG: 3/5/07: CLW



LEGEND:

- SB-4 — SOIL BORING LOCATION
- MW-2 — MONITORING WELL
- TP-3 — TEST PIT LOCATION
- SV-2 — SOIL VAPOR POINT
- IA-4 — INDOOR/AMBIENT AIR SAMPLE LOCATION
- CHAIN LINK FENCE

LIMITED SITE INVESTIGATION (2002)

- SB-4 — LSI SOIL BORING LOCATION
- TW-2 — LSI MONITORING WELL
- TP-3 — LSI TEST PIT LOCATION

NOTE: SOIL GAS SAMPLES WERE COLLECTED DURING THE LIMITED SITE INVESTIGATION AT ALL SOIL BORING AND MONITORING WELL LOCATIONS.

60 30 0 60 120

SCALE: 1"=60'

FILE NAME: P:\CONED\443562 – GREENBURGH\CAD\SITE CHARACT REPORT\443562SK001.DWG
PLOT DATE: 3/23/2009 11:28 AM PLOTTED BY: WINTERS, CHRIS

PARSONS
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LIVERPOOL, N.Y. 13088
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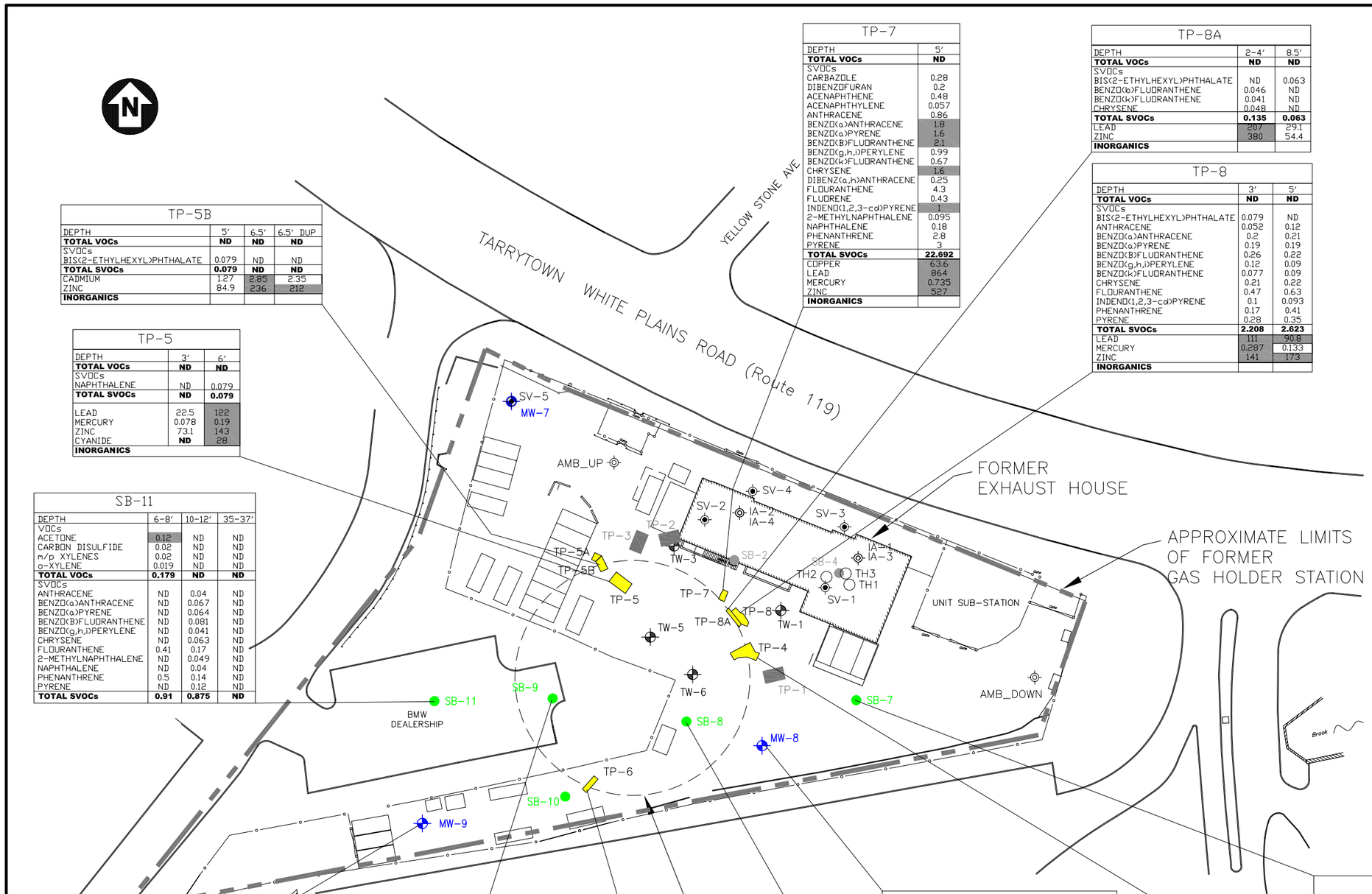
CONSOLIDATED EDISON COMPANY OF NEW YORK
TOWN OF GREENBURGH, NEW YORK
HOLDER STATION SITE

SAMPLE AND FORMER MGP STRUCTURE LOCATION MAP

FIGURE NO. 2



TP-7	
DEPTH	5′
TOTAL VOCs	**ND**
SVOCs	
CARBAZOLE	0.28
DIBENZOFURAN	0.2
ACENAPHTHENE	0.48
ACENAPHTHYLENE	0.057
ANTHRACENE	0.86
BENZO(a)ANTHRACENE	1.8
BENZO(a)PYRENE	1.6
BENZO(B)FLUORANTHENE	2.1
BENZO(g,h,i)PERYLENE	0.99
BENZO(k)FLUORANTHENE	0.67
CHRYSENE	1.6
DIBENZ(a,h)ANTHRACENE	0.25
FLOURANTHENE	4.3
FLUORENE	0.43
INDENO(1,2,3-cd)PYRENE	1
2-METHYLNAPHTHALENE	0.095
NAPHTHALENE	0.18
PHENANTHRENE	2.8
PYRENE	3
TOTAL SVOCs	**22.692**
COPPER	636
LEAD	864
MERCURY	0.735
ZINC	527
INORGANICS	

TP-8A		
DEPTH	2-4′	8.5′
TOTAL VOCs	**ND**	**ND**
SVOCs		
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.063
BENZO(b)FLUORANTHENE	0.046	ND
BENZO(k)FLUORANTHENE	0.041	ND
CHRYSENE	0.048	ND
TOTAL SVOCs	**0.135**	**0.063**
LEAD	207	29.1
ZINC	380	54.4
INORGANICS		

TP-8		
DEPTH	3′	5′
TOTAL VOCs	**ND**	**ND**
SVOCs		
BIS(2-ETHYLHEXYL)PHTHALATE	0.079	ND
ANTHRACENE	0.052	0.12
BENZO(a)ANTHRACENE	0.2	0.21
BENZO(a)PYRENE	0.19	0.19
BENZO(B)FLUORANTHENE	0.26	0.22
BENZO(g,h,i)PERYLENE	0.12	0.09
BENZO(k)FLUORANTHENE	0.077	0.09
CHRYSENE	0.21	0.22
FLOURANTHENE	0.47	0.63
INDENO(1,2,3-cd)PYRENE	0.1	0.093
PHENANTHRENE	0.17	0.41
PYRENE	0.28	0.35
TOTAL SVOCs	**2.208**	**2.623**
LEAD	111	20.8
MERCURY	0.287	0.133
ZINC	141	173
INORGANICS		

TP-5B			
DEPTH	5′	6.5′	6.5′ DUP
TOTAL VOCs	**ND**	**ND**	**ND**
SVOCs			
BIS(2-ETHYLHEXYL)PHTHALATE	0.079	ND	ND
TOTAL SVOCs	**0.079**	**ND**	**ND**
CADMIUM	1.27	2.85	2.35
ZINC	84.9	236	212
INORGANICS			

TP-5		
DEPTH	3′	6′
TOTAL VOCs	**ND**	**ND**
SVOCs		
NAPHTHALENE	ND	0.079
TOTAL SVOCs	**ND**	**0.079**
LEAD	22.5	122
MERCURY	0.078	0.19
ZINC	73.1	143
CYANIDE	**ND**	28
INORGANICS		

SB-11			
DEPTH	6-8′	10-12′	35-37′
VOCs			
ACETONE	0.12	ND	ND
CARBON DISULFIDE	0.02	ND	ND
m/p XYLENES	0.02	ND	ND
o-XYLENE	0.019	ND	ND
TOTAL VOCs	**0.179**	**ND**	**ND**
SVOCs			
ANTHRACENE	ND	0.04	ND
BENZO(a)ANTHRACENE	ND	0.067	ND
BENZO(a)PYRENE	ND	0.064	ND
BENZO(B)FLUORANTHENE	ND	0.081	ND
BENZO(g,h,i)PERYLENE	ND	0.041	ND
CHRYSENE	ND	0.063	ND
FLOURANTHENE	0.41	0.17	ND
2-METHYLNAPHTHALENE	ND	0.049	ND
NAPHTHALENE	ND	0.04	ND
PHENANTHRENE	0.5	0.14	ND
PYRENE	ND	0.12	ND
TOTAL SVOCs	**0.91**	**0.875**	**ND**

MW-9		
DEPTH	7-9′	29-31′
TOTAL VOCs	**ND**	**ND**
SVOCs		
BENZALDEHYDE	0.39	ND
ANTHRACENE	0.32	ND
BENZO(a)ANTHRACENE	1.9	ND
BENZO(a)PYRENE	1.3	ND
BENZO(B)FLUORANTHENE	2.3	ND
BENZO(g,h,i)PERYLENE	0.94	ND
BENZO(k)FLUORANTHENE	0.69	ND
CHRYSENE	1.7	ND
FLOURANTHENE	3.6	ND
INDENO(1,2,3-cd)PYRENE	0.92	ND
PHENANTHRENE	1.6	ND
PYRENE	3.1	ND
TOTAL SVOCs	**18.76**	**ND**

SB-9		
DEPTH	14-16′	20-22′
NICKEL	8.29	32
INORGANICS		

TP-6	
DEPTH	3′
TOTAL VOCs	**ND**
SVOCs	
BENZO(a)ANTHRACENE	0.049
BENZO(a)PYRENE	0.059
BENZO(B)FLUORANTHENE	0.069
BENZO(g,h,i)PERYLENE	0.041
CHRYSENE	0.069
FLOURANTHENE	0.12
NAPHTHALENE	0.047
PHENANTHRENE	0.081
PYRENE	0.095
TOTAL SVOCs	**0.63**
LEAD	300
ZINC	275
INORGANICS	

SB-8		
DEPTH	9-11′	11-13′
TOTAL VOCs	**ND**	**ND**
SVOCs		
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.045
TOTAL SVOCs	**ND**	**0.045**

MW-8		
DEPTH	7-9′	11-13′
TOTAL VOCs	**ND**	**ND**
SVOCs		
BIS(2-ETHYLHEXYL)PHTHALATE	0.048	0.082
PHENANTHRENE	0.043	ND
TOTAL SVOCs	**0.091**	**0.082**

SB-7			
DEPTH	7-9′	21-23′	21-23′ DUP
TOTAL VOCs	**ND**	**ND**	**ND**
SVOCs			
BIS(2-ETHYLHEXYL)PHTHALATE	0.05	ND	ND
TOTAL SVOCs	**0.05**	**ND**	**ND**

TP-4		
DEPTH	3′	7.5′
ETHYL BENZENE	0.007	ND
o-XYLENE	0.0062	ND
TOTAL VOCs	**0.0132**	**ND**
TOTAL SVOCs	**ND**	**ND**
LEAD	14.6	475
ZINC	35	218
INORGANICS		

LEGEND:

- SB-4 ● SOIL BORING LOCATION
- MW-2 ⊕ MONITORING WELL
- TP-3 ▬ TEST PIT LOCATION
- SV-2 ⊙ SOIL VAPOR POINT
- IA-4 ⊙ INDOOR/AMBIENT AIR SAMPLE LOCATION
- CHAIN LINK FENCE
- DT-1 DRIP TANK

NOTES:

1) ALL CONCENTRATIONS ARE IN PARTS PER MILLION (ppm).

2) SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.

3) ND – NOT DETECTED

4) ONLY METALS DETECTED ABOVE PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES ARE SHOWN.

5) NEITHER VOCs OR SVOCs WERE DETECTED IN SUBSURFACE SOIL SAMPLES COLLECTED FROM MW-7, SB-9 AND SB-10.

6) INORGANICS WERE NOT DETECTED ABOVE PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES IN SOIL SAMPLES COLLECTED FROM MW-7, MW-8, MW-9, SB-7, SB-8, SB-10 AND SB-11.

LIMITED SITE INVESTIGATION (LSI) (2002)

- SB-4 ● LSI SOIL BORING LOCATION
- TW-5 ⊕ LSI TEMPORARY WELL
- TP-3 ▬ LSI TEST PIT LOCATION

NOTE: SOIL GAS SAMPLES WERE COLLECTED DURING THE LIMITED SITE INVESTIGATION AT ALL SOIL BORING AND MONITORING WELL LOCATIONS.

60 30 0 60 120

SCALE: 1"=60'

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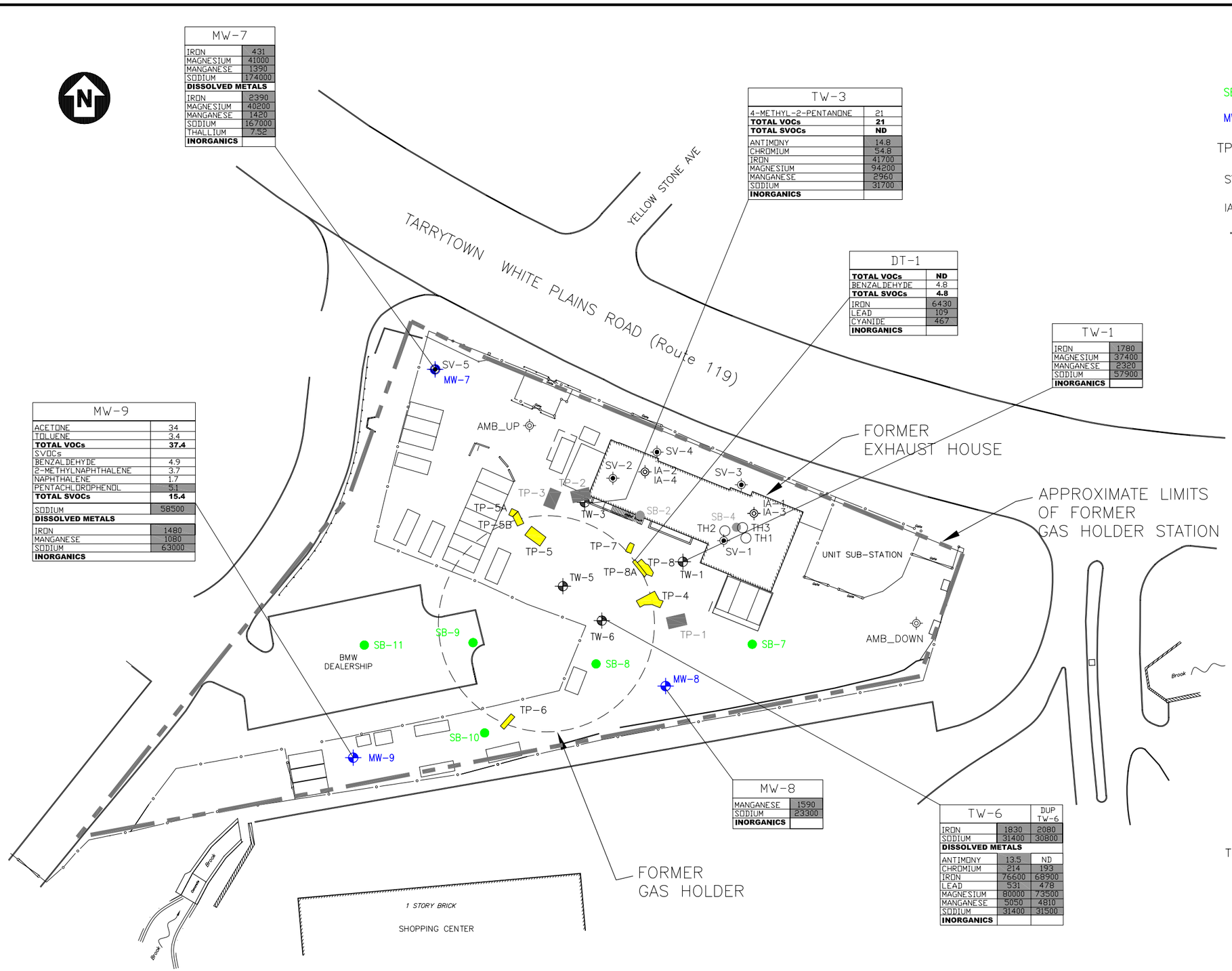
CONSOLIDATED EDISON COMPANY OF NEW YORK
TOWN OF GREENBURGH, NEW YORK
HOLDER STATION SITE

SUMMARY OF VOCs, SVOCs AND METALS IN SUBSURFACE SOIL

FIGURE NO. 3

FILE NAME: P:\CONED\443562 – GREENBURGH\CAD\SITE CHARACT REPORT\443562SK008.DWG
PLOT DATE: 3/23/2009 11:17 AM PLOTTED BY: WINTERS, CHRIS



LEGEND:

- SB-4 ● SOIL BORING LOCATION
- MW-2 ⊕ MONITORING WELL
- TP-3 ▬ TEST PIT LOCATION
- SV-2 ⊙ SOIL VAPOR POINT
- IA-4 ⊙ INDOOR/AMBIENT AIR SAMPLE LOCATION
- CHAIN LINK FENCE
- DT-1 DRIP TANK

NOTES:

1) ALL CONCENTRATIONS ARE IN PARTS PER BILLION (ppb).

2) SHADED VALUES EXCEED NYSDEC GROUNDWATER QUALITY STANDARDS OR GUIDANCE VALUES (TOGS 1.1.1).

3) ND–NOT DETECTED

4) VOCs AND SVOCs WERE NOT DETECTED IN GROUNDWATER SAMPLES COLLECTED FROM MW-7, MW-8, TW-1, AND TW-6.

5) A GROUNDWATER SAMPLE WAS NOT COLLECTED FROM TW-5. MONITORING WELL DID NOT RECHARGE FOLLOWING PURGING.

6) SAMPLE (DT-1) WAS COLLECTED FROM WATER CONTAINED IN THE TANK OBSERVED IN TEST PIT TP-8A.

7) ONLY METALS DETECTED ABOVE NYSDEC GROUNDWATER QUALITY STANDARDS OR GUIDANCE VALUES (TOGS 1.1.1) ARE SHOWN.

LIMITED SITE INVESTIGATION (LSI) (2002)

- SB-4 ● LSI SOIL BORING LOCATION
- TW-5 ⊕ LSI TEMPORARY WELL
- TP-3 ▬ LSI TEST PIT LOCATION

NOTE: SOIL GAS SAMPLES WERE COLLECTED DURING THE LIMITED SITE INVESTIGATION AT ALL SOIL BORING AND MONITORING WELL LOCATIONS.

FILE NAME: P:\CONED\443562 – GREENBURGH\CAD\SITE CHARACT REPORT\443562SK009.DWG
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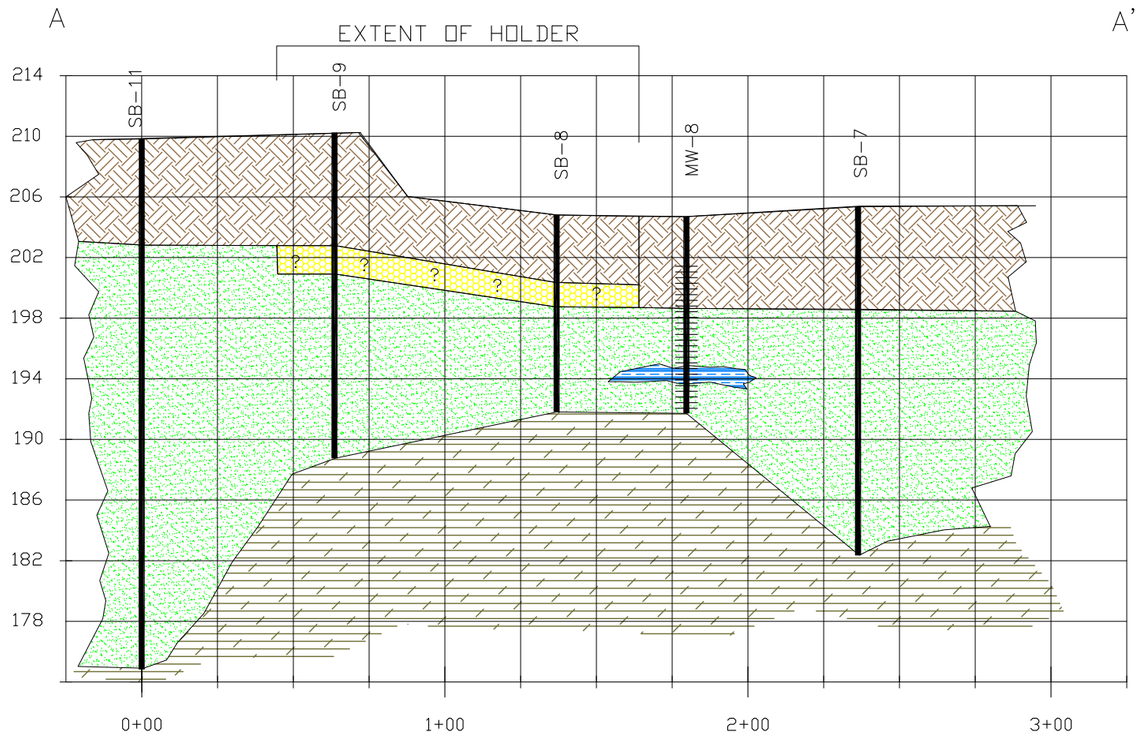
CONSOLIDATED EDISON COMPANY OF NEW YORK
TOWN OF GREENBURGH, NEW YORK
HOLDER STATION SITE

SUMMARY OF VOCs, SVOCs & METALS IN GROUNDWATER

FIGURE NO. 4

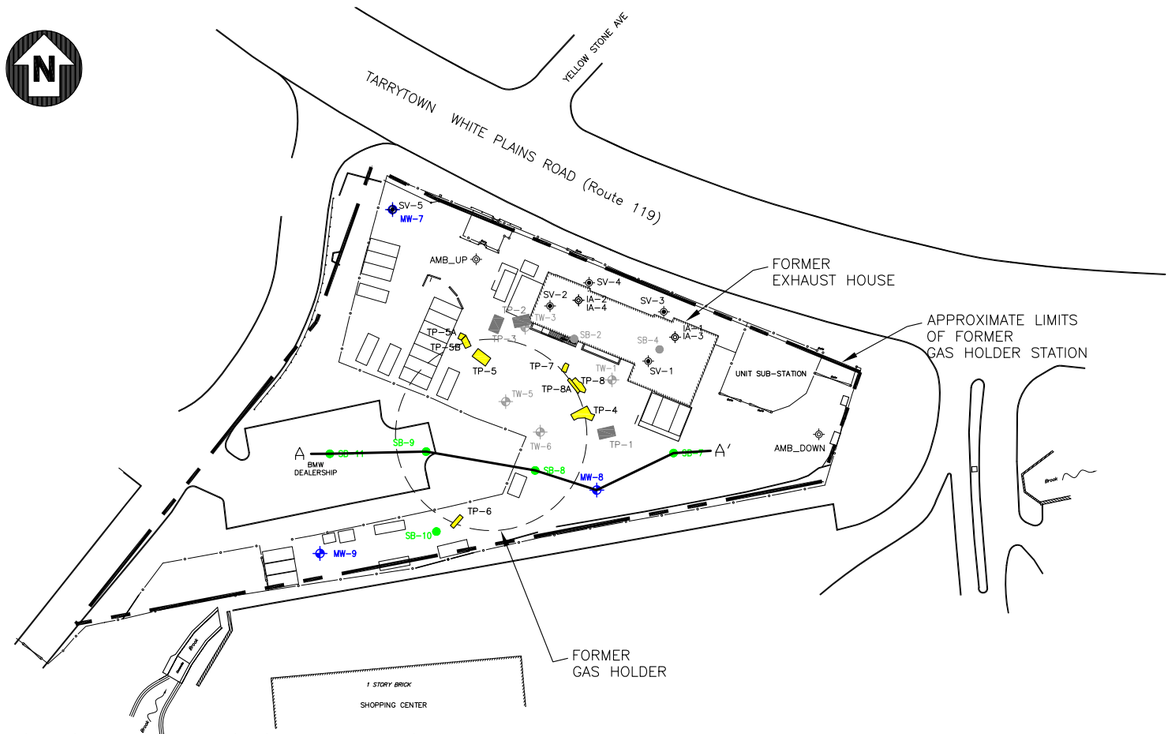


LEGEND:

- FILL (SAND, GRAVEL, BRICK, CONCRETE)
- SILT
- SAND
- SILT/CLAY
- SUSPECTED BEDROCK
- SUSPECTED HOLDER BOTTOM
- VISIBLE NAPL OR SOLIDIFIED COAL TAR
- ELEVATION OF WATER TABLE
- WELL SCREEN FOR MONITORING WELL
- SOIL BORING

NOTES:
1) ELEVATIONS BASED ON NAVD88.

2) NO VISIBLE NAPL, COAL TAR, OR STAINING WAS OBSERVED.



10 5 0 10 20

SCALE: 1"=10'

VERTICAL SCALE

50 25 0 50 100

SCALE: 1"=50'

HORIZONTAL SCALE

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290 ELWOOD DAVIS ROAD
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LIVERPOOL, N.Y. 13088
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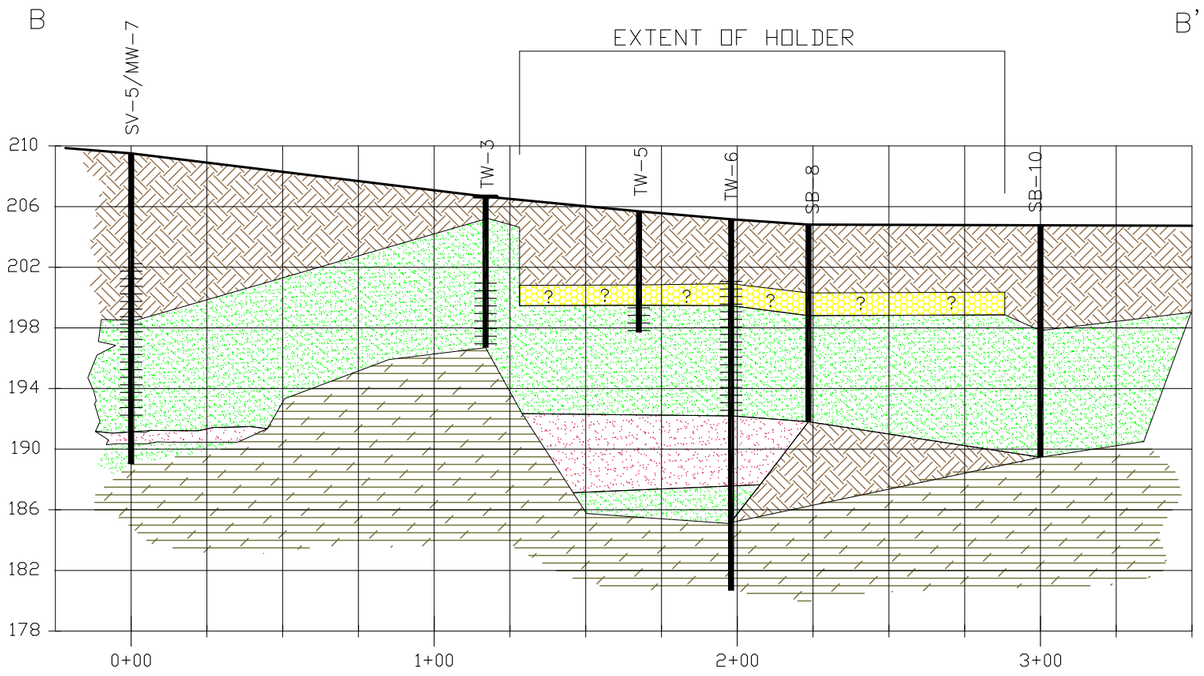
FAX: (315) 451-9570

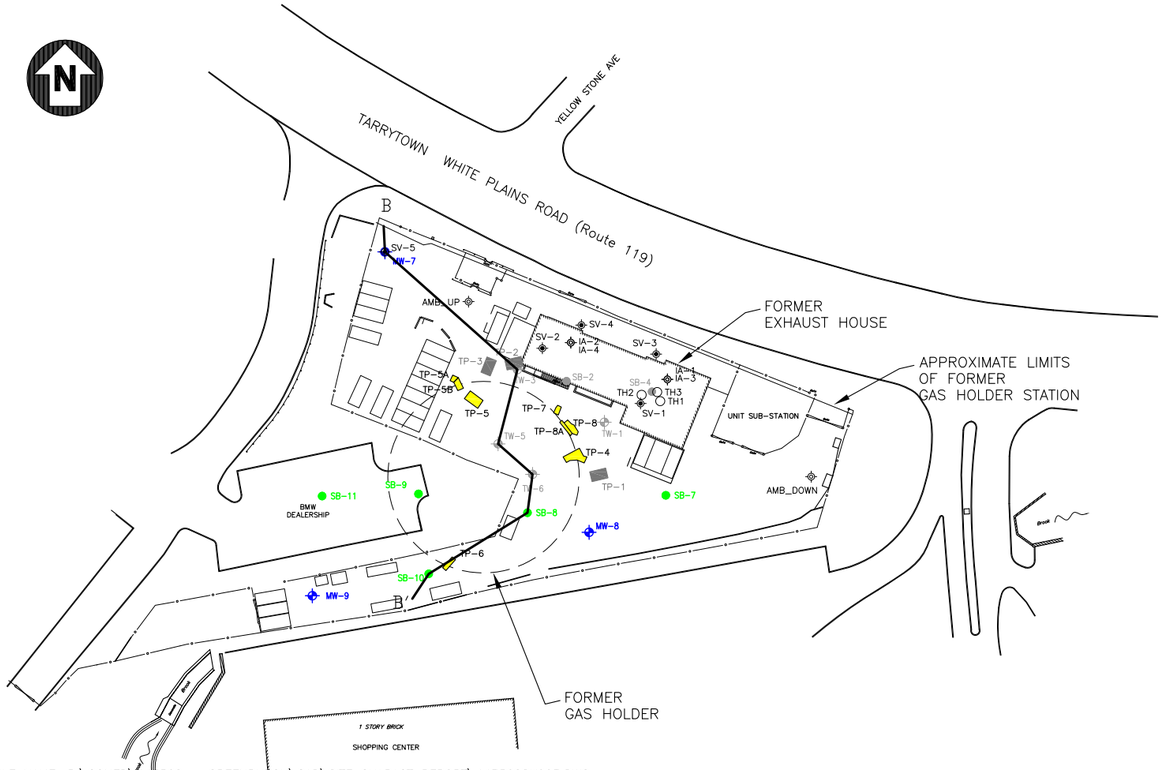
Con Edison

CONSOLIDATED EDISON COMPANY OF NEW YORK
TOWN OF GREENBURGH, NEW YORK
HOLDER STATION SITE

CROSS SECTION A-A'

FIGURE NO. 5





LEGEND:

- FILL (SAND, GRAVEL, BRICK, CONCRETE)
- SILT
- SAND
- SILT/CLAY
- SUSPECTED BEDROCK
- SUSPECTED HOLDER BOTTOM
- VISIBLE NAPL OR SOLIDIFIED COAL TAR
- ELEVATION OF WATER TABLE
- WELL SCREEN FOR MONITORING WELL
- SOIL BORING

NOTES:
1) ELEVATIONS BASED ON NAVD88.

2) NO VISIBLE NAPL, COAL TAR, OR STAINING WAS OBSERVED.

10 5 0 10 20

SCALE: 1"=10'

VERTICAL SCALE

50 25 0 50 100

SCALE: 1"=50'

HORIZONTAL SCALE

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290 ELWOOD DAVIS ROAD
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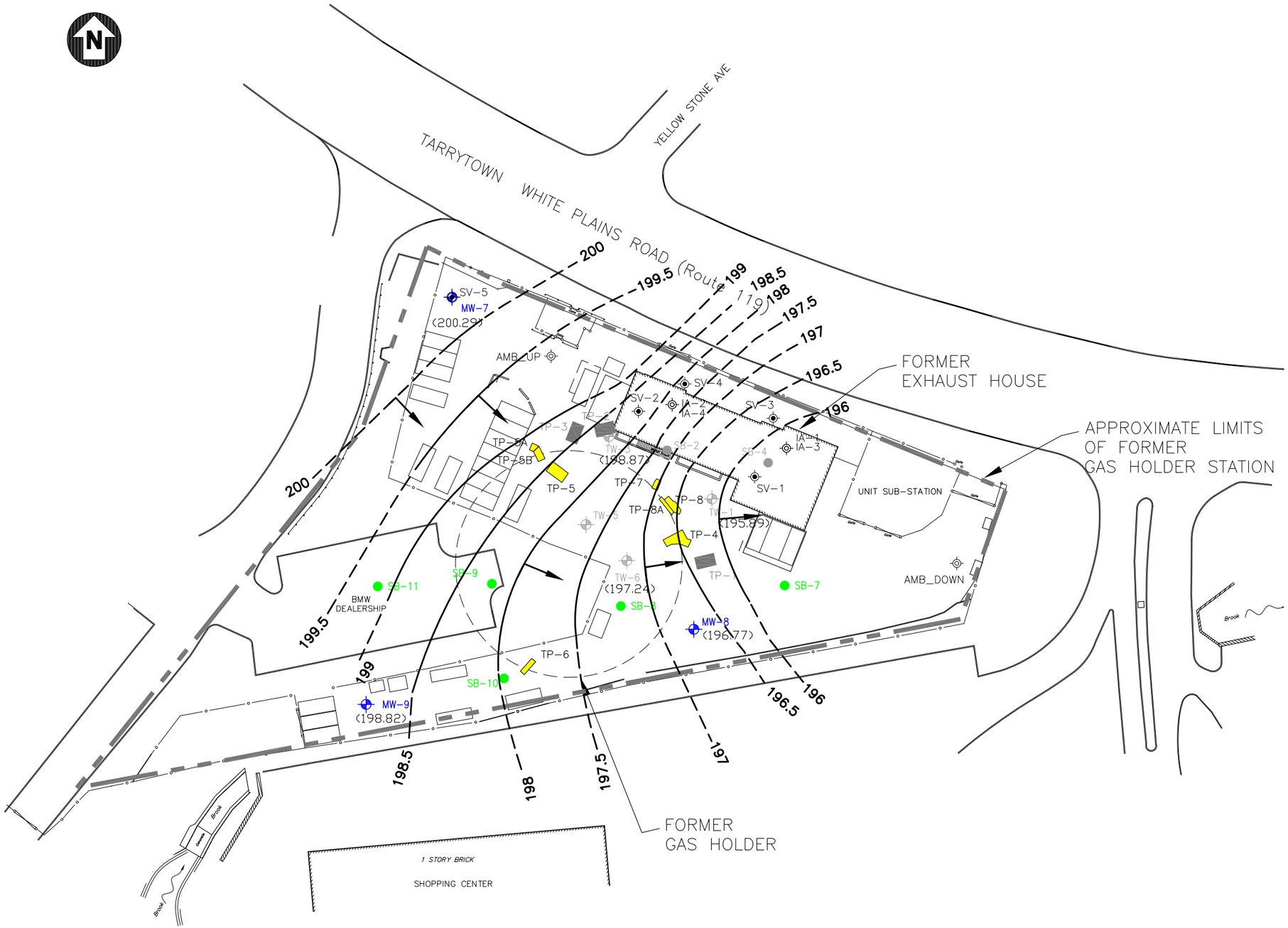
CONSOLIDATED EDISON COMPANY OF NEW YORK
TOWN OF GREENBURGH, NEW YORK
HOLDER STATION SITE

CROSS SECTION B-B'

FIGURE NO. 6



LEGEND:

- SB-4 ● SOIL BORING LOCATION
- MW-2 ⊕ MONITORING WELL
- TP-3 ▬ TEST PIT LOCATION
- SV-2 ⊕ SOIL VAPOR POINT
- IA-4 ⊚ INDOOR/AMBIENT AIR SAMPLE LOCATION
- ·—·—· CHAIN LINK FENCE
- (196.77) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (NAVD88) BASED ON 4/23/08 WATER LEVEL MEASUREMENTS
- ——— GROUNDWATER ELEVATION CONTOUR
- - - - - (DASHED WHERE INFERRED)
- ←— GROUNDWATER FLOW DIRECTION

NOTES:
1) GROUNDWATER ELEVATION DATA COULD NOT BE COLLECTED FROM TW-5. LOCATION WAS COVERED BY SUBSTATION EQUIPMENT.

LIMITED SITE INVESTIGATION (LSI) (2002)

- SB-4 ● LSI SOIL BORING LOCATION
- TW-5 ⊕ LSI MONITORING WELL
- TP-3 ▬ LSI TEST PIT LOCATION

NOTE: SOIL GAS SAMPLES WERE COLLECTED DURING THE LIMITED SITE INVESTIGATION AT ALL SOIL BORING AND MONITORING WELL LOCATIONS.

60 30 0 60 120

SCALE: 1"=60'

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GROUNDWATER CONTOUR MAP

FIGURE NO. 7