REMEDIAL ACTION WORK PLAN

FOR THE

EAST 138TH STREET WORKS FORMER MGP SITE

SITE # V00551

BRONX, NEW YORK

Prepared For

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
31-01 20TH AVENUE – BUILDING 136
ASTORIA, NEW YORK 11105

Prepared By

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Engineering Certification

I, Allen Zgaljardic, certify that I am currently a NYS registered professional engineer and that this Remedial Action Work Plan for the East 138th Street Works Former Manufactured Gas Plant Site (Site #V00551) 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).

Respectfully submitted,

URS Corporation

Allen Zgaljardic, PE Date
New York State Licensed Professional Engineer
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LIST OF ACRONYMS AND ABBREVIATIONS

aka	also known as
amsl	above mean sea level
BCP	Brownfield Cleanup Program
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylenes
CC	coal carbonization
cf	cubic feet
CO	Certificate of Occupancy
Con Edison	Consolidated Edison Company of New York, Inc.
CPCs	contaminants of potential concern
CVOCs	chlorinate volatile organic compounds
CWG	carbureted water gas
DCE	dichloroethene
DER	Division of Environmental Remediation
DNAPL	dense non-aqueous phase liquid
ECs	Engineering Controls
EE	Environmental Easement
ELAP	Environmental Laboratory Approval Program
Environ	Environ International Corporation
ESA	Environmental Site Assessment
GC/FID	gas chromatograph/flame ionization detector
GC/MS	gas chromatograph/mass spectrometer
GEI	GEI Consultants, Inc.
GIS	Geographic Information System
HASP	Health and Safety Plan
ICs	Institutional Controls
Inc.	Incorporated
L	liter
LNAPL	light non-aqueous phase liquid
MAHs	monocyclic aromatic hydrocarbons
mg/kg	milligrams per kilogram (parts per million)
META	Meta Environmental, Inc.
MGP	manufactured gas plant
mL	milliliter
MW	monitoring well
MOSF	Major Oil Storage Facility
MTBE	Methyl tert-butyl ether
NYC	New York City
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OASIS	Open Access Space Information System
O&M	Operation and Maintenance
PAHs	polycyclic aromatic hydrocarbons
PCE	perchloroethene, aka tetrachloroethene or tetrachloroethylene or perchloroethylene

PID	photoionization detector
PRR	Periodic Review Report
QA/QC	quality assurance/quality control
RAOs	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
Roux	Roux Associates, Inc.
SC	Site Characterization
SCGs	standards, criteria and guidance
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SVOCs	semi-volatile organic compounds
TCE	trichloroethene, aka trichloroethylene
TOGS	Technical and Operational Guidance Series
µg/L	micrograms per liter (parts per billion)
URS	URS Corporation
UST	underground storage tank
VC	vinyl chloride
VCA	Voluntary Cleanup Agreement
VOCs	volatile organic compounds

1.0 INTRODUCTION

On behalf of Consolidated Edison Company of New York, Inc. (Con Edison), URS Corporation - New York (URS) presents to the New York State Department of Environmental Conservation (NYSDEC) this Remedial Action Work Plan (RAWP) for the East 138th Street Works Former Manufactured Gas Plant (MGP) Site, herein referred to as "the Site" (NYSDEC Site #V00551) located in the Bronx, Bronx County, New York (Figure 1-1). This RAWP provides specific details on the implementation of the proposed remedy to meet the remedial objectives in accordance with the NYSDEC's DER-10 Technical Guidance Document for Site Investigation and Remediation (NYSDEC, December 2010).

This RAWP is based upon a Site Characterization (SC) and Remedial Investigations (RI) conducted at the Site. The SC and RI fieldwork at the former MGP site was conducted pursuant to Voluntary Cleanup Agreement Index #D2-0003-0208 (VCA) between the NYSDEC and Con Edison. The project began as a SC investigation and evolved into separate projects: the East 138th Street Works SC Investigation and 295 Locust Avenue RI (Block 2598/Lot46). The 295 Locust Avenue RI became a priority in 2011 when there was a property ownership transfer and was subsequently managed under NYSDEC's Brownfield Cleanup Program (BCP Site #203053-05-12). The property at 295 Locust Avenue was investigated as a separate RI in 2011 and a RI report was finalized and submitted to NYSDEC in April 2012. An Environmental Easement (EE) for the 295 Locust Avenue site was filed and authorized by NYSDEC on February 22, 2014. In 2014, the NYSDEC requested that the East 138th Street Works SC be completed as a RI and finalized based upon the data and information gathered to date. With the exception of data obtained from the 295 Locust Avenue RI, data gathered as part of the former MGP site SC/RI are discussed and summarized herein. Investigation activities at the properties associated with the former MGP site were performed over a period of several years due to property access issues dating back to 2009. The SC and RI field investigation activities were conducted in conformance with the Site Characterization Investigation Work Plan (URS, March 2008) that was approved by the NYSDEC for the former MGP site. NYSDEC approved the *Remedial Investigation of the East 138th Street Works Site* (URS, 2016) on January 23, 2017 and requested that a RAWP be developed for the Site.

This RAWP includes Institutional Controls for portions of the former MGP and groundwater monitoring for portions of the Site. The proposed remedial actions presented are based on the current use of the properties that comprise the former MGP site, as well as the anticipated future use of the Site. All properties that comprise the former MGP site are currently used for commercial purposes. The proposed remedial actions provide protection of human health and the environment, and eliminate potential for

uncontrolled exposure to any remaining MGP-related contaminants. The RAWP is divided into 6 Sections as listed below:

- Section 1 – Introduction
- Section 2 – Site Description and History
- Section 3 – Summary of Remedial Investigation and Exposure Assessment
- Section 4 – Remedial Goals, Remedial Action Objectives, and Proposed Remedial Action
- Section 5 – Schedule
- Section 6 – References

2.0 SITE DESCRIPTION AND HISTORY

The former MGP site is located in an industrial area of the Port Morris section of the Bronx, New York (Figure 1-1). Figure 2-1 illustrates the buildings that presently occupy the properties and the approximate locations of the former MGP structures that were located on the respective parcels. For the purpose of the RAWP, the areas for which RAWP activities will be conducted include the sidewalk areas around the various parcels up to the nearest adjacent curb lines along Rose Feiss Boulevard, East 138th Street, East 139th Street, East 140th Street, and Locust Avenue. The Site is situated on approximately 12 acres and occupied several current-day city blocks between East 138th Street and East 141st Streets, east of the New York, New Haven and Hartford Railroad tracks, and west of the East River in the Port Morris neighborhood (Figures 1-1 and 2-1). The shoreline of the East River downgradient of the Site consists of a steel sheeting bulkhead. Figure 2-1 illustrates the former MGP structures and current site features.

The Site consists of eight parcels of land now occupied by commercial/industrial businesses, a bulk fuel terminal, and parking lots. The Site area is generally flat lying, at an average elevation of approximately 10 feet above mean sea level (amsl), but slopes gently towards the East River. The Site is zoned M3-1, a manufacturing district, designed to accommodate heavy industrial uses. No new residences or community facilities are permitted. Potable water in the Bronx is supplied by the New York City water system and there are no water supply wells reported within one mile of the Site. There are a number of businesses and commercial/industrial facilities that currently occupy the former MGP site area which are identified in the *Manufactured Gas Plant History Report* (GEI, 2003). The following sections describe the site operational and ownership history.

2.1 Adjoining Property Descriptions

The Site area is zoned M3-1, an industrial and manufacturing district, and current uses include commercial, manufacturing, and dry cleaning facilities. Land use in the surrounding area is predominantly industrial paper manufacturing, a marble importing facility, steel cutting facilities, the Major Oil Storage Facility (MOSF), dry cleaning facilities, and storage warehouses. The nearest residential area, according to New York City Geographic Information System (GIS) mapping is located near the corner of Locust Avenue and East 141st Street. The population of the Bronx is 1,385,108 according to the 2010 US Census.

2.2 Site History

A summary of the site history is provided below. In brief, the former MGP site was constructed between 1869 and 1879 and facilities associated with gas manufacturing were operated by Con Edison or its predecessor companies from 1869 to 1968. The summary information below was obtained from the *Manufactured Gas Plant History Report* (GEI, 2003).

Central Gas Lighting Company (formerly Westchester County Gas Lighting Company prior to 1875) initially constructed the East 138th Street Works between 1869 and 1879 on Block 2598, Lot 1. The former plant expanded operations into Block 2597, Lot 1 by the 1880s. In 1897, Central Gas Lighting Company changed its name to Central Union Gas Company, and was a subsidiary to Con Edison by 1910 and merged into Con Edison in 1936. From plant start up through 1891, plant operations generated gas using the coal gas process. In 1892, the plant expanded to include the carbureted water gas processes. Four below-grade gas holders were constructed with capacities between 75,000 and 2,630,000 cubic feet (cf). Manufactured gas was produced at the plant until 1932 when it was decommissioned in 1934/1935, when almost all of the MGP structures were removed. The former MGP site had a daily capacity of 8,000,000 cf.

A summary for each tax parcel is provided below. This information has been compiled from a review of Sanborn Maps, Bronx Building Department records, city directories, and chain-of-title searches. Records reviewed did not indicate whether buildings constructed after the MGP operated had basements and if subsurface materials were removed during post-MGP site development.

2.2.1 Block 2590, Lot 51

Bronx Building Department records indicate that Central Union Gas Company demolished all buildings on this lot circa 1934. No structures are shown on the 1935 and 1946 Sanborn Maps. It is unknown what this lot was used for from 1934 to 1946. Con Edison sold this lot in 1946, and according to Bronx Building Department records, a large factory building was constructed on the lot circa 1946. Bronx Building Department records and the 1951 Sanborn Map indicate the building was occupied by The Atlas Baby Carriage Company (Atlas) and a soap manufacturer, and that a 3,000-gallon underground storage tank (UST) was installed in 1947 (the location and contents of the tank is unknown). The building is visible on the 1954 aerial photograph. Bronx Building Department records indicate that in 1960, the building was still occupied by Atlas and also leased to Empire State Dry Cleaners and Launderers. The Bronx Building Department issued a certificate of occupancy (CO) in 1961 for building alterations for the manufacture of

baby carriages, a steam laundry, dry cleaning establishment, clothes storage, and office space. The 1968 through 1989 Sanborn Maps do not indicate the building use/occupant, and there were no listings for the lot in the EDR city directory report. The 1996 Sanborn Map indicates an automobile auction company as a building occupant. Automobile service businesses currently occupy the building. The 2016 owner of record is listed as Walcott Shoe LLC according to the New York City Open Accessible Space Information System (NYC OASIS).

2.2.2 Block 2591, Lot 46

The store house and office (former garage) building was demolished circa 1936. Con Edison sold this lot in 1937 to the Harlem Metal Corporation and it appears that the lot was operated as a scrap metal yard from 1937 to 1959. The 1946 and 1951 Sanborn Maps show the scrap metal yard with a few small buildings (labeled office, storage, and steel cutting) on the lot. The yard is visible on the 1954 photograph. The lot was sold in 1959 to the Jacklee Corporation, and a large commercial building was constructed in 1960. The building is visible on a 1966 aerial photograph. Bronx Building Department records and the 1968 through 1984 Sanborn Maps indicate Empire Liquor Corporation (warehouse and office) occupied the building from 1960 to the mid-1980s. The 1989 and 1996 Sanborn Maps show the building occupied by Paper Enterprises, Inc. A 1993 city directory listed Best Marketing Reps and Paper Corporation (party supplies) as the building occupant. A 2000 city directory listed Consolidated Paper Company, Paper Enterprises, and Peter Pak as building occupants. The 2016 owner of record is listed as Empire 850 LLC/Paper Enterprises, Inc. (NYC OASIS).

2.2.3 Block 2592, Lot 35

The storage buildings/sheds were removed from this lot circa 1934; no structures are shown on the 1935 and 1946 Sanborn Maps. Con Edison sold this lot to Walnut Avenue Realty Corporation in 1945. It is unknown what this lot was used for from 1935 to circa 1950. The 1951 Sanborn Map and 1954 aerial photograph show a commercial building occupied by Colonial Steel Corporation on the western portion of the lot. A gasoline UST is shown on the interior, southern side of the building. The building was added on to between 1954 and 1966, as the building in the 1966 aerial photograph covers the whole lot. The 1968 through 1996 Sanborn Maps show the building occupied by Colonial Steel. Colonial Steel continues to occupy the building. The 2016 owner of record is listed as LEGEIS Realty LLC (NYC OASIS).

2.2.4 Block 2597, Lot 1

Bronx Building Department records indicate that Central Union demolished all the buildings and structures on this lot circa 1934; no structures are shown on the 1935 and 1946 Sanborn Maps. Bronx Building Department records indicate that in 1937 Con Edison leased this lot (including an office and locker building) to Schiavone-Bonomo Corporation who used it as a junkyard. It is unknown how long this lot was used for a junkyard, or if there were other uses from 1934 to the late 1940s. Con Edison sold this lot in 1946 to the Petroleum Terminal Corporation. A bulk fuel oil terminal was constructed on this lot in the late 1940s. Large fuel oil tanks and small ancillary buildings were constructed on the southern two-thirds of this lot in the late 1940s. These mounded tanks are shown on the 1951 Sanborn Map and the 1954 aerial photograph. Fuel loading racks were constructed on the northern one-third of this lot sometime between 1954 and 1966. This lot continues to be operated as a bulk fuel oil terminal. The 2016 owner of record is listed as Sprague Operating Resources, LLC. (NYC OASIS).

2.2.5 Block 2598, Lot 1

Central Union Gas Company demolished/removed all structures on this lot circa 1934; no structures are shown on the 1935 and 1946 Sanborn Maps. It is unknown what this lot was used for from 1934 to 1950. Con Edison sold this lot in 1946. In 1947, the AS Beck Shoe Company, Inc. acquired the lot, and according to Bronx Building Department records, constructed a large commercial building on the lot in 1950. Two 5,000-gallon USTs were also installed when the building was constructed. The location of the two tanks is unknown. The 1951 and 1968 Sanborn Maps indicate the building was occupied by A.S. Beck and labeled "shoe warehouse". Bronx Building Department records indicate a CO was issued in 1977 for building alterations, and that the building would be used for a factory, woodworking shop, warehouse, shipping and receiving, parts assembly, and offices. Bronx Building Department records indicate that the two USTs were still located on the site in 1978. The 1978 through 1996 Sanborn Maps indicate the building as a warehouse. Murray Feiss Industries (light fixture manufacturers) occupied the building for a period of time, although it is unknown when they occupied it. A 2000 city directory lists Modem Tech Cleaners as a building occupant that year. A commercial cleaning business was observed to occupy the building during GEI's walkover (GEI, 2003). The 2016 owner of record is listed as 885 east 138th Street/Carnegie Hotel Cleaners, Ltd. (NYC OASIS).

2.2.6 Block 2598, Lot 46

Central Union Gas Company demolished/removed all MGP structures on the northern portion of this lot circa 1934, and Con Edison sold this lot in 1946. No structures or uses are shown on the 1935, 1946, and 1951 Sanborn Maps. No structures are shown on the 1954 aerial photograph. It is unknown what the northern portion of this lot was used for from 1934 to the mid- 1960s. Parked vehicles and a dispenser island canopy are visible on the northern portion of the lot on the 1966 aerial photograph. Aerial photographs and the 1968 through 1996 Sanborn Maps indicate that a filling station and parking area for vehicles and trucks were located on the northern portion of this lot. A building was constructed on the southern portion of this lot (not formerly owned/occupied by the MGP) between 1908 and 1935. 1935 through 1968 Sanborn Maps and city directories indicate this building was occupied by various businesses (building supplies, a private garage and repair business, a metal warehouse, woodworking, millwork, and motor freight business) until the early 1970s. The 1978 through 1996 Sanborn Maps and city directories indicate that Hertz Corporation Truck Rental occupied the building from the early 1970s to the late 1990s. This building was demolished in the late 1990s. A large industrial building was constructed circa 2000 on the entire lot, which was occupied by Murray Feiss Industries, and was recently sold. The 2016 owner of record is listed as BPA North LLC/295 Locust Associates (NYC OASIS).

2.2.7 Block 2598, Lot 62

No structures are shown on the 1935 and 1946 Sanborn Map. It is unknown what this lot was used for from circa 1934 to 1950. Con Edison sold this lot in 1945. A small building labeled office is shown on the center of the lot on the 1951 Sanborn Map. According to a 1954 aerial photograph and the 1968 Sanborn Map, a garage building was constructed in 1954 on the entire lot. City directories indicate this building was occupied by a garage business in the 1960s. Service System Corporation was listed as occupying the building in 1976. Directories and deed information indicates that Steiner Egg Noodle Co./Steiner Foods occupied the building from 1973 to the 1993. It is unknown what this building was used for from the 1993 to 2001. A machine shop and welding shop currently occupy the building. The 2016 owner of record is listed as Walnut Realty Associates/ANDA Realty LLC (NYC OASIS).

2.2.8 Block 2598, Lot 66

No structures are shown on the 1935 Sanborn Map. It is unknown what this lot was used for from circa 1934 to 1946. A storage building occupied by Griffin Wellpoint Corporation is shown on the lot on

the 1946 and 1951 Sanborn Maps. Records reviewed do not indicate what the building was used for from the early 1950s to 2001. A Carting and Demolition Company currently occupy the building. The 2016 owner of record is listed as ANDA Realty, LLC (NYC OASIS).

3.0 SUMMARY OF REMEDIAL INVESTIGATION AND EXPOSURE ASSESSMENT

Prior to the RI, investigations were conducted at three parcels that were part of the former MGP, including Block 2591, Lot 46; Block 2597, Lot 1; and Block 2598, Lot 46 as part of environmental assessments; and a subsurface investigation was conducted by the RETEC Group, Inc. in 2007 to support the 36-inch gas main installation along the southern portion of East 138th Street for Con Edison, as discussed below. At Block 2591, Lot 46, ten soil borings were advanced around the perimeter of a 10,000-gallon No. 2 oil UST situated in the interior of the building footprint approximately mid-block along Rose Feiss Boulevard to depths between 2 and 16 feet below ground surface (bgs) to assess subsurface conditions around the UST (MC Environmental, 2010). At Block 2597, Lot 1, several borings were advanced and monitoring wells installed to assess soil and groundwater conditions at the MOSF terminal (Castle Port Morris, 2010). At Block 2598, Lot 46, previous investigations include the RI of the 295 Locust Avenue portion of the former MGP Site in 2012; the Phase I and II Environmental Site Assessments of the 295 Locust Avenue and 901-903 East 140th Street portions of the property in 2009 (Roux, May and June 2009); the Indoor Air Sampling Summary in 2004 (Environ, April 2004); the Environmental Review of Murray Feiss Import Corp. in 2004 (march 2004); review of the Manufactured Gas Plant History in 2003 (GEI, January 2003); and the Phase I Environmental Site Assessment of the Murray Feiss Distribution Center in 1998 (Environmental Planning & Management, Inc., November 1998).

During the SC and RI field investigations, soil, soil vapor, groundwater, indoor air, and free product samples were collected for laboratory analysis. Sampling locations are shown on Figure 3-1. The information gathered as part of investigation activities at the Site are summarized in the following sections.

3.1 Site Geology and Hydrogeology

The Site is located near the border between the New England Uplands and the Atlantic Coastal Lowlands physiographic provinces. The overburden is predominantly comprised of miscellaneous fill, glacial till and recent alluvium including clay, silt, sands, gravel, cobbles, and boulders overlying bedrock. Bedrock consists of the Fordham Gneiss, Middle Proterozoic in age, and the Inwood Marble, Early Ordovician to Early Cambrian in age. The overburden is estimated to be between 4 and approximately 46 feet deep and is comprised of predominantly miscellaneous fill, glacial till and tidal marsh deposits.

The Site is located near a northeast trending geologic contact between the Fordham Gneiss and the Inwood Marble (Fisher et al., 1970). The Fordham Gneiss is subdivided into four Members (A through D). Member A consists of predominantly pinkish white to salmon-red and medium gray gneiss. Member B consists predominantly of black and white banded gneiss. Members C and D are largely undivided comprised of schistose-, hornblende-, amphibolite- and quartz gneiss rocks. The Inwood Marble consists predominantly of calcite and dolomitic marble. Based on the geologic mapping of the area, Member B of the Fordham Gneiss and rocks of the Inwood Marble underlie the western portion of the Site. There is reportedly a northeast trending thrust fault that thrust older rocks of the Manhattan Schist over the younger rocks of the Inwood Marble and Fordham Gneiss. This thrust fault is mapped in the area of the western boundary of the Site near the railroad tracks northwest of Rose Feiss Boulevard (Fisher et al., 1970).

Figure 3-2 presents the locations of the monitoring wells and cross sections developed from subsurface information gathered as part of the RI. Cross sections A-A', B-B', C-C', and D-D' are shown on Figures 3-3 through 3-6, respectively. Lithology observed in the soil borings indicated that the site is underlain by a series of unconsolidated sediments overlying bedrock. The overburden includes an upper fill layer, overlying natural alluvial sediments interbedded with sand, silt and sand, gravel, clayey silt, clay, and silty peat and peat.

The fill unit ranges from approximately 5 to 13-foot continuous layer comprised of sand, gravel, rock and brick fragments, and other anthropogenic materials. The fill layer appears to be thickest beneath the warehouse buildings located at Block 2598, Lot 46 and Block 2598, Lot 1. In the area immediately surrounding and within the former gas holder #4 on Block 2598, Lot 46, fill material extends to a maximum depth of 46 feet. The fill materials on Block 2598, Lot 1 around the former gas holders extends to approximately 21 feet bgs.

Throughout the site area, an alluvial sand unit represented by stratified sands of varying textures containing some to no fines is present to the top of bedrock. Three distinct layers were observed within the sand unit at Block 2598, Lot 46. In areas outside the footprint of former gas holder #4, a layer approximately 2 to 16 feet thick of silt, sand and gravel, continuously underlies the fill layer. A clayey silt layer up to 10 feet thick, that includes peat and other organic material, is found below the silt, sand and gravel layer over the majority of Block 2598, Lot 46 west of Locust Avenue.

A sand, and silt and sand layer, between zero and 25 feet thick, is present above the top of bedrock in the central portion of Block 2598, Lot 46 (Figure 3-3). A clay wedge, approximately up to 20 feet thick, was found between the silt and peat layer and underlying sand layer west of Rose Feiss Boulevard. Interstratified

sands with silt, and clay and silt, up to approximately 25 feet thick were observed along the southern portion of Block 2598, Lot 46.

An estimated top of bedrock elevation contour is provided in Figure 3-7. The bedrock surface elevation was estimated based upon drilling refusal obtained at most boring locations, and confirmed bedrock depths at bedrock monitoring wells BW-01 through BW-04. At several boring locations, the presence of igneous and intrusive rock fragments lodged within the macrocore sampler at refusal depths was noted during the field investigations. The estimated bedrock surface slopes away from the East River, from approximately -10 feet amsl near Locust Avenue to approximately -20 to -25 feet amsl near the intersection of Rose Feiss Boulevard and East 140th Street. The bedrock appears to have been excavated to approximately -33 feet amsl in the vicinity of former gas holder #4, and appears to be approximately -10 feet amsl near gas holders #1 through #3.

The primary hydrogeologic unit identified beneath the investigation area is the upper glacial aquifer. The groundwater within the overburden is present in unconfined conditions and is not used for potable purposes. The water table surface was found to be between approximately 3 and 6 feet bgs depending on the well location and time of year that water level gauging was performed. Classification of groundwater at the site is GA, although tidal influence extends inland from the East River to approximately Locust Avenue. Several rounds of groundwater levels were obtained during the RI and measurements are generally consistent between rounds. The water levels measured during the August 2015 synoptic gauging were used to develop the shallow overburden and bedrock groundwater contour maps provided in Figures 3-8 through 3-11. These Figures show groundwater elevations based on water levels measured during both high and low tide.

Based on water levels measured on August 11, 2015 during high tide (Figure 3-8), a groundwater mound occurs which is centered beneath Block 2598, Lot 46. Groundwater flows radially away from the mound. The groundwater mound is attributable to localized variations in subsurface geology, bedrock topography, and presence of subsurface utilities, based upon information obtained as part of the 295 Locust Avenue RI (URS, 2012). A relatively shallow horizontal hydraulic gradient is apparent east of Locust Avenue. For the August 12, 2015 water level round during low tide in the shallow overburden (Figure 3-9), there is a relatively steep hydraulic gradient east of Locust Avenue toward the East River. The groundwater mound situated at Block 2598, Lot 46 was also still present, and horizontal hydraulic gradients are somewhat steeper with very similar groundwater flow directions around the mound as compared to Figure 3-8. Based upon water levels obtained, there is tidal influence in the shallow overburden groundwater and it is most apparent east of Locust Avenue, but does extend further west to a much lesser degree. Since the East River water level

elevations were generally lower than most of the water level measurements recorded in the monitoring wells during low tide, the overall groundwater flow is toward the East River. However, locally and in the immediate area around the Block 2598, Lot 46, there appears to be variations in the direction of groundwater flow. The local deviations to the overall flow (i.e., towards the East River) are likely due to variations in subsurface geology, bedrock topography, and presence of subsurface utilities and structures that may impact localized groundwater flow.

Bedrock wells are only located around the perimeter of Block 2598, Lot 46, and as such, the observations and conclusions are limited to this area. For the August 11, 2015 water level round during high tide in the bedrock (Figure 3-10), groundwater flows from BW-01 and BW-04 towards the west and southwest at Block 2598, Lot 46. Horizontal hydraulic gradients are relatively shallow as there is not much variation across the Block. For the August 12, 2015 water level round during low tide in the bedrock (Figure 3-11), there is very little difference compared to the measurements recorded during high tide, and generally similar groundwater flow direction. Based upon water levels obtained in in bedrock, there is no apparent measurable tidal influence in the bedrock groundwater. Since the East River water level elevations were lower than the water level measurements recorded in the bedrock monitoring wells during low and high tides, the overall groundwater regional flow is expected to be toward the East River.

The vertical hydraulic gradients on August 11, 2015 were determined to be flat at MWMF-07S/MWMF-07D (0.0 ft/ft), downward at MWMF-08/BW-02 (0.0217 ft/ft), and upward at MWMF-05/BW-03 (0.0252 ft/ft). Overall, there is no appreciable vertical gradient between groundwater in the overburden and bedrock.

3.2 Nature and Extent of Impacts

3.2.1 Soil

A summary of the detected analytical results exceeding Commercial Use SCOs in the RI soil samples for each property investigated as part of this RI Report is presented in Tables 3-1A (Block 2592, Lot 35), 3-1B (Block 2598, Lot 62), 3-1C (Block 2591, Lot 46), 3-1D (Block 2590, Lot 51), 3-1E (Block 2598, Lot 1), and 3-1F (Block 2597, Lot 1). Statistical summaries of the detected TCL parameters and comparisons to Commercial Use SCOs for each property are presented in Tables 3-2A through 3-2F. The locations of detected volatile organic compound (VOC) and semi-volatile organic compound (SVOC) soil results from samples

collected during the RI that exceeded Commercial Use SCOs at properties north of East 139th Street and south of East 139th Street are shown on Figures 3-12 and 3-13, respectively.

As part of the RI, and to assess the potential sources of polycyclic aromatic hydrocarbon (PAH) contamination and fuel-related compounds present at the former MGP operation areas, a total of 16 soil samples and one light non-aqueous phase liquid (LNAPL) sample were sent to META Environmental, Inc. (META) for forensic and fuel-fingerprinting analyses. Hydrocarbon fingerprints and extended PAH analyses/diagnostic ratios, as well as site history and observations made during the RI fieldwork, were evaluated as part of the characterization. META reported that the majority of samples were classified as a mixture of pyrogenic and petrogenic materials. Some samples were tentatively identified as generally tar and tar mixtures from a coal carbonization (CC) or carbureted water gas (CWG) manufacturing process, and mixtures of fuel and weathered fuel products determined to be present based upon gas chromatograph/mass spectrometer (GC/MS) and gas chromatograph/flame ionization detector (GC/FID) chromatograms. The 16 soil samples were collected from former MGP operational areas and were biased at locations and depths where there was visual and/or field screening evidence including elevated photoionization detector (PID) readings, visual observations of chemical impact such as sheens, blebs, presence of coal tar dense non-aqueous phase liquid (DNAPL), and/or odors characteristic of former MGP operations or petroleum constituents. The LNAPL sample was collected from piezometer B-7 situated on Block 2591, Lot 46 in the immediate vicinity of the 10,000-gallon fuel oil UST. These samples were analyzed for hydrocarbon fingerprints and an expanded list of monocyclic aromatic hydrocarbons (MAHs) and PAHs. Complete results are summarized in the RI Report and a brief summary is provided below.

3.2.1.1 Block 2590, Lot 51

Three soil borings were advanced along the eastern sidewalk perimeter of this property. Property access was not granted to obtain subsurface information beneath the building. There were no VOC exceedances of commercial use SCOs in any samples collected from perimeter portions around the property as summarized in Tables 3-1D and 3-2D. Benzo(a)pyrene and dibenz(a,h)anthracene were the only SVOCs detected above commercial use SCOs. There was no metals detected exceeding commercial use SCOs. As depicted in Figure 2-1, this property was used for MGP manufacturing operations.

3.2.1.2 Block 2591, Lot 46

Seventeen soil borings were advanced in both interior portions and the sidewalk areas at this property. There were no VOC exceedances of commercial use SCOs in any samples collected from this property as summarized in Tables 3-1C and 3-2C. Several PAHs were detected above commercial use SCOs in the area near the 10,000-gallon fuel oil UST, former MGP pipe racks, and former MGP coal shed. In general, there were fewer or no exceedances in the central and western-central portion of the property. Metals exceeding commercial use SCOs included arsenic, barium, copper, lead, and mercury.

Four soil samples were collected for forensic analysis at locations on this property including SB-02 (4.7-5.3'), SB-38 (7.8-8.5'), SB-39 (5-5.5'), and MW-01 (11-12'). One LNAPL sample was collected from piezometer B-7 adjacent to the 10,000 gallon fuel oil UST. SB-02 was situated adjacent to the 10,000 gallon fuel oil UST; SB-38 and SB-39 were situated within the footprint of a former coal storage area and nearby a former MGP gasoline UST; and MW-01 is near the former pipe racks associated with the former MGP. META reported the sample from SB-02 was No. 6 fuel oil or severely weathered crude oil; SB-38 had similarities with CWG tars; SB-39 had similarities with both No. 6 and crude oil; MW-01 had similarities with CC and CWG tars; and B-7 contained a mixture of petroleum products and coal tars.

In 2011, the NYSDEC reviewed SC investigation data and issued two letters regarding their review of data collected around and within the Paper Enterprises building portion of this property. The letters are provided in Appendix A. NYSDEC indicated that no further investigation, remedial action or ICs were required at this property since there were no significant source of MGP contamination there.

3.2.1.3 Block 2592, Lot 35

Note that there were no MGP operations known to have been performed at this property. Two perimeter soil borings were advanced in sidewalk areas at this property (MW-03 and SB-06). There were no VOC exceedances of commercial use SCOs in any samples collected from this property as summarized in Tables 3-1A and 3-2A. Benzo(a)pyrene was the only SVOC detected above the commercial use SCO. There were no metals detected that exceeded commercial use SCOs.

One soil sample was collected at MW-03 (6-7') which contained LNAPL and MW-03 is situated adjacent to the former anthracite coal storage area. META reported that LNAPL in the soil sample was classified as a mixture of No. 4/5/6 fuel oils.

3.2.1.4 Block 2597, Lot 1

Six soil borings were advanced at perimeter locations around this property. There were no VOC exceedances in any samples collected from this property. There were no VOC exceedances of commercial use SCOs in any samples collected from this property as summarized in Tables 3-1F and 3-2F. Several PAHs were detected above commercial use SCOs, however total PAHs were generally low, and were generally at depth beneathstructural material. There were no metals detected that exceeded commercial use SCOs.

Two samples were collected at SB-20 (near former retort house – 5-5.5') and SB-21 (near former tar tanks – 21-22'). META reported the sample from SB-20 had similarities with gas oil and fuel oils; and the sample from SB-21 had similarities with CWG tars.

3.2.1.5 Block 2598, Lot 1

Fourteen soil borings were advanced in both interior portions and the sidewalk areas at this property. Benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds exceeded individual commercial use SCOs in two soil borings (SB-43 and SB-44) within the footprint of former gas holders #2 and #1, respectively (Figure 3-13). Tables 3-1E and 3-2E summarize the analytical results.

SVOCs detected above SCOs included PAHs, phenol, di-n-butylphthalate, 1,1-biphenyl, cresols, and 2,6-dinitrotoluene. PAHs were detected at the highest concentrations from samples collected in the areas of former gas holders #1 and #2, and along the southern and eastern property perimeter. PAHs were detected at greater concentrations and frequencies above commercial use SCOs in the areas within or near the footprint of the three former gas holders (where coal tar was observed in SB-43 and SB-44). Coal tar was also observed in bedrock well BW-01, which is situated to the north at adjacent Block 2598. The maximum detected PAH concentrations and greatest frequency of exceedances occurred in SB-43 and/or SB-44 where coal tar was observed at depths between 5 and 20 feet bgs and were located within the footprint of former gas holders #1 and #2. Metals exceeding commercial use SCOs include arsenic, copper, and mercury.

Nine soil samples were collected for forensic analysis at locations on this property including SB-07 (adjacent to former water gas plant -13.3-14.2'), SB-16 (adjacent to former governor house - 5-6.5' and 17.5-18'), SB-17 (adjacent to tar well #2 – 5.5-6'), SB-43 (gas holder #2 -10-12'), SB-44 (gas holder #1 – 15-20'), MW-05 (adjacent to gas holder #2 – 4.5-5' and 20.5-21'), and MW-06 (downgradient of gas holder #1 – 10.5-

11'). META reported the sample from SB-07 had similarities with CC and coal tar; SB-16 had similarities with CWG tars; SB-17 had similarities with CC and CWG tars; SB-43 was coal tar/creosote; SB-44 was coal tar/creosote; MW-05 had similarities with CWG tars; and MW-06 had similarities with CC and CWG tars.

3.2.1.6 Block 2598, Lot 46

No field investigations were performed under the subject field effort addressed by this RAWP because this property is being managed under a BCP Site #203053-05-12 EE as discussed in Section 1.0. The RI report for the 295 Locust Avenue Site was submitted to NYSDEC in April 2012.

3.2.1.7 Block 2598, Lot 62

Note that there were no MGP operations known to have been performed at this property. One soil boring was advanced in the sidewalk area adjacent to this property (MW-04). There were no VOC, SVOC, or metals exceedances of commercial use SCOs in any samples collected from this property as summarized in Tables 3-1B and 3-2B.

3.2.1.8 Block 2598, Lot 66

This property was not investigated because there were no MGP operations known to have been performed there.

3.2.1.9 Metals Summary

Overall, at the properties that comprise the former MGP site, there were few exceedances of commercial use SCOs for metals and detected concentrations appear to be consistent with urban fill materials.

3.2.2 Groundwater

The standards, criteria, and guidance (SCGs) for groundwater are the Ambient Water Quality Standards and Guidance Values (AWQSGVs) for Class GA standards and guidance values presented in NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 (April 2000 and including subsequent revisions). Tables 3-3 and 3-4 summarize the laboratory analytical results for VOCs, SVOCs, and metals detected in overburden and bedrock groundwater samples, respectively, collected during the March 2012, April

2015, and August 2015 sampling events. Results exceeding TOGS No. 1.1.1 Class GA groundwater criteria are circled.

3.2.2.1 Overburden

Groundwater contamination in the overburden can be characterized as generally spread across the site area and is most concentrated in the vicinity of Block 2598, Lot 46 and to a lesser extent near Block 2598, Lot 1. The locations of detected results for VOCs and SVOCs, and total cyanide that exceeded their respective criteria during the August 2015 sampling event are shown on Figure 3-14. There were no VOCs, SVOCs, or total cyanide detected above criteria in upgradient monitoring well MW-02; monitoring wells MW-04, MWMF-02, and MWMF-07D situated around the perimeter of Block 2598, Lot 46; and monitoring well MW-07 situated at Block 2597, Lot 1.

Detected VOCs exceeding criteria included chlorinated VOCs (CVOCs) [perchloroethene (PCE) and its degradation products: trichloroethene (TCE), cis- and trans-1,2-dichloroethene (DCE); 1,1-dichloroethane, and vinyl chloride (VC); 1,2-dichloroethane; methylene chloride; chloroform, and chloroethane], BTEX compounds, methyl tert-butyl ether (MTBE), and isopropylbenzene. CVOCs were detected at the greatest frequencies in MWMF-04, nearest to the dry cleaners operating across East 139th Street; however, total CVOCs were detected at the highest concentrations in MW-03, at 6,500 micrograms per liter (µg/L). PCE and its degradation products were detected at their greatest concentrations in MWMF-04. Other CVOCs included 1,1,2,2-tetrachloroethane and 1,1,2-trichloroethane. CVOCs are associated with dry cleaning facilities and are not MGP-related. MTBE was detected above criteria in MWMF-01 and MWMF-05. MTBE is a gasoline additive and ubiquitous in urban areas.

Detected SVOCs included 1,1'-biphenyl, methylphenol isomers, 2-nitrophenol, 2-chlorophenol, and MGP-related contaminants naphthalene, acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, chrysene, and phenol. The greatest concentrations of SVOCs, naphthalene in particular, were detected in monitoring wells east, north, and south of former gas holders #1, #2, and #3 around Block 2598, Lot 1, and gas holder #4 around Block 2598, Lot 46.

Total cyanide was detected above the groundwater standard at most locations across the former MGP operational area. Iron, manganese, magnesium, selenium, and sodium exceeded groundwater SCGs in the majority of the groundwater samples. Additionally, lead exceeded the groundwater SCG in MW-03, MW-04,

MW-05, and MW-06. Other metals that exceeded criteria were arsenic, barium, beryllium, cadmium, chromium, copper, nickel, thallium, and zinc.

3.2.2.2 Bedrock

Contamination in the bedrock is more concentrated compared to overburden (Figure 3-15). Relative to the criteria and overburden results, significantly elevated levels of VOCs were detected in all four wells located around Block 2598, Lot 46.

Detected VOCs exceeding criteria included trans- and cis-1,2-DCE, 1,1-dichloroethene, 1,2-dichloroethane, VC, BTEX compounds, MTBE, isopropylbenzene, styrene, and acetone. The highest concentrations of CVOCs were detected in BW-02 nearest to the dry cleaners operating across East 139th Street.

Detected SVOCs exceeding criteria included 1,1'-biphenyl, methylphenol isomers, and PAHs naphthalene, acenaphthene, and phenol. The greatest concentrations of SVOCs, naphthalene in particular, were detected in monitoring wells BW-01 and BW-02.

Total cyanide detections exceeded the groundwater criterion in BW-01, BW-02, and BW-03. Iron, lead, manganese, magnesium, selenium, chromium, thallium, nickel, and sodium exceeded groundwater SCGs in bedrock wells.

3.2.3 Soil Vapor – Block 2598, Lot 46

Six sub-slab soil vapor samples and one outdoor air sample were collected during the 295 Locust Avenue RI at this property as part of the 295 Locust Avenue RI. This property is being managed under a BCP Site #203053-05-12 EE as discussed in section 1.0.

3.3 Qualitative Human Exposure Assessment Summary

The information collected during both the Site Characterization and Remedial Investigation has been used to qualitatively assess potential exposure pathways for the various detected compounds at the Site and summarized below by media.

3.3.1 Surface Soil

The Former East 138th Street Works site is located in a highly urbanized area, which is primarily commercial and industrial. Accordingly, the current surface at the Site is covered by structural material consisting of concrete, asphalt, and buildings. Therefore, surface soils do not exist, and hence, are not considered to represent a potential exposure pathway.

3.3.2 Subsurface Soil

Since subsurface soil is not accessible to the general public because soil in the site area is entirely covered by structural material consisting of concrete, asphalt, and buildings, the only potential complete exposure pathway is for construction workers who could come into contact with contaminated soil during intrusive activities. Therefore, subsurface soil is considered a potentially complete exposure pathway under the current use scenario for construction workers in areas where contaminant levels exceed commercial use SCOs. Under the future use scenario, intrusive activities from possible construction efforts may result in a completed exposure pathway.

3.3.3 Soil Vapor

There are currently no employees working within the warehouse building on Block 2598, Lot 46, although the building is being renovated and employees are anticipated to be present at some point in the future. During the Phase II Environmental Site Assessment (ESA) at Block 2598, Lot 46, Roux Associates, Inc. (Roux) measured indoor air and concluded that the indoor air VOC concentrations were significantly lower than the VOC concentrations in the sub-slab samples, and therefore, the sub-slab VOC concentrations were not impacting indoor air quality. Therefore, there is not a completed pathway for the current use scenario. In the future use scenario, the potential exists for contaminants of potential concern (CPCs) detected in the soil and soil vapor beneath the building at Block 2598, Lot 46 as well as other nearby buildings on adjacent properties were contaminants of potential concern were detected, to migrate into the warehouse building. In addition, under the current use scenario, construction workers could come into contact with contaminated soil vapor during intrusive activities. Therefore, soil vapor is considered a potentially complete exposure pathway under the current use scenario for construction workers. However, CPCs in soil vapor are not considered to be associated with former MGP operations or remaining constituents.

3.3.4 Outdoor Air

Since the entire Site area is covered by structural material consisting of concrete, asphalt, and buildings, outdoor air is not impacted under current use conditions. The potential exists for the public to be exposed to contaminants from the exposed subsurface soil and/or fugitive dust generated during construction activities. A Site Management Plan (SMP) would provide the requirements for controlling volatilization, erosion, and/or fugitive dust during construction activities.

3.3.5 Groundwater

Under the current use scenario, groundwater is not used as a potable water supply (drinking water is supplied to local residents by the New York Water Department) or for any other known industrial purposes in the vicinity of the Site area. Therefore, it is not a completed exposure pathway under the current use scenario. It is not anticipated that in the future, onsite groundwater would be used for potable purposes. Construction workers could potentially be exposed to groundwater contaminants during future intrusive activities. A SMP would provide requirements for adding potential construction dewatering activities.

4.0 PROPOSED REMEDIAL ACTION

4.1 Remedial Goal

The remedial goal for impacted portions of the Site is to prevent potential exposure of MGP-related contamination to human health or the environment. Since the affected properties are designated for commercial use only, and these areas are entirely covered by structural material consisting of concrete, asphalt, and buildings, potential exposure scenarios include only site workers and construction workers during intrusive activities. There is no residential exposure scenario in the current use or anticipated future use. The remedial goal will be achieved by implementing a plan to prevent uncontrolled exposure to MGP-impacted soil and groundwater during future site development, and emergency or planned excavation activities.

4.2 Remedial Action Objectives (RAOs)

Remedial Action Objectives (RAOs) are medium-specific objectives which achieve protection of public health and the environment. RAOs were established based on contaminated media, identified contaminants of concern, SCGs, and results of the exposure assessment.

4.2.1 Applicable Standards, Criteria, and Guidance (SCGs)

SCGs are promulgated requirements and non-promulgated guidance which guide Site activities during investigation and remediation. The standards and criteria are set forth in Federal or New York State law and are either directly applicable or relevant and appropriate to a contaminant, remedial action, location, or other circumstance. Guidance includes non-promulgated criteria which should be considered for investigation and/or remediation.

The NYSDEC *DER-10* includes a complete list of Standards, Criteria, and Guidance (SCGs). Currently, 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Subchapter 1.8(f)9 requires that land use criterion be considered when selecting a remedy for a site. Pursuant to 6 NYCRR Part 375 Subchapter 1.8(g), a property is designated as either unrestricted or restricted. Unrestricted use is a use without imposed restrictions following remediation to Part 375-6 SCOs for Unrestricted Use. Restricted uses include imposed controls and restrictions, such as ICs/ECs following remediation to Part 375 SCOs for restricted use, such as restricted residential, commercial, or industrial use. The individual properties that comprise the former MGP Site boundary are considered under commercial use only, and usage is not anticipated to change in the

near or longer term future. Therefore, ICs/ECs relevant to commercial use in accordance with 6 NYCRR Part 375 will be sufficient to achieve the RAOs.

The SCGs for soil and groundwater include the following:

- 6 NYCRR Part 375-6 SCOs for commercial use; and
- The NYSDEC *Division of Water Technical and Operational Guidance Series Water Quality Standards (WQS) 6 NYCRR Parts 700 through 706* (NYSDEC, 1998).

These SCGs represent available criteria and guidance used by the NYSDEC to evaluate soil and groundwater quality.

4.2.2 Establishment of RAOs

The following RAOs are established for this Site:

Groundwater RAOs

RAOs for Protection of Public Health

- Prevent ingestion of groundwater with contaminant levels exceeding Class GA Water Quality Standards; and
- Prevent contact with or inhalation of volatiles from contaminated groundwater.

RAOs for Protection of Environment

- Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable; and

Soil RAOs

RAOs for Protection of Public Health

- Prevent ingestion/direct contact with soil containing contaminants above commercial use RSCOs; and
- Prevent inhalation of or exposure to contaminants volatilizing from contaminated soil.

RAOs for Protection of Environment

- Prevent migration of contaminants that would result in groundwater or surface water contamination; and
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

4.3 Proposed Remedial Action

The proposed remedial action components on a block/lot basis are summarized in Table 4-1. Particular components of the remedial actions are discussed below and may or may not apply to each property. As an overall site discussion, however, the proposed remedial action will consist of the following elements:

1. Groundwater Monitoring Program: Annual groundwater monitoring using some of the existing monitoring well network. Unnecessary monitoring wells are proposed for well decommissioning in accordance with NYSDEC CP-43 requirements (Table 4-2).
2. Quality Assurance/Quality Control (QA/QC) Program: Identification of accuracy, precision, and sensitivity of analysis for laboratory analytical testing and methods.
3. Site Management Plan: Development and implementation of a SMP which will include an Excavation Work Plan that will be implemented during any future intrusive activities that could potentially encounter MGP-impacted materials. The SMP will include procedures to control site worker exposure to MGP-impacted materials, community air monitoring, and proper soil handling and disposal procedures. The SMP will include a generic Health and Safety Plan (HASP). Development of a site-specific HASP is required for any future intrusive construction activities.
4. Environmental Easements: Establishment of institutional controls (ICs) in the form of an environmental easement on affected properties within the former MGP site boundary as shown on Figure 4-1. Environmental easements will note the presence of possible contaminants and require the owner to allow compliance with conditions of the SMP. ICs on these properties will prohibit groundwater use and allow use for only commercial and industrial purposes as defined by local zoning laws.
5. Periodic Review: Annual site inspections of areas subject to the SMP conditions or ICs identified on Figure 4-1 to document the Site usage and any change in Site features (e.g., paving, buildings). Changes to Site use and/or Site features may require re-evaluation of the remedial action and/or the extent of areas requiring SMPs and environmental easements.

This proposed remedial action meets the site RAOs by imposing environmental easements to maintain current barriers to exposure (for example prohibiting future groundwater use, and maintaining commercial use), and to prevent future exposures to contaminants above SCGs through establishment of an Excavation Work Plan.

The components of the proposed remedial action are discussed in further detail immediately below.

4.3.1 Groundwater Monitoring Program

Groundwater samples will be collected from some of the monitoring wells that comprise the existing Site monitoring well network, which will include six overburden monitoring wells, and DNAPL measurements in four bedrock monitoring wells (Figure 4-2), on an annual basis. Table 4-2 summarizes the annual groundwater monitoring program and wells requested for decommissioning. Following four sampling events, the data will be evaluated and a recommendation will be made for future monitoring activities. During each groundwater monitoring event, a comprehensive round of groundwater levels will be measured from all monitoring wells at the Site. DNAPL measurements will also be collected from the four existing bedrock wells located around the perimeter of Block 2598, Lot 46. If appropriate and based upon the data obtained, site conditions, and site use, Con Edison may request from the NYSDEC and New York State Department of Health (NYSDOH) to modify the monitoring plan including the monitoring frequency and/or parameters in accordance with DER-10 requirements.

4.3.2 Site Management Plan (SMP)

4.3.2.1 General

An SMP is required for sites such as the subject project where restrictions will be in place after completion of the remedial action. The SMP will contain a description of plans and procedures to be followed for implementation of ICs/ECs, such as the implementation of an Excavation Work Plan for the safe handling of MGP-related impacted soils that may be disturbed during any maintenance, redevelopment, or subsurface utility repair/relocation. The SMP will include any other provisions necessary to identify or establish methods for implementing the ICs/ECs required by the Site remedy, as determined by the NYSDEC. The SMP will include the notification requirements for future soil disturbance activities that will encounter MGP-impacted

materials, including building renovation/expansion, subsurface utility line repair/relocation, and new construction.

The SMP will include up to three separate plans as required by the site remedy, as follows, in accordance with DER-10 Subsection 6.2:

- IC/EC Plan – The IC/EC Plan is required for sites such as the subject site where the remedy does not allow for unrestricted use. This portion of the SMP will include the Excavation Work Plan, and a Health and Safety Plan (HASP);
- Monitoring Plan – The Monitoring Plan will describe measures for monitoring performance/ effectiveness of the selected remedy and include provisions for periodic evaluation of gathered site information, and
- Operation and Maintenance (O&M) Plan – The O&M Plan is applicable for sites where the remedy includes any physical components. Therefore, a limited O&M program is applicable to the East 138th Street Works site since the only such systems will be monitoring wells.

4.3.2.2 IC/EC Plan

The IC/EC Plan will detail the steps necessary to ensure the ICs/ECs remain in place and effective, identify the items to be evaluated so that certification of ICs/ECs can be made, and identify areas of the site where contamination to remain in place will be managed by the SMP. To this end, the IC/EC Plan will include the following plans:

- Excavation Work Plan: Components of this plan will include detailing excavation and material handling requirements, handling provisions for any encountered groundwater, and requirements for notification to DER. The Plan will include guidelines for the import and reuse of soils. A summary of the excavation protocols will follow steps outlined in Figure 4-3;
- Remedy-Specific Plans;
- Property Transfer Provisions; and
- Health and Safety Plan (HASP): The HASP will address all aspects of long term management of the ICs/ECs at the Site. A HASP is required for sites where the following will occur, as described in DER-10, 6.2.1(b)4:

  - Intrusive activities below the surface or in other areas where remaining contamination exceed or, of no data is available, may exceed commercial use levels;

- The decommissioning/removal of monitoring wells or other engineering controls;
- Implementation of elements of the Monitoring Plan; and/or
- Operation and maintenance per the O&M Plan.

The NYSDOH requires that during intrusive activities at contaminated sites, real-time monitoring for VOCs and particulates (i.e., dust) must be conducted at the downwind perimeter of each designated work area. Air monitoring during future intrusive remediation or construction excavation activities must be conducted in accordance with the NYSDOH Generic Community Air Monitoring Plan (CAMP). The air monitoring program is necessary to prevent potential exposure to hazardous constituents at levels above accepted regulatory limits to, construction workers, the community, and general public. For any future remediation and construction activities, worker protection and community air monitoring will be conducted by a contractor or owner's representative, who will have the authority to act as the Site Health and Safety Officer.

4.3.2.3 Monitoring Plan

The Monitoring Plan will detail the steps to inspect, monitor and report the performance and effectiveness of the remedy. The Plan will include a description of the features that should be evaluated during each periodic inspection and compliance certification period. The Plan will identify the requirements for periodic evaluation of site information, sampling and analysis, evaluate any monitored natural attenuation, and any trend analysis. The major components of the Plan are as follows:

- Performance monitoring that will be dictated by the groundwater monitoring remedy such as consideration for compliance with New York State Class GA groundwater standards, and measuring static water levels in both overburden and bedrock monitoring wells to determine flow path, and DNAPL measurements in bedrock monitoring wells to assess and evaluate DNAPL volume.
- Effectiveness monitoring consisting of the periodic chemical and physical analysis of the media of concern such as for groundwater in relation to applicable baseline data gathered during the RI. Remedy implementation will not be delayed in order to gather additional baseline data. Trend monitoring will be conducted and evaluated against baseline data, and statistical trend analyses will be conducted once the data set is sufficient to conduct such analyses. Based upon the effectiveness monitoring and statistical trend analyses, modifications to the groundwater monitoring program may be implemented, including reduction in monitoring frequency, analytical parameter modifications, etc. as per DER-10 requirements and with NYSDEC concurrence.

- A Monitoring Work Plan section of the SMP will contain sufficient detail to demonstrate that necessary information will be obtained so that the performance and effectiveness can be judged. The Monitoring Work Plan will include sampling/testing/reporting protocols, a HASP for the monitoring, and provisions for inspecting/maintaining/decommissioning groundwater monitoring wells. Site inspection, monitoring well inspection/maintenance, and monitoring well decommissioning record forms are included in Appendix B.

4.3.2.4 Operation and Maintenance (O&M) Plan

The O&M Plan will be prepared in sufficient detail to allow individuals unfamiliar with the site to operate and maintain relevant components of the remedy. It will also allow for periodic update of the O&M Plan to reflect changes in site conditions. When the DER determines that the O&M Plan is no longer required then the SMP will be revised to eliminate the O&M Plan.

4.3.3 Environmental Easements

Environmental easements are proposed for Block 2590, Lot 51 and Block 2598, Lot 1. The Site is zoned M3-1, a manufacturing district, designed to accommodate heavy industrial uses. With concurrence from the NYSDEC, property use restrictions will be for commercial use only and will prohibit groundwater usage until soil and groundwater conditions are restored and comply with NYSDEC standards.

4.3.4 Periodic Review

Annual periodic reviews are required in accordance with DER-10 Section 6.3 with the initial review conducted no later than 18 months after issuance of the certificate of completion or closure letter. Periodic Review Reports (PRR) will be submitted to the NYSDEC to document the efficacy of the institutional controls. The PRR General Guidance (Appendix C) will be followed and, as certification of the periodic reviews, an inspection checklist Certification will be completed, as appropriate. The PRR will be signed by a Professional Engineer or other qualified environmental professional.

If changes are noted, the PRR will include documentation explaining why the certification cannot be rendered and a statement of proposed corrective measures with a proposed schedule for implementing the corrective action. The PRR summarize and document the collected data, address overall O&M-related performance, any recommendations for modifications to the ICs/ECs, cumulative data summary tables and/or

graphs of contaminants of concern, laboratory data, and inspection reports. IC/EC certification will be provided in the PRR.

4.4 Organizational Structure and Responsibility

Con Edison and New York State regulatory agencies will participate jointly in the remedial action for the East 138th Street Works Former MGP Site. Con Edison has the ultimate responsibility for implementing this RAWP. Approval of this RAWP by NYSDEC and NYSDOH shall be obtained prior to conducting remedial actions.

Communication with regulatory agencies and with members of the surrounding community will be managed by Con Edison. The plan for sharing project information with the community, a Citizen Participation Plan, will be included with the SMP, if appropriate.

Key guidelines and contact information for intrusive activities are identified in Figure 4-3.

5.0 SCHEDULE

The schedule presented below is based on completing the RAWP and submitting environmental easements for Block 2591, Lot 51 and Block 2598, Lot 1. It is anticipated that the Final RAWP will be prepared after presenting the proposed remedy is presented to the public and public comments are received and addressed. The estimated schedule presented below is dependent upon completing earlier tasks before successive tasks (e.g., Final RAWP cannot be completed until the public comments are received and the responsiveness summary is approved by New York State regulators and community).

Task	Duration
Public Comments	30 Days
Revised RAWP per the public comments	6 weeks
Draft SMP	12 weeks
NYSDEC Comments on SMP	6 weeks
Execution of Environmental Easements	TBD*
Final SMP	4 weeks

*TBD = to be determined

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TABLES

TABLE 3-1A
BLOCK 2592 LOT 35
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-03	MW-03	MW-03	SB-06	SB-06
Sample ID				MW-03-(3.5-4.5)	MW-03-(6-7)	MW-03-(14-15)	SB-06-(3-4)	20100414-FD-1
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.5	6.0-7.0	14.0-15.0	3.0-4.0	4.5-5.5
Date Sampled				04/15/10	04/19/10	04/19/10	04/14/10	04/14/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					Field Duplicate (1-1)
Volatile Organic Compounds								
Acetone	MG/KG	0.05	500		0.061 J	0.0051 J	0.020 J	0.0040 J
Benzene	MG/KG	0.06	44		0.31			
Carbon disulfide	MG/KG	2.7 CP-51	-		0.015 J			
Ethylbenzene	MG/KG	1	390		0.036			
Isopropylbenzene	MG/KG	2.3 CP-51	-		2.4 J			
Methyl acetate	MG/KG	-	-				0.0064	0.0056
Methylcyclohexane	MG/KG	-	-		1.0 J			
Methylene chloride	MG/KG	0.05	500				0.0012 J	
Tetrachloroethene	MG/KG	1.3	150		0.020			
Toluene	MG/KG	0.7	500		0.024			
Xylene (total)	MG/KG	0.26	500		0.29 J			
Total BTEX	MG/KG	-	-	ND	0.66	ND	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	ND	4.156	0.0051	0.0276	0.0096
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-		14 J			
Acenaphthene	MG/KG	20	500		1.0 J		0.027 J	
Acenaphthylene	MG/KG	100	500	0.12 J			0.048 J	
Anthracene	MG/KG	100	500	0.047 J	1.7 J		0.16 J	
Benzo(a)anthracene	MG/KG	1	5.6	0.20	1.9 J		0.44	0.077 J
Benzo(a)pyrene	MG/KG	1	1	0.21 J	1.5 J		0.29	0.046 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1A
BLOCK 2592 LOT 35
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-03	MW-03	MW-03	SB-06	SB-06
Sample ID				MW-03-(3.5-4.5)	MW-03-(6-7)	MW-03-(14-15)	SB-06-(3-4)	20100414-FD-1
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.5	6.0-7.0	14.0-15.0	3.0-4.0	4.5-5.5
Date Sampled				04/15/10	04/19/10	04/19/10	04/14/10	04/14/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					Field Duplicate (1-1)
Semivolatile Organic Compounds								
Benzo(b)fluoranthene	MG/KG	1	5.6	0.20 J	1.8 J		0.34	0.071 J
Benzo(g,h,i)perylene	MG/KG	100	500	0.24 J	0.88 J		0.23	0.057 J
Benzo(k)fluoranthene	MG/KG	0.8	56	0.15 J	0.90 J		0.11 J	0.040 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.12 J	1.1 J	0.084 J	0.15 J	0.033 J
Carbazole	MG/KG	-	-				0.042 J	
Chrysene	MG/KG	1	56	0.21	3.1 J		0.37	0.065 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.040 J			0.034 J	
Dibenzofuran	MG/KG	7	350				0.023 J	
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.021 J	1.6 J			
Fluoranthene	MG/KG	100	500	0.29	4.0 J		1.1	0.14 J
Fluorene	MG/KG	30	500		4.0 J		0.042 J	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.15 J	0.64 J		0.16 J	0.039 J
Naphthalene	MG/KG	12	500	0.021 J				
Phenanthrene	MG/KG	100	500	0.096 J	10 J		0.50	0.026 J
Pyrene	MG/KG	100	500	0.27	7.0 J		0.96	0.15 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	2.244	52.42	ND	4.811	0.711
Total Semivolatile Organic Compounds	MG/KG	-	-	2.385	55.12	0.084	5.026	0.744
Metals								
Aluminum	MG/KG	10000 CP-51	-	8,670 J	10,000	9,770	8,650 J	9,310 J
Arsenic	MG/KG	13	16	2.1	0.78 J		1.8	1.2

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1A
BLOCK 2592 LOT 35
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-03	MW-03	MW-03	SB-06	SB-06
Sample ID				MW-03-(3.5-4.5)	MW-03-(6-7)	MW-03-(14-15)	SB-06-(3-4)	20100414-FD-1
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.5	6.0-7.0	14.0-15.0	3.0-4.0	4.5-5.5
Date Sampled				04/15/10	04/19/10	04/19/10	04/14/10	04/14/10
Parameter	Units	Criteria (1)	Criteria (2)					Field Duplicate (1-1)
Metals								
Barium	MG/KG	350	400	72.1 J	53.8 J	81.0 J	91.9 J	73.7 J
Beryllium	MG/KG	7.2	590	0.84 J	1.0 J	1.4 J	0.93 J	1.0 J
Cadmium	MG/KG	2.5	9.3	0.34	0.088 J	0.14 J	0.22 J	0.30
Calcium	MG/KG	10000 CP-51	-	4,400 J	2,430	2,750	3,720 J	4,580 J
Chromium	MG/KG	30	1500	22.3 J	34.4 J	27.3 J	22.8 J	28.5 J
Cobalt	MG/KG	20 CP-51	-	9.9 J	7.4 J	12.2 J	10.0 J	10.3 J
Copper	MG/KG	50	270	49.2 J	51.7	30.9	32.8 J	33.4 J
Iron	MG/KG	2000 CP-51	-	19,900	19,000	23,300	25,200	22,700
Lead	MG/KG	63	1000	41.3 J	8.5	5.0	33.0 J	7.0 J
Magnesium	MG/KG	-	-	5,400 J	4,270 J	6,450 J	4,100 J	6,220 J
Manganese	MG/KG	1600	10000	291 J	134 J	281 J	240 J	194 J
Mercury	MG/KG	0.18	2.8	0.16 J			0.19 J	0.024 J
Nickel	MG/KG	30	310	19.1 J	22.2 J	22.8 J	19.3 J	22.9 J
Potassium	MG/KG	-	-	3,010 J	2,000	3,630	3,660 J	2,840 J
Selenium	MG/KG	3.9	1500	1.9	2.5	3.2	3.4	2.5
Silver	MG/KG	2	1500	0.070 J	0.11 J		0.093 J	
Sodium	MG/KG	-	-	123 J	291 J	275 J	123 J	159 J
Thallium	MG/KG	5 CP-51	-	1.8			1.9	1.3 J
Vanadium	MG/KG	39 CP-51	-	28.2 J	29.2	34.3	27.7 J	30.9 J
Zinc	MG/KG	109	10000	115 J	213 J	50.3 J	53.4 J	102 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1A
BLOCK 2592 LOT 35
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-06
Sample ID				SB-06-(4.5-5.5)
Matrix				Soil
Depth Interval (ft)				4.5-5.5
Date Sampled				04/14/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	
Volatile Organic Compounds				
Acetone	MG/KG	0.05	500	
Benzene	MG/KG	0.06	44	
Carbon disulfide	MG/KG	2.7 CP-51	-	
Ethylbenzene	MG/KG	1	390	
Isopropylbenzene	MG/KG	2.3 CP-51	-	
Methyl acetate	MG/KG	-	-	
Methylcyclohexane	MG/KG	-	-	
Methylene chloride	MG/KG	0.05	500	
Tetrachloroethene	MG/KG	1.3	150	
Toluene	MG/KG	0.7	500	0.0013 J
Xylene (total)	MG/KG	0.26	500	
Total BTEX	MG/KG	-	-	0.0013
Total Volatile Organic Compounds	MG/KG	-	-	0.0013
Semivolatile Organic Compounds				
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	
Acenaphthene	MG/KG	20	500	
Acenaphthylene	MG/KG	100	500	
Anthracene	MG/KG	100	500	
Benzo(a)anthracene	MG/KG	1	5.6	0.071 J
Benzo(a)pyrene	MG/KG	1	1	0.047 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1A
BLOCK 2592 LOT 35
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-06
Sample ID				SB-06-(4.5-5.5)
Matrix				Soil
Depth Interval (ft)				4.5-5.5
Date Sampled				04/14/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	
Semivolatile Organic Compounds				
Benzo(b)fluoranthene	MG/KG	1	5.6	0.066 J
Benzo(g,h,i)perylene	MG/KG	100	500	0.050 J
Benzo(k)fluoranthene	MG/KG	0.8	56	0.030 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.044 J
Carbazole	MG/KG	-	-	
Chrysene	MG/KG	1	56	0.069 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	
Dibenzofuran	MG/KG	7	350	
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	
Fluoranthene	MG/KG	100	500	0.15 J
Fluorene	MG/KG	30	500	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.037 J
Naphthalene	MG/KG	12	500	
Phenanthrene	MG/KG	100	500	0.024 J
Pyrene	MG/KG	100	500	0.14 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	0.684
Total Semivolatile Organic Compounds	MG/KG	-	-	0.728
Metals				
Aluminum	MG/KG	10000 CP-51	-	11,900 J
Arsenic	MG/KG	13	16	1.6

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1A
BLOCK 2592 LOT 35
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

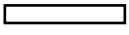
Location ID				SB-06
Sample ID				SB-06-(4.5-5.5)
Matrix				Soil
Depth Interval (ft)				4.5-5.5
Date Sampled				04/14/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	
Metals				
Barium	MG/KG	350	400	80.7 J
Beryllium	MG/KG	7.2	590	1.1 J
Cadmium	MG/KG	2.5	9.3	0.31
Calcium	MG/KG	10000 CP-51	-	4,460 J
Chromium	MG/KG	30	1500	28.7 J
Cobalt	MG/KG	20 CP-51	-	11.9 J
Copper	MG/KG	50	270	32.5 J
Iron	MG/KG	2000 CP-51	-	26,400
Lead	MG/KG	63	1000	9.2 J
Magnesium	MG/KG	-	-	6,930 J
Manganese	MG/KG	1600	10000	311 J
Mercury	MG/KG	0.18	2.8	0.021 J
Nickel	MG/KG	30	310	23.6 J
Potassium	MG/KG	-	-	3,130 J
Selenium	MG/KG	3.9	1500	3.4
Silver	MG/KG	2	1500	
Sodium	MG/KG	-	-	142 J
Thallium	MG/KG	5 CP-51	-	2.3 J
Vanadium	MG/KG	39 CP-51	-	35.9 J
Zinc	MG/KG	109	10000	64.8 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1B
BLOCK 2598 LOT 62
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-04	MW-04	MW-04
Sample ID				MW-04-(3.5-4.5)	MW-04-(3.5-4.5)	MW-04-(8.5-9.5)
Matrix				Soil	Soil	Soil
Depth Interval (ft)				3.5-4.5	3.5-4.5	8.5-9.5
Date Sampled				04/16/10	04/16/10	04/20/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)		
Volatile Organic Compounds						
Acetone	MG/KG	0.05	500	0.012 J	0.020 J	0.0067 J
Isopropylbenzene	MG/KG	2.3 CP-51	-	0.10 J	0.16 J	
Methylcyclohexane	MG/KG	-	-	0.17 J	0.28 J	
Styrene	MG/KG	300 CP-51	-		0.017 J	
Xylene (total)	MG/KG	0.26	500	0.0064 J		
Total BTEX	MG/KG	-	-	0.0064	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.2884	0.477	0.0067
Semivolatile Organic Compounds						
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	10 J	9.2 J	
Acenaphthene	MG/KG	20	500		0.43 J	
Acenaphthylene	MG/KG	100	500		0.31 J	
Anthracene	MG/KG	100	500	0.17 J	0.43	
Benzo(a)anthracene	MG/KG	1	5.6	0.22	0.14 J	
Benzo(a)pyrene	MG/KG	1	1	0.13 J	0.10 J	
Benzo(b)fluoranthene	MG/KG	1	5.6	0.16 J	0.14 J	
Benzo(g,h,i)perylene	MG/KG	100	500	0.099 J	0.22	
Benzo(k)fluoranthene	MG/KG	0.8	56	0.066 J	0.060 J	
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.052 J	0.044 J	
Chrysene	MG/KG	1	56	0.22 J	0.15 J	
Dibenz(a,h)anthracene	MG/KG	0.33	0.56		0.026 J	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1B
BLOCK 2598 LOT 62
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-04	MW-04	MW-04
Sample ID				MW-04-(3.5-4.5)	MW-04-(3.5-4.5)	MW-04-(8.5-9.5)
Matrix				Soil	Soil	Soil
Depth Interval (ft)				3.5-4.5	3.5-4.5	8.5-9.5
Date Sampled				04/16/10	04/16/10	04/20/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)		
Semivolatile Organic Compounds						
Dibenzofuran	MG/KG	7	350		0.31 J	
Di-n-butylphthalate	MG/KG	0.014 CP-51	-		0.11 J	
Fluoranthene	MG/KG	100	500	0.46	0.30	
Fluorene	MG/KG	30	500		0.77 J	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.073 J	0.13 J	
Naphthalene	MG/KG	12	500	0.56	0.54	
Phenanthrene	MG/KG	100	500	4.7	3.8	
Pyrene	MG/KG	100	500	1.3	1.0	
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	18.158	17.746	ND
Total Semivolatile Organic Compounds	MG/KG	-	-	18.21	18.21	ND
Metals						
Aluminum	MG/KG	10000 CP-51	-	8,910	11,500 J	8,120
Arsenic	MG/KG	13	16		2.2	1.4
Barium	MG/KG	350	400	83.6 J	71.4 J	46.0 J
Beryllium	MG/KG	7.2	590	1.2 J	0.90 J	0.65 J
Cadmium	MG/KG	2.5	9.3	0.087 J	0.33	0.045 J
Calcium	MG/KG	10000 CP-51	-	14,500	6,900 J	1,450
Chromium	MG/KG	30	1500	22.6 J	27.0 J	14.2 J
Cobalt	MG/KG	20 CP-51	-	9.6 J	12.3 J	6.3 J
Copper	MG/KG	50	270	35.6	27.2 J	9.2

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1B
BLOCK 2598 LOT 62
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-04	MW-04	MW-04
Sample ID				MW-04-(3.5-4.5)	MW-04-(3.5-4.5)	MW-04-(8.5-9.5)
Matrix				Soil	Soil	Soil
Depth Interval (ft)				3.5-4.5	3.5-4.5	8.5-9.5
Date Sampled				04/16/10	04/16/10	04/20/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)		
Metals						
Iron	MG/KG	2000 CP-51	-	22,300	25,300	19,700
Lead	MG/KG	63	1000	11.6	7.8 J	4.9
Magnesium	MG/KG	-	-	11,200 J	6,680 J	2,800 J
Manganese	MG/KG	1600	10000	232 J	213 J	213 J
Mercury	MG/KG	0.18	2.8		0.013 J	
Nickel	MG/KG	30	310	17.3 J	21.2 J	11.5 J
Potassium	MG/KG	-	-	3,060	2,200 J	828
Selenium	MG/KG	3.9	1500	3.7	2.6	1.5
Silver	MG/KG	2	1500	0.12 J		0.087 J
Sodium	MG/KG	-	-	126 J	118 J	53.0 J
Thallium	MG/KG	5 CP-51	-		1.7	
Vanadium	MG/KG	39 CP-51	-	31.3	35.1 J	16.1
Zinc	MG/KG	109	10000	52.4 J	40.0 J	28.5 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-01	MW-01	MW-01	MW-01	MW-11
Sample ID				MW-01-(3.4-4)	MW-01-(4.5-5)	MW-01-(11-12)	MW-01-(16.5-18)	MW-11-(3.5-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.4-4.0	4.5-5.0	11.0-12.0	16.5-18.0	3.5-4.5
Date Sampled				03/24/10	03/24/10	03/26/10	03/26/10	01/07/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500		0.0052 J	0.030 J	0.0088 J	0.021 J
Benzene	MG/KG	0.06	44			0.32		0.0018 J
Carbon disulfide	MG/KG	2.7 CP-51	-				0.0077	0.0014 J
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390			0.34		
Isopropylbenzene	MG/KG	2.3 CP-51	-			0.036 J		
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500			0.39		0.0012 J
Xylene (total)	MG/KG	0.26	500	0.0028		1.4 J		
Total BTEX	MG/KG	-	-	0.0028	ND	2.45	ND	0.003
Total Volatile Organic Compounds	MG/KG	-	-	0.0028	0.0052	2.516	0.0165	0.0254
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-			14	0.039 J	0.045 J
2,4-Dimethylphenol	MG/KG	-	-			0.50 J		

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-01	MW-01	MW-01	MW-01	MW-11
Sample ID				MW-01-(3.4-4)	MW-01-(4.5-5)	MW-01-(11-12)	MW-01-(16.5-18)	MW-11-(3.5-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.4-4.0	4.5-5.0	11.0-12.0	16.5-18.0	3.5-4.5
Date Sampled				03/24/10	03/24/10	03/26/10	03/26/10	01/07/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-			34 J	0.073 J	0.20
2-Methylphenol (o-cresol)	MG/KG	0.33	500			0.29 J		
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500			0.73 J		0.039 J
Acenaphthene	MG/KG	20	500			52	0.18 J	0.082 J
Acenaphthylene	MG/KG	100	500		0.062 J	23	0.064 J	0.28
Acetophenone	MG/KG	-	-					
Anthracene	MG/KG	100	500		0.030 J	59	0.21	0.43
Benzo(a)anthracene	MG/KG	1	5.6	0.091 J	0.16 J	62	0.23	0.77
Benzo(a)pyrene	MG/KG	1	1	0.067 J	0.14 J	49	0.18 J	0.70
Benzo(b)fluoranthene	MG/KG	1	5.6	0.077 J	0.19 J	59	0.21	0.84
Benzo(g,h,i)perylene	MG/KG	100	500			41		0.61
Benzo(k)fluoranthene	MG/KG	0.8	56	0.034 J	0.065 J	20	0.070 J	0.39
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.13 J	0.10 J		0.054 J	0.16 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-			26	0.066 J	0.19
Chrysene	MG/KG	1	56	0.087 J	0.18 J	50	0.17 J	0.69
Dibenz(a,h)anthracene	MG/KG	0.33	0.56		0.032 J	21 J	0.044 J	0.12 J
Dibenzofuran	MG/KG	7	350			45	0.16 J	0.18 J
Di-n-butylphthalate	MG/KG	0.014 CP-51	-					
Fluoranthene	MG/KG	100	500	0.14 J	0.23	120	0.40	1.5

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-01	MW-01	MW-01	MW-01	MW-11
Sample ID				MW-01-(3.4-4)	MW-01-(4.5-5)	MW-01-(11-12)	MW-01-(16.5-18)	MW-11-(3.5-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.4-4.0	4.5-5.0	11.0-12.0	16.5-18.0	3.5-4.5
Date Sampled				03/24/10	03/24/10	03/26/10	03/26/10	01/07/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500			51	0.19 J	0.25
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6			33 J		0.44 J
Naphthalene	MG/KG	12	500			270	1.1	1.0
Phenanthrene	MG/KG	100	500	0.051 J	0.078 J	190	0.73	1.3
Phenol	MG/KG	0.33	500			0.59 J		0.020 J
Pyrene	MG/KG	100	500	0.16 J	0.31	120	0.42	1.6
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	0.707	1.477	1,254	4.271	11.202
Total Semivolatile Organic Compounds	MG/KG	-	-	0.837	1.577	1,341.11	4.59	11.836
Metals								
Aluminum	MG/KG	10000 CP-51	-	14,000	5,550	5,040	10,200	7,770
Antimony	MG/KG	12 CP-51	-					1.1 J
Arsenic	MG/KG	13	16	3.0	4.0	5.6	6.2	5.2
Barium	MG/KG	350	400	80.7 J	39.4 J	35.5 J	21.8 J	317
Beryllium	MG/KG	7.2	590	1.0 J	0.52 J	0.41 J	0.72 J	0.49
Cadmium	MG/KG	2.5	9.3	0.24 J	0.34	0.61	0.44	0.51 J
Calcium	MG/KG	10000 CP-51	-	2,010 J	156,000 J	2,200 J	2,170 J	23,700 J
Chromium	MG/KG	30	1500	25.0	13.0	10.8 J	20.9 J	22.1
Cobalt	MG/KG	20 CP-51	-	10.0 J	5.2 J	5.2 J	7.5 J	6.7 J
Copper	MG/KG	50	270	16.4 J	17.0 J	28.9	10.9	31.2
Iron	MG/KG	2000 CP-51	-	25,500	20,400	29,700	24,600	15,300 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

[SITEID] = '02' AND [MATRIX] = 'SO' AND ([LOCID] = 'MW-01' OR [LOCID] = 'SB-32' OR [LOCID] = 'MW-11' OR [LOCID] = 'SB-40' OR [LOCID] = 'SB-38' OR [LOCID] = 'SB-37' OR [LOCID] = 'SB-39' OR [LOCID] = 'SB-03' OR [LOCID] = 'SB-02' OR [LOCID] = 'SB-36' OR [LOCID] = 'SB-01' OR [LOCID] = 'SB-04' OR [LOCID] = 'SB-05' OR [LOCID] = 'SB-35' OR [LOCID] = 'SB-34' OR [LOCID]

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-01	MW-01	MW-01	MW-01	MW-11
Sample ID				MW-01-(3.4-4)	MW-01-(4.5-5)	MW-01-(11-12)	MW-01-(16.5-18)	MW-11-(3.5-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.4-4.0	4.5-5.0	11.0-12.0	16.5-18.0	3.5-4.5
Date Sampled				03/24/10	03/24/10	03/26/10	03/26/10	01/07/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Lead	MG/KG	63	1000	51.3 J	29.5 J	20.6 J	10.1 J	680 J
Magnesium	MG/KG	-	-	4,170	7,920	2,450 J	4,930 J	3,360
Manganese	MG/KG	1600	10000	479 J	439 J	161 J	253 J	482
Mercury	MG/KG	0.18	2.8	0.045	0.10	0.053	0.019 J	0.38
Nickel	MG/KG	30	310	18.4 J	9.8 J	10.1 J	16.9 J	17.1
Potassium	MG/KG	-	-	1,120	841	694	2,190	3,030
Selenium	MG/KG	3.9	1500	2.4		1.4	1.0 J	
Silver	MG/KG	2	1500		0.073 J			
Sodium	MG/KG	-	-	144	135	1,090	2,800	199
Thallium	MG/KG	5 CP-51	-	2.2		0.30 J	0.86	
Vanadium	MG/KG	39 CP-51	-	32.2	15.5	11.7 J	25.5 J	22.0
Zinc	MG/KG	109	10000	52.3 J	48.3 J	39.9 J	48.3 J	109 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-11	MW-11	SB-01	SB-01	SB-01
Sample ID				MW-11-(5-6)	MW-11-(20-21)	SB-01-(4.5-5)	SB-01-(5-5.5)	SB-01-(8.5-10)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				5.0-6.0	20.0-21.0	4.5-5.0	5.0-5.5	8.5-10.0
Date Sampled				01/17/11	01/17/11	03/24/10	03/25/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500	0.0074 J	0.014 J		0.0053 J	0.022 J
Benzene	MG/KG	0.06	44			0.0058		0.0047 J
Carbon disulfide	MG/KG	2.7 CP-51	-	0.0033	0.017			0.0047 J
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390					
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500					
Xylene (total)	MG/KG	0.26	500					
Total BTEX	MG/KG	-	-	ND	ND	0.0058	ND	0.0047
Total Volatile Organic Compounds	MG/KG	-	-	0.0107	0.031	0.0058	0.0053	0.0314
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.050 J				
2,4-Dimethylphenol	MG/KG	-	-					

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-11	MW-11	SB-01	SB-01	SB-01
Sample ID				MW-11-(5-6)	MW-11-(20-21)	SB-01-(4.5-5)	SB-01-(5-5.5)	SB-01-(8.5-10)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				5.0-6.0	20.0-21.0	4.5-5.0	5.0-5.5	8.5-10.0
Date Sampled				01/17/11	01/17/11	03/24/10	03/25/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.17 J		0.046 J	0.037 J	
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500	0.035 J				
Acenaphthene	MG/KG	20	500	0.27		0.075 J	0.086 J	0.047 J
Acenaphthylene	MG/KG	100	500	0.38		0.34	0.45	
Acetophenone	MG/KG	-	-			0.031 J		
Anthracene	MG/KG	100	500	0.64		0.15 J	0.21	
Benzo(a)anthracene	MG/KG	1	5.6	1.2	0.031 J	0.63	0.85	0.049 J
Benzo(a)pyrene	MG/KG	1	1	1.1		0.47	0.69	0.042 J
Benzo(b)fluoranthene	MG/KG	1	5.6	1.4		0.67	1.0	
Benzo(g,h,i)perylene	MG/KG	100	500	1.2		0.46	0.75	
Benzo(k)fluoranthene	MG/KG	0.8	56	0.57		0.30	0.41	
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.11 J		0.075 J	0.067 J	0.097 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	0.28		0.031 J	0.034 J	
Chrysene	MG/KG	1	56	1.1		0.71	0.97	0.052 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.19 J		0.11 J	0.21	
Dibenzofuran	MG/KG	7	350	0.27		0.047 J	0.041 J	
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.024 J				
Fluoranthene	MG/KG	100	500	2.3	0.048 J	1.2	1.7	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-11	MW-11	SB-01	SB-01	SB-01
Sample ID				MW-11-(5-6)	MW-11-(20-21)	SB-01-(4.5-5)	SB-01-(5-5.5)	SB-01-(8.5-10)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				5.0-6.0	20.0-21.0	4.5-5.0	5.0-5.5	8.5-10.0
Date Sampled				01/17/11	01/17/11	03/24/10	03/25/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500	0.38		0.060 J	0.082 J	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.79		0.31	0.53	
Naphthalene	MG/KG	12	500	0.45		0.067 J	0.051 J	
Phenanthrene	MG/KG	100	500	2.1	0.041 J	0.26	0.32	
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	2.2	0.049 J	1.4	1.6	
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	16.44	0.169	7.258	9.946	0.19
Total Semivolatile Organic Compounds	MG/KG	-	-	17.209	0.169	7.442	10.088	0.287
Metals								
Aluminum	MG/KG	10000 CP-51	-	4,640 J	12,600 J	7,260	8,320	13,600 J
Antimony	MG/KG	12 CP-51	-	0.64 J	0.88 J		0.72 J	
Arsenic	MG/KG	13	16	1.5	12.8	3.2	3.8	4.0 J
Barium	MG/KG	350	400	37.0 J	28.6 J	120 J	255 J	34.9 J
Beryllium	MG/KG	7.2	590	0.17 J	0.62 J	0.73 J	1.1 J	0.96 J
Cadmium	MG/KG	2.5	9.3	0.14 J	0.70	0.48	0.77	0.59 J
Calcium	MG/KG	10000 CP-51	-	46,100 J	1,800 J	17,400 J	6,930 J	2,920 J
Chromium	MG/KG	30	1500	12.4 J	26.6 J	24.7	25.2	27.0 J
Cobalt	MG/KG	20 CP-51	-	6.3 J	10.4 J	6.3 J	9.8 J	8.7 J
Copper	MG/KG	50	270	15.1	14.1	122 J	189 J	12.5 J
Iron	MG/KG	2000 CP-51	-	12,000 J	48,500 J	22,900	32,300	26,300 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-11	MW-11	SB-01	SB-01	SB-01
Sample ID				MW-11-(5-6)	MW-11-(20-21)	SB-01-(4.5-5)	SB-01-(5-5.5)	SB-01-(8.5-10)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				5.0-6.0	20.0-21.0	4.5-5.0	5.0-5.5	8.5-10.0
Date Sampled				01/17/11	01/17/11	03/24/10	03/25/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Lead	MG/KG	63	1000	37.9 J	12.3 J	186 J	1,190 J	12.7 J
Magnesium	MG/KG	-	-	4,380 J	6,370 J	3,610	4,290	6,780 J
Manganese	MG/KG	1600	10000	259 J	534 J	149 J	203 J	383 J
Mercury	MG/KG	0.18	2.8	0.096 J	0.97 J	0.67	2.6	
Nickel	MG/KG	30	310	12.5 J	23.7 J	13.8 J	18.7 J	23.3 J
Potassium	MG/KG	-	-	1,030	2,990	1,530	1,770	2,920 J
Selenium	MG/KG	3.9	1500			1.6	1.9	1.8 J
Silver	MG/KG	2	1500			0.11 J	0.28 J	
Sodium	MG/KG	-	-	209	2,620	107	116	3,470 J
Thallium	MG/KG	5 CP-51	-		0.54 J	0.41 J	0.83	1.0 J
Vanadium	MG/KG	39 CP-51	-	12.5 J	34.8 J	27.9	37.2	43.7 J
Zinc	MG/KG	109	10000	86.4 J	68.2 J	140 J	297 J	61.6 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-01	SB-02	SB-02	SB-02	SB-02
Sample ID				SB-01-(33-34)	20100 325-FD-1	SB-02-(4.7-5.3)	SB-02-(11.5-13)	SB-02-(27-28)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				33.0-34.0	4.7-5.3	4.7-5.3	11.5-13.0	27.0-28.0
Date Sampled				03/29/10	03/25/10	03/25/10	03/29/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500			0.0014 J		
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500	0.0055 J	0.012 J	0.014 J	0.023 J	
Benzene	MG/KG	0.06	44		0.0079	0.0079	0.0024 J	
Carbon disulfide	MG/KG	2.7 CP-51	-				0.024 J	
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-		0.0052 J	0.0037 J		
Ethylbenzene	MG/KG	1	390		0.0015 J	0.0016 J		
Isopropylbenzene	MG/KG	2.3 CP-51	-		0.029	0.019		
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-		0.022	0.015		
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500					
Xylene (total)	MG/KG	0.26	500		0.0074	0.0057		
Total BTEX	MG/KG	-	-	ND	0.0168	0.0152	0.0024	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.0055	0.085	0.0683	0.0494	ND
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-					
2,4-Dimethylphenol	MG/KG	-	-					

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-01	SB-02	SB-02	SB-02	SB-02
Sample ID				SB-01-(33-34)	20100 325-FD-1	SB-02-(4.7-5.3)	SB-02-(11.5-13)	SB-02-(27-28)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				33.0-34.0	4.7-5.3	4.7-5.3	11.5-13.0	27.0-28.0
Date Sampled				03/29/10	03/25/10	03/25/10	03/29/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-		9.6	10		
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500					
Acenaphthene	MG/KG	20	500		2.2 J	1.7 J		
Acenaphthylene	MG/KG	100	500		0.54 J	0.55 J		
Acetophenone	MG/KG	-	-					
Anthracene	MG/KG	100	500		0.85 J	0.95 J		
Benzo(a)anthracene	MG/KG	1	5.6		1.4 J	1.4 J		
Benzo(a)pyrene	MG/KG	1	1		0.78 J	0.91 J		
Benzo(b)fluoranthene	MG/KG	1	5.6		0.59 J	0.54 J		
Benzo(g,h,i)perylene	MG/KG	100	500		0.79 J	0.99 J		
Benzo(k)fluoranthene	MG/KG	0.8	56		0.44 J	0.54 J		
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.037 J			0.10 J	0.041 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-					
Chrysene	MG/KG	1	56		1.1 J	1.2 J		
Dibenz(a,h)anthracene	MG/KG	0.33	0.56		0.26 J	0.29 J		
Dibenzofuran	MG/KG	7	350					
Di-n-butylphthalate	MG/KG	0.014 CP-51	-					
Fluoranthene	MG/KG	100	500		1.1 J	1.1 J	0.035 J	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-01	SB-02	SB-02	SB-02	SB-02
Sample ID				SB-01-(33-34)	20100 325-FD-1	SB-02-(4.7-5.3)	SB-02-(11.5-13)	SB-02-(27-28)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				33.0-34.0	4.7-5.3	4.7-5.3	11.5-13.0	27.0-28.0
Date Sampled				03/29/10	03/25/10	03/25/10	03/29/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500		2.7 J	2.7 J		
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6		0.64 J	0.64 J		
Naphthalene	MG/KG	12	500		0.63 J	0.63 J	0.10 J	
Phenanthrene	MG/KG	100	500		3.2 J	4.4 J		
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500		2.6 J	2.6 J		
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	ND	29.42	31.14	0.135	ND
Total Semivolatile Organic Compounds	MG/KG	-	-	0.037	29.42	31.14	0.235	0.041
Metals								
Aluminum	MG/KG	10000 CP-51	-	5,130	14,500	15,200	16,400 J	6,920
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16	3.5	2.1	2.0	8.2 J	2.5
Barium	MG/KG	350	400	35.0 J	71.2 J	79.2 J	32.8 J	58.1 J
Beryllium	MG/KG	7.2	590	0.57 J	1.5 J	1.1 J	1.1 J	0.52 J
Cadmium	MG/KG	2.5	9.3	0.24	0.86 J	1.3 J	0.81 J	0.23
Calcium	MG/KG	10000 CP-51	-	1,440 J	1,270 J	1,610 J	2,490 J	1,010 J
Chromium	MG/KG	30	1500	20.3 J	31.3	34.2	32.5 J	16.8 J
Cobalt	MG/KG	20 CP-51	-	7.9 J	11.8 J	9.6 J	11.5 J	6.5 J
Copper	MG/KG	50	270	19.8	38.4 J	59.9 J	14.1 J	11.9
Iron	MG/KG	2000 CP-51	-	17,100	25,000	24,800	42,200 J	15,700

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-01	SB-02	SB-02	SB-02	SB-02
Sample ID				SB-01-(33-34)	20100 325-FD-1	SB-02-(4.7-5.3)	SB-02-(11.5-13)	SB-02-(27-28)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				33.0-34.0	4.7-5.3	4.7-5.3	11.5-13.0	27.0-28.0
Date Sampled				03/29/10	03/25/10	03/25/10	03/29/10	03/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Metals								
Lead	MG/KG	63	1000	3.7 J	10.4 J	20.1 J	13.6 J	5.2 J
Magnesium	MG/KG	-	-	2,990 J	4,370	4,970	7,860 J	2,930 J
Manganese	MG/KG	1600	10000	87.1 J	125 J	117 J	443 J	107 J
Mercury	MG/KG	0.18	2.8		0.022 J	0.085	0.026 J	
Nickel	MG/KG	30	310	20.3 J	26.1 J	24.3 J	28.0 J	11.7 J
Potassium	MG/KG	-	-	1,820	2,070	2,550	3,460 J	702
Selenium	MG/KG	3.9	1500	0.71 J	1.5 J	1.3		0.83 J
Silver	MG/KG	2	1500			0.13 J		
Sodium	MG/KG	-	-	430	126	154	3,400 J	572
Thallium	MG/KG	5 CP-51	-	0.37 J	0.96 J	1.0	1.4 J	0.39 J
Vanadium	MG/KG	39 CP-51	-	18.9 J	38.4	39.6	40.6 J	18.1 J
Zinc	MG/KG	109	10000	31.2 J	267 J	154 J	76.2 J	26.3 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-03	SB-03	SB-04	SB-04	SB-04
Sample ID				SB-03-(4.5-5.5)	SB-03-(28-29)	SB-04-(2.5-3.5)	SB-04-(4.2-5)	SB-04-(11-12)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.5-5.5	28.0-29.0	2.5-3.5	4.2-5.0	11.0-12.0
Date Sampled				03/26/10	03/29/10	04/13/10	04/13/10	04/16/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500	0.020 J	0.0081 J			
Benzene	MG/KG	0.06	44	0.012				
Carbon disulfide	MG/KG	2.7 CP-51	-					
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-	0.017				
Ethylbenzene	MG/KG	1	390	0.0060				
Isopropylbenzene	MG/KG	2.3 CP-51	-	0.082 J				
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-	0.080 J				
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500					
Xylene (total)	MG/KG	0.26	500	0.012 J				
Total BTEX	MG/KG	-	-	0.03	ND	ND	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.229	0.0081	ND	ND	ND
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-					
2,4-Dimethylphenol	MG/KG	-	-					

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-03	SB-03	SB-04	SB-04	SB-04
Sample ID				SB-03-(4.5-5.5)	SB-03-(28-29)	SB-04-(2.5-3.5)	SB-04-(4.2-5)	SB-04-(11-12)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.5-5.5	28.0-29.0	2.5-3.5	4.2-5.0	11.0-12.0
Date Sampled				03/26/10	03/29/10	04/13/10	04/13/10	04/16/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	35				
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500					
Acenaphthene	MG/KG	20	500	2.7				
Acenaphthylene	MG/KG	100	500			0.062 J	0.064 J	
Acetophenone	MG/KG	-	-					
Anthracene	MG/KG	100	500	1.5 J	0.021 J	0.059 J	0.083 J	
Benzo(a)anthracene	MG/KG	1	5.6	1.7 J	0.036 J	0.25	0.29	
Benzo(a)pyrene	MG/KG	1	1	0.98 J		0.22	0.22	
Benzo(b)fluoranthene	MG/KG	1	5.6	0.83 J		0.30	0.32	
Benzo(g,h,i)perylene	MG/KG	100	500	0.86 J		0.21	0.20 J	
Benzo(k)fluoranthene	MG/KG	0.8	56	0.76 J		0.091 J	0.091 J	
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-		0.095 J		0.054 J	0.034 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-					
Chrysene	MG/KG	1	56	2.6	0.026 J	0.26	0.29	
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.22 J		0.041 J	0.045 J	
Dibenzofuran	MG/KG	7	350					
Di-n-butylphthalate	MG/KG	0.014 CP-51	-					
Fluoranthene	MG/KG	100	500	1.8 J	0.045 J	0.35	0.50	0.043 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-03	SB-03	SB-04	SB-04	SB-04
Sample ID				SB-03-(4.5-5.5)	SB-03-(28-29)	SB-04-(2.5-3.5)	SB-04-(4.2-5)	SB-04-(11-12)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.5-5.5	28.0-29.0	2.5-3.5	4.2-5.0	11.0-12.0
Date Sampled				03/26/10	03/29/10	04/13/10	04/13/10	04/16/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500	3.8			0.039 J	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.57 J		0.17 J	0.17 J	
Naphthalene	MG/KG	12	500	1.1 J		0.022 J	0.022 J	
Phenanthrene	MG/KG	100	500	9.7	0.067 J	0.20 J	0.34	
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	4.6	0.073 J	0.38	0.52	
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	68.72	0.268	2.615	3.194	0.043
Total Semivolatile Organic Compounds	MG/KG	-	-	68.72	0.363	2.615	3.248	0.077
Metals								
Aluminum	MG/KG	10000 CP-51	-	9,010	5,720	10,700 J	9,650 J	10,100 J
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16	3.2	1.6	4.3	8.1	8.3
Barium	MG/KG	350	400	68.3 J	29.3 J	79.2 J	53.1 J	22.5 J
Beryllium	MG/KG	7.2	590	0.92 J	0.58 J	1.1 J	0.91 J	0.73 J
Cadmium	MG/KG	2.5	9.3	1.5	0.19 J	0.51	0.41	0.29 J
Calcium	MG/KG	10000 CP-51	-	2,910 J	1,040 J	4,100 J	3,570 J	1,300 J
Chromium	MG/KG	30	1500	24.5 J	16.0 J	27.3 J	27.0 J	21.5 J
Cobalt	MG/KG	20 CP-51	-	9.0 J	4.3 J	11.1 J	18.2 J	7.5 J
Copper	MG/KG	50	270	90.3	18.0	38.6 J	19.0 J	8.3 J
Iron	MG/KG	2000 CP-51	-	22,600	10,000	33,000	29,000	26,900

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-03	SB-03	SB-04	SB-04	SB-04
Sample ID				SB-03-(4.5-5.5)	SB-03-(28-29)	SB-04-(2.5-3.5)	SB-04-(4.2-5)	SB-04-(11-12)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.5-5.5	28.0-29.0	2.5-3.5	4.2-5.0	11.0-12.0
Date Sampled				03/26/10	03/29/10	04/13/10	04/13/10	04/16/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Lead	MG/KG	63	1000	94.4 J	3.3 J	59.6 J	26.9 J	9.0 J
Magnesium	MG/KG	-	-	3,350 J	2,520 J	5,850 J	5,370 J	5,210 J
Manganese	MG/KG	1600	10000	114 J	70.6 J	250 J	206 J	317 J
Mercury	MG/KG	0.18	2.8	0.17		4.1 J	0.97 J	0.018 J
Nickel	MG/KG	30	310	21.2 J	10.2 J	24.4 J	24.4 J	16.9 J
Potassium	MG/KG	-	-	1,770	1,500	3,570 J	3,210 J	2,470 J
Selenium	MG/KG	3.9	1500	0.68 J	0.83 J	3.5	3.6	3.2
Silver	MG/KG	2	1500			0.15 J	0.12 J	0.16 J
Sodium	MG/KG	-	-	122	279	287 J	325 J	3,620 J
Thallium	MG/KG	5 CP-51	-	0.50 J	0.27 J	1.7	1.7	2.5
Vanadium	MG/KG	39 CP-51	-	31.0 J	23.5 J	33.7 J	31.7 J	26.0 J
Zinc	MG/KG	109	10000	488 J	25.5 J	127 J	66.3 J	50.1 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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- = No standard, criteria or guidance value.

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-05	SB-05	SB-05	SB-32	SB-32
Sample ID				SB-05-(4-5)	SB-05-(6.5-7.0)	SB-05-(11.5-12)	SB-32-(3-4)	SB-32-(5-6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	6.5-7.0	11.5-12.0	3.0-4.0	5.0-6.0
Date Sampled				04/13/10	04/16/10	04/16/10	01/13/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500		0.047 J	0.015 J		0.030 J
Benzene	MG/KG	0.06	44					
Carbon disulfide	MG/KG	2.7 CP-51	-		0.024 J	0.0050 J		
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390		0.040			
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500		0.019			
Xylene (total)	MG/KG	0.26	500		0.034			
Total BTEX	MG/KG	-	-	ND	0.093	ND	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	ND	0.164	0.02	ND	0.03
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.027 J	25 J		0.14 J	0.027 J
2,4-Dimethylphenol	MG/KG	-	-		1.8 J			

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-05	SB-05	SB-05	SB-32	SB-32
Sample ID				SB-05-(4-5)	SB-05-(6.5-7.0)	SB-05-(11.5-12)	SB-32-(3-4)	SB-32-(5-6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	6.5-7.0	11.5-12.0	3.0-4.0	5.0-6.0
Date Sampled				04/13/10	04/16/10	04/16/10	01/13/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.12 J	84 J		0.42	0.048 J
2-Methylphenol (o-cresol)	MG/KG	0.33	500		1.1 J			
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500		3.2 J		0.050 J	
Acenaphthene	MG/KG	20	500	0.035 J	250	0.21 J	0.32	0.024 J
Acenaphthylene	MG/KG	100	500	0.90			2.5	0.50
Acetophenone	MG/KG	-	-	0.026 J				
Anthracene	MG/KG	100	500	0.29	140 J	0.43 J	2.4	0.15 J
Benzo(a)anthracene	MG/KG	1	5.6	2.1	390	0.27 J	7.6	0.56
Benzo(a)pyrene	MG/KG	1	1	2.8	290	0.12 J	9.2	1.8
Benzo(b)fluoranthene	MG/KG	1	5.6	2.6	370	0.16 J	11	1.3
Benzo(g,h,i)perylene	MG/KG	100	500	3.1	160	0.16 J	6.4	2.8
Benzo(k)fluoranthene	MG/KG	0.8	56	1.7	27 J	0.072 J	2.5	0.41
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.069 J				0.026 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	0.039 J	96 J	0.11 J	0.37	
Chrysene	MG/KG	1	56	1.9	390	0.28 J	7.3	0.64
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.64	27 J	0.046 J	1.7	0.33
Dibenzofuran	MG/KG	7	350	0.036 J	170	0.35 J	0.64	0.023 J
Di-n-butylphthalate	MG/KG	0.014 CP-51	-				0.23	
Fluoranthene	MG/KG	100	500	2.8	1,100	0.56 J	13	0.53

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-05	SB-05	SB-05	SB-32	SB-32
Sample ID				SB-05-(4-5)	SB-05-(6.5-7.0)	SB-05-(11.5-12)	SB-32-(3-4)	SB-32-(5-6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	6.5-7.0	11.5-12.0	3.0-4.0	5.0-6.0
Date Sampled				04/13/10	04/16/10	04/16/10	01/13/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500	0.089 J	170	0.78 J	0.96	0.062 J
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	2.1 J	140 J	0.078 J	5.4	1.7
Naphthalene	MG/KG	12	500	0.11 J	410	0.13 J	0.58	0.15 J
Phenanthrene	MG/KG	100	500	0.90	1,200	2.1 J	7.7	0.25
Phenol	MG/KG	0.33	500		1.1 J			
Pyrene	MG/KG	100	500	2.5	830	0.41 J	14	1.2
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	24.684	5,978	5.806	92.98	12.454
Total Semivolatile Organic Compounds	MG/KG	-	-	24.881	6,276.2	6.266	94.41	12.53
Metals								
Aluminum	MG/KG	10000 CP-51	-	9,250 J	5,720 J	16,400 J	6,550	3,690 J
Antimony	MG/KG	12 CP-51	-				0.71 J	0.52 J
Arsenic	MG/KG	13	16	2.3	4.8	5.0 J	8.2	2.0
Barium	MG/KG	350	400	113 J	94.7 J	54.5 J	144	42.3 J
Beryllium	MG/KG	7.2	590	0.95 J	0.55 J	1.1 J	0.30	0.20 J
Cadmium	MG/KG	2.5	9.3	0.35	0.22 J	0.38 J	1.5	0.096 J
Calcium	MG/KG	10000 CP-51	-	12,000 J	102,000 J	1,620 J	22,300 J	7,270 J
Chromium	MG/KG	30	1500	21.4 J	12.7 J	35.0 J	23.4	7.9 J
Cobalt	MG/KG	20 CP-51	-	9.0 J	4.6 J	18.2 J	7.5	3.8 J
Copper	MG/KG	50	270	33.5 J	50.3 J	62.4 J	58.6 J	21.9
Iron	MG/KG	2000 CP-51	-	22,700	10,900	20,200 J	21,200	12,900 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

[SITEID] = '02' AND [MATRIX] = 'SO' AND ([LOCID] = 'MW-01' OR [LOCID] = 'SB-32' OR [LOCID] = 'MW-11' OR [LOCID] = 'SB-40' OR [LOCID] = 'SB-38' OR [LOCID] = 'SB-37' OR [LOCID] = 'SB-39' OR [LOCID] = 'SB-03' OR [LOCID] = 'SB-02' OR [LOCID] = 'SB-36' OR [LOCID] = 'SB-01' OR [LOCID] = 'SB-04' OR [LOCID] = 'SB-05' OR [LOCID] = 'SB-35' OR [LOCID] = 'SB-34' OR [LOCID]

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-05	SB-05	SB-05	SB-32	SB-32
Sample ID				SB-05-(4-5)	SB-05-(6.5-7.0)	SB-05-(11.5-12)	SB-32-(3-4)	SB-32-(5-6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	6.5-7.0	11.5-12.0	3.0-4.0	5.0-6.0
Date Sampled				04/13/10	04/16/10	04/16/10	01/13/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Lead	MG/KG	63	1000	52.9 J	175 J	20.2 J	266	99.9 J
Magnesium	MG/KG	-	-	8,120 J	2,820 J	6,310 J	3,830 J	1,350 J
Manganese	MG/KG	1600	10000	246 J	1,150 J	222 J	248	125 J
Mercury	MG/KG	0.18	2.8	0.36 J	1.5 J	0.13 J	0.32 J	0.0070 J
Nickel	MG/KG	30	310	20.9 J	14.1 J	29.3 J	21.9	11.7 J
Potassium	MG/KG	-	-	2,790 J	891 J	3,610 J	1,400	494
Selenium	MG/KG	3.9	1500	3.0	1.1 J	3.8 J	1.7	0.65 J
Silver	MG/KG	2	1500	0.10 J	0.20 J	0.20 J		
Sodium	MG/KG	-	-	295 J	730 J	3,400 J	254	275
Thallium	MG/KG	5 CP-51	-	1.7	4.5	1.7 J		
Vanadium	MG/KG	39 CP-51	-	26.4 J	14.4 J	42.0 J	23.4	10.4 J
Zinc	MG/KG	109	10000	95.8 J	144 J	72.8 J	215 J	41.0 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-32	SB-32	SB-33	SB-33	SB-33
Sample ID				SB-32-(9-10)	SB-32-(13-14)	SB-33-(3.5-4)	SB-33-(10.5-11)	SB-33-(13.5-14)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	13.0-14.0	3.5-4.0	10.5-11.0	13.5-14.0
Date Sampled				01/17/11	01/17/11	01/11/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500	0.0072 J				
Acetone	MG/KG	0.05	500	0.036 J	0.017 J	0.0042 J	0.019 J	0.014 J
Benzene	MG/KG	0.06	44				0.015	
Carbon disulfide	MG/KG	2.7 CP-51	-	0.0023	0.012		0.0088	
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390					
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500			0.0016 J		
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500	0.0020 J			0.0027 J	
Xylene (total)	MG/KG	0.26	500	0.0053			0.013	
Total BTEX	MG/KG	-	-	0.0073	ND	ND	0.0307	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.0528	0.029	0.0058	0.0585	0.014
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.025 J			2.2	
2,4-Dimethylphenol	MG/KG	-	-				0.46	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-32	SB-32	SB-33	SB-33	SB-33
Sample ID				SB-32-(9-10)	SB-32-(13-14)	SB-33-(3.5-4)	SB-33-(10.5-11)	SB-33-(13.5-14)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	13.0-14.0	3.5-4.0	10.5-11.0	13.5-14.0
Date Sampled				01/17/11	01/17/11	01/11/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.056 J		0.027 J	5.5	
2-Methylphenol (o-cresol)	MG/KG	0.33	500				0.21 J	
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500				0.57	
Acenaphthene	MG/KG	20	500	0.075 J		0.14 J	3.4	
Acenaphthylene	MG/KG	100	500	0.12 J		0.28	8.0	0.034 J
Acetophenone	MG/KG	-	-				0.044 J	
Anthracene	MG/KG	100	500	0.24		0.42	14	0.052 J
Benzo(a)anthracene	MG/KG	1	5.6	0.41		1.6	16	0.11 J
Benzo(a)pyrene	MG/KG	1	1	0.48		1.6	17	0.10 J
Benzo(b)fluoranthene	MG/KG	1	5.6	0.56		2.0	21	0.13 J
Benzo(g,h,i)perylene	MG/KG	100	500	0.33		1.0	11	0.066 J
Benzo(k)fluoranthene	MG/KG	0.8	56	0.24		0.89	4.4	0.053 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.081 J		0.27	0.55	
Butylbenzylphthalate	MG/KG	100 CP-51	-				0.076 J	
Carbazole	MG/KG	-	-	0.21		0.15 J	4.8	
Chrysene	MG/KG	1	56	0.38		1.6	15	0.094 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.11 J		0.29	2.9	0.019 J
Dibenzofuran	MG/KG	7	350	0.22		0.050 J	8.9	0.023 J
Di-n-butylphthalate	MG/KG	0.014 CP-51	-				0.040 J	
Fluoranthene	MG/KG	100	500	0.66		2.7	39	0.20

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-32	SB-32	SB-33	SB-33	SB-33
Sample ID				SB-32-(9-10)	SB-32-(13-14)	SB-33-(3.5-4)	SB-33-(10.5-11)	SB-33-(13.5-14)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	13.0-14.0	3.5-4.0	10.5-11.0	13.5-14.0
Date Sampled				01/17/11	01/17/11	01/11/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500	0.18 J		0.12 J	11	0.034 J
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.30		0.94	9.4	0.060 J
Naphthalene	MG/KG	12	500	0.32		0.047 J	25	0.021 J
Phenanthrene	MG/KG	100	500	0.38		1.2	46	0.13 J
Phenol	MG/KG	0.33	500				0.40	
Pyrene	MG/KG	100	500	0.62		2.6	37	0.19
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	5.461	ND	17.454	285.6	1.293
Total Semivolatile Organic Compounds	MG/KG	-	-	5.997	ND	17.924	303.85	1.316
Metals								
Aluminum	MG/KG	10000 CP-51	-	10,100 J	16,700 J	6,300	5,740	8,430
Antimony	MG/KG	12 CP-51	-	1.5 J	1.2 J	0.40 J	2.4 J	
Arsenic	MG/KG	13	16	1.8	8.0	6.1	7.3	1.7
Barium	MG/KG	350	400	72.3 J	34.5 J	720	118	42.8
Beryllium	MG/KG	7.2	590	0.21 J	0.81 J	0.29	0.23	0.55
Cadmium	MG/KG	2.5	9.3	0.34	0.64	0.87	2.4	0.49
Calcium	MG/KG	10000 CP-51	-	1,760 J	2,000 J	61,600 J	23,400 J	20,600 J
Chromium	MG/KG	30	1500	63.2 J	34.7 J	14.3	37.1	15.9
Cobalt	MG/KG	20 CP-51	-	9.0 J	11.4 J	4.5	7.5	9.3
Copper	MG/KG	50	270	25.1	15.1	27.5 J	141 J	15.8 J
Iron	MG/KG	2000 CP-51	-	20,600 J	26,900 J	11,200	41,000	14,400

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-32	SB-32	SB-33	SB-33	SB-33
Sample ID				SB-32-(9-10)	SB-32-(13-14)	SB-33-(3.5-4)	SB-33-(10.5-11)	SB-33-(13.5-14)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	13.0-14.0	3.5-4.0	10.5-11.0	13.5-14.0
Date Sampled				01/17/11	01/17/11	01/11/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Lead	MG/KG	63	1000	7.5 J	19.6 J	1,330	232	9.0
Magnesium	MG/KG	-	-	6,210 J	8,020 J	3,680 J	3,110 J	14,700 J
Manganese	MG/KG	1600	10000	172 J	447 J	182	263	317
Mercury	MG/KG	0.18	2.8		0.028 J	0.20 J	0.47 J	0.13 J
Nickel	MG/KG	30	310	35.0 J	29.0 J	13.6	17.6	13.6
Potassium	MG/KG	-	-	3,100	3,890	1,480	927	1,050
Selenium	MG/KG	3.9	1500			0.60 J	0.64 J	0.92 J
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	911	4,570	393	472	468
Thallium	MG/KG	5 CP-51	-					
Vanadium	MG/KG	39 CP-51	-	31.4 J	42.2 J	19.8	32.7	23.8
Zinc	MG/KG	109	10000	42.5 J	76.7 J	486 J	246 J	41.3 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-34	SB-34	SB-35	SB-35	SB-35
Sample ID				SB-34-(10-11)	SB-34-(20-20.9)	01182011-FD-1	SB-35-(9.5-10.0)	SB-35-(17.2-17.8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-11.0	20.0-20.9	9.5-10.0	9.5-10.0	17.2-17.8
Date Sampled				01/14/11	01/14/11	01/18/11	01/18/11	01/18/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			Field Duplicate (1-1)		
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500					0.0033 J
Acetone	MG/KG	0.05	500	0.015 J	0.012 J	0.012 J	0.018 J	0.028 J
Benzene	MG/KG	0.06	44					
Carbon disulfide	MG/KG	2.7 CP-51	-		0.0050			0.0022 J
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390					
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500			0.0017 J		
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500				0.0022	
Xylene (total)	MG/KG	0.26	500					
Total BTEX	MG/KG	-	-	ND	ND	ND	0.0022	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.015	0.017	0.0137	0.0202	0.0335
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-					
2,4-Dimethylphenol	MG/KG	-	-					

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-34	SB-34	SB-35	SB-35	SB-35
Sample ID				SB-34-(10-11)	SB-34-(20-20.9)	01182011-FD-1	SB-35-(9.5-10.0)	SB-35-(17.2-17.8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-11.0	20.0-20.9	9.5-10.0	9.5-10.0	17.2-17.8
Date Sampled				01/14/11	01/14/11	01/18/11	01/18/11	01/18/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			Field Duplicate (1-1)		
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-					
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500					
Acenaphthene	MG/KG	20	500	0.020 J				
Acenaphthylene	MG/KG	100	500	0.036 J	0.036 J			
Acetophenone	MG/KG	-	-					
Anthracene	MG/KG	100	500	0.036 J	0.053 J			0.068 J
Benzo(a)anthracene	MG/KG	1	5.6	0.11 J	0.11 J	0.060 J	0.052 J	0.14 J
Benzo(a)pyrene	MG/KG	1	1	0.13 J	0.13 J	0.069 J	0.058 J	0.14 J
Benzo(b)fluoranthene	MG/KG	1	5.6	0.17 J	0.16 J	0.082 J	0.069 J	0.19 J
Benzo(g,h,i)perylene	MG/KG	100	500	0.092 J	0.085 J	0.056 J	0.057 J	0.096 J
Benzo(k)fluoranthene	MG/KG	0.8	56	0.061 J	0.058 J	0.037 J	0.035 J	0.087 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-			0.058 J	0.033 J	
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-					
Chrysene	MG/KG	1	56	0.12 J	0.11 J	0.057 J	0.053 J	0.13 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.024 J				0.031 J
Dibenzofuran	MG/KG	7	350		0.028 J			
Di-n-butylphthalate	MG/KG	0.014 CP-51	-					
Fluoranthene	MG/KG	100	500	0.18 J	0.19 J	0.082 J	0.073 J	0.21

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-34	SB-34	SB-35	SB-35	SB-35
Sample ID				SB-34-(10-11)	SB-34-(20-20.9)	01182011-FD-1	SB-35-(9.5-10.0)	SB-35-(17.2-17.8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-11.0	20.0-20.9	9.5-10.0	9.5-10.0	17.2-17.8
Date Sampled				01/14/11	01/14/11	01/18/11	01/18/11	01/18/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			Field Duplicate (1-1)		
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500		0.036 J			0.032 J
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.078 J	0.088 J	0.047 J	0.040 J	0.091 J
Naphthalene	MG/KG	12	500	0.033 J	0.088 J			
Phenanthrene	MG/KG	100	500	0.11 J	0.17 J	0.052 J	0.043 J	0.15 J
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	0.19	0.19 J	0.083 J	0.076 J	0.19 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	1.39	1.504	0.625	0.556	1.555
Total Semivolatile Organic Compounds	MG/KG	-	-	1.39	1.532	0.683	0.589	1.555
Metals								
Aluminum	MG/KG	10000 CP-51	-	9,950	15,200	5,580 J	5,690 J	14,000 J
Antimony	MG/KG	12 CP-51	-	0.43 J	0.47 J	0.48 J	0.37 J	1.3 J
Arsenic	MG/KG	13	16	3.8	11.6			1.2
Barium	MG/KG	350	400	73.3	33.6	33.7 J	36.9 J	59.6 J
Beryllium	MG/KG	7.2	590	0.69	0.75	0.45 J	0.41 J	0.48 J
Cadmium	MG/KG	2.5	9.3	0.93	1.1		0.099 J	0.40
Calcium	MG/KG	10000 CP-51	-	15,900 J	1,950 J	46,000 J	31,800 J	1,150 J
Chromium	MG/KG	30	1500	19.5	30.9	11.1 J	11.4 J	27.9 J
Cobalt	MG/KG	20 CP-51	-	10.4	10.4	7.4 J	6.2 J	9.4 J
Copper	MG/KG	50	270	36.3 J	16.0 J	16.0	13.5	17.5
Iron	MG/KG	2000 CP-51	-	15,700	34,400	10,400 J	9,110 J	19,400 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

[SITEID] = '02' AND [MATRIX] = 'SO' AND ([LOCID] = 'MW-01' OR [LOCID] = 'SB-32' OR [LOCID] = 'MW-11' OR [LOCID] = 'SB-40' OR [LOCID] = 'SB-38' OR [LOCID] = 'SB-37' OR [LOCID] = 'SB-39' OR [LOCID] = 'SB-03' OR [LOCID] = 'SB-02' OR [LOCID] = 'SB-36' OR [LOCID] = 'SB-01' OR [LOCID] = 'SB-04' OR [LOCID] = 'SB-05' OR [LOCID] = 'SB-35' OR [LOCID] = 'SB-34' OR [LOCID]

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-34	SB-34	SB-35	SB-35	SB-35
Sample ID				SB-34-(10-11)	SB-34-(20-20.9)	01182011-FD-1	SB-35-(9.5-10.0)	SB-35-(17.2-17.8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-11.0	20.0-20.9	9.5-10.0	9.5-10.0	17.2-17.8
Date Sampled				01/14/11	01/14/11	01/18/11	01/18/11	01/18/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			Field Duplicate (1-1)		
Metals								
Lead	MG/KG	63	1000	129	16.2	16.7 J	9.6 J	10.9 J
Magnesium	MG/KG	-	-	8,950 J	7,250 J	29,900 J	21,000 J	5,870 J
Manganese	MG/KG	1600	10000	305	469	272 J	461 J	251 J
Mercury	MG/KG	0.18	2.8	0.20 J	0.044 J	0.040 J	0.067 J	0.039 J
Nickel	MG/KG	30	310	22.1	25.0	10.4 J	11.1 J	21.2 J
Potassium	MG/KG	-	-	1,440	3,710	1,110	1,270	2,010
Selenium	MG/KG	3.9	1500	1.2	2.6			
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	406	4,360	322	322	1,430
Thallium	MG/KG	5 CP-51	-					
Vanadium	MG/KG	39 CP-51	-	26.2	40.1	17.9 J	17.6 J	31.8 J
Zinc	MG/KG	109	10000	86.6 J	71.6 J	38.1 J	33.2 J	57.6 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

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Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-36	SB-36	SB-36	SB-36	SB-37
Sample ID				01132011-FD-1	SB-36-(3-4)	SB-36-(6.5-7)	SB-36-(13.5-14.2)	SB-37-(3-4)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	3.0-4.0	6.5-7.0	13.5-14.2	3.0-4.0
Date Sampled				01/13/11	01/13/11	01/17/11	01/17/11	01/06/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)				
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500			0.0038 J		
Acetone	MG/KG	0.05	500	0.014 J		0.020 J	0.014 J	
Benzene	MG/KG	0.06	44			0.0021 J		
Carbon disulfide	MG/KG	2.7 CP-51	-	0.0012 J			0.0050	
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390					
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500			0.0015 J		
Xylene (total)	MG/KG	0.26	500					
Total BTEX	MG/KG	-	-	ND	ND	0.0036	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.0152	ND	0.0274	0.019	ND
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	3.6 J	0.94	0.028 J		0.37
2,4-Dimethylphenol	MG/KG	-	-	0.40	0.19			

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-36	SB-36	SB-36	SB-36	SB-37
Sample ID				01132011-FD-1	SB-36-(3-4)	SB-36-(6.5-7)	SB-36-(13.5-14.2)	SB-37-(3-4)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	3.0-4.0	6.5-7.0	13.5-14.2	3.0-4.0
Date Sampled				01/13/11	01/13/11	01/17/11	01/17/11	01/06/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)				
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	11	3.0	0.12 J		1.2
2-Methylphenol (o-cresol)	MG/KG	0.33	500	0.23	0.12 J			0.021 J
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500	0.64	0.27	0.025 J		0.054 J
Acenaphthene	MG/KG	20	500	7.5 J	2.0	0.052 J		0.78
Acenaphthylene	MG/KG	100	500	25	6.8	1.4		2.7
Acetophenone	MG/KG	-	-	0.048 J	0.023 J	0.074 J		0.038 J
Anthracene	MG/KG	100	500	38	11	0.49		2.9
Benzo(a)anthracene	MG/KG	1	5.6	58	17	1.4		6.3
Benzo(a)pyrene	MG/KG	1	1	50	14	1.6		5.7
Benzo(b)fluoranthene	MG/KG	1	5.6	66	17	3.3		7.1
Benzo(g,h,i)perylene	MG/KG	100	500	30	8.3	2.3		3.8
Benzo(k)fluoranthene	MG/KG	0.8	56	21	6.8	1.1		1.7
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-			0.046 J		0.30
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	12	3.4 J	0.066 J		1.1
Chrysene	MG/KG	1	56	51	14	1.7		5.5
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	6.3 J	2.5	0.60		1.0
Dibenzofuran	MG/KG	7	350	19	5.5			1.8
Di-n-butylphthalate	MG/KG	0.014 CP-51	-			0.054 J		0.059 J
Fluoranthene	MG/KG	100	500	130	39	1.6	0.052 J	15

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-36	SB-36	SB-36	SB-36	SB-37
Sample ID				01132011-FD-1	SB-36-(3-4)	SB-36-(6.5-7)	SB-36-(13.5-14.2)	SB-37-(3-4)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	3.0-4.0	6.5-7.0	13.5-14.2	3.0-4.0
Date Sampled				01/13/11	01/13/11	01/17/11	01/17/11	01/06/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)				
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500	26	7.8	0.14 J		2.3
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	27	7.6	2.0 J		3.3
Naphthalene	MG/KG	12	500	21	7.5	0.23		3.6
Phenanthrene	MG/KG	100	500	140	39	0.61	0.055 J	15
Phenol	MG/KG	0.33	500	0.39	0.15 J			0.033 J
Pyrene	MG/KG	100	500	120	35	2.0	0.048 J	14
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	827.8	238.3	20.642	0.155	91.88
Total Semivolatile Organic Compounds	MG/KG	-	-	864.108	248.893	20.935	0.155	95.655
Metals								
Aluminum	MG/KG	10000 CP-51	-	8,680	10,800	4,710 J	14,700 J	7,020
Antimony	MG/KG	12 CP-51	-	0.66 J	0.86 J	1.7 J	0.67 J	2.8 J
Arsenic	MG/KG	13	16	3.9	4.2	9.2	11.1	9.2
Barium	MG/KG	350	400	73.3	87.9	230 J	28.5 J	367
Beryllium	MG/KG	7.2	590	0.26	0.35	0.16 J	0.73 J	0.47
Cadmium	MG/KG	2.5	9.3	0.75	0.97	1.0	0.69	2.4 J
Calcium	MG/KG	10000 CP-51	-	4,190 J	3,170 J	11,100 J	1,930 J	20,500 J
Chromium	MG/KG	30	1500	23.4	27.0	15.9 J	31.1 J	28.0
Cobalt	MG/KG	20 CP-51	-	7.7	8.2	4.7 J	11.0 J	7.3 J
Copper	MG/KG	50	270	46.9 J	115 J	85.4	13.9	148
Iron	MG/KG	2000 CP-51	-	17,800	20,800	24,000 J	32,400 J	34,900 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-36	SB-36	SB-36	SB-36	SB-37
Sample ID				01132011-FD-1	SB-36-(3-4)	SB-36-(6.5-7)	SB-36-(13.5-14.2)	SB-37-(3-4)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	3.0-4.0	6.5-7.0	13.5-14.2	3.0-4.0
Date Sampled				01/13/11	01/13/11	01/17/11	01/17/11	01/06/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)				
Metals								
Lead	MG/KG	63	1000	85.1	96.2	355 J	13.6 J	762 J
Magnesium	MG/KG	-	-	4,380 J	4,580 J	1,820 J	7,250 J	4,370
Manganese	MG/KG	1600	10000	132	171	166 J	553 J	333
Mercury	MG/KG	0.18	2.8	0.16 J	0.21 J	0.61 J	0.0090 J	1.0
Nickel	MG/KG	30	310	19.2	20.2	13.8 J	25.8 J	23.0
Potassium	MG/KG	-	-	1,790	2,420	1,440	3,360	2,270
Selenium	MG/KG	3.9	1500	1.4	1.3 J	0.95 J		
Silver	MG/KG	2	1500			0.37 J		0.16 J
Sodium	MG/KG	-	-	194	206	409	3,730	347
Thallium	MG/KG	5 CP-51	-					0.99
Vanadium	MG/KG	39 CP-51	-	27.0	34.0	35.3 J	37.8 J	22.9
Zinc	MG/KG	109	10000	113 J	142 J	230 J	72.7 J	556 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-37	SB-37	SB-37	SB-38	SB-38
Sample ID				SB-37-(8.5-9)	SB-37-(8.2-9.0)	SB-37-(13.5-14.5)	SB-38-(4-5)	SB-38-(7.8-8.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				8.5-9.0	8.2-9.0	13.5-14.5	4.0-5.0	7.8-8.5
Date Sampled				01/06/11	01/11/11	01/11/11	01/06/11	01/11/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500		0.0078 J			
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500		0.11 J	0.013 J		0.019 J
Benzene	MG/KG	0.06	44		0.026 J		0.0016 J	0.0074
Carbon disulfide	MG/KG	2.7 CP-51	-		0.0088 J			
Chloroform	MG/KG	0.37	350	0.11 J				
Cyclohexane	MG/KG	-	-	2.0	0.49 J			
Ethylbenzene	MG/KG	1	390	2.8	8.6 J			0.019
Isopropylbenzene	MG/KG	2.3 CP-51	-	0.41	0.61 J			0.0048
Methyl tert-butyl ether	MG/KG	0.93	500					
Methylcyclohexane	MG/KG	-	-	1.6	0.67 J			0.0042 J
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					0.048
Toluene	MG/KG	0.7	500		0.082 J		0.0018 J	0.017
Xylene (total)	MG/KG	0.26	500	0.33 J	4.6 J			0.083
Total BTEX	MG/KG	-	-	3.13	13.308	ND	0.0034	0.1264
Total Volatile Organic Compounds	MG/KG	-	-	7.25	15.2046	0.013	0.0034	0.2024
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-				0.071 J	54 J
2,4-Dimethylphenol	MG/KG	-	-					

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-37	SB-37	SB-37	SB-38	SB-38
Sample ID				SB-37-(8.5-9)	SB-37-(8.2-9.0)	SB-37-(13.5-14.5)	SB-38-(4-5)	SB-38-(7.8-8.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				8.5-9.0	8.2-9.0	13.5-14.5	4.0-5.0	7.8-8.5
Date Sampled				01/06/11	01/11/11	01/11/11	01/06/11	01/11/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-				0.43	520
2-Methylphenol (o-cresol)	MG/KG	0.33	500				0.042 J	
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500				0.14 J	
Acenaphthene	MG/KG	20	500	6.1	3.3		0.15 J	17
Acenaphthylene	MG/KG	100	500	3.8			3.6	29
Acetophenone	MG/KG	-	-	0.85 J			0.12 J	24
Anthracene	MG/KG	100	500	2.4	1.5		2.0	45 J
Benzo(a)anthracene	MG/KG	1	5.6	3.6	0.72 J		7.1	150
Benzo(a)pyrene	MG/KG	1	1	2.0 J	0.54 J		6.4	65 J
Benzo(b)fluoranthene	MG/KG	1	5.6	7.1	0.50 J		11	120
Benzo(g,h,i)perylene	MG/KG	100	500	3.7	0.36 J		7.4	56 J
Benzo(k)fluoranthene	MG/KG	0.8	56	3.5	0.45 J		2.5	24
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.36 J			0.15 J	
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	0.40 J			0.19 J	
Chrysene	MG/KG	1	56	6.9	1.6 J		7.4	160
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	1.4 J	0.12 J		1.7	15
Dibenzofuran	MG/KG	7	350	3.0	1.7 J		0.21	14
Di-n-butylphthalate	MG/KG	0.014 CP-51	-				0.035 J	
Fluoranthene	MG/KG	100	500	3.0	1.5 J		8.7	190

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-37	SB-37	SB-37	SB-38	SB-38
Sample ID				SB-37-(8.5-9)	SB-37-(8.2-9.0)	SB-37-(13.5-14.5)	SB-38-(4-5)	SB-38-(7.8-8.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				8.5-9.0	8.2-9.0	13.5-14.5	4.0-5.0	7.8-8.5
Date Sampled				01/06/11	01/11/11	01/11/11	01/06/11	01/11/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500	6.2	3.6		0.29	88
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	3.2 J	0.29 J		6.0 J	44 J
Naphthalene	MG/KG	12	500	0.80 J	0.54		1.9	1,100
Phenanthrene	MG/KG	100	500	10	5.8		3.0	420
Phenol	MG/KG	0.33	500				0.047 J	
Pyrene	MG/KG	100	500	5.5	2.8 J		14	300
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	69.2	23.62	ND	83.57	3,343
Total Semivolatile Organic Compounds	MG/KG	-	-	73.81	25.32	ND	84.575	3,435
Metals								
Aluminum	MG/KG	10000 CP-51	-	3,310	2,670	12,900	9,990	2,220
Antimony	MG/KG	12 CP-51	-	1.0 J		0.66 J	1.3 J	3.2 J
Arsenic	MG/KG	13	16	4.1	3.9	4.2	5.6	32.7
Barium	MG/KG	350	400	67.4	84.3	31.7	69.3	88.6
Beryllium	MG/KG	7.2	590	0.19 J	0.17 J	0.41	0.40	0.039 J
Cadmium	MG/KG	2.5	9.3	0.12 J	0.39	0.54	0.66 J	2.7
Calcium	MG/KG	10000 CP-51	-	567 J	1,870 J	1,060 J	3,630 J	725 J
Chromium	MG/KG	30	1500	13.9	6.8	19.2	22.8	14.2
Cobalt	MG/KG	20 CP-51	-	1.5 J	3.3	8.2	4.4 J	4.8
Copper	MG/KG	50	270	26.7	58.3 J	13.3 J	72.9	319 J
Iron	MG/KG	2000 CP-51	-	12,800 J	14,000	20,100	18,200 J	62,200

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

[SITEID] = '02' AND [MATRIX] = 'SO' AND ([LOCID] = 'MW-01' OR [LOCID] = 'SB-32' OR [LOCID] = 'MW-11' OR [LOCID] = 'SB-40' OR [LOCID] = 'SB-38' OR [LOCID] = 'SB-37' OR [LOCID] = 'SB-39' OR [LOCID] = 'SB-03' OR [LOCID] = 'SB-02' OR [LOCID] = 'SB-36' OR [LOCID] = 'SB-01' OR [LOCID] = 'SB-04' OR [LOCID] = 'SB-05' OR [LOCID] = 'SB-35' OR [LOCID] = 'SB-34' OR [LOCID]

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-37	SB-37	SB-37	SB-38	SB-38
Sample ID				SB-37-(8.5-9)	SB-37-(8.2-9.0)	SB-37-(13.5-14.5)	SB-38-(4-5)	SB-38-(7.8-8.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				8.5-9.0	8.2-9.0	13.5-14.5	4.0-5.0	7.8-8.5
Date Sampled				01/06/11	01/11/11	01/11/11	01/06/11	01/11/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Metals								
Lead	MG/KG	63	1000	54.6 J	20.7	7.7	169 J	275
Magnesium	MG/KG	-	-	1,080	515 J	3,620 J	5,740	1,470 J
Manganese	MG/KG	1600	10000	38.0	61.4	816	156	211
Mercury	MG/KG	0.18	2.8	0.44	0.15 J	0.0094 J	0.70	0.58 J
Nickel	MG/KG	30	310	9.2	6.8	14.5	18.0	9.7
Potassium	MG/KG	-	-	613	1,170	1,010	2,360	868
Selenium	MG/KG	3.9	1500		1.1	1.2 J		4.2
Silver	MG/KG	2	1500	0.085 J			0.080 J	
Sodium	MG/KG	-	-	74.2	75.6	916	285	292
Thallium	MG/KG	5 CP-51	-	0.56 J			0.47 J	0.84 J
Vanadium	MG/KG	39 CP-51	-	21.5	13.3	26.2	33.1	24.1
Zinc	MG/KG	109	10000	26.3 J	26.5 J	33.0 J	169 J	162 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-38	SB-38	SB-39	SB-39	SB-39
Sample ID				SB-38-(11-11.5)	SB-38-(15.5-16.5)	SB-39-(3.5-4)	SB-39-(5-5.5)	SB-39-(6.7-7.7)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				11.0-11.5	15.5-16.5	3.5-4.0	5.0-5.5	6.7-7.7
Date Sampled				01/11/11	01/11/11	01/07/11	01/07/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2-Dichlorobenzene	MG/KG	1.1	500					
2-Butanone	MG/KG	0.12	500		0.0057 J			
Acetone	MG/KG	0.05	500		0.032 J		0.059 J	
Benzene	MG/KG	0.06	44		0.0019 J		0.035	0.31 J
Carbon disulfide	MG/KG	2.7 CP-51	-		0.041			
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-				0.091	0.43
Ethylbenzene	MG/KG	1	390					
Isopropylbenzene	MG/KG	2.3 CP-51	-	1.0			0.24	1.2
Methyl tert-butyl ether	MG/KG	0.93	500		0.0022 J			
Methylcyclohexane	MG/KG	-	-	1.3			0.36	2.2
Methylene chloride	MG/KG	0.05	500		0.0017 J			
Styrene	MG/KG	300 CP-51	-					
Toluene	MG/KG	0.7	500		0.0069		0.016 J	
Xylene (total)	MG/KG	0.26	500					
Total BTEX	MG/KG	-	-	ND	0.0088	ND	0.051	0.31
Total Volatile Organic Compounds	MG/KG	-	-	2.3	0.0914	ND	0.801	4.14
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-					
2,4-Dimethylphenol	MG/KG	-	-					

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-38	SB-38	SB-39	SB-39	SB-39
Sample ID				SB-38-(11-11.5)	SB-38-(15.5-16.5)	SB-39-(3.5-4)	SB-39-(5-5.5)	SB-39-(6.7-7.7)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				11.0-11.5	15.5-16.5	3.5-4.0	5.0-5.5	6.7-7.7
Date Sampled				01/11/11	01/11/11	01/07/11	01/07/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	43			12	70
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500					
Acenaphthene	MG/KG	20	500	2.6			9.1	8.4
Acenaphthylene	MG/KG	100	500			0.73 J		
Acetophenone	MG/KG	-	-					
Anthracene	MG/KG	100	500	1.5		0.60 J	4.3	2.6
Benzo(a)anthracene	MG/KG	1	5.6	1.7		2.4	3.4	1.4 J
Benzo(a)pyrene	MG/KG	1	1	1.4		2.4	1.7 J	0.76 J
Benzo(b)fluoranthene	MG/KG	1	5.6	1.2		3.6	1.3 J	0.88 J
Benzo(g,h,i)perylene	MG/KG	100	500	1.1		1.9 J	0.74 J	
Benzo(k)fluoranthene	MG/KG	0.8	56	1.1		1.3 J	0.49 J	0.43 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-				0.45 J	
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-			0.22 J		1.0 J
Chrysene	MG/KG	1	56	2.3		2.5	5.2	1.5 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.33		0.48 J	0.33 J	
Dibenzofuran	MG/KG	7	350	1.3				4.1
Di-n-butylphthalate	MG/KG	0.014 CP-51	-					
Fluoranthene	MG/KG	100	500	1.7		4.5	3.8	2.7

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-38	SB-38	SB-39	SB-39	SB-39
Sample ID				SB-38-(11-11.5)	SB-38-(15.5-16.5)	SB-39-(3.5-4)	SB-39-(5-5.5)	SB-39-(6.7-7.7)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				11.0-11.5	15.5-16.5	3.5-4.0	5.0-5.5	6.7-7.7
Date Sampled				01/11/11	01/11/11	01/07/11	01/07/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Fluorene	MG/KG	30	500	3.8 J		0.22 J	11	10
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.87		1.7 J	0.58 J	0.36 J
Naphthalene	MG/KG	12	500	4.7				8.5
Phenanthrene	MG/KG	100	500	10		2.3	23	19
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	3.6 J		4.4	9.1	5.7
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	80.9	ND	29.03	86.04	132.23
Total Semivolatile Organic Compounds	MG/KG	-	-	82.2	ND	29.25	86.49	137.33
Metals								
Aluminum	MG/KG	10000 CP-51	-	11,600	14,100	6,290	7,180	9,440 J
Antimony	MG/KG	12 CP-51	-	0.38 J		1.2 J	0.99 J	1.0 J
Arsenic	MG/KG	13	16	1.5	8.6	3.9	1.7	1.3
Barium	MG/KG	350	400	144	31.0	142	58.9	38.5 J
Beryllium	MG/KG	7.2	590		0.72	0.35	0.39	0.31 J
Cadmium	MG/KG	2.5	9.3	0.78	0.84	1.0 J	1.2 J	0.26
Calcium	MG/KG	10000 CP-51	-	6,630 J	1,720 J	29,000 J	9,230 J	2,540 J
Chromium	MG/KG	30	1500	15.4	29.1	15.5	25.0	17.5 J
Cobalt	MG/KG	20 CP-51	-	10.1	10	4.4 J	6.7 J	10.7 J
Copper	MG/KG	50	270	37.3 J	12.4 J	34.2	35.6	15.9
Iron	MG/KG	2000 CP-51	-	24,100	29,300	10,700 J	16,400 J	12,300 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-38	SB-38	SB-39	SB-39	SB-39
Sample ID				SB-38-(11-11.5)	SB-38-(15.5-16.5)	SB-39-(3.5-4)	SB-39-(5-5.5)	SB-39-(6.7-7.7)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				11.0-11.5	15.5-16.5	3.5-4.0	5.0-5.5	6.7-7.7
Date Sampled				01/11/11	01/11/11	01/07/11	01/07/11	01/17/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Lead	MG/KG	63	1000	8.1	12.4	163 J	55.2 J	6.3 J
Magnesium	MG/KG	-	-	5,320 J	6,860 J	2,930	5,420	4,280 J
Manganese	MG/KG	1600	10000	554	421	261	151	181 J
Mercury	MG/KG	0.18	2.8	0.042 J	0.017 J	0.58	0.32	0.0098 J
Nickel	MG/KG	30	310	11.5	23.7	14.2	21.0	20.1 J
Potassium	MG/KG	-	-	6,460	3,070	1,990	2,050	1,670
Selenium	MG/KG	3.9	1500	0.94 J	2.2 J			
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	270	4,680	281	141	185
Thallium	MG/KG	5 CP-51	-					
Vanadium	MG/KG	39 CP-51	-	45.8	37.7	19.0	27.2	22.9 J
Zinc	MG/KG	109	10000	44.0 J	69.1 J	136 J	130 J	96.3 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-39	SB-40	SB-40
Sample ID				SB-39-(14-15)	SB-40-(9.5-10)	SB-40-(13.5-14.5)
Matrix				Soil	Soil	Soil
Depth Interval (ft)				14.0-15.0	9.5-10.0	13.5-14.5
Date Sampled				01/17/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			
Volatile Organic Compounds						
1,2-Dichlorobenzene	MG/KG	1.1	500			
2-Butanone	MG/KG	0.12	500			0.0062 J
Acetone	MG/KG	0.05	500	0.011 J		0.030 J
Benzene	MG/KG	0.06	44			
Carbon disulfide	MG/KG	2.7 CP-51	-	0.014		
Chloroform	MG/KG	0.37	350			
Cyclohexane	MG/KG	-	-			
Ethylbenzene	MG/KG	1	390			
Isopropylbenzene	MG/KG	2.3 CP-51	-			
Methyl tert-butyl ether	MG/KG	0.93	500			
Methylcyclohexane	MG/KG	-	-			
Methylene chloride	MG/KG	0.05	500	0.0017 J		
Styrene	MG/KG	300 CP-51	-			
Toluene	MG/KG	0.7	500			
Xylene (total)	MG/KG	0.26	500			
Total BTEX	MG/KG	-	-	ND	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.0267	ND	0.0362
Semivolatile Organic Compounds						
1,1'-Biphenyl	MG/KG	60 CP-51	-			
2,4-Dimethylphenol	MG/KG	-	-			

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-39	SB-40	SB-40
Sample ID				SB-39-(14-15)	SB-40-(9.5-10)	SB-40-(13.5-14.5)
Matrix				Soil	Soil	Soil
Depth Interval (ft)				14.0-15.0	9.5-10.0	13.5-14.5
Date Sampled				01/17/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			
Semivolatile Organic Compounds						
2-Methylnaphthalene	MG/KG	0.41 CP-51	-			
2-Methylphenol (o-cresol)	MG/KG	0.33	500			
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500			
Acenaphthene	MG/KG	20	500		2.4	0.020 J
Acenaphthylene	MG/KG	100	500			
Acetophenone	MG/KG	-	-			
Anthracene	MG/KG	100	500		0.69	
Benzo(a)anthracene	MG/KG	1	5.6		0.45	
Benzo(a)pyrene	MG/KG	1	1		0.26	
Benzo(b)fluoranthene	MG/KG	1	5.6		0.25	
Benzo(g,h,i)perylene	MG/KG	100	500		0.14 J	
Benzo(k)fluoranthene	MG/KG	0.8	56		0.078 J	
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-			
Butylbenzylphthalate	MG/KG	100 CP-51	-			
Carbazole	MG/KG	-	-			
Chrysene	MG/KG	1	56		0.97	
Dibenz(a,h)anthracene	MG/KG	0.33	0.56		0.059 J	
Dibenzofuran	MG/KG	7	350		0.78	
Di-n-butylphthalate	MG/KG	0.014 CP-51	-			
Fluoranthene	MG/KG	100	500		0.70	0.020 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-39	SB-40	SB-40
Sample ID				SB-39-(14-15)	SB-40-(9.5-10)	SB-40-(13.5-14.5)
Matrix				Soil	Soil	Soil
Depth Interval (ft)				14.0-15.0	9.5-10.0	13.5-14.5
Date Sampled				01/17/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			
Semivolatile Organic Compounds						
Fluorene	MG/KG	30	500		2.4	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6		0.098 J	
Naphthalene	MG/KG	12	500		0.47	0.052 J
Phenanthrene	MG/KG	100	500		2.2	
Phenol	MG/KG	0.33	500			
Pyrene	MG/KG	100	500		1.7	
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	ND	12.865	0.092
Total Semivolatile Organic Compounds	MG/KG	-	-	ND	13.645	0.092
Metals						
Aluminum	MG/KG	10000 CP-51	-	11,200 J	1,330	14,600
Antimony	MG/KG	12 CP-51	-	0.76 J		0.63 J
Arsenic	MG/KG	13	16	9.1	2.9	2.5
Barium	MG/KG	350	400	22.3 J	54.1	87.2
Beryllium	MG/KG	7.2	590	0.55 J	0.064 J	0.69
Cadmium	MG/KG	2.5	9.3	0.49	0.16 J	1.0
Calcium	MG/KG	10000 CP-51	-	3,230 J	938 J	1,460 J
Chromium	MG/KG	30	1500	23.4 J	6.9	41.6
Cobalt	MG/KG	20 CP-51	-	8.2 J	1.7 J	15.6
Copper	MG/KG	50	270	10.1	23.6 J	27.6 J
Iron	MG/KG	2000 CP-51	-	38,600 J	6,900	33,700

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

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Only Detected Results Reported.

TABLE 3-1C
BLOCK 2591 LOT 46
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-39	SB-40	SB-40
Sample ID				SB-39-(14-15)	SB-40-(9.5-10)	SB-40-(13.5-14.5)
Matrix				Soil	Soil	Soil
Depth Interval (ft)				14.0-15.0	9.5-10.0	13.5-14.5
Date Sampled				01/17/11	01/14/11	01/14/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			
Metals						
Lead	MG/KG	63	1000	10.4 J	30.2	10.3
Magnesium	MG/KG	-	-	5,830 J	412 J	6,200 J
Manganese	MG/KG	1600	10000	388 J	22.6	368
Mercury	MG/KG	0.18	2.8	0.0073 J	0.014 J	0.018 J
Nickel	MG/KG	30	310	19.6 J	6.0	26.8
Potassium	MG/KG	-	-	2,620	412	2,770
Selenium	MG/KG	3.9	1500		1.4 J	1.5
Silver	MG/KG	2	1500			
Sodium	MG/KG	-	-	3,400	93.7	1,500
Thallium	MG/KG	5 CP-51	-			
Vanadium	MG/KG	39 CP-51	-	31.1 J	8.6	45.2
Zinc	MG/KG	109	10000	53.4 J	18.9 J	63.2 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1D
BLOCK 2590 LOT 51
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-09	SB-09	SB-11	SB-11	SB-11
Sample ID				SB-09-(4.5-5.5)	SB-09-(7-8)	SB-11-(3-4)	SB-11-(4.5-5)	SB-11-(13-13.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.5-5.5	7.0-8.0	3.0-4.0	4.5-5.0	13.0-13.5
Date Sampled				04/27/10	04/28/10	04/28/10	04/28/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	MG/KG	0.05	500		0.010 J		0.036 J	0.017 J
Carbon disulfide	MG/KG	2.7 CP-51	-					
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Total Volatile Organic Compounds	MG/KG	-	-	ND	0.01	ND	0.036	0.017
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.21 J		0.034 J	2.5 J	0.026 J
Acenaphthene	MG/KG	20	500	0.14 J		0.038 J	0.11 J	
Acenaphthylene	MG/KG	100	500	0.35		1.4	1.5 J	
Acetophenone	MG/KG	-	-			0.23	0.36 J	
Anthracene	MG/KG	100	500	0.43		0.71	0.51 J	
Benzaldehyde	MG/KG	-	-					
Benzo(a)anthracene	MG/KG	1	5.6	1.3		3.0	2.2 J	0.033 J
Benzo(a)pyrene	MG/KG	1	1	1.1		2.4	1.4 J	0.027 J
Benzo(b)fluoranthene	MG/KG	1	5.6	0.96 J		4.4 J	3.3 J	0.032 J
Benzo(g,h,i)perylene	MG/KG	100	500	0.67		3.1	2.4 J	
Benzo(k)fluoranthene	MG/KG	0.8	56	1.0 J		2.6	2.6 J	
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.46	0.024 J	0.049 J	2.7	0.044 J
Butylbenzylphthalate	MG/KG	100 CP-51	-				0.040 J	
Carbazole	MG/KG	-	-	0.069 J		0.081 J	0.087 J	
Chrysene	MG/KG	1	56	1.1		3.7	3.3 J	0.022 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1D
BLOCK 2590 LOT 51
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-09	SB-09	SB-11	SB-11	SB-11
Sample ID				SB-09-(4.5-5.5)	SB-09-(7-8)	SB-11-(3-4)	SB-11-(4.5-5)	SB-11-(13-13.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.5-5.5	7.0-8.0	3.0-4.0	4.5-5.0	13.0-13.5
Date Sampled				04/27/10	04/28/10	04/28/10	04/28/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.21 J		0.86 J	0.72 J	
Dibenzofuran	MG/KG	7	350	0.047 J		0.058 J	0.16 J	
Di-n-octylphthalate	MG/KG	100 CP-51	-			0.032 J		
Fluoranthene	MG/KG	100	500	2.0		5.2	3.4 J	0.047 J
Fluorene	MG/KG	30	500	0.15 J		0.12 J	0.34 J	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.66 J		2.5 J	1.9 J	
Naphthalene	MG/KG	12	500	0.36		0.11 J	3.4 J	0.12 J
Phenanthrene	MG/KG	100	500	1.1		1.5	2.7 J	
Pyrene	MG/KG	100	500	3.2		7.1	4.2 J	0.054 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	14.94	ND	38.772	36.48	0.361
Total Semivolatile Organic Compounds	MG/KG	-	-	15.516	0.024	39.222	39.827	0.405
Metals								
Aluminum	MG/KG	10000 CP-51	-	10,200	9,540	6,340	4,960	11,500
Arsenic	MG/KG	13	16	2.6	1.3	7.9	8.2	0.79 J
Barium	MG/KG	350	400	92.6	48.6	80.1	78.1	69.1
Beryllium	MG/KG	7.2	590		0.30 J			
Cadmium	MG/KG	2.5	9.3	0.34	0.054 J	0.13 J	0.66	0.14 J
Calcium	MG/KG	10000 CP-51	-	13,400 J	896 J	1,010 J	7,160 J	1,390 J
Chromium	MG/KG	30	1500	21.2	15.2	20.5	12.5	25.1
Cobalt	MG/KG	20 CP-51	-	7.7	6.4	4.7	6.6	8.9

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1D
BLOCK 2590 LOT 51
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-09	SB-09	SB-11	SB-11	SB-11
Sample ID				SB-09-(4.5-5.5)	SB-09-(7-8)	SB-11-(3-4)	SB-11-(4.5-5)	SB-11-(13-13.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.5-5.5	7.0-8.0	3.0-4.0	4.5-5.0	13.0-13.5
Date Sampled				04/27/10	04/28/10	04/28/10	04/28/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Copper	MG/KG	50	270	42.0	8.9	55.0	75.1	18.9
Iron	MG/KG	2000 CP-51	-	18,500	16,500	30,000	38,100	27,100
Lead	MG/KG	63	1000	70.7	6.9	269	142	7.4
Magnesium	MG/KG	-	-	7,840	2,690	2,480	3,610	4,180
Manganese	MG/KG	1600	10000	195	287	112	159	637
Mercury	MG/KG	0.18	2.8	0.16	0.013 J	0.31	0.69	
Nickel	MG/KG	30	310	18.8	11.2	13.6	13.2	16.6
Potassium	MG/KG	-	-	2,040	645 J	1,660 J	1,370 J	1,760 J
Selenium	MG/KG	3.9	1500	2.3	1.2	2.6	2.0	2.6
Sodium	MG/KG	-	-	321	751	216	957	382
Vanadium	MG/KG	39 CP-51	-	30.1	21.4	31.7	20.8	33.9
Zinc	MG/KG	109	10000	115 J	30.4 J	44.8 J	123 J	40.8 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1D
BLOCK 2590 LOT 51
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-12	SB-12	SB-12	SB-12	SB-12
Sample ID				SB-12-(3.5-4)	20100427-FD-1	SB-12-(4.5-5.5)	SB-12-(7-8)	SB-12-(12-13)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	4.5-5.5	4.5-5.5	7.0-8.0	12.0-13.0
Date Sampled				04/27/10	04/27/10	04/27/10	04/29/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Volatile Organic Compounds								
Acetone	MG/KG	0.05	500		0.0086 J	0.011 J	0.013 J	0.011 J
Carbon disulfide	MG/KG	2.7 CP-51	-					0.0037
Isopropylbenzene	MG/KG	2.3 CP-51	-				0.0050 J	
Total Volatile Organic Compounds	MG/KG	-	-	ND	0.0086	0.011	0.018	0.0147
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.020 J				0.085 J
Acenaphthene	MG/KG	20	500		0.023 J	0.023 J		
Acenaphthylene	MG/KG	100	500	0.14 J		0.021 J		
Acetophenone	MG/KG	-	-	0.045 J				
Anthracene	MG/KG	100	500	0.042 J				
Benzaldehyde	MG/KG	-	-	0.040 J				
Benzo(a)anthracene	MG/KG	1	5.6	0.15 J		0.031 J		
Benzo(a)pyrene	MG/KG	1	1	0.27		0.037 J		
Benzo(b)fluoranthene	MG/KG	1	5.6	0.35 J		0.056 J		
Benzo(g,h,i)perylene	MG/KG	100	500	0.36		0.040 J		
Benzo(k)fluoranthene	MG/KG	0.8	56	0.25 J		0.026 J		
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.022 J	0.035 J	0.12 J	0.047 J	
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-					
Chrysene	MG/KG	1	56	0.17 J		0.034 J		

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1D
BLOCK 2590 LOT 51
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-12	SB-12	SB-12	SB-12	SB-12
Sample ID				SB-12-(3.5-4)	20100427-FD-1	SB-12-(4.5-5.5)	SB-12-(7-8)	SB-12-(12-13)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	4.5-5.5	4.5-5.5	7.0-8.0	12.0-13.0
Date Sampled				04/27/10	04/27/10	04/27/10	04/29/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.12 J				
Dibenzofuran	MG/KG	7	350					
Di-n-octylphthalate	MG/KG	100 CP-51	-					
Fluoranthene	MG/KG	100	500	0.11 J	0.027 J	0.035 J		
Fluorene	MG/KG	30	500					
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.39 J		0.045 J		
Naphthalene	MG/KG	12	500	0.026 J		0.037 J		0.40
Phenanthrene	MG/KG	100	500	0.024 J				
Pyrene	MG/KG	100	500	0.22	0.031 J	0.047 J		
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	2.642	0.081	0.432	ND	0.485
Total Semivolatile Organic Compounds	MG/KG	-	-	2.749	0.116	0.552	0.047	0.485
Metals								
Aluminum	MG/KG	10000 CP-51	-	17,300	14,000	11,900	11,800	15,900
Arsenic	MG/KG	13	16	1.6	2.0	1.4		10.4
Barium	MG/KG	350	400	72.4	85.2 J	141 J	73.6	31.5
Beryllium	MG/KG	7.2	590	0.37 J	0.42 J	0.32 J		0.75 J
Cadmium	MG/KG	2.5	9.3	0.26	0.17 J	0.19 J	0.14 J	0.28 J
Calcium	MG/KG	10000 CP-51	-	990 J	1,260 J	1,740 J	2,290 J	1,410 J
Chromium	MG/KG	30	1500	37.8	23.7	29.9	31.7	30.0
Cobalt	MG/KG	20 CP-51	-	6.8	6.9	8.8	12.9	11.1

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1D
BLOCK 2590 LOT 51
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-12	SB-12	SB-12	SB-12	SB-12
Sample ID				SB-12-(3.5-4)	20100427-FD-1	SB-12-(4.5-5.5)	SB-12-(7-8)	SB-12-(12-13)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	4.5-5.5	4.5-5.5	7.0-8.0	12.0-13.0
Date Sampled				04/27/10	04/27/10	04/27/10	04/29/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Metals								
Copper	MG/KG	50	270	34.1	17.6	24.9	33.4	13.7
Iron	MG/KG	2000 CP-51	-	34,400	24,300	22,500	30,100	45,800
Lead	MG/KG	63	1000	9.5	8.5	8.9	7.3	15.0
Magnesium	MG/KG	-	-	5,210	4,000	4,490	6,660	7,830
Manganese	MG/KG	1600	10000	214	261 J	137 J	612	622
Mercury	MG/KG	0.18	2.8				0.014 J	
Nickel	MG/KG	30	310	22.8	18.2	22.5	24.6	25.6
Potassium	MG/KG	-	-	2,650	1,610	2,090	3,960 J	3,730 J
Selenium	MG/KG	3.9	1500	2.5	1.4 J	1.7	3.1	1.8 J
Sodium	MG/KG	-	-	279	193	208	177	5,450
Vanadium	MG/KG	39 CP-51	-	52.3	33.3	37.1	45.5	42.5
Zinc	MG/KG	109	10000	56.5 J	50.9 J	60.1 J	58.0 J	80.8 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. Blank cell or ND - Not detected. NA - Not analyzed.

Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-05	MW-05	MW-05	MW-05	MW-06
Sample ID				MW-05-(3-3.5)	MW-05-(4.5-5)	MW-05-(15-16)	MW-05-(20.5-21)	MW-06-(4-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	4.5-5.0	15.0-16.0	20.5-21.0	4.0-4.5
Date Sampled				04/26/10	04/26/10	04/30/10	04/30/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-					
1,2-Dichloroethene (cis)	MG/KG	0.25	500				1.3 J	
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500		0.047 J			
Benzene	MG/KG	0.06	44		0.047	3.1	21	
Carbon disulfide	MG/KG	2.7 CP-51	-					
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390		0.36	29	93	
Isopropylbenzene	MG/KG	2.3 CP-51	-		0.092 J	0.68 J	2.2 J	
Methylcyclohexane	MG/KG	-	-		0.0076 J			
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-			17	40	
Tetrachloroethene	MG/KG	1.3	150					
Toluene	MG/KG	0.7	500		0.014	13	28	
Xylene (total)	MG/KG	0.26	500		0.19	49	170	
Total BTEX	MG/KG	-	-	ND	0.611	94.1	312	ND
Total Volatile Organic Compounds	MG/KG	-	-	ND	0.7576	111.78	355.5	ND
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-		0.37 J	1.4	29	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. J+ - The reported concntration is an estimated value, with high bias.

D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-05	MW-05	MW-05	MW-05	MW-06
Sample ID				MW-05-(3-3.5)	MW-05-(4.5-5)	MW-05-(15-16)	MW-05-(20.5-21)	MW-06-(4-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	4.5-5.0	15.0-16.0	20.5-21.0	4.0-4.5
Date Sampled				04/26/10	04/26/10	04/30/10	04/30/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-				1.2 J	
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.27	14	17 J	180	0.058 J
2-Methylphenol (o-cresol)	MG/KG	0.33	500	0.024 J				
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500	0.044 J		0.031 J		
3,3'-Dichlorobenzidine	MG/KG	-	-				0.68 J	
Acenaphthene	MG/KG	20	500	2.2	5.4	1.2	22	
Acenaphthylene	MG/KG	100	500	1.8	1.3 J	8.4 J	64 J	0.096 J
Acetophenone	MG/KG	-	-	0.12 J	0.18 J			
Anthracene	MG/KG	100	500	3.7 J	3.2	2.9	24 J	0.050 J
Benzaldehyde	MG/KG	-	-		0.33 J			
Benzo(a)anthracene	MG/KG	1	5.6	17	5.1	2.6	21 J	0.38
Benzo(a)pyrene	MG/KG	1	1	2.5	3.9	1.9 J	18 J	0.58 J
Benzo(b)fluoranthene	MG/KG	1	5.6	17	3.3 J	1.4	11 J	0.66 J
Benzo(g,h,i)perylene	MG/KG	100	500	7.7	1.8 J	0.57	4.5 J	0.52
Benzo(k)fluoranthene	MG/KG	0.8	56	2.7	3.0 J	0.73	6.1	0.34
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.31	0.30 J	0.048 J		0.031 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	1.1	0.29 J	0.021 J	0.23 J	
Chrysene	MG/KG	1	56	2.1	5.0	2.6	25	0.41
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	2.4 J	0.50 J	0.19 J	1.2 J	0.15 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. J+ - The reported concntration is an estimated value, with high bias.

D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-05	MW-05	MW-05	MW-05	MW-06
Sample ID				MW-05-(3-3.5)	MW-05-(4.5-5)	MW-05-(15-16)	MW-05-(20.5-21)	MW-06-(4-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	4.5-5.0	15.0-16.0	20.5-21.0	4.0-4.5
Date Sampled				04/26/10	04/26/10	04/30/10	04/30/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350	0.41	0.42 J	0.19 J	3.0	
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.039 J				
Fluoranthene	MG/KG	100	500	31	7.3	4.9 J	26 J	0.31
Fluorene	MG/KG	30	500	1.2	3.4	4.2 J	31 J	0.020 J
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	8.8	1.9 J	0.45 J	3.2 J	0.45
Naphthalene	MG/KG	12	500	0.31	32	30 J	540	0.20
Phenanthrene	MG/KG	100	500	13	11	14 J	90 J	0.10 J
Phenol	MG/KG	0.33	500			0.050 J		
Pyrene	MG/KG	100	500	30	11	7.1 J	51 J	0.39
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	143.68	113.1	100.14	1,118	4.714
Total Semivolatile Organic Compounds	MG/KG	-	-	145.727	114.99	101.88	1,152.11	4.745
Metals								
Aluminum	MG/KG	10000 CP-51	-	9,270	16,500	10,500	6,810	13,000
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16	12.4	3.9	2.5	0.66 J	3.6 J
Barium	MG/KG	350	400	120	75.1	54.9	150	71.9 J
Beryllium	MG/KG	7.2	590	0.24 J				0.38 J
Cadmium	MG/KG	2.5	9.3	0.41	0.42	0.23	0.26	0.23
Calcium	MG/KG	10000 CP-51	-	3,190 J	1,650 J	2,280 J	2,240 J	1,230
Chromium	MG/KG	30	1500	24.2	51.5	34.7	25.5	28.8

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

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D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-05	MW-05	MW-05	MW-05	MW-06
Sample ID				MW-05-(3-3.5)	MW-05-(4.5-5)	MW-05-(15-16)	MW-05-(20.5-21)	MW-06-(4-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	4.5-5.0	15.0-16.0	20.5-21.0	4.0-4.5
Date Sampled				04/26/10	04/26/10	04/30/10	04/30/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	20 CP-51	-	6.8	18.1	15.6	14.1	6.9 J
Copper	MG/KG	50	270	83.5	425	33.5	34.3	22.2
Iron	MG/KG	2000 CP-51	-	28,700	19,000	18,500	21,300	20,300
Lead	MG/KG	63	1000	250	48.1	39.4	8.9	28.2 J
Magnesium	MG/KG	-	-	3,840	4,980	4,600	4,210	4,080 J
Manganese	MG/KG	1600	10000	163	122	140	737	145 J
Mercury	MG/KG	0.18	2.8	0.38	0.070			
Nickel	MG/KG	30	310	18.0	39.5	36.6	28.1	16.9 J
Potassium	MG/KG	-	-	2,360	2,710	2,520 J	3,080 J	2,080 J
Selenium	MG/KG	3.9	1500	2.3	2.7	2.0	2.4	
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	222	154	155	191	254 J
Thallium	MG/KG	5 CP-51	-					
Vanadium	MG/KG	39 CP-51	-	45.2	55.5	40.0	28.8	36.5 J
Zinc	MG/KG	109	10000	93.8 J	278 J	218 J	41.0 J	57.7 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-06	SB-07	SB-07	SB-07	SB-07
Sample ID				MW-06-(10.5-11)	SB-07-(3-4)	SB-07-(4.5-5.5)	SB-07-(13.3-14.2)	SB-07-(16-17)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.5-11.0	3.0-4.0	4.5-5.5	13.3-14.2	16.0-17.0
Date Sampled				05/12/10	04/14/10	04/14/10	04/20/10	04/20/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-					
1,2-Dichloroethene (cis)	MG/KG	0.25	500				0.0091 J	0.031
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500	0.089 J	0.0058 J			
Benzene	MG/KG	0.06	44	0.041	0.0015 J	0.048	0.84	0.84
Carbon disulfide	MG/KG	2.7 CP-51	-					
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390	21		0.026	2.1	0.15
Isopropylbenzene	MG/KG	2.3 CP-51	-	0.38 J			0.014 J	
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-	1.7 J			2.6	0.33
Tetrachloroethene	MG/KG	1.3	150		0.013			
Toluene	MG/KG	0.7	500	0.94 J	0.0012 J		0.68	0.62
Xylene (total)	MG/KG	0.26	500	52		0.050 J	6.5	0.54 J
Total BTEX	MG/KG	-	-	73.981	0.0027	0.124	10.12	2.15
Total Volatile Organic Compounds	MG/KG	-	-	76.15	0.0215	0.124	12.7431	2.511
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	15	0.25 J	0.33 J	3.5 J	0.052 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-06	SB-07	SB-07	SB-07	SB-07
Sample ID				MW-06-(10.5-11)	SB-07-(3-4)	SB-07-(4.5-5.5)	SB-07-(13.3-14.2)	SB-07-(16-17)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.5-11.0	3.0-4.0	4.5-5.5	13.3-14.2	16.0-17.0
Date Sampled				05/12/10	04/14/10	04/14/10	04/20/10	04/20/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-					
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	160	2.2 J	0.21 J	31 J	0.41 J
2-Methylphenol (o-cresol)	MG/KG	0.33	500				0.077 J	
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500				0.049 J	
3,3'-Dichlorobenzidine	MG/KG	-	-					
Acenaphthene	MG/KG	20	500	17 J	3.2 J	6.4	2.6 J	0.023 J
Acenaphthylene	MG/KG	100	500	20 J	38	6.0	18	0.19 J
Acetophenone	MG/KG	-	-		0.35 J			
Anthracene	MG/KG	100	500	12	16 J	21	10	0.39
Benzaldehyde	MG/KG	-	-					
Benzo(a)anthracene	MG/KG	1	5.6	13	70	15	9.4	0.17 J
Benzo(a)pyrene	MG/KG	1	1	9.4 J	66	12	5.7 J	0.076 J
Benzo(b)fluoranthene	MG/KG	1	5.6	10 J	91	12	5.7 J	0.071 J
Benzo(g,h,i)perylene	MG/KG	100	500	3.8	64	8.1	3.2 J	0.068 J
Benzo(k)fluoranthene	MG/KG	0.8	56	4.0	27	3.7	2.0	0.037 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-					0.033 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	0.42 J	3.2 J	7.3	9.7	1.2
Chrysene	MG/KG	1	56	13 J	65	12	7.8	0.13 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	1.2 J	11 J	2.8 J	1.2	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-06	SB-07	SB-07	SB-07	SB-07
Sample ID				MW-06-(10.5-11)	SB-07-(3-4)	SB-07-(4.5-5.5)	SB-07-(13.3-14.2)	SB-07-(16-17)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.5-11.0	3.0-4.0	4.5-5.5	13.3-14.2	16.0-17.0
Date Sampled				05/12/10	04/14/10	04/14/10	04/20/10	04/20/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350	2.6	2.7 J	9.2	6.9 J	0.084 J
Di-n-butylphthalate	MG/KG	0.014 CP-51	-		0.073 J			
Fluoranthene	MG/KG	100	500	20 J	160	49	23	0.37
Fluorene	MG/KG	30	500	27 J	5.8 J	15	14	0.52
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	3.0 J	44	6.2	2.9	0.047 J
Naphthalene	MG/KG	12	500	370	4.0 J	7.7	71	2.1
Phenanthrene	MG/KG	100	500	73	55	51	41	0.64
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	43	140	36	20	0.32
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	799.4	862.2	264.11	268.5	5.562
Total Semivolatile Organic Compounds	MG/KG	-	-	817.42	868.773	280.94	288.726	6.931
Metals								
Aluminum	MG/KG	10000 CP-51	-	12,600	11,700 J	9,250 J	6,280	6,970
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16		8.1	1.8	0.21 J	0.38 J
Barium	MG/KG	350	400	116	212 J	46.8 J	57.6 J	86.4 J
Beryllium	MG/KG	7.2	590		0.93 J	0.66 J	0.89 J	0.91 J
Cadmium	MG/KG	2.5	9.3	0.30	3.0	0.22 J	0.10 J	0.21
Calcium	MG/KG	10000 CP-51	-	1,110	60,700 J	3,090 J	1,390	4,220
Chromium	MG/KG	30	1500	75.7	29.4 J	16.8 J	18.0 J	30.8 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

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D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-06	SB-07	SB-07	SB-07	SB-07
Sample ID				MW-06-(10.5-11)	SB-07-(3-4)	SB-07-(4.5-5.5)	SB-07-(13.3-14.2)	SB-07-(16-17)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				10.5-11.0	3.0-4.0	4.5-5.5	13.3-14.2	16.0-17.0
Date Sampled				05/12/10	04/14/10	04/14/10	04/20/10	04/20/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	20 CP-51	-	8.8	6.4 J	6.9 J	7.4 J	10.1 J
Copper	MG/KG	50	270	27.4	101 J	12.0 J	18.5	28.9
Iron	MG/KG	2000 CP-51	-	29,700	26,200	20,700	17,100	20,100
Lead	MG/KG	63	1000	5.3	265 J	12.6 J	3.1	6.5
Magnesium	MG/KG	-	-	8,120	7,430 J	3,050 J	3,620 J	5,520 J
Manganese	MG/KG	1600	10000	187	388 J	325 J	140 J	235 J
Mercury	MG/KG	0.18	2.8		4.2 J	0.052 J		
Nickel	MG/KG	30	310	41.1	22.7 J	12.3 J	16.7 J	28.9 J
Potassium	MG/KG	-	-	5,280	1,910 J	1,000 J	2,300	3,000
Selenium	MG/KG	3.9	1500	2.2	2.2	4.0	2.9	3.4
Silver	MG/KG	2	1500		0.17 J	0.11 J		
Sodium	MG/KG	-	-	178	574 J	173 J	179 J	179 J
Thallium	MG/KG	5 CP-51	-		1.6	1.7		
Vanadium	MG/KG	39 CP-51	-	66.1	30.3 J	18.1 J	22.4	33.3
Zinc	MG/KG	109	10000	51.7	165 J	33.2 J	34.4 J	36.5 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-08	SB-08	SB-08	SB-08	SB-10
Sample ID				SB-08-(3-3.5)	SB-08-(5-6)	SB-08-(7-7.5)	SB-08-(10.5-11)	20100426-FD-1
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.0-6.0	7.0-7.5	10.5-11.0	3.0-4.0
Date Sampled				04/28/10	04/28/10	04/29/10	04/29/10	04/26/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					Field Duplicate (1-1)
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-					
1,2-Dichloroethene (cis)	MG/KG	0.25	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500	0.0092 J	0.076 J	0.22 J	0.22 J	0.0084 J
Benzene	MG/KG	0.06	44				0.33 J	
Carbon disulfide	MG/KG	2.7 CP-51	-				0.0073 J	
Chloroform	MG/KG	0.37	350			0.020 J	0.028 J	
Cyclohexane	MG/KG	-	-			0.098 J	0.35 J	
Ethylbenzene	MG/KG	1	390				2.6	
Isopropylbenzene	MG/KG	2.3 CP-51	-				2.5 J	
Methylcyclohexane	MG/KG	-	-			0.21 J	0.55 J	
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Tetrachloroethene	MG/KG	1.3	150					
Toluene	MG/KG	0.7	500				0.043 J	
Xylene (total)	MG/KG	0.26	500			0.017 J	2.9 J	
Total BTEX	MG/KG	-	-	ND	ND	0.017	5.873	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.0092	0.076	0.565	9.5283	0.0084
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.055 J			4.8	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-08	SB-08	SB-08	SB-08	SB-10
Sample ID				SB-08-(3-3.5)	SB-08-(5-6)	SB-08-(7-7.5)	SB-08-(10.5-11)	20100426-FD-1
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.0-6.0	7.0-7.5	10.5-11.0	3.0-4.0
Date Sampled				04/28/10	04/28/10	04/29/10	04/29/10	04/26/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					Field Duplicate (1-1)
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-					
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.22	0.27 J		28	
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500					
3,3'-Dichlorobenzidine	MG/KG	-	-					
Acenaphthene	MG/KG	20	500	0.38	1.8	0.70	26	
Acenaphthylene	MG/KG	100	500	3.0	1.7	0.16 J	7.5	
Acetophenone	MG/KG	-	-	0.072 J	0.21 J			
Anthracene	MG/KG	100	500	2.5	1.0	0.52 J	15	
Benzaldehyde	MG/KG	-	-					
Benzo(a)anthracene	MG/KG	1	5.6	7.1	2.4	0.61	13	0.056 J
Benzo(a)pyrene	MG/KG	1	1	4.9	1.5 J	0.32 J	13 J	0.031 J
Benzo(b)fluoranthene	MG/KG	1	5.6	6.2	2.4 J	0.23 J	8.5 J	0.039 J
Benzo(g,h,i)perylene	MG/KG	100	500	1.7 J	0.97	0.10 J	3.3	0.023 J
Benzo(k)fluoranthene	MG/KG	0.8	56	3.0 J	1.1	0.12 J	3.4	0.021 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.43		0.088 J		0.097 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	0.17 J				
Chrysene	MG/KG	1	56	8.0	3.1	0.53	12	0.043 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.93 J	0.32 J	0.026 J	0.99 J	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-08	SB-08	SB-08	SB-08	SB-10
Sample ID				SB-08-(3-3.5)	SB-08-(5-6)	SB-08-(7-7.5)	SB-08-(10.5-11)	20100426-FD-1
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.0-6.0	7.0-7.5	10.5-11.0	3.0-4.0
Date Sampled				04/28/10	04/28/10	04/29/10	04/29/10	04/26/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					Field Duplicate (1-1)
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350	0.16 J	0.31 J	0.12 J	0.52 J	
Di-n-butylphthalate	MG/KG	0.014 CP-51	-					
Fluoranthene	MG/KG	100	500	28	3.5	0.50 J	18	0.080 J
Fluorene	MG/KG	30	500	0.54	2.7	0.65	15	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	1.7 J	0.77 J	0.072 J	2.4 J	
Naphthalene	MG/KG	12	500	0.17 J	0.44	0.11 J	74	
Phenanthrene	MG/KG	100	500	5.4	0.55	0.53 J	55	0.041 J
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	15	8.4 J	1.9	30	0.073 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	88.74	32.92	7.078	325.09	0.407
Total Semivolatile Organic Compounds	MG/KG	-	-	89.627	33.44	7.286	330.41	0.504
Metals								
Aluminum	MG/KG	10000 CP-51	-	8,070	9,650	12,400	11,400	14,600 J
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16	4.4	7.7	1.6	0.43 J	0.46 J
Barium	MG/KG	350	400	61.9	65.4	35.5	105	96.8
Beryllium	MG/KG	7.2	590	0.18 J	0.33 J	0.42 J		0.26 J
Cadmium	MG/KG	2.5	9.3	0.14 J	0.46	0.055 J	0.13 J	0.27
Calcium	MG/KG	10000 CP-51	-	58,400 J	925 J	516 J	1,090 J	653 J
Chromium	MG/KG	30	1500	19.2	17.3	23.6	32.3	47.9 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

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D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

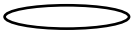
TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-08	SB-08	SB-08	SB-08	SB-10
Sample ID				SB-08-(3-3.5)	SB-08-(5-6)	SB-08-(7-7.5)	SB-08-(10.5-11)	20100426-FD-1
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.0-6.0	7.0-7.5	10.5-11.0	3.0-4.0
Date Sampled				04/28/10	04/28/10	04/29/10	04/29/10	04/26/10
Parameter	Units	Criteria (1)	Criteria (2)					Field Duplicate (1-1)
Metals								
Cobalt	MG/KG	20 CP-51	-	4.1	7.0	5.5	10.5	8.7 J
Copper	MG/KG	50	270	31.1	36.8	22.9	37.0	35.5
Iron	MG/KG	2000 CP-51	-	13,900	27,500	24,700	28,500	33,500
Lead	MG/KG	63	1000	107	74.3	7.5	8.0	8.0 J
Magnesium	MG/KG	-	-	6,150	2,570	3,100	4,700	6,890 J
Manganese	MG/KG	1600	10000	186	120	203	346	204 J
Mercury	MG/KG	0.18	2.8	0.55	0.091			
Nickel	MG/KG	30	310	11.9	25.8	25.0	23.8	27.6 J
Potassium	MG/KG	-	-	1,300 J	1,270 J	1,210 J	3,340 J	3,840 J
Selenium	MG/KG	3.9	1500	2.3	1.9	1.7	2.8	2.3
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	179	125	177	221	121 J
Thallium	MG/KG	5 CP-51	-					
Vanadium	MG/KG	39 CP-51	-	20.9	25.4	36.8	41.5	51.0 J
Zinc	MG/KG	109	10000	56.7 J	203 J	49.9 J	88.4 J	79.7 J

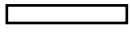
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-10	SB-10	SB-10	SB-13	SB-13
Sample ID				SB-10-(3-4)	SB-10-(5-5.5)	SB-10-(11-11.5)	SB-13-(3-4)	SB-13-(15-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	5.0-5.5	11.0-11.5	3.0-4.0	15.0-16.0
Date Sampled				04/26/10	04/26/10	04/29/10	04/28/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-		0.0017 J			
1,2-Dichloroethene (cis)	MG/KG	0.25	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500	0.0044 J	0.0085 J			0.038 J
Benzene	MG/KG	0.06	44			0.024 J		0.0049 J
Carbon disulfide	MG/KG	2.7 CP-51	-			0.0045 J		0.0083 J
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390					0.0089 J
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500				0.0059	
Styrene	MG/KG	300 CP-51	-					
Tetrachloroethene	MG/KG	1.3	150					
Toluene	MG/KG	0.7	500	0.0021 J				0.0049 J
Xylene (total)	MG/KG	0.26	500					0.018 J
Total BTEX	MG/KG	-	-	0.0021	ND	0.024	ND	0.0367
Total Volatile Organic Compounds	MG/KG	-	-	0.0065	0.0102	0.0285	0.0059	0.083
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-					0.024 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-10	SB-10	SB-10	SB-13	SB-13
Sample ID				SB-10-(3-4)	SB-10-(5-5.5)	SB-10-(11-11.5)	SB-13-(3-4)	SB-13-(15-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	5.0-5.5	11.0-11.5	3.0-4.0	15.0-16.0
Date Sampled				04/26/10	04/26/10	04/29/10	04/28/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-					
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.049 J		0.086 J		0.17 J
2-Methylphenol (o-cresol)	MG/KG	0.33	500	0.028 J				
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500	0.027 J				
3,3'-Dichlorobenzidine	MG/KG	-	-					
Acenaphthene	MG/KG	20	500	0.13 J				0.090 J
Acenaphthylene	MG/KG	100	500	0.58				0.11 J
Acetophenone	MG/KG	-	-	0.091 J				
Anthracene	MG/KG	100	500	0.44				0.18 J
Benzaldehyde	MG/KG	-	-					
Benzo(a)anthracene	MG/KG	1	5.6	2.0	0.030 J		0.023 J	0.25
Benzo(a)pyrene	MG/KG	1	1	1.9	0.021 J		0.026 J	0.17 J
Benzo(b)fluoranthene	MG/KG	1	5.6	2.4 J			0.032 J	0.17 J
Benzo(g,h,i)perylene	MG/KG	100	500	1.2			0.024 J	0.084 J
Benzo(k)fluoranthene	MG/KG	0.8	56	1.8 J				0.087 J
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.14 J	0.089 J		0.033 J	2.0
Butylbenzylphthalate	MG/KG	100 CP-51	-					0.027 J
Carbazole	MG/KG	-	-	0.12 J				
Chrysene	MG/KG	1	56	1.6	0.029 J		0.026 J	0.24
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.11 J				0.022 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-10	SB-10	SB-10	SB-13	SB-13
Sample ID				SB-10-(3-4)	SB-10-(5-5.5)	SB-10-(11-11.5)	SB-13-(3-4)	SB-13-(15-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	5.0-5.5	11.0-11.5	3.0-4.0	15.0-16.0
Date Sampled				04/26/10	04/26/10	04/29/10	04/28/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350	0.035 J				0.059 J
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.033 J				
Fluoranthene	MG/KG	100	500	2.7	0.037 J			0.53
Fluorene	MG/KG	30	500	0.10 J				0.15 J
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.23 J			0.025 J	0.064 J
Naphthalene	MG/KG	12	500	0.065 J		0.21 J		0.35
Phenanthrene	MG/KG	100	500	1.3	0.021 J			0.65
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	2.3	0.047 J			0.53
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	18.904	0.185	0.296	0.156	3.847
Total Semivolatile Organic Compounds	MG/KG	-	-	19.378	0.274	0.296	0.189	5.957
Metals								
Aluminum	MG/KG	10000 CP-51	-	9,280 J	14,600	19,400 J	15,800	3,870
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16	5.3	0.45 J	12.2 J	3.4	0.67 J
Barium	MG/KG	350	400	71.2	102	47.3 J	59.3	31.8
Beryllium	MG/KG	7.2	590			0.89 J	0.46 J	
Cadmium	MG/KG	2.5	9.3	0.17 J	0.22 J	0.32 J	0.29	0.15 J
Calcium	MG/KG	10000 CP-51	-	1,690 J	1,090 J	1,590 J	925 J	31,900 J
Chromium	MG/KG	30	1500	22.4 J	50.7	37.4 J	29.7	11.4

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-10	SB-10	SB-10	SB-13	SB-13
Sample ID				SB-10-(3-4)	SB-10-(5-5.5)	SB-10-(11-11.5)	SB-13-(3-4)	SB-13-(15-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	5.0-5.5	11.0-11.5	3.0-4.0	15.0-16.0
Date Sampled				04/26/10	04/26/10	04/29/10	04/28/10	04/29/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	20 CP-51	-	5.3 J	8.7	13.8 J	7.1	2.2 J
Copper	MG/KG	50	270	32.9	34.6	18.0 J	20.6	27.8
Iron	MG/KG	2000 CP-51	-	25,000	33,200	53,100 J	29,800	6,690
Lead	MG/KG	63	1000	116 J	7.8	17.6 J	17.5	156
Magnesium	MG/KG	-	-	3,410 J	7,320	8,910 J	3,590	4,180
Manganese	MG/KG	1600	10000	109 J	197	750 J	135	135
Mercury	MG/KG	0.18	2.8					0.37
Nickel	MG/KG	30	310	14.1 J	29.7	32.0 J	20.7	13.0
Potassium	MG/KG	-	-	1,700 J	3,820	4,230 J	1,480	548 J
Selenium	MG/KG	3.9	1500	1.5 J	2.8	1.9 J	1.6	1.4 J
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	207 J	164	1,550 J	991	473
Thallium	MG/KG	5 CP-51	-					
Vanadium	MG/KG	39 CP-51	-	30.0 J	51.7	54.5 J	36.1	9.1
Zinc	MG/KG	109	10000	51.6 J	76.0 J	95.2 J	49.0 J	78.3 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (2)

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-14	SB-14	SB-14	SB-15	SB-15
Sample ID				SB-14-(3.5-4)	SB-14-(4.5-5)	SB-14-(14.5-15)	SB-15-(3-3.5)	SB-15-(6-6.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	4.5-5.0	14.5-15.0	3.0-3.5	6.0-6.5
Date Sampled				04/28/10	04/28/10	04/29/10	05/04/10	05/04/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-					
1,2-Dichloroethene (cis)	MG/KG	0.25	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500	0.012 J	0.041 J	0.0081 J		0.041 J
Benzene	MG/KG	0.06	44					0.13
Carbon disulfide	MG/KG	2.7 CP-51	-					0.0071 J
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390					0.36
Isopropylbenzene	MG/KG	2.3 CP-51	-					0.072 J
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-					
Tetrachloroethene	MG/KG	1.3	150					
Toluene	MG/KG	0.7	500					0.32
Xylene (total)	MG/KG	0.26	500					2.9
Total BTEX	MG/KG	-	-	ND	ND	ND	ND	3.71
Total Volatile Organic Compounds	MG/KG	-	-	0.012	0.041	0.0081	ND	3.8301
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-				30 J	4.9 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-14	SB-14	SB-14	SB-15	SB-15
Sample ID				SB-14-(3.5-4)	SB-14-(4.5-5)	SB-14-(14.5-15)	SB-15-(3-3.5)	SB-15-(6-6.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	4.5-5.0	14.5-15.0	3.0-3.5	6.0-6.5
Date Sampled				04/28/10	04/28/10	04/29/10	05/04/10	05/04/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-					
2-Methylnaphthalene	MG/KG	0.41 CP-51	-			0.092 J	170 J	31
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500					
3,3'-Dichlorobenzidine	MG/KG	-	-					
Acenaphthene	MG/KG	20	500			0.062 J	110 J	1.6
Acenaphthylene	MG/KG	100	500	0.079 J		0.068 J	60 J	14 J
Acetophenone	MG/KG	-	-				0.56 J	
Anthracene	MG/KG	100	500	0.026 J		0.044 J	56 J	4.2 J
Benzaldehyde	MG/KG	-	-					
Benzo(a)anthracene	MG/KG	1	5.6	0.047 J	0.046 J	0.18 J	63 J	4.5 J
Benzo(a)pyrene	MG/KG	1	1	0.038 J	0.037 J	0.20 J	46 J	1.9 J
Benzo(b)fluoranthene	MG/KG	1	5.6	0.053 J	0.039 J	0.23 J	50 J	3.5 J
Benzo(g,h,i)perylene	MG/KG	100	500			0.19 J	23 J	1.4
Benzo(k)fluoranthene	MG/KG	0.8	56	0.027 J	0.025 J	0.12 J	21 J	2.1
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.091 J	0.29	0.061 J	0.29 J	
Butylbenzylphthalate	MG/KG	100 CP-51	-				0.16 J	
Carbazole	MG/KG	-	-				7.5	0.32
Chrysene	MG/KG	1	56	0.053 J	0.059 J	0.20 J	50 J	4.4 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56			0.034 J	5.4	0.45 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

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Concentration Exceeds Criteria (2)

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-14	SB-14	SB-14	SB-15	SB-15
Sample ID				SB-14-(3.5-4)	SB-14-(4.5-5)	SB-14-(14.5-15)	SB-15-(3-3.5)	SB-15-(6-6.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	4.5-5.0	14.5-15.0	3.0-3.5	6.0-6.5
Date Sampled				04/28/10	04/28/10	04/29/10	05/04/10	05/04/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350				96 J	1.3
Di-n-butylphthalate	MG/KG	0.014 CP-51	-					
Fluoranthene	MG/KG	100	500	0.057 J	0.088 J	0.24	180 J	6.0 J
Fluorene	MG/KG	30	500				73 J	7.0 J
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6			0.15 J	22 J	1.0
Naphthalene	MG/KG	12	500			0.33	770	100
Phenanthrene	MG/KG	100	500	0.041 J	0.068 J	0.086 J	280 J	20
Phenol	MG/KG	0.33	500					
Pyrene	MG/KG	100	500	0.068 J	0.11 J	0.35	180 J	11 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	0.489	0.472	2.576	2,159.4	214.05
Total Semivolatile Organic Compounds	MG/KG	-	-	0.58	0.762	2.637	2,293.91	220.57
Metals								
Aluminum	MG/KG	10000 CP-51	-	13,100	12,600	11,500	12,200	19,400
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16	2.8	2.5	1.5	5.6 J	1.0 J
Barium	MG/KG	350	400	58.5	63.7	63.8	136 J	147 J
Beryllium	MG/KG	7.2	590	0.35 J	0.56 J	0.39 J		
Cadmium	MG/KG	2.5	9.3	0.16 J	0.14 J	0.19	0.55	0.55
Calcium	MG/KG	10000 CP-51	-	1,190 J	1,300 J	3,930 J	1,700	1,960
Chromium	MG/KG	30	1500	24.7	20.4	19.9	34.4 J	46.7 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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Concentration Exceeds Criteria (1)

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Only Detected Results Reported.

TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-14	SB-14	SB-14	SB-15	SB-15
Sample ID				SB-14-(3.5-4)	SB-14-(4.5-5)	SB-14-(14.5-15)	SB-15-(3-3.5)	SB-15-(6-6.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	4.5-5.0	14.5-15.0	3.0-3.5	6.0-6.5
Date Sampled				04/28/10	04/28/10	04/29/10	05/04/10	05/04/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	20 CP-51	-	8.3	8.0	8.2	9.1 J	20.9 J
Copper	MG/KG	50	270	28.0	17.7	32.0	85.7	26.6
Iron	MG/KG	2000 CP-51	-	26,300	23,500	23,000	41,800	22,600
Lead	MG/KG	63	1000	65.8	23.4	45.5	230 J	4.0 J
Magnesium	MG/KG	-	-	4,120	3,130	3,590	4,670 J	7,580 J
Manganese	MG/KG	1600	10000	256	267	463	153 J	1,230 J
Mercury	MG/KG	0.18	2.8	0.050	0.036 J	0.067	1.3 J	
Nickel	MG/KG	30	310	16.9	14.8	15.3	20.7 J	28.0 J
Potassium	MG/KG	-	-	1,510 J	950 J	1,320 J	2,630 J	10,900 J
Selenium	MG/KG	3.9	1500	1.9	1.5	1.4		
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	148	175	750	195	259
Thallium	MG/KG	5 CP-51	-					1.6
Vanadium	MG/KG	39 CP-51	-	35.3	29.4	30.7	43.8 J	61.9 J
Zinc	MG/KG	109	10000	72.4 J	43.8 J	68.3 J	96.1 J	84.7 J

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-15	SB-16	SB-16	SB-16	SB-16
Sample ID				SB-15-(22-23)	SB-16-(3.5-4)	SB-16-(6-6.5)	SB-16-(9-10)	SB-16-(17.5-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				22.0-23.0	3.5-4.0	6.0-6.5	9.0-10.0	17.5-18.0
Date Sampled				05/04/10	05/05/10	05/05/10	05/05/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-					
1,2-Dichloroethene (cis)	MG/KG	0.25	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500		0.0089 J		0.011 J	
Benzene	MG/KG	0.06	44	1.6		0.45 J		3.1
Carbon disulfide	MG/KG	2.7 CP-51	-					
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-					
Ethylbenzene	MG/KG	1	390	22		22		19
Isopropylbenzene	MG/KG	2.3 CP-51	-	0.31 J		0.49 J		1.4 J
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-	3.5				
Tetrachloroethene	MG/KG	1.3	150					
Toluene	MG/KG	0.7	500	0.79	0.0012 J	0.54 J		0.41 J
Xylene (total)	MG/KG	0.26	500	35		0.59 J		18
Total BTEX	MG/KG	-	-	59.39	0.0012	23.58	ND	40.51
Total Volatile Organic Compounds	MG/KG	-	-	63.2	0.0101	24.07	0.011	41.91
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.12 J	0.074 J	0.10 J		2.7

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-15	SB-16	SB-16	SB-16	SB-16
Sample ID				SB-15-(22-23)	SB-16-(3.5-4)	SB-16-(6-6.5)	SB-16-(9-10)	SB-16-(17.5-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				22.0-23.0	3.5-4.0	6.0-6.5	9.0-10.0	17.5-18.0
Date Sampled				05/04/10	05/05/10	05/05/10	05/05/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-					
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.63	0.40	0.60		9.0
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500					
3,3'-Dichlorobenzidine	MG/KG	-	-					
Acenaphthene	MG/KG	20	500	0.16 J	0.16 J	1.2	0.027 J	6.6
Acenaphthylene	MG/KG	100	500	1.1	1.2	3.1		2.6 J
Acetophenone	MG/KG	-	-	0.12 J	0.085 J			
Anthracene	MG/KG	100	500	0.68	0.74	2.7		3.3 J
Benzaldehyde	MG/KG	-	-					
Benzo(a)anthracene	MG/KG	1	5.6	1.4	1.5	6.1		2.8 J
Benzo(a)pyrene	MG/KG	1	1	1.6	2.0 J	3.0		2.9 J
Benzo(b)fluoranthene	MG/KG	1	5.6	1.9 J	1.9 J	3.5 J		1.7 J
Benzo(g,h,i)perylene	MG/KG	100	500	1.6	2.0	1.5		0.81
Benzo(k)fluoranthene	MG/KG	0.8	56	1.7	2.2	2.8		1.1
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-		0.19 J	0.25	0.037 J	0.11 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	0.054 J	0.058 J	0.13 J		0.096 J
Chrysene	MG/KG	1	56	1.8	1.8	6.7		2.6 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.45 J	0.54 J	0.55 J		0.25 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-15	SB-16	SB-16	SB-16	SB-16
Sample ID				SB-15-(22-23)	SB-16-(3.5-4)	SB-16-(6-6.5)	SB-16-(9-10)	SB-16-(17.5-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				22.0-23.0	3.5-4.0	6.0-6.5	9.0-10.0	17.5-18.0
Date Sampled				05/04/10	05/05/10	05/05/10	05/05/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350	0.12 J	0.095 J	0.14 J		0.38
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.037 J	0.037 J			
Fluoranthene	MG/KG	100	500	2.8	2.7	11		4.2
Fluorene	MG/KG	30	500	0.57	0.42	1.2		4.6
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	1.2	1.4 J	1.3		0.60 J
Naphthalene	MG/KG	12	500	0.38	0.23	0.30		22
Phenanthrene	MG/KG	100	500	3.8	2.9	8.1		14
Phenol	MG/KG	0.33	500					0.099 J
Pyrene	MG/KG	100	500	3.8	3.4	18		7.8
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	25.57	25.49	71.65	0.027	86.86
Total Semivolatile Organic Compounds	MG/KG	-	-	26.021	26.029	72.27	0.064	90.245
Metals								
Aluminum	MG/KG	10000 CP-51	-	5,620	9,070	10,300	15,000	9,300
Antimony	MG/KG	12 CP-51	-			0.64 J		
Arsenic	MG/KG	13	16	1.7 J	5.7 J	16.6 J	4.3 J	1.2 J
Barium	MG/KG	350	400	48.8 J	111 J	73.9 J	75.7 J	87.6 J
Beryllium	MG/KG	7.2	590	0.30 J	0.37 J	0.33 J	0.43 J	0.16 J
Cadmium	MG/KG	2.5	9.3	0.25	0.92	2.6	0.17 J	0.19 J
Calcium	MG/KG	10000 CP-51	-	1,030	17,000	5,840	953	1,130
Chromium	MG/KG	30	1500	24.2 J	24.3 J	25.1 J	19.8 J	34.8 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-15	SB-16	SB-16	SB-16	SB-16
Sample ID				SB-15-(22-23)	SB-16-(3.5-4)	SB-16-(6-6.5)	SB-16-(9-10)	SB-16-(17.5-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				22.0-23.0	3.5-4.0	6.0-6.5	9.0-10.0	17.5-18.0
Date Sampled				05/04/10	05/05/10	05/05/10	05/05/10	05/05/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	20 CP-51	-	8.2 J	9.3 J	9.3 J	7.2 J	11.3 J
Copper	MG/KG	50	270	25.8	54.2	53.1	15.6	26.5
Iron	MG/KG	2000 CP-51	-	16,700	24,900	113,000	21,300 J	25,000
Lead	MG/KG	63	1000	5.0 J	91.9 J	66.6 J	9.0 J	7.5 J
Magnesium	MG/KG	-	-	2,990 J	5,240 J	4,260 J	3,460 J	4,870 J
Manganese	MG/KG	1600	10000	164 J	226 J	406 J	156 J	261 J
Mercury	MG/KG	0.18	2.8		2.1 J	0.70 J	0.0073 J	
Nickel	MG/KG	30	310	17.7 J	22.5 J	19.7 J	14.9 J	25.1 J
Potassium	MG/KG	-	-	2,340 J	2,010 J	2,090 J	923 J	4,550 J
Selenium	MG/KG	3.9	1500					
Silver	MG/KG	2	1500					
Sodium	MG/KG	-	-	224	302	165	201	128
Thallium	MG/KG	5 CP-51	-		0.52 J			
Vanadium	MG/KG	39 CP-51	-	30.8 J	29.9 J	36.2 J	29.7 J	37.5 J
Zinc	MG/KG	109	10000	35.5 J	113 J	134 J	41.5 J	43.5 J

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-17	SB-17	SB-17	SB-41	SB-41
Sample ID				SB-17-(3-3.5)	SB-17-(5.5-6)	SB-17-(12-12.5)	SB-41 (0.5-1.0)	SB-41 (7-9)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.5-6.0	12.0-12.5	0.5-1.0	7.0-9.0
Date Sampled				05/11/10	05/11/10	05/12/10	02/18/14	02/18/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-					
1,2-Dichloroethene (cis)	MG/KG	0.25	500					
2-Butanone	MG/KG	0.12	500					
Acetone	MG/KG	0.05	500		0.040 J	0.12 J		0.0054 J
Benzene	MG/KG	0.06	44		0.025	5.7 J		0.0024 J
Carbon disulfide	MG/KG	2.7 CP-51	-		0.022			
Chloroform	MG/KG	0.37	350					
Cyclohexane	MG/KG	-	-			0.038 J		
Ethylbenzene	MG/KG	1	390		1.7	11		
Isopropylbenzene	MG/KG	2.3 CP-51	-		0.074 J	0.33 J		
Methylcyclohexane	MG/KG	-	-			0.14 J		
Methylene chloride	MG/KG	0.05	500					
Styrene	MG/KG	300 CP-51	-			15		
Tetrachloroethene	MG/KG	1.3	150					
Toluene	MG/KG	0.7	500		0.19 J	12		
Xylene (total)	MG/KG	0.26	500		2.6 J	66	0.0092 J	
Total BTEX	MG/KG	-	-	ND	4.515	94.7	0.0092	0.0024
Total Volatile Organic Compounds	MG/KG	-	-	ND	4.651	110.328	0.0092	0.0078
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.15 J	0.60			NA

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-17	SB-17	SB-17	SB-41	SB-41
Sample ID				SB-17-(3-3.5)	SB-17-(5.5-6)	SB-17-(12-12.5)	SB-41 (0.5-1.0)	SB-41 (7-9)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.5-6.0	12.0-12.5	0.5-1.0	7.0-9.0
Date Sampled				05/11/10	05/11/10	05/12/10	02/18/14	02/18/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-					NA
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	1.8 J	1.3	670	0.075 J	NA
2-Methylphenol (o-cresol)	MG/KG	0.33	500					NA
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500	0.048 J				NA
3,3'-Dichlorobenzidine	MG/KG	-	-					NA
Acenaphthene	MG/KG	20	500	0.31 J	2.7	33 J		NA
Acenaphthylene	MG/KG	100	500	4.6	3.1	180 J	0.59	NA
Acetophenone	MG/KG	-	-				0.064 J	NA
Anthracene	MG/KG	100	500	4.0	6.8	64 J	0.21 J	NA
Benzaldehyde	MG/KG	-	-					NA
Benzo(a)anthracene	MG/KG	1	5.6	22	4.1	79 J	0.65	NA
Benzo(a)pyrene	MG/KG	1	1	24	2.7	41 J	0.74	NA
Benzo(b)fluoranthene	MG/KG	1	5.6	26 J	2.7 J		1.1	NA
Benzo(g,h,i)perylene	MG/KG	100	500	14	1.4		0.85	NA
Benzo(k)fluoranthene	MG/KG	0.8	56	13 J	1.4 J		0.48	NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.10 J	0.020 J			NA
Butylbenzylphthalate	MG/KG	100 CP-51	-				0.043 J	NA
Carbazole	MG/KG	-	-	0.38 J	7.1		0.071 J	NA
Chrysene	MG/KG	1	56	22	4.2	73 J	0.86	NA
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	3.4 J	0.57		0.17 J	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-17	SB-17	SB-17	SB-41	SB-41
Sample ID				SB-17-(3-3.5)	SB-17-(5.5-6)	SB-17-(12-12.5)	SB-41 (0.5-1.0)	SB-41 (7-9)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.5-6.0	12.0-12.5	0.5-1.0	7.0-9.0
Date Sampled				05/11/10	05/11/10	05/12/10	02/18/14	02/18/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350	0.40 J	2.6			NA
Di-n-butylphthalate	MG/KG	0.014 CP-51	-				0.26 J	NA
Fluoranthene	MG/KG	100	500	47	8.3	120 J	0.83	NA
Fluorene	MG/KG	30	500	1.4 J	3.4	120 J		NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	12 J	1.3		0.82	NA
Naphthalene	MG/KG	12	500	1.8 J	16	1,800	0.090 J	NA
Phenanthrene	MG/KG	100	500	10	7.9	380	0.34 J	NA
Phenol	MG/KG	0.33	500					NA
Pyrene	MG/KG	100	500	59	13	230 J	1.0	NA
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	266.31	80.87	3,790	8.805	NA
Total Semivolatile Organic Compounds	MG/KG	-	-	267.388	91.19	3,790	9.243	NA
Metals								
Aluminum	MG/KG	10000 CP-51	-	4,990	11,100	9,170	2,840	NA
Antimony	MG/KG	12 CP-51	-				0.53 J	NA
Arsenic	MG/KG	13	16	3.5	0.77		6.2	NA
Barium	MG/KG	350	400	50.1	48.4	202	88.1	NA
Beryllium	MG/KG	7.2	590	0.071 J	0.17		0.28	NA
Cadmium	MG/KG	2.5	9.3	0.20 J	0.23	0.22	0.28	NA
Calcium	MG/KG	10000 CP-51	-	808	1,630	1,040	21,800	NA
Chromium	MG/KG	30	1500	9.6	19.7	39.0	6.2	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-17	SB-17	SB-17	SB-41	SB-41
Sample ID				SB-17-(3-3.5)	SB-17-(5.5-6)	SB-17-(12-12.5)	SB-41 (0.5-1.0)	SB-41 (7-9)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-3.5	5.5-6.0	12.0-12.5	0.5-1.0	7.0-9.0
Date Sampled				05/11/10	05/11/10	05/12/10	02/18/14	02/18/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	20 CP-51	-	4.7	5.4	8.6	22.2	NA
Copper	MG/KG	50	270	14.7	19.2	30.0	34.3	NA
Iron	MG/KG	2000 CP-51	-	11,100	26,300	25,000	6,550	NA
Lead	MG/KG	63	1000	53.1	7.5	4.0	154	NA
Magnesium	MG/KG	-	-	1,320	3,440	5,140	1,940	NA
Manganese	MG/KG	1600	10000	64.9	265	135	57.0	NA
Mercury	MG/KG	0.18	2.8	0.27	0.24		0.20	NA
Nickel	MG/KG	30	310	15.4	13.6	40.4	9.8	NA
Potassium	MG/KG	-	-	503	1,500	3,050	600	NA
Selenium	MG/KG	3.9	1500	1.3 J	1.4	1.8	0.61 J	NA
Silver	MG/KG	2	1500					NA
Sodium	MG/KG	-	-	338	572	100	937	NA
Thallium	MG/KG	5 CP-51	-				0.34 J	NA
Vanadium	MG/KG	39 CP-51	-	12.8	26.4	36.6	12.3	NA
Zinc	MG/KG	109	10000	78.5	36.9	43.1	116	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-41	SB-42	SB-42	SB-42	SB-43
Sample ID				SB-41 (9-11)	DUP021914	SB-42 (0.5-1.0)	SB-42 (18.5-19.5)	SB-43 (1-2)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-11.0	0.5-1.0	0.5-1.0	18.5-19.5	1.0-2.0
Date Sampled				02/18/14	02/19/14	02/19/14	02/21/14	02/19/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Volatile Organic Compounds								
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-	NA				
1,2-Dichloroethene (cis)	MG/KG	0.25	500	NA				
2-Butanone	MG/KG	0.12	500	NA				
Acetone	MG/KG	0.05	500	NA	0.0065 J	0.012 J		
Benzene	MG/KG	0.06	44	NA			2.5	0.0014 J
Carbon disulfide	MG/KG	2.7 CP-51	-	NA				
Chloroform	MG/KG	0.37	350	NA				
Cyclohexane	MG/KG	-	-	NA				
Ethylbenzene	MG/KG	1	390	NA			8.2	
Isopropylbenzene	MG/KG	2.3 CP-51	-	NA			1.0	
Methylcyclohexane	MG/KG	-	-	NA				
Methylene chloride	MG/KG	0.05	500	NA				0.0031 J
Styrene	MG/KG	300 CP-51	-	NA			5.0	
Tetrachloroethene	MG/KG	1.3	150	NA				
Toluene	MG/KG	0.7	500	NA			5.8	
Xylene (total)	MG/KG	0.26	500	NA			17	
Total BTEX	MG/KG	-	-	NA	ND	ND	33.5	0.0014
Total Volatile Organic Compounds	MG/KG	-	-	NA	0.0065	0.012	39.5	0.0045
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.078 J	0.47	0.42	17 J	0.040 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-41	SB-42	SB-42	SB-42	SB-43
Sample ID				SB-41 (9-11)	DUP021914	SB-42 (0.5-1.0)	SB-42 (18.5-19.5)	SB-43 (1-2)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-11.0	0.5-1.0	0.5-1.0	18.5-19.5	1.0-2.0
Date Sampled				02/18/14	02/19/14	02/19/14	02/21/14	02/19/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-					
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.69	0.20 J	0.13 J	240 D	0.15 J
2-Methylphenol (o-cresol)	MG/KG	0.33	500					
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500				0.13 J	
3,3'-Dichlorobenzidine	MG/KG	-	-					
Acenaphthene	MG/KG	20	500	5.9 D	0.75	0.59	9.0 J	0.17 J
Acenaphthylene	MG/KG	100	500	3.2	4.8 DJ	2.4 J	98 DJ	1.5
Acetophenone	MG/KG	-	-					
Anthracene	MG/KG	100	500	4.9 D	3.7 DJ	2.6	32 DJ	0.68
Benzaldehyde	MG/KG	-	-					
Benzo(a)anthracene	MG/KG	1	5.6	11 D	4.5 D	2.9	33 DJ	1.5
Benzo(a)pyrene	MG/KG	1	1	10 D	3.3 DJ	2.1	21 DJ	2.0
Benzo(b)fluoranthene	MG/KG	1	5.6	12 D	4.4 DJ	2.2 J	13 DJ	2.6
Benzo(g,h,i)perylene	MG/KG	100	500	9.4 D	2.5 J	1.1 J	6.7 J	1.9
Benzo(k)fluoranthene	MG/KG	0.8	56	5.0 D	2.2 J	0.95 J	5.5 J	0.96
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-					0.097 J
Butylbenzylphthalate	MG/KG	100 CP-51	-	0.071 J				
Carbazole	MG/KG	-	-	0.16 J	0.18 J	0.069 J	0.31 J	0.14 J
Chrysene	MG/KG	1	56	17 D	5.1 DJ	2.9 J	27 DJ	2.0
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	2.2	0.64 J	0.33 J	2.1	0.45

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-41	SB-42	SB-42	SB-42	SB-43
Sample ID				SB-41 (9-11)	DUP021914	SB-42 (0.5-1.0)	SB-42 (18.5-19.5)	SB-43 (1-2)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-11.0	0.5-1.0	0.5-1.0	18.5-19.5	1.0-2.0
Date Sampled				02/18/14	02/19/14	02/19/14	02/21/14	02/19/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
Dibenzofuran	MG/KG	7	350	0.27 J	0.41	0.29 J		
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.12 J	0.10 J	0.10 J		0.041 J
Fluoranthene	MG/KG	100	500	15 D	7.5 DJ	4.0 DJ	38 DJ	2.0
Fluorene	MG/KG	30	500	2.1	4.1 D	2.6	41 DJ	0.36 J
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	8.3 D	2.6 J	1.2 J	6.3 J	1.9
Naphthalene	MG/KG	12	500	3.3	0.50	0.48	710 D	0.73
Phenanthrene	MG/KG	100	500	8.1 D	13 D	8.2 D	140 DJ	1.4
Phenol	MG/KG	0.33	500				0.13 J	
Pyrene	MG/KG	100	500	22 D	11 DJ	6.6 DJ	42 J	2.8
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	140.09	70.79	41.28	1,464.6	23.1
Total Semivolatile Organic Compounds	MG/KG	-	-	140.789	71.95	42.159	1,482.17	23.418
Metals								
Aluminum	MG/KG	10000 CP-51	-	6,100	6,480	7,100	11,100	3,440
Antimony	MG/KG	12 CP-51	-			1.7 J		0.44 J
Arsenic	MG/KG	13	16	13.3	12.0	10.4	1.8	6.8
Barium	MG/KG	350	400	64.4	145	135	69.0	99.5
Beryllium	MG/KG	7.2	590	0.28	0.44	0.46		0.32
Cadmium	MG/KG	2.5	9.3	0.33			0.46	0.15 J
Calcium	MG/KG	10000 CP-51	-	5,420	4,140	5,080	1,320	5,810
Chromium	MG/KG	30	1500	13.2	15.5	24.8 J	48.2	7.6

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-41	SB-42	SB-42	SB-42	SB-43
Sample ID				SB-41 (9-11)	DUP021914	SB-42 (0.5-1.0)	SB-42 (18.5-19.5)	SB-43 (1-2)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-11.0	0.5-1.0	0.5-1.0	18.5-19.5	1.0-2.0
Date Sampled				02/18/14	02/19/14	02/19/14	02/21/14	02/19/14
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)			
Metals								
Cobalt	MG/KG	20 CP-51	-	3.1	10.7	13.3	11.1	9.1
Copper	MG/KG	50	270	65.4	54.5	53.5	34.0	59.8
Iron	MG/KG	2000 CP-51	-	20,500	21,500	18,500	21,700	10,100
Lead	MG/KG	63	1000	335	134	144	2.1	76.9
Magnesium	MG/KG	-	-	3,860	2,230	2,790	6,580	1,640
Manganese	MG/KG	1600	10000	140	128	127	545	68.9
Mercury	MG/KG	0.18	2.8	0.28	0.18	0.13		0.30
Nickel	MG/KG	30	310	21.2	15.3	17.7	39.6	10.4
Potassium	MG/KG	-	-	719	1,460	1,590	5,120	798
Selenium	MG/KG	3.9	1500		2.1		0.62 J	1.3 J
Silver	MG/KG	2	1500				0.40 J	
Sodium	MG/KG	-	-	479	685	681	168	376
Thallium	MG/KG	5 CP-51	-					
Vanadium	MG/KG	39 CP-51	-	50.7	24.3	26.6	47.3	14.1
Zinc	MG/KG	109	10000	133	103	105	52.2	94.9

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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TABLE 3-1E
BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-43	SB-44	SB-44	SB-44
Sample ID				SB-43 (10-12)	SB-44 (1.5-2)	SB-44 (10-12)	SB-44 (15-20)
Matrix				Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-12.0	1.5-2.0	10.0-12.0	15.0-20.0
Date Sampled				02/19/14	02/19/14	02/21/14	02/21/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				
Volatile Organic Compounds							
1,2,4-Trichlorobenzene	MG/KG	3.4 CP-51	-				
1,2-Dichloroethene (cis)	MG/KG	0.25	500				
2-Butanone	MG/KG	0.12	500		0.0071 J		
Acetone	MG/KG	0.05	500		0.040 J		
Benzene	MG/KG	0.06	44	1,600	0.0030	2,600	2,000
Carbon disulfide	MG/KG	2.7 CP-51	-				
Chloroform	MG/KG	0.37	350				
Cyclohexane	MG/KG	-	-				
Ethylbenzene	MG/KG	1	390	82	0.014	2,600	690
Isopropylbenzene	MG/KG	2.3 CP-51	-		0.0052	25 J	
Methylcyclohexane	MG/KG	-	-				
Methylene chloride	MG/KG	0.05	500		0.0029 J		
Styrene	MG/KG	300 CP-51	-	220	0.0012 J	1,300	1,000
Tetrachloroethene	MG/KG	1.3	150				
Toluene	MG/KG	0.7	500	950		3,800	2,500
Xylene (total)	MG/KG	0.26	500	1,000	0.0063	4,700	2,000
Total BTEX	MG/KG	-	-	3,632	0.0233	13,700	7,190
Total Volatile Organic Compounds	MG/KG	-	-	3,852	0.0797	15,025	8,190
Semivolatile Organic Compounds							
1,1'-Biphenyl	MG/KG	60 CP-51	-	530 J	0.34 J	150 J	1,800

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-43	SB-44	SB-44	SB-44
Sample ID				SB-43 (10-12)	SB-44 (1.5-2)	SB-44 (10-12)	SB-44 (15-20)
Matrix				Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-12.0	1.5-2.0	10.0-12.0	15.0-20.0
Date Sampled				02/19/14	02/19/14	02/21/14	02/21/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				
Semivolatile Organic Compounds							
2,6-Dinitrotoluene	MG/KG	0.17 CP-51	-				
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	4,700 DJ		4,100 D	28,000 D
2-Methylphenol (o-cresol)	MG/KG	0.33	500				
3&4-Methylphenol (m,p-cresol)	MG/KG	0.33	500	1,100 DJ		0.65 J	
3,3'-Dichlorobenzidine	MG/KG	-	-				
Acenaphthene	MG/KG	20	500	950 J	0.84	150 J	1,300
Acenaphthylene	MG/KG	100	500		2.8	700 J	9,900 DJ
Acetophenone	MG/KG	-	-				
Anthracene	MG/KG	100	500	2,800 DJ	4.0 D	360 DJ	3,400
Benzaldehyde	MG/KG	-	-				
Benzo(a)anthracene	MG/KG	1	5.6	2,500 DJ	5.5 D	230 DJ	1,600
Benzo(a)pyrene	MG/KG	1	1		3.8 DJ	130 J	1,200
Benzo(b)fluoranthene	MG/KG	1	5.6	2,600 DJ	3.9 D	99 J	890
Benzo(g,h,i)perylene	MG/KG	100	500		2.0	35 J	490
Benzo(k)fluoranthene	MG/KG	0.8	56	830 DJ	2.8	48 J	450
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-				
Butylbenzylphthalate	MG/KG	100 CP-51	-				
Carbazole	MG/KG	-	-	700 J		5.7	81 J
Chrysene	MG/KG	1	56	2,000 DJ	5.5 D	250 DJ	1,700
Dibenz(a,h)anthracene	MG/KG	0.33	0.56		0.58	14	140 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-43	SB-44	SB-44	SB-44
Sample ID				SB-43 (10-12)	SB-44 (1.5-2)	SB-44 (10-12)	SB-44 (15-20)
Matrix				Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-12.0	1.5-2.0	10.0-12.0	15.0-20.0
Date Sampled				02/19/14	02/19/14	02/21/14	02/21/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				
Semivolatile Organic Compounds							
Dibenzofuran	MG/KG	7	350			59 J	700
Di-n-butylphthalate	MG/KG	0.014 CP-51	-				
Fluoranthene	MG/KG	100	500	7,800 D	7.4 D	340 DJ	2,700
Fluorene	MG/KG	30	500		3.9 D	710 DJ	4,000 DJ
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6		2.0	42 J	510 J
Naphthalene	MG/KG	12	500	48,000 D	0.46	11,000 D	74,000 D
Phenanthrene	MG/KG	100	500	12,000 D	15 D	1,500 DJ	11,000 DJ
Phenol	MG/KG	0.33	500	350 J			
Pyrene	MG/KG	100	500	6,700 D	13 D	530 DJ	5,000 DJ
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	90,880	73.48	20,238	146,280
Total Semivolatile Organic Compounds	MG/KG	-	-	93,560	73.82	20,453.35	148,861
Metals							
Aluminum	MG/KG	10000 CP-51	-	NA	11,300	9,910 J	NA
Antimony	MG/KG	12 CP-51	-	NA		1.7 J	NA
Arsenic	MG/KG	13	16	NA	11.5	30.9	NA
Barium	MG/KG	350	400	NA	98.2	66.6	NA
Beryllium	MG/KG	7.2	590	NA	0.47	0.54	NA
Cadmium	MG/KG	2.5	9.3	NA		0.53	NA
Calcium	MG/KG	10000 CP-51	-	NA	3,940	7,710	NA
Chromium	MG/KG	30	1500	NA	25.6	14.5	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

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BLOCK 2598 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-43	SB-44	SB-44	SB-44
Sample ID				SB-43 (10-12)	SB-44 (1.5-2)	SB-44 (10-12)	SB-44 (15-20)
Matrix				Soil	Soil	Soil	Soil
Depth Interval (ft)				10.0-12.0	1.5-2.0	10.0-12.0	15.0-20.0
Date Sampled				02/19/14	02/19/14	02/21/14	02/21/14
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				
Metals							
Cobalt	MG/KG	20 CP-51	-	NA	10.2	3.7	NA
Copper	MG/KG	50	270	NA	83.9	123 J	NA
Iron	MG/KG	2000 CP-51	-	NA	22,600	18,500	NA
Lead	MG/KG	63	1000	NA	224	306	NA
Magnesium	MG/KG	-	-	NA	3,960	2,650	NA
Manganese	MG/KG	1600	10000	NA	159	103	NA
Mercury	MG/KG	0.18	2.8	NA	0.83	3.7 J+	NA
Nickel	MG/KG	30	310	NA	26.5	24.7	NA
Potassium	MG/KG	-	-	NA	1,910	935 J	NA
Selenium	MG/KG	3.9	1500	NA	1.2 J	5.1	NA
Silver	MG/KG	2	1500	NA			NA
Sodium	MG/KG	-	-	NA	285	644 J	NA
Thallium	MG/KG	5 CP-51	-	NA		1.5	NA
Vanadium	MG/KG	39 CP-51	-	NA	33.0	29.3	NA
Zinc	MG/KG	109	10000	NA	147	165	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

J - The reported concentration is an estimated value. J+ - The reported concntration is an estimated value, with high bias.

D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-07-URS	MW-07-URS	SB-18	SB-18	SB-18
Sample ID				MW-7-(4-4.5)	MW-7-(9.8-10.5)	SB-18-(4-4.5)	SB-18-(5.5-6)	SB-18-(8.5-9)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-4.5	9.8-10.5	4.0-4.5	5.5-6.0	8.5-9.0
Date Sampled				12/15/11	12/16/11	05/11/10	05/12/10	05/12/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	MG/KG	0.05	500				0.0045 J	0.030 J
Carbon disulfide	MG/KG	2.7 CP-51	-					
Isopropylbenzene	MG/KG	2.3 CP-51	-		0.031			
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500		0.018			
Xylene (total)	MG/KG	0.26	500					
Total BTEX	MG/KG	-	-	ND	ND	ND	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	ND	0.049	ND	0.0045	0.03
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-					
2-Chloronaphthalene	MG/KG	-	-	1.3 J	1.3 J			
2-Methylnaphthalene	MG/KG	0.41 CP-51	-				1.0	
Acenaphthene	MG/KG	20	500				0.42	
Acenaphthylene	MG/KG	100	500				6.1	0.049 J
Anthracene	MG/KG	100	500	0.088 J	0.18		2.7	
Benzo(a)anthracene	MG/KG	1	5.6	0.42	0.048 J	0.14 J	2.6	0.042 J
Benzo(a)pyrene	MG/KG	1	1	0.39		0.17 J	3.0	0.036 J
Benzo(b)fluoranthene	MG/KG	1	5.6	0.30		0.16 J	5.4	
Benzo(g,h,i)perylene	MG/KG	100	500	0.24		0.14 J	3.1	
Benzo(k)fluoranthene	MG/KG	0.8	56	0.34		0.096 J	2.5 J	

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				MW-07-URS	MW-07-URS	SB-18	SB-18	SB-18
Sample ID				MW-7-(4-4.5)	MW-7-(9.8-10.5)	SB-18-(4-4.5)	SB-18-(5.5-6)	SB-18-(8.5-9)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-4.5	9.8-10.5	4.0-4.5	5.5-6.0	8.5-9.0
Date Sampled				12/15/11	12/16/11	05/11/10	05/12/10	05/12/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.066 J	0.21	0.22	0.17 J	0.030 J
Butylbenzylphthalate	MG/KG	100 CP-51	-			0.019 J		
Carbazole	MG/KG	-	-				0.022 J	
Chrysene	MG/KG	1	56	0.38	0.075 J	0.11 J	1.9	0.032 J
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.074 J		0.036 J	1.4	
Dibenzofuran	MG/KG	7	350					
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.11 J	0.11 J			
Di-n-octylphthalate	MG/KG	100 CP-51	-			0.042 J		
Fluoranthene	MG/KG	100	500	0.57		0.11 J	1.8	0.040 J
Fluorene	MG/KG	30	500				0.48	
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.21		0.14 J	2.5 J	
Naphthalene	MG/KG	12	500					
Phenanthrene	MG/KG	100	500	0.27		0.044 J	0.48	0.042 J
Pyrene	MG/KG	100	500	0.57	0.25	0.14 J	3.5	0.12 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	3.852	0.553	1.286	38.88	0.361
Total Semivolatile Organic Compounds	MG/KG	-	-	5.328	2.173	1.567	39.072	0.391
Metals								
Aluminum	MG/KG	10000 CP-51	-	10,600	11,500	9,410	10,300	28,600
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16	1.7		1.5		

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

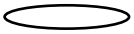
TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

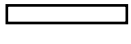
Location ID				MW-07-URS	MW-07-URS	SB-18	SB-18	SB-18
Sample ID				MW-7-(4-4.5)	MW-7-(9.8-10.5)	SB-18-(4-4.5)	SB-18-(5.5-6)	SB-18-(8.5-9)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-4.5	9.8-10.5	4.0-4.5	5.5-6.0	8.5-9.0
Date Sampled				12/15/11	12/16/11	05/11/10	05/12/10	05/12/10
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Barium	MG/KG	350	400	94.4	48.1	72.2	85.6	353
Beryllium	MG/KG	7.2	590	0.71	0.69		0.098 J	
Cadmium	MG/KG	2.5	9.3			0.25	0.31	0.58
Calcium	MG/KG	10000 CP-51	-	8,450	3,980	3,750	10,900	3,140
Chromium	MG/KG	30	1500	41.5	69.1	26.0	29.6	177
Cobalt	MG/KG	20 CP-51	-	8.3	8.3	9.7	11.1	20.9
Copper	MG/KG	50	270	44.4	89.2	33.6	31.0	28.0
Iron	MG/KG	2000 CP-51	-	20,500	21,500	22,600	26,500	46,400
Lead	MG/KG	63	1000	26.1	2.7	11.3	5.9	1.5
Magnesium	MG/KG	-	-	10,100	9,600	5,160	10,600	18,200
Manganese	MG/KG	1600	10000	280	195	289	209	386
Mercury	MG/KG	0.18	2.8	0.040 J		0.095		
Nickel	MG/KG	30	310	26.8	40.3	20	35.0	71.8
Potassium	MG/KG	-	-	6,170	8,880	3,010	3,500	16,500
Selenium	MG/KG	3.9	1500			1.5	1.4	
Sodium	MG/KG	-	-	1,300	204	145	131	171
Thallium	MG/KG	5 CP-51	-	0.65 J	0.90 J			0.59 J
Vanadium	MG/KG	39 CP-51	-	42.8	42.2	34.6	38.3	127
Zinc	MG/KG	109	10000	57.0	44.7	53.5	49.1	94.7

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.


Concentration Exceeds Criteria (1)


Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

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J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-19	SB-19	SB-19	SB-20	SB-20
Sample ID				20100512-FD-1	SB-19-(3-4)	SB-19-(5-5.5)	SB-20-(3-3.5)	SB-20-(4.5-5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	3.0-4.0	5.0-5.5	3.0-3.5	4.5-5.0
Date Sampled				05/12/10	05/12/10	05/12/10	12/15/11	12/15/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)				
Volatile Organic Compounds								
Acetone	MG/KG	0.05	500	0.031 J	0.016 J	0.24 J		0.014 J
Carbon disulfide	MG/KG	2.7 CP-51	-			0.019		0.0034 J
Isopropylbenzene	MG/KG	2.3 CP-51	-			0.065 J		
Methylcyclohexane	MG/KG	-	-			0.044 J		
Methylene chloride	MG/KG	0.05	500				0.009	
Xylene (total)	MG/KG	0.26	500			0.013 J		
Total BTEX	MG/KG	-	-	ND	ND	0.013	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	0.031	0.016	0.381	0.009	0.0174
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-					
2-Chloronaphthalene	MG/KG	-	-				1.4 J	
2-Methylnaphthalene	MG/KG	0.41 CP-51	-				0.21	
Acenaphthene	MG/KG	20	500					
Acenaphthylene	MG/KG	100	500	0.065 J	0.022 J			
Anthracene	MG/KG	100	500	0.045 J		1.9		1.3 J
Benzo(a)anthracene	MG/KG	1	5.6	0.23	0.021 J	0.60	0.10 J	0.31
Benzo(a)pyrene	MG/KG	1	1	0.23	0.023 J	0.57	0.10 J	0.29
Benzo(b)fluoranthene	MG/KG	1	5.6	0.27 J		0.34 J	0.14 J	0.12 J
Benzo(g,h,i)perylene	MG/KG	100	500	0.22	0.024 J	0.44	0.15 J	
Benzo(k)fluoranthene	MG/KG	0.8	56	0.11 J		0.34 J	0.10 J	0.17 J

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-19	SB-19	SB-19	SB-20	SB-20
Sample ID				20100512-FD-1	SB-19-(3-4)	SB-19-(5-5.5)	SB-20-(3-3.5)	SB-20-(4.5-5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	3.0-4.0	5.0-5.5	3.0-3.5	4.5-5.0
Date Sampled				05/12/10	05/12/10	05/12/10	12/15/11	12/15/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)				
Semivolatile Organic Compounds								
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.065 J	0.046 J	0.054 J	0.061 J	
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-					
Chrysene	MG/KG	1	56	0.20		1.8	0.098 J	0.22
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.036 J		0.33 J	0.043 J	
Dibenzofuran	MG/KG	7	350					0.49 J
Di-n-butylphthalate	MG/KG	0.014 CP-51	-				0.10 J	
Di-n-octylphthalate	MG/KG	100 CP-51	-					
Fluoranthene	MG/KG	100	500	0.39	0.019 J	0.89	0.12 J	0.26
Fluorene	MG/KG	30	500			3.4		
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	0.20 J	0.021 J	0.24 J	0.11 J	
Naphthalene	MG/KG	12	500				0.13 J	
Phenanthrene	MG/KG	100	500	0.10 J	0.022 J	1.6	0.11 J	0.41 J
Pyrene	MG/KG	100	500	0.49	0.023 J	1.5	0.11 J	0.55 J
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	2.586	0.175	13.95	1.521	3.63
Total Semivolatile Organic Compounds	MG/KG	-	-	2.651	0.221	14.004	3.082	4.12
Metals								
Aluminum	MG/KG	10000 CP-51	-	14,100	13,900	9,720	13,700	17,400
Antimony	MG/KG	12 CP-51	-					
Arsenic	MG/KG	13	16				1.7	1.9

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-19	SB-19	SB-19	SB-20	SB-20
Sample ID				20100512-FD-1	SB-19-(3-4)	SB-19-(5-5.5)	SB-20-(3-3.5)	SB-20-(4.5-5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-4.0	3.0-4.0	5.0-5.5	3.0-3.5	4.5-5.0
Date Sampled				05/12/10	05/12/10	05/12/10	12/15/11	12/15/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)				
Metals								
Barium	MG/KG	350	400	55.7	57.7	76.2	192	225
Beryllium	MG/KG	7.2	590				0.80	0.94
Cadmium	MG/KG	2.5	9.3	0.32	0.32	0.27		0.15 J
Calcium	MG/KG	10000 CP-51	-	1,770	1,660	2,100	3,040	11,500
Chromium	MG/KG	30	1500	12.1 J	21.9 J	11.9	25.7	71.6
Cobalt	MG/KG	20 CP-51	-	8.8	8.4	9.0	5.7	15.7
Copper	MG/KG	50	270	56.8	51.6	57.8	35.9	32.2
Iron	MG/KG	2000 CP-51	-	29,400	29,500	24,700	26,800	42,800
Lead	MG/KG	63	1000	12.4	9.4	6.3	17.5	13.9
Magnesium	MG/KG	-	-	7,950	7,240	6,380	8,730	13,000
Manganese	MG/KG	1600	10000	222	204	237	241	174
Mercury	MG/KG	0.18	2.8	0.010 J	0.0086 J	0.031 J	0.11	0.021 J
Nickel	MG/KG	30	310	10.4	13.0	6.8	19.4	58.2
Potassium	MG/KG	-	-	3,860	3,760	2,550	8,570	7,550
Selenium	MG/KG	3.9	1500	2.0	2.3	1.8		
Sodium	MG/KG	-	-	370	326	175	132	112
Thallium	MG/KG	5 CP-51	-				1.1	1.2
Vanadium	MG/KG	39 CP-51	-	41.8	45.2	49.6	70.4	99.0
Zinc	MG/KG	109	10000	80.5	74.9	58.3	128	165

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-21	SB-21	SB-21	SB-22	SB-22
Sample ID				SB-21-(3.5-4)	SB-21-(10-11)	SB-21-(21-22)	20111215-FD-1	SB-22-(4-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	10.0-11.0	21.0-22.0	4.0-4.5	4.0-4.5
Date Sampled				12/15/11	12/16/11	12/16/11	12/15/11	12/15/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Volatile Organic Compounds								
Acetone	MG/KG	0.05	500		0.010 J	0.0088 J		
Carbon disulfide	MG/KG	2.7 CP-51	-		0.0029			
Isopropylbenzene	MG/KG	2.3 CP-51	-					
Methylcyclohexane	MG/KG	-	-					
Methylene chloride	MG/KG	0.05	500				0.0036	
Xylene (total)	MG/KG	0.26	500					
Total BTEX	MG/KG	-	-	ND	ND	ND	ND	ND
Total Volatile Organic Compounds	MG/KG	-	-	ND	0.0129	0.0088	0.0036	ND
Semivolatile Organic Compounds								
1,1'-Biphenyl	MG/KG	60 CP-51	-	0.13 J	32			
2-Chloronaphthalene	MG/KG	-	-	1.4 J		1.4 J	1.3 J	1.3 J
2-Methylnaphthalene	MG/KG	0.41 CP-51	-	0.092 J				
Acenaphthene	MG/KG	20	500	0.17 J	120			
Acenaphthylene	MG/KG	100	500	0.60	22	0.091 J	0.092 J	0.12 J
Anthracene	MG/KG	100	500	0.84	60	0.28	0.085 J	0.097 J
Benzo(a)anthracene	MG/KG	1	5.6	2.8 D	39	0.39	0.29	0.30
Benzo(a)pyrene	MG/KG	1	1	2.9 D	28	0.55	0.28	0.38
Benzo(b)fluoranthene	MG/KG	1	5.6	2.5	18 J	0.16 J	0.25	0.26
Benzo(g,h,i)perylene	MG/KG	100	500	1.9	12 J	0.26	0.18	0.27
Benzo(k)fluoranthene	MG/KG	0.8	56	2.4	11 J	0.12 J	0.19	0.30

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

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Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-21	SB-21	SB-21	SB-22	SB-22
Sample ID				SB-21-(3.5-4)	SB-21-(10-11)	SB-21-(21-22)	20111215-FD-1	SB-22-(4-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	10.0-11.0	21.0-22.0	4.0-4.5	4.0-4.5
Date Sampled				12/15/11	12/16/11	12/16/11	12/15/11	12/15/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Semivolatile Organic Compounds								
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.084 J			0.094 J	0.11 J
Butylbenzylphthalate	MG/KG	100 CP-51	-					
Carbazole	MG/KG	-	-	0.23				
Chrysene	MG/KG	1	56	1.5	37	0.32	0.24	0.29
Dibenz(a,h)anthracene	MG/KG	0.33	0.56	0.37			0.068 J	0.083 J
Dibenzofuran	MG/KG	7	350	0.14 J	6.4 J			
Di-n-butylphthalate	MG/KG	0.014 CP-51	-	0.15 J		0.087 J	0.11 J	0.10 J
Di-n-octylphthalate	MG/KG	100 CP-51	-					
Fluoranthene	MG/KG	100	500	4.0 D	62	0.23	0.33	0.35
Fluorene	MG/KG	30	500	0.20	62			
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	5.6	1.6	8.2 J	0.073 J	0.13 J	0.20
Naphthalene	MG/KG	12	500	0.093 J	32	0.065 J		
Phenanthrene	MG/KG	100	500	2.3	190	0.088 J	0.16 J	0.17 J
Pyrene	MG/KG	100	500	3.5 D	99	1.7	0.34	0.40
Total Polynuclear Aromatic Hydrocarbons	MG/KG	-	-	27.765	800.2	4.327	2.635	3.22
Total Semivolatile Organic Compounds	MG/KG	-	-	29.899	838.6	5.814	4.139	4.73
Metals								
Aluminum	MG/KG	10000 CP-51	-	4,080	7,980	18,800	8,850	8,200
Antimony	MG/KG	12 CP-51	-	4.0				
Arsenic	MG/KG	13	16	9.6	4.8	9.0	2.1	2.1

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-1F
BLOCK 2597 LOT 1
SUMMARY OF DETECTED COMPOUNDS IN RI SOIL SAMPLES
EAST 138th STREET WORKS SITE

Location ID				SB-21	SB-21	SB-21	SB-22	SB-22
Sample ID				SB-21-(3.5-4)	SB-21-(10-11)	SB-21-(21-22)	20111215-FD-1	SB-22-(4-4.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.5-4.0	10.0-11.0	21.0-22.0	4.0-4.5	4.0-4.5
Date Sampled				12/15/11	12/16/11	12/16/11	12/15/11	12/15/11
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Metals								
Barium	MG/KG	350	400	66.9	79.3	104	61.8	56.2
Beryllium	MG/KG	7.2	590	0.36	0.85	2.0	0.63	0.62
Cadmium	MG/KG	2.5	9.3	0.87				0.016 J
Calcium	MG/KG	10000 CP-51	-	32,200	1,960	2,350	10,300	14,800
Chromium	MG/KG	30	1500	13.9	21.2	45.8	26.4	29.3
Cobalt	MG/KG	20 CP-51	-	3.1	4.9	9.1	6.3	6.4
Copper	MG/KG	50	270	37.1	16.4	52.8	28.1	28.8
Iron	MG/KG	2000 CP-51	-	55,400	19,800	37,700	17,000	18,200
Lead	MG/KG	63	1000	132	6.9	48.8	34.7	41.5
Magnesium	MG/KG	-	-	2,530	4,440	10,000	8,240	7,430
Manganese	MG/KG	1600	10000	276	198	515	291	260
Mercury	MG/KG	0.18	2.8	0.13	0.012 J	0.046	0.066	0.045
Nickel	MG/KG	30	310	14.0	11.5	21.7	20.1	20.1
Potassium	MG/KG	-	-	1,190	4,040	10,700	3,700	3,710
Selenium	MG/KG	3.9	1500					
Sodium	MG/KG	-	-	259	614	2,840	402	385
Thallium	MG/KG	5 CP-51	-		0.33 J	0.93 J	0.54 J	0.65 J
Vanadium	MG/KG	39 CP-51	-	25.5	32.6	77.2	31.9	37.0
Zinc	MG/KG	109	10000	159	35.2	93.8	51.8	52.8

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value.

Blank cell or ND - Not detected. NA - Not analyzed.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-2A
BLOCK 2592 LOT 35
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Volatile Organic Compounds										
Acetone	MG/KG	500	6	4	0.004	0.061	0.023	0	MW-03	6-7
Benzene	MG/KG	44	6	1	0.310	0.310	0.310	0	MW-03	6-7
Carbon disulfide	MG/KG	-	6	1	0.015	0.015	0.015	0	MW-03	6-7
Ethylbenzene	MG/KG	390	6	1	0.036	0.036	0.036	0	MW-03	6-7
Isopropylbenzene	MG/KG	-	6	1	2.40	2.40	2.40	0	MW-03	6-7
Methyl acetate	MG/KG	-	6	2	0.006	0.006	0.006	0	SB-06	3-4
Methylcyclohexane	MG/KG	-	6	1	1.00	1.00	1.00	0	MW-03	6-7
Methylene chloride	MG/KG	500	6	1	0.001	0.001	0.001	0	SB-06	3-4
Tetrachloroethene	MG/KG	150	6	1	0.020	0.020	0.020	0	MW-03	6-7
Toluene	MG/KG	500	6	2	0.001	0.024	0.013	0	MW-03	6-7
Xylene (total)	MG/KG	500	6	1	0.290	0.290	0.290	0	MW-03	6-7
Semivolatile Organic Compounds										
2-Methylnaphthalene	MG/KG	-	6	1	14.00	14.00	14.00	0	MW-03	6-7
Acenaphthene	MG/KG	500	6	2	0.027	1.00	0.514	0	MW-03	6-7
Acenaphthylene	MG/KG	500	6	2	0.048	0.120	0.084	0	MW-03	3.5-4.5
Anthracene	MG/KG	500	6	3	0.047	1.70	0.636	0	MW-03	6-7
Benzo(a)anthracene	MG/KG	5.6	6	5	0.071	1.90	0.538	0	MW-03	6-7
Benzo(a)pyrene	MG/KG	1	6	5	0.046	1.50	0.419	1	MW-03	6-7
Benzo(b)fluoranthene	MG/KG	5.6	6	5	0.066	1.80	0.495	0	MW-03	6-7

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2A
BLOCK 2592 LOT 35
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
Benzo(g,h,i)perylene	MG/KG	500	6	5	0.050	0.880	0.291	0	MW-03	6-7
Benzo(k)fluoranthene	MG/KG	56	6	5	0.030	0.900	0.246	0	MW-03	6-7
bis(2-Ethylhexyl)phthalate	MG/KG	-	6	6	0.033	1.10	0.255	0	MW-03	6-7
Carbazole	MG/KG	-	6	1	0.042	0.042	0.042	0	SB-06	3-4
Chrysene	MG/KG	56	6	5	0.065	3.10	0.763	0	MW-03	6-7
Dibenz(a,h)anthracene	MG/KG	0.56	6	2	0.034	0.040	0.037	0	MW-03	3.5-4.5
Dibenzofuran	MG/KG	350	6	1	0.023	0.023	0.023	0	SB-06	3-4
Di-n-butylphthalate	MG/KG	-	6	2	0.021	1.60	0.811	0	MW-03	6-7
Fluoranthene	MG/KG	500	6	5	0.140	4.00	1.14	0	MW-03	6-7
Fluorene	MG/KG	500	6	2	0.042	4.00	2.02	0	MW-03	6-7
Indeno(1,2,3-cd)pyrene	MG/KG	5.6	6	5	0.037	0.640	0.205	0	MW-03	6-7
Naphthalene	MG/KG	500	6	1	0.021	0.021	0.021	0	MW-03	3.5-4.5
Phenanthrene	MG/KG	500	6	5	0.024	10.00	2.13	0	MW-03	6-7
Pyrene	MG/KG	500	6	5	0.140	7.00	1.70	0	MW-03	6-7
Metals										
Aluminum	MG/KG	-	6	6	8,650	1.19E+04	9,717	0	SB-06	4.5-5.5
Arsenic	MG/KG	16	6	5	0.780	2.10	1.50	0	MW-03	3.5-4.5
Barium	MG/KG	400	6	6	53.80	91.90	75.53	0	SB-06	3-4
Beryllium	MG/KG	590	6	6	0.840	1.40	1.05	0	MW-03	14-15

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2A
BLOCK 2592 LOT 35
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Metals										
Cadmium	MG/KG	9.3	6	6	0.088	0.340	0.233	0	MW-03	3.5-4.5
Calcium	MG/KG	-	6	6	2,430	4,580	3,723	0	SB-06	4.5-5.5
Chromium	MG/KG	1500	6	6	22.30	34.40	27.33	0	MW-03	6-7
Cobalt	MG/KG	-	6	6	7.40	12.20	10.28	0	MW-03	14-15
Copper	MG/KG	270	6	6	30.90	51.70	38.42	0	MW-03	6-7
Iron	MG/KG	-	6	6	1.90E+04	2.64E+04	2.28E+04	0	SB-06	4.5-5.5
Lead	MG/KG	1000	6	6	5.00	41.30	17.33	0	MW-03	3.5-4.5
Magnesium	MG/KG	-	6	6	4,100	6,930	5,562	0	SB-06	4.5-5.5
Manganese	MG/KG	10000	6	6	134.0	311.0	241.8	0	SB-06	4.5-5.5
Mercury	MG/KG	2.8	6	4	0.021	0.190	0.099	0	SB-06	3-4
Nickel	MG/KG	310	6	6	19.10	23.60	21.65	0	SB-06	4.5-5.5
Potassium	MG/KG	-	6	6	2,000	3,660	3,045	0	SB-06	3-4
Selenium	MG/KG	1500	6	6	1.90	3.40	2.82	0	SB-06	4.5-5.5
Silver	MG/KG	1500	6	3	0.070	0.110	0.091	0	MW-03	6-7
Sodium	MG/KG	-	6	6	123.0	291.0	185.5	0	MW-03	6-7
Thallium	MG/KG	-	6	4	1.30	2.30	1.83	0	SB-06	4.5-5.5
Vanadium	MG/KG	-	6	6	27.70	35.90	31.03	0	SB-06	4.5-5.5
Zinc	MG/KG	10000	6	6	50.30	213.0	99.75	0	MW-03	6-7

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2B
BLOCK 2598 LOT 62
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Volatile Organic Compounds										
Acetone	MG/KG	500	3	3	0.007	0.020	0.013	0	MW-04	3.5-4.5
Isopropylbenzene	MG/KG	-	3	2	0.100	0.160	0.130	0	MW-04	3.5-4.5
Methylcyclohexane	MG/KG	-	3	2	0.170	0.280	0.225	0	MW-04	3.5-4.5
Styrene	MG/KG	-	3	1	0.017	0.017	0.017	0	MW-04	3.5-4.5
Xylene (total)	MG/KG	500	3	1	0.006	0.006	0.006	0	MW-04	3.5-4.5
Semivolatile Organic Compounds										
2-Methylnaphthalene	MG/KG	-	3	2	9.20	10.00	9.60	0	MW-04	3.5-4.5
Acenaphthene	MG/KG	500	3	1	0.430	0.430	0.430	0	MW-04	3.5-4.5
Acenaphthylene	MG/KG	500	3	1	0.310	0.310	0.310	0	MW-04	3.5-4.5
Anthracene	MG/KG	500	3	2	0.170	0.430	0.300	0	MW-04	3.5-4.5
Benzo(a)anthracene	MG/KG	5.6	3	2	0.140	0.220	0.180	0	MW-04	3.5-4.5
Benzo(a)pyrene	MG/KG	1	3	2	0.100	0.130	0.115	0	MW-04	3.5-4.5
Benzo(b)fluoranthene	MG/KG	5.6	3	2	0.140	0.160	0.150	0	MW-04	3.5-4.5
Benzo(g,h,i)perylene	MG/KG	500	3	2	0.099	0.220	0.160	0	MW-04	3.5-4.5
Benzo(k)fluoranthene	MG/KG	56	3	2	0.060	0.066	0.063	0	MW-04	3.5-4.5
bis(2-Ethylhexyl)phthalate	MG/KG	-	3	2	0.044	0.052	0.048	0	MW-04	3.5-4.5
Chrysene	MG/KG	56	3	2	0.150	0.220	0.185	0	MW-04	3.5-4.5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2B
BLOCK 2598 LOT 62
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
Dibenz(a,h)anthracene	MG/KG	0.56	3	1	0.026	0.026	0.026	0	MW-04	3.5-4.5
Dibenzofuran	MG/KG	350	3	1	0.310	0.310	0.310	0	MW-04	3.5-4.5
Di-n-butylphthalate	MG/KG	-	3	1	0.110	0.110	0.110	0	MW-04	3.5-4.5
Fluoranthene	MG/KG	500	3	2	0.300	0.460	0.380	0	MW-04	3.5-4.5
Fluorene	MG/KG	500	3	1	0.770	0.770	0.770	0	MW-04	3.5-4.5
Indeno(1,2,3-cd)pyrene	MG/KG	5.6	3	2	0.073	0.130	0.102	0	MW-04	3.5-4.5
Naphthalene	MG/KG	500	3	2	0.540	0.560	0.550	0	MW-04	3.5-4.5
Phenanthrene	MG/KG	500	3	2	3.80	4.70	4.25	0	MW-04	3.5-4.5
Pyrene	MG/KG	500	3	2	1.00	1.30	1.15	0	MW-04	3.5-4.5
Metals										
Aluminum	MG/KG	-	3	3	8,120	1.15E+04	9,510	0	MW-04	3.5-4.5
Arsenic	MG/KG	16	3	2	1.40	2.20	1.80	0	MW-04	3.5-4.5
Barium	MG/KG	400	3	3	46.00	83.60	67.00	0	MW-04	3.5-4.5
Beryllium	MG/KG	590	3	3	0.650	1.20	0.917	0	MW-04	3.5-4.5
Cadmium	MG/KG	9.3	3	3	0.045	0.330	0.154	0	MW-04	3.5-4.5
Calcium	MG/KG	-	3	3	1,450	1.45E+04	7,617	0	MW-04	3.5-4.5
Chromium	MG/KG	1500	3	3	14.20	27.00	21.27	0	MW-04	3.5-4.5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2B
BLOCK 2598 LOT 62
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Metals										
Cobalt	MG/KG	-	3	3	6.30	12.30	9.40	0	MW-04	3.5-4.5
Copper	MG/KG	270	3	3	9.20	35.60	24.00	0	MW-04	3.5-4.5
Iron	MG/KG	-	3	3	1.97E+04	2.53E+04	2.24E+04	0	MW-04	3.5-4.5
Lead	MG/KG	1000	3	3	4.90	11.60	8.10	0	MW-04	3.5-4.5
Magnesium	MG/KG	-	3	3	2,800	1.12E+04	6,893	0	MW-04	3.5-4.5
Manganese	MG/KG	10000	3	3	213.0	232.0	219.3	0	MW-04	3.5-4.5
Mercury	MG/KG	2.8	3	1	0.013	0.013	0.013	0	MW-04	3.5-4.5
Nickel	MG/KG	310	3	3	11.50	21.20	16.67	0	MW-04	3.5-4.5
Potassium	MG/KG	-	3	3	828.0	3,060	2,029	0	MW-04	3.5-4.5
Selenium	MG/KG	1500	3	3	1.50	3.70	2.60	0	MW-04	3.5-4.5
Silver	MG/KG	1500	3	2	0.087	0.120	0.104	0	MW-04	3.5-4.5
Sodium	MG/KG	-	3	3	53.00	126.0	99.00	0	MW-04	3.5-4.5
Thallium	MG/KG	-	3	1	1.70	1.70	1.70	0	MW-04	3.5-4.5
Vanadium	MG/KG	-	3	3	16.10	35.10	27.50	0	MW-04	3.5-4.5
Zinc	MG/KG	10000	3	3	28.50	52.40	40.30	0	MW-04	3.5-4.5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2C
BLOCK 2591 LOT 46
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Volatile Organic Compounds										
1,2-Dichlorobenzene	MG/KG	500	53	2	0.001	0.008	0.005	0	SB-37	8.2-9
2-Butanone	MG/KG	500	53	5	0.003	0.007	0.005	0	SB-32	9-10
Acetone	MG/KG	500	53	37	0.004	0.110	0.021	0	SB-37	8.2-9
Benzene	MG/KG	44	53	16	0.002	0.320	0.048	0	MW-01	11-12
Carbon disulfide	MG/KG	-	53	18	0.001	0.041	0.010	0	SB-38	15.5-16.5
Chloroform	MG/KG	350	53	1	0.110	0.110	0.110	0	SB-37	8.5-9
Cyclohexane	MG/KG	-	53	7	0.004	2.00	0.434	0	SB-37	8.5-9
Ethylbenzene	MG/KG	390	53	8	0.002	8.60	1.48	0	SB-37	8.2-9
Isopropylbenzene	MG/KG	-	53	10	0.005	1.20	0.363	0	SB-39	6.7-7.7
Methyl tert-butyl ether	MG/KG	500	53	1	0.002	0.002	0.002	0	SB-38	15.5-16.5
Methylcyclohexane	MG/KG	-	53	9	0.004	2.20	0.695	0	SB-39	6.7-7.7
Methylene chloride	MG/KG	500	53	4	0.002	0.002	0.002	0	SB-39	14-15
Styrene	MG/KG	-	53	1	0.048	0.048	0.048	0	SB-38	7.8-8.5
Toluene	MG/KG	500	53	12	0.001	0.390	0.045	0	MW-01	11-12
Xylene (total)	MG/KG	500	53	11	0.003	4.60	0.590	0	SB-37	8.2-9
Semivolatile Organic Compounds										
1,1'-Biphenyl	MG/KG	-	53	16	0.025	54.00	6.29	0	SB-38	7.8-8.5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2C
BLOCK 2591 LOT 46
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
2,4-Dimethylphenol	MG/KG	-	53	5	0.190	1.80	0.670	0	SB-05	6.5-7
2-Methylnaphthalene	MG/KG	-	53	25	0.027	520.0	33.60	0	SB-38	7.8-8.5
2-Methylphenol (o-cresol)	MG/KG	500	53	7	0.021	1.10	0.288	0	SB-05	6.5-7
3&4-Methylphenol (m,p-cresol)	MG/KG	500	53	11	0.025	3.20	0.523	0	SB-05	6.5-7
Acenaphthene	MG/KG	500	53	32	0.020	250.0	11.66	0	SB-05	6.5-7
Acenaphthylene	MG/KG	500	53	28	0.034	29.00	3.97	0	SB-38	7.8-8.5
Acetophenone	MG/KG	-	53	10	0.023	24.00	2.53	0	SB-38	7.8-8.5
Anthracene	MG/KG	500	53	38	0.021	140.0	8.82	0	SB-05	6.5-7
Benzo(a)anthracene	MG/KG	5.6	53	43	0.031	390.0	17.29	9	SB-05	6.5-7
Benzo(a)pyrene	MG/KG	1	53	41	0.042	290.0	12.95	18	SB-05	6.5-7
Benzo(b)fluoranthene	MG/KG	5.6	53	40	0.069	370.0	17.87	10	SB-05	6.5-7
Benzo(g,h,i)perylene	MG/KG	500	53	36	0.056	160.0	9.67	0	SB-05	6.5-7
Benzo(k)fluoranthene	MG/KG	56	53	40	0.034	27.00	3.14	0	SB-05	6.5-7
bis(2-Ethylhexyl)phthalate	MG/KG	-	53	26	0.026	0.550	0.136	0	SB-33	10.5-11
Butylbenzylphthalate	MG/KG	-	53	1	0.076	0.076	0.076	0	SB-33	10.5-11
Carbazole	MG/KG	-	53	21	0.031	96.00	6.98	0	SB-05	6.5-7
Chrysene	MG/KG	56	53	42	0.026	390.0	17.56	2	SB-05	6.5-7

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2C
BLOCK 2591 LOT 46
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
Dibenz(a,h)anthracene	MG/KG	0.56	53	35	0.019	27.00	2.44	12	SB-05	6.5-7
Dibenzofuran	MG/KG	350	53	26	0.023	170.0	10.67	0	SB-05	6.5-7
Di-n-butylphthalate	MG/KG	-	53	6	0.024	0.230	0.074	0	SB-32	3-4
Fluoranthene	MG/KG	500	53	46	0.020	1,100	36.85	1	SB-05	6.5-7
Fluorene	MG/KG	500	53	34	0.032	170.0	11.95	0	SB-05	6.5-7
Indeno(1,2,3-cd)pyrene	MG/KG	5.6	53	37	0.040	140.0	7.96	7	SB-05	6.5-7
Naphthalene	MG/KG	500	53	35	0.021	1,100	53.17	1	SB-38	7.8-8.5
Phenanthrene	MG/KG	500	53	43	0.041	1,200	50.28	1	SB-05	6.5-7
Phenol	MG/KG	500	53	8	0.020	1.10	0.341	0	SB-05	6.5-7
Pyrene	MG/KG	500	53	43	0.048	830.0	35.94	1	SB-05	6.5-7
Metals										
Aluminum	MG/KG	-	53	53	1,330	1.67E+04	9,139	0	SB-32	13-14
Antimony	MG/KG	-	53	30	0.370	3.20	1.03	0	SB-38	7.8-8.5
Arsenic	MG/KG	16	53	51	1.20	32.70	5.42	1	SB-38	7.8-8.5
Barium	MG/KG	400	53	53	21.80	720.0	92.03	1	SB-33	3.5-4
Beryllium	MG/KG	590	53	52	0.039	1.50	0.576	0	SB-02	4.7-5.3
Cadmium	MG/KG	9.3	53	52	0.096	2.70	0.710	0	SB-38	7.8-8.5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2C
BLOCK 2591 LOT 46
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Metals										
Calcium	MG/KG	-	53	53	567.0	1.56E+05	1.39E+04	0	MW-01	4.5-5
Chromium	MG/KG	1500	53	53	6.80	63.20	22.68	0	SB-32	9-10
Cobalt	MG/KG	-	53	53	1.50	18.20	8.12	0	SB-05	11.5-12
Copper	MG/KG	270	53	53	8.30	319.0	45.70	1	SB-38	7.8-8.5
Iron	MG/KG	-	53	53	6,900	6.22E+04	2.31E+04	0	SB-38	7.8-8.5
Lead	MG/KG	1000	53	53	3.30	1,330	132.2	2	SB-33	3.5-4
Magnesium	MG/KG	-	53	53	412.0	2.99E+04	5,601	0	SB-35	9.5-10
Manganese	MG/KG	10000	53	53	22.60	1,150	288.5	0	SB-05	6.5-7
Mercury	MG/KG	2.8	53	48	0.007	4.10	0.390	1	SB-04	2.5-3.5
Nickel	MG/KG	310	53	53	6.00	35.00	18.33	0	SB-32	9-10
Potassium	MG/KG	-	53	53	412.0	6,460	2,052	0	SB-38	11-11.5
Selenium	MG/KG	1500	53	35	0.600	4.20	1.68	0	SB-38	7.8-8.5
Silver	MG/KG	1500	53	14	0.073	0.370	0.158	0	SB-36	6.5-7
Sodium	MG/KG	-	53	53	74.20	4,680	1,055	0	SB-38	15.5-16.5
Thallium	MG/KG	-	53	24	0.270	4.50	1.15	0	SB-05	6.5-7
Vanadium	MG/KG	-	53	53	8.60	45.80	27.87	0	SB-38	11-11.5
Zinc	MG/KG	10000	53	53	18.90	556.0	116.1	0	SB-37	3-4

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2D
BLOCK 2590 LOT 51
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Volatile Organic Compounds										
Acetone	MG/KG	500	10	7	0.009	0.036	0.015	0	SB-11	4.5-5
Carbon disulfide	MG/KG	-	10	1	0.004	0.004	0.004	0	SB-12	12-13
Isopropylbenzene	MG/KG	-	10	1	0.005	0.005	0.005	0	SB-12	7-8
Semivolatile Organic Compounds										
2-Methylnaphthalene	MG/KG	-	10	6	0.020	2.50	0.479	0	SB-11	4.5-5
Acenaphthene	MG/KG	500	10	5	0.023	0.140	0.067	0	SB-09	4.5-5.5
Acenaphthylene	MG/KG	500	10	5	0.021	1.50	0.682	0	SB-11	4.5-5
Acetophenone	MG/KG	-	10	3	0.045	0.360	0.212	0	SB-11	4.5-5
Anthracene	MG/KG	500	10	4	0.042	0.710	0.423	0	SB-11	3-4
Benzaldehyde	MG/KG	-	10	1	0.040	0.040	0.040	0	SB-12	3.5-4
Benzo(a)anthracene	MG/KG	5.6	10	6	0.031	3.00	1.12	0	SB-11	3-4
Benzo(a)pyrene	MG/KG	1	10	6	0.027	2.40	0.872	3	SB-11	3-4
Benzo(b)fluoranthene	MG/KG	5.6	10	6	0.032	4.40	1.52	0	SB-11	3-4
Benzo(g,h,i)perylene	MG/KG	500	10	5	0.040	3.10	1.31	0	SB-11	3-4
Benzo(k)fluoranthene	MG/KG	56	10	5	0.026	2.60	1.30	0	SB-11	4.5-5
bis(2-Ethylhexyl)phthalate	MG/KG	-	10	9	0.022	2.70	0.389	0	SB-11	4.5-5
Butylbenzylphthalate	MG/KG	-	10	1	0.040	0.040	0.040	0	SB-11	4.5-5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2D
BLOCK 2590 LOT 51
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
Carbazole	MG/KG	-	10	3	0.069	0.087	0.079	0	SB-11	4.5-5
Chrysene	MG/KG	56	10	6	0.022	3.70	1.39	0	SB-11	3-4
Dibenz(a,h)anthracene	MG/KG	0.56	10	4	0.120	0.860	0.478	2	SB-11	3-4
Dibenzofuran	MG/KG	350	10	3	0.047	0.160	0.088	0	SB-11	4.5-5
Di-n-octylphthalate	MG/KG	-	10	1	0.032	0.032	0.032	0	SB-11	3-4
Fluoranthene	MG/KG	500	10	7	0.027	5.20	1.55	0	SB-11	3-4
Fluorene	MG/KG	500	10	3	0.120	0.340	0.203	0	SB-11	4.5-5
Indeno(1,2,3-cd)pyrene	MG/KG	5.6	10	5	0.045	2.50	1.10	0	SB-11	3-4
Naphthalene	MG/KG	500	10	7	0.026	3.40	0.636	0	SB-11	4.5-5
Phenanthrene	MG/KG	500	10	4	0.024	2.70	1.33	0	SB-11	4.5-5
Pyrene	MG/KG	500	10	7	0.031	7.10	2.12	0	SB-11	3-4
Metals										
Aluminum	MG/KG	-	10	10	4,960	1.73E+04	1.13E+04	0	SB-12	3.5-4
Arsenic	MG/KG	16	10	9	0.790	10.40	4.02	0	SB-12	12-13
Barium	MG/KG	400	10	10	31.50	141.0	77.22	0	SB-12	4.5-5.5
Beryllium	MG/KG	590	10	5	0.300	0.750	0.432	0	SB-12	12-13
Cadmium	MG/KG	9.3	10	10	0.054	0.660	0.236	0	SB-11	4.5-5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2D
BLOCK 2590 LOT 51
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Metals										
Calcium	MG/KG	-	10	10	896.0	1.34E+04	3,155	0	SB-09	4.5-5.5
Chromium	MG/KG	1500	10	10	12.50	37.80	24.76	0	SB-12	3.5-4
Cobalt	MG/KG	-	10	10	4.70	12.90	8.08	0	SB-12	7-8
Copper	MG/KG	270	10	10	8.90	75.10	32.36	0	SB-11	4.5-5
Iron	MG/KG	-	10	10	1.65E+04	4.58E+04	2.87E+04	0	SB-12	12-13
Lead	MG/KG	1000	10	10	6.90	269.0	54.52	0	SB-11	3-4
Magnesium	MG/KG	-	10	10	2,480	7,840	4,899	0	SB-09	4.5-5.5
Manganese	MG/KG	10000	10	10	112.0	637.0	323.6	0	SB-11	13-13.5
Mercury	MG/KG	2.8	10	5	0.013	0.690	0.237	0	SB-11	4.5-5
Nickel	MG/KG	310	10	10	11.20	25.60	18.71	0	SB-12	12-13
Potassium	MG/KG	-	10	10	645.0	3,960	2,152	0	SB-12	7-8
Selenium	MG/KG	1500	10	10	1.20	3.10	2.12	0	SB-12	7-8
Sodium	MG/KG	-	10	10	177.0	5,450	893.4	0	SB-12	12-13
Vanadium	MG/KG	-	10	10	20.80	52.30	34.86	0	SB-12	3.5-4
Zinc	MG/KG	10000	10	10	30.40	123.0	66.03	0	SB-11	4.5-5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.


Concentration Exceeds Criteria

Only Detected Results Reported.

Advanced Selection: BLOCK 2590 LOT 51
J:\Projects\\11175538.00000\DB\Program\Stat.mde
Printed: 12/28/2015 11:46:06 AM
WHERE [SITEID] = '02' AND [MATRIX] = 'SO' AND ([LOCID] = 'SB-09' OR [LOCID] = 'SB-12' OR [LOCID] = 'SB-11') AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND NOT ([UNITS] = 'PERCENT' OR [PRCCODE] = 'STD');

TABLE 3-2E
BLOCK 2598 LOT 1
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Volatile Organic Compounds										
1,2,4-Trichlorobenzene	MG/KG	-	43	1	0.002	0.002	0.002	0	SB-10	5-5.5
1,2-Dichloroethene (cis)	MG/KG	500	43	3	0.009	1.30	0.447	0	MW-05	20.5-21
2-Butanone	MG/KG	500	43	1	0.007	0.007	0.007	0	SB-44	1.5-2
Acetone	MG/KG	500	43	23	0.004	0.220	0.047	0	SB-08	10.5-11
Benzene	MG/KG	44	43	24	0.001	2,600	260.0	3	SB-44	10-12
Carbon disulfide	MG/KG	-	43	5	0.005	0.022	0.010	0	SB-17	5.5-6
Chloroform	MG/KG	350	43	2	0.020	0.028	0.024	0	SB-08	10.5-11
Cyclohexane	MG/KG	-	43	3	0.038	0.350	0.162	0	SB-08	10.5-11
Ethylbenzene	MG/KG	390	43	20	0.009	2,600	180.2	2	SB-44	10-12
Isopropylbenzene	MG/KG	-	43	15	0.005	25.00	2.30	0	SB-44	10-12
Methylcyclohexane	MG/KG	-	43	4	0.008	0.550	0.227	0	SB-08	10.5-11
Methylene chloride	MG/KG	500	43	3	0.003	0.006	0.004	0	SB-13	3-4
Styrene	MG/KG	-	43	12	0.001	1,300	217.1	0	SB-44	10-12
Tetrachloroethene	MG/KG	150	43	1	0.013	0.013	0.013	0	SB-07	3-4
Toluene	MG/KG	500	43	21	0.001	3,800	348.3	3	SB-44	10-12
Xylene (total)	MG/KG	500	43	22	0.006	4,700	369.2	3	SB-44	10-12
Semivolatile Organic Compounds										
1,1'-Biphenyl	MG/KG	-	43	28	0.024	1,800	92.56	0	SB-44	15-20

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2E
BLOCK 2598 LOT 1
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
2,6-Dinitrotoluene	MG/KG	-	43	1	1.20	1.20	1.20	0	MW-05	20.5-21
2-Methylnaphthalene	MG/KG	-	43	35	0.049	2.80E+04	1,096	0	SB-44	15-20
2-Methylphenol (o-cresol)	MG/KG	500	43	3	0.024	0.077	0.043	0	SB-07	13.3-14.2
3&4-Methylphenol (m,p-cresol)	MG/KG	500	43	8	0.027	1,100	137.6	1	SB-43	10-12
3,3'-Dichlorobenzidine	MG/KG	-	43	1	0.680	0.680	0.680	0	MW-05	20.5-21
Acenaphthene	MG/KG	500	43	35	0.023	1,300	76.06	2	SB-44	15-20
Acenaphthylene	MG/KG	500	43	36	0.068	9,900	309.8	2	SB-44	15-20
Acetophenone	MG/KG	-	43	10	0.064	0.560	0.185	0	SB-15	3-3.5
Anthracene	MG/KG	500	43	37	0.026	3,400	185.5	2	SB-44	15-20
Benzaldehyde	MG/KG	-	43	1	0.330	0.330	0.330	0	MW-05	4.5-5
Benzo(a)anthracene	MG/KG	5.6	43	41	0.023	2,500	115.9	17	SB-43	10-12
Benzo(a)pyrene	MG/KG	1	43	40	0.021	1,200	41.01	29	SB-44	15-20
Benzo(b)fluoranthene	MG/KG	5.6	43	39	0.032	2,600	99.79	15	SB-43	10-12
Benzo(g,h,i)perylene	MG/KG	500	43	36	0.023	490.0	19.36	0	SB-44	15-20
Benzo(k)fluoranthene	MG/KG	56	43	38	0.021	830.0	38.17	2	SB-43	10-12
bis(2-Ethylhexyl)phthalate	MG/KG	-	43	23	0.020	2.00	0.223	0	SB-13	15-16
Butylbenzylphthalate	MG/KG	-	43	4	0.027	0.160	0.075	0	SB-15	3-3.5
Carbazole	MG/KG	-	43	28	0.021	700.0	29.54	0	SB-43	10-12

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2E
BLOCK 2598 LOT 1
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
Chrysene	MG/KG	56	43	41	0.026	2,000	105.8	5	SB-43	10-12
Dibenz(a,h)anthracene	MG/KG	0.56	43	33	0.022	140.0	5.91	17	SB-44	15-20
Dibenzofuran	MG/KG	350	43	28	0.035	700.0	31.70	1	SB-44	15-20
Di-n-butylphthalate	MG/KG	-	43	10	0.033	0.260	0.084	0	SB-41	0.5-1
Fluoranthene	MG/KG	500	43	40	0.037	7,800	291.8	2	SB-43	10-12
Fluorene	MG/KG	500	43	33	0.020	4,000	154.5	2	SB-44	15-20
Indeno(1,2,3-cd)pyrene	MG/KG	5.6	43	35	0.025	510.0	19.78	9	SB-44	15-20
Naphthalene	MG/KG	500	43	37	0.065	7.40E+04	3,718	7	SB-44	15-20
Phenanthrene	MG/KG	500	43	40	0.021	1.20E+04	645.6	3	SB-43	10-12
Phenol	MG/KG	500	43	4	0.050	350.0	87.57	0	SB-43	10-12
Pyrene	MG/KG	500	43	40	0.047	6,700	331.3	3	SB-43	10-12
Metals										
Aluminum	MG/KG	-	41	41	2,840	1.94E+04	1.03E+04	0	SB-15	6-6.5
Antimony	MG/KG	-	41	5	0.440	1.70	1.00	0	SB-42	10-12
Arsenic	MG/KG	16	41	39	0.210	30.90	5.39	2	SB-44	10-12
Barium	MG/KG	400	41	41	31.80	212.0	87.79	0	SB-07	3-4
Beryllium	MG/KG	590	41	29	0.071	0.930	0.430	0	SB-07	3-4
Cadmium	MG/KG	9.3	41	38	0.055	3.00	0.413	0	SB-07	3-4

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2E
BLOCK 2598 LOT 1
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Metals										
Calcium	MG/KG	-	41	41	516.0	6.07E+04	6,698	0	SB-07	3-4
Chromium	MG/KG	1500	41	41	6.20	75.70	27.45	0	MW-06	10.5-11
Cobalt	MG/KG	-	41	41	2.20	22.20	9.17	0	SB-41	0.5-1
Copper	MG/KG	270	41	41	12.00	425.0	49.29	1	MW-05	4.5-5
Iron	MG/KG	-	41	41	6,550	1.13E+05	2.53E+04	0	SB-16	6-6.5
Lead	MG/KG	1000	41	41	2.10	335.0	77.47	0	SB-41	9-11
Magnesium	MG/KG	-	41	41	1,320	8,910	4,384	0	SB-10	11-11.5
Manganese	MG/KG	10000	41	41	57.00	1,230	252.2	0	SB-15	6-6.5
Mercury	MG/KG	2.8	41	23	0.007	4.20	0.700	2	SB-07	3-4
Nickel	MG/KG	310	41	41	9.80	41.10	22.31	0	MW-06	10.5-11
Potassium	MG/KG	-	41	41	503.0	1.09E+04	2,351	0	SB-15	6-6.5
Selenium	MG/KG	1500	41	31	0.610	5.10	2.08	0	SB-44	10-12
Silver	MG/KG	1500	41	3	0.110	0.400	0.227	0	SB-42	18.5-19.5
Sodium	MG/KG	-	41	41	100.0	1,550	348.3	0	SB-10	11-11.5
Thallium	MG/KG	-	41	6	0.340	1.70	1.21	0	SB-07	4.5-5.5
Vanadium	MG/KG	-	41	41	9.10	66.10	34.43	0	MW-06	10.5-11
Zinc	MG/KG	10000	41	41	33.20	278.0	88.89	0	MW-05	4.5-5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2F
BLOCK 2597 LOT 1
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Volatile Organic Compounds										
Acetone	MG/KG	500	15	8	0.005	0.240	0.044	0	SB-19	5-5.5
Carbon disulfide	MG/KG	-	15	3	0.003	0.019	0.008	0	SB-19	5-5.5
Isopropylbenzene	MG/KG	-	15	2	0.031	0.065	0.048	0	SB-19	5-5.5
Methylcyclohexane	MG/KG	-	15	1	0.044	0.044	0.044	0	SB-19	5-5.5
Methylene chloride	MG/KG	500	15	3	0.004	0.018	0.010	0	MW-07-URS	9.8-10.5
Xylene (total)	MG/KG	500	15	1	0.013	0.013	0.013	0	SB-19	5-5.5
Semivolatile Organic Compounds										
1,1'-Biphenyl	MG/KG	-	15	2	0.130	32.00	16.07	0	SB-21	10-11
2-Chloronaphthalene	MG/KG	-	15	7	1.30	1.40	1.34	0	SB-20	3-3.5
2-Methylnaphthalene	MG/KG	-	15	3	0.092	1.00	0.434	0	SB-18	5.5-6
Acenaphthene	MG/KG	500	15	3	0.170	120.0	40.20	0	SB-21	10-11
Acenaphthylene	MG/KG	500	15	9	0.022	22.00	3.24	0	SB-21	10-11
Anthracene	MG/KG	500	15	11	0.045	60.00	6.14	0	SB-21	10-11
Benzo(a)anthracene	MG/KG	5.6	15	15	0.021	39.00	3.15	1	SB-21	10-11
Benzo(a)pyrene	MG/KG	1	15	14	0.023	28.00	2.64	3	SB-21	10-11
Benzo(b)fluoranthene	MG/KG	5.6	15	12	0.120	18.00	2.33	1	SB-21	10-11
Benzo(g,h,i)perylene	MG/KG	500	15	12	0.024	12.00	1.58	0	SB-21	10-11
Benzo(k)fluoranthene	MG/KG	56	15	12	0.096	11.00	1.47	0	SB-21	10-11
bis(2-Ethylhexyl)phthalate	MG/KG	-	15	12	0.030	0.220	0.101	0	SB-18	4-4.5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2F
BLOCK 2597 LOT 1
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Semivolatile Organic Compounds										
Butylbenzylphthalate	MG/KG	-	15	1	0.019	0.019	0.019	0	SB-18	4-4.5
Carbazole	MG/KG	-	15	2	0.022	0.230	0.126	0	SB-21	3.5-4
Chrysene	MG/KG	56	15	14	0.032	37.00	3.15	0	SB-21	10-11
Dibenz(a,h)anthracene	MG/KG	0.56	15	9	0.036	1.40	0.271	1	SB-18	5.5-6
Dibenzofuran	MG/KG	350	15	3	0.140	6.40	2.34	0	SB-21	10-11
Di-n-butylphthalate	MG/KG	-	15	7	0.087	0.150	0.110	0	SB-21	3.5-4
Di-n-octylphthalate	MG/KG	-	15	1	0.042	0.042	0.042	0	SB-18	4-4.5
Fluoranthene	MG/KG	500	15	14	0.019	62.00	5.08	0	SB-21	10-11
Fluorene	MG/KG	500	15	4	0.200	62.00	16.52	0	SB-21	10-11
Indeno(1,2,3-cd)pyrene	MG/KG	5.6	15	12	0.021	8.20	1.14	1	SB-21	10-11
Naphthalene	MG/KG	500	15	4	0.065	32.00	8.07	0	SB-21	10-11
Phenanthrene	MG/KG	500	15	14	0.022	190.0	13.99	0	SB-21	10-11
Pyrene	MG/KG	500	15	15	0.023	99.00	7.48	0	SB-21	10-11
Metals										
Aluminum	MG/KG	-	15	15	4,080	2.86E+04	1.25E+04	0	SB-18	8.5-9
Antimony	MG/KG	-	15	1	4.00	4.00	4.00	0	SB-21	3.5-4
Arsenic	MG/KG	16	15	9	1.50	9.60	3.82	0	SB-21	3.5-4
Barium	MG/KG	400	15	15	48.10	353.0	108.5	0	SB-18	8.5-9
Beryllium	MG/KG	590	15	10	0.098	2.00	0.770	0	SB-21	21-22

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-2F
BLOCK 2597 LOT 1
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI SOIL SAMPLES - COMMERCIAL USE
EAST 138th STREET WORKS SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value	Depth Of Max
					Min	Max	Avg			
Metals										
Cadmium	MG/KG	9.3	15	9	0.016	0.870	0.343	0	SB-21	3.5-4
Calcium	MG/KG	-	15	15	1,660	3.22E+04	7,460	0	SB-21	3.5-4
Chromium	MG/KG	1500	15	15	11.90	177.0	41.53	0	SB-18	8.5-9
Cobalt	MG/KG	-	15	15	3.10	20.90	9.05	0	SB-18	8.5-9
Copper	MG/KG	270	15	15	16.40	89.20	41.58	0	MW-07-URS	9.8-10.5
Iron	MG/KG	-	15	15	1.70E+04	5.54E+04	2.93E+04	0	SB-21	3.5-4
Lead	MG/KG	1000	15	15	1.50	132.0	24.73	0	SB-21	3.5-4
Magnesium	MG/KG	-	15	15	2,530	1.82E+04	8,640	0	SB-18	8.5-9
Manganese	MG/KG	10000	15	15	174.0	515.0	265.1	0	SB-21	21-22
Mercury	MG/KG	2.8	15	12	0.009	0.130	0.051	0	SB-21	3.5-4
Nickel	MG/KG	310	15	15	6.80	71.80	25.94	0	SB-18	8.5-9
Potassium	MG/KG	-	15	15	1,190	1.65E+04	5,846	0	SB-18	8.5-9
Selenium	MG/KG	1500	15	5	1.40	2.30	1.80	0	SB-19	3-4
Sodium	MG/KG	-	15	15	112.0	2,840	504.4	0	SB-21	21-22
Thallium	MG/KG	-	15	9	0.330	1.20	0.766	0	SB-20	4.5-5
Vanadium	MG/KG	-	15	15	25.50	127.0	53.01	0	SB-18	8.5-9
Zinc	MG/KG	10000	15	15	35.20	165.0	79.89	0	SB-20	4.5-5

*Criteria- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.

Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-01	MW-02	MW-03	MW-04	MW-05
Sample ID			MW-01	MW-02	MW-03	MW-04	MW-05
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/12/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
1,1,2,2-Tetrachloroethane	UG/L	5					
1,1,2-Trichloroethane	UG/L	1					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					14
1,2-Dichloroethene (cis)	UG/L	5			3,800 D		6.8
1,2-Dichloroethene (trans)	UG/L	5					
1,2-Dichloropropane	UG/L	1					
Acetone	UG/L	50					
Benzene	UG/L	1	18		7.8		480 D
Bromodichloromethane	UG/L	50					
Bromomethane	UG/L	5					
Carbon disulfide	UG/L	60					
Chlorobenzene	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7					
Chloromethane	UG/L	5					
Cyclohexane	UG/L	-		2.0	2.7		1.4
Ethylbenzene	UG/L	5	5.5		4.3		640 D
Isopropylbenzene	UG/L	5			2.6		64
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-			2.1		2.1
Methylene chloride	UG/L	5					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-01	MW-02	MW-03	MW-04	MW-05
Sample ID			MW-01	MW-02	MW-03	MW-04	MW-05
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/12/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Styrene	UG/L	5					
Tetrachloroethene	UG/L	5					
Toluene	UG/L	5	1.6		1.4		150 D
Trichloroethene	UG/L	5					
Vinyl chloride	UG/L	2			2,700 D		
Xylene (total)	UG/L	5	15		29		600 D
Total BTEX	UG/L	-	40.1	ND	42.5	ND	1,870
Total Volatile Organic Compounds	UG/L	-	40.1	2	6,549.9	ND	1,958.3
Semivolatile Organic Compounds							
1,1'-Biphenyl	UG/L	5	11				32
2,4,6-Trichlorophenol	UG/L	1					
2,4-Dichlorophenol	UG/L	5			1.2 J		
2,4-Dimethylphenol	UG/L	50					
2-Chlorophenol	UG/L	1					
2-Methylnaphthalene	UG/L	-	21		11		640 DJ
2-Methylphenol (o-cresol)	UG/L	1					
2-Nitrophenol	UG/L	1					
3&4-Methylphenol (m,p-cresol)	UG/L	1					5.8
4-Nitrophenol	UG/L	1					
Acenaphthene	UG/L	20	67 DJ	1.0 J		2.3 J	67 J
Acenaphthylene	UG/L	-	3.5 J				38
Acetophenone	UG/L	-					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

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Printed: 12/29/2015 9:54:31 AM
WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-01	MW-02	MW-03	MW-04	MW-05
Sample ID			MW-01	MW-02	MW-03	MW-04	MW-05
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/12/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***					
Semivolatile Organic Compounds							
Anthracene	UG/L	50	5.6		0.89 J		6.9
Benzaldehyde	UG/L	-					
Benzo(a)anthracene	UG/L	0.002			0.97 J		0.95 J
Benzo(a)pyrene	UG/L	ND			0.69 J		0.95 J
Benzo(b)fluoranthene	UG/L	0.002			0.92 J		0.71 J
bis(2-Ethylhexyl)phthalate	UG/L	5	1.0 J	1.2 J			0.83 J
Carbazole	UG/L	-	46 DJ				6.2
Chrysene	UG/L	0.002			1.0 J		0.92 J
Dibenzofuran	UG/L	-	38				4.6 J
Diethylphthalate	UG/L	50					
Dimethylphthalate	UG/L	50	2.6 J	2.6 J	1.7 J	4.2 J	3.1 J
Fluoranthene	UG/L	50	6.6		2.5 J		2.9 J
Fluorene	UG/L	50	31		2.3 J	1.1 J	33
Naphthalene	UG/L	10	570 D				5,700 D
Phenanthrene	UG/L	50	39		6.6		31
Phenol	UG/L	1					3.2 J
Pyrene	UG/L	50	4.4 J		2.3 J		4.2 J
Total Polynuclear Aromatic Hydrocarbons	UG/L	-	748.1	1	29.17	3.4	6,526.53
Total Semivolatile Organic Compounds	UG/L	-	846.7	4.8	32.07	7.6	6,582.26
Metals							
Aluminum	UG/L	-			107 J		6,140
Arsenic	UG/L	25				6.7 J	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

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Printed: 12/29/2015 9:54:31 AM
WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-01	MW-02	MW-03	MW-04	MW-05
Sample ID			MW-01	MW-02	MW-03	MW-04	MW-05
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/12/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***					
Metals							
Barium	UG/L	1000	267	1,790	212	118 J	259
Beryllium	UG/L	3					
Cadmium	UG/L	5					
Calcium	UG/L	-	305,000	281,000	460,000	73,000	85,600
Chromium	UG/L	50			2.3 J	1.1 J	15.8 J
Cobalt	UG/L	-	0.99 J				9.2 J
Copper	UG/L	200	5.8 J	12.2 J	8.5 J		29.0 J
Iron	UG/L	300	23,600	52,300	51,200	16,000	28,500
Lead	UG/L	25		5.9 J	8.4 J		7.7 J
Magnesium	UG/L	35000	131,000	116,000	85,000	19,600	36,900
Manganese	UG/L	300	1,130	2,670	2,050	718	841
Mercury	UG/L	0.7			0.037 J		
Nickel	UG/L	100		2.4 J	17.7 J	2.1 J	20.8 J
Potassium	UG/L	-	61,500	57,100 J	46,400	19,500	11,600
Selenium	UG/L	10	32.8	15.6 J	13.6 J		
Silver	UG/L	50					
Sodium	UG/L	20000	1,360,000	3,030,000	345,000	253,000	160,000
Thallium	UG/L	0.5					
Vanadium	UG/L	-	4.2 J	7.4 J	9.8 J	2.5 J	20.8 J
Zinc	UG/L	2000					24.5 J
Miscellaneous Parameters							
Cyanide, Total	UG/L	200	126		470		482

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

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Printed: 12/29/2015 9:54:32 AM
WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Sample ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/12/15	08/12/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
1,1,2,2-Tetrachloroethane	UG/L	5					
1,1,2-Trichloroethane	UG/L	1					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6				7.4	
1,2-Dichloroethene (cis)	UG/L	5				2.3	
1,2-Dichloroethene (trans)	UG/L	5					
1,2-Dichloropropane	UG/L	1					
Acetone	UG/L	50					
Benzene	UG/L	1	11			340 D	
Bromodichloromethane	UG/L	50					
Bromomethane	UG/L	5					
Carbon disulfide	UG/L	60					
Chlorobenzene	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7					
Chloromethane	UG/L	5					
Cyclohexane	UG/L	-				6.0	
Ethylbenzene	UG/L	5	47			5.0	
Isopropylbenzene	UG/L	5	15	1.5		15	
Methyl tert-butyl ether	UG/L	10				25	
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Sample ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/12/15	08/12/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Styrene	UG/L	5					
Tetrachloroethene	UG/L	5					
Toluene	UG/L	5				2.5	
Trichloroethene	UG/L	5					
Vinyl chloride	UG/L	2				3.2	
Xylene (total)	UG/L	5	37			4.4	
Total BTEX	UG/L	-	95	ND	ND	351.9	ND
Total Volatile Organic Compounds	UG/L	-	110	1.5	ND	410.8	ND
Semivolatile Organic Compounds							
1,1'-Biphenyl	UG/L	5	6.5				
2,4,6-Trichlorophenol	UG/L	1					
2,4-Dichlorophenol	UG/L	5					
2,4-Dimethylphenol	UG/L	50					
2-Chlorophenol	UG/L	1					
2-Methylnaphthalene	UG/L	-					
2-Methylphenol (o-cresol)	UG/L	1			0.66 J		
2-Nitrophenol	UG/L	1					
3&4-Methylphenol (m,p-cresol)	UG/L	1			0.86 J		
4-Nitrophenol	UG/L	1					
Acenaphthene	UG/L	20	30	2.4 J	7.0	30	
Acenaphthylene	UG/L	-	3.1 J				
Acetophenone	UG/L	-					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

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Printed: 12/29/2015 9:54:32 AM
WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Sample ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/12/15	08/12/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***					
Semivolatile Organic Compounds							
Anthracene	UG/L	50	2.2 J			0.62 J	
Benzaldehyde	UG/L	-					
Benzo(a)anthracene	UG/L	0.002					
Benzo(a)pyrene	UG/L	ND					
Benzo(b)fluoranthene	UG/L	0.002					
bis(2-Ethylhexyl)phthalate	UG/L	5		0.73 J	6.6	2.1 J	1.1 J
Carbazole	UG/L	-	1.4 J		1.2 J	5.1	
Chrysene	UG/L	0.002					
Dibenzofuran	UG/L	-	4.0 J			2.5 J	
Diethylphthalate	UG/L	50					
Dimethylphthalate	UG/L	50	2.4 J	2.3 J	2.0 J	2.2 J	2.9 J
Fluoranthene	UG/L	50	5.7				
Fluorene	UG/L	50	8.7		0.61 J	9.4	
Naphthalene	UG/L	10	34			8.8	
Phenanthrene	UG/L	50	10				
Phenol	UG/L	1			0.67 J	2.0 J	
Pyrene	UG/L	50	7.7				
Total Polynuclear Aromatic Hydrocarbons	UG/L	-	101.4	2.4	7.61	48.82	ND
Total Semivolatile Organic Compounds	UG/L	-	115.7	5.43	19.6	62.72	4
Metals							
Aluminum	UG/L	-			769		202
Arsenic	UG/L	25					9.8 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

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Only Detected Results Reported.

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WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Sample ID			MW-06	MW-07-URS	MW-11	MWMF-01	MWMF-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/12/15	08/12/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***					
Metals							
Barium	UG/L	1000	436	390	486	231	
Beryllium	UG/L	3					
Cadmium	UG/L	5					
Calcium	UG/L	-	295,000	214,000	295,000	163,000	78,100
Chromium	UG/L	50		0.78 J	1.7 J	0.95 J	
Cobalt	UG/L	-			1.7 J	5.5 J	
Copper	UG/L	200			7.5 J	4.4 J	
Iron	UG/L	300	4,560	511	33,000	28,500	9,670
Lead	UG/L	25					
Magnesium	UG/L	35000	32,800	107,000	106,000	19,300	10,700
Manganese	UG/L	300	993	1,420	1,120	720	975
Mercury	UG/L	0.7					
Nickel	UG/L	100	3.4 J	4.4 J	1.4 J	2.2 J	
Potassium	UG/L	-	24,000	43,700	47,300	24,500	8,650
Selenium	UG/L	10	14.2 J	16.7 J	17.3 J		12.2 J
Silver	UG/L	50					
Sodium	UG/L	20000	676,000	1,010,000	825,000	353,000	37,500
Thallium	UG/L	0.5					
Vanadium	UG/L	-	1.7 J	3.0 J	5.6 J	3.6 J	1.8 J
Zinc	UG/L	2000					
Miscellaneous Parameters							
Cyanide, Total	UG/L	200	234		155	898	31.0

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

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WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-03	MWMF-03	MWMF-04	MWMF-05	MWMF-06
Sample ID			DUPLICATE-081315	MWMF-03	MWMF-04	WMMF-05	MWMF-06
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***	Field Duplicate (1-1)				
Volatile Organic Compounds							
1,1,2,2-Tetrachloroethane	UG/L	5			22		
1,1,2-Trichloroethane	UG/L	1			120	2.4	
1,1-Dichloroethane	UG/L	5			9.4	1.6	
1,2-Dichloroethane	UG/L	0.6			150 D	14	2.0
1,2-Dichloroethene (cis)	UG/L	5	1.4	1.5	450 D	120	13
1,2-Dichloroethene (trans)	UG/L	5			140	2.9	
1,2-Dichloropropane	UG/L	1			5.2		
Acetone	UG/L	50			280 DJ	62 J	27 J
Benzene	UG/L	1	26	24	120 D	190 D	26
Bromodichloromethane	UG/L	50			1.2		
Bromomethane	UG/L	5			140 J		
Carbon disulfide	UG/L	60			97	110	42
Chlorobenzene	UG/L	5			1.2		
Chloroethane	UG/L	5			80		
Chloroform	UG/L	7			77	5.1	
Chloromethane	UG/L	5		1.2	720 D	11	3.5
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5		1.0	4.8	110	
Isopropylbenzene	UG/L	5	2.7	2.6		11	
Methyl tert-butyl ether	UG/L	10			8.0	13	
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5			320 D	20	7.8

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-03	MWMF-03	MWMF-04	MWMF-05	MWMF-06
Sample ID			DUPLICATE-081315	MWMF-03	MWMF-04	WMMF-05	MWMF-06
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***	Field Duplicate (1-1)				
Volatile Organic Compounds							
Styrene	UG/L	5					1.0
Tetrachloroethene	UG/L	5			20		
Toluene	UG/L	5			1.8	8.5	2.1
Trichloroethene	UG/L	5			9.6		
Vinyl chloride	UG/L	2			52	190	6.4
Xylene (total)	UG/L	5				49	
Total BTEX	UG/L	-	26	25	126.6	357.5	28.1
Total Volatile Organic Compounds	UG/L	-	30.1	30.3	2,829.2	920.5	130.8
Semivolatile Organic Compounds							
1,1'-Biphenyl	UG/L	5			2.3 J		
2,4,6-Trichlorophenol	UG/L	1					0.73 J
2,4-Dichlorophenol	UG/L	5					
2,4-Dimethylphenol	UG/L	50					
2-Chlorophenol	UG/L	1					1.2 J
2-Methylnaphthalene	UG/L	-			1.5 J	1.1 J	
2-Methylphenol (o-cresol)	UG/L	1				1.6 J	1.5 J
2-Nitrophenol	UG/L	1			3.5 J		
3&4-Methylphenol (m,p-cresol)	UG/L	1			1.7 J	1.1 J	2.0 J
4-Nitrophenol	UG/L	1			2.3 J		
Acenaphthene	UG/L	20	0.59 J			7.8	0.89 J
Acenaphthylene	UG/L	-				1.0 J	
Acetophenone	UG/L	-			600 D	13	16

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-03	MWMF-03	MWMF-04	MWMF-05	MWMF-06
Sample ID			DUPLICATE-081315	MWMF-03	MWMF-04	WMMF-05	MWMF-06
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***	Field Duplicate (1-1)				
Semivolatile Organic Compounds							
Anthracene	UG/L	50					
Benzaldehyde	UG/L	-			180 DJ		2.3 J
Benzo(a)anthracene	UG/L	0.002					
Benzo(a)pyrene	UG/L	ND					
Benzo(b)fluoranthene	UG/L	0.002					
bis(2-Ethylhexyl)phthalate	UG/L	5	0.92 J			0.67 J	
Carbazole	UG/L	-					
Chrysene	UG/L	0.002					
Dibenzofuran	UG/L	-				0.94 J	
Diethylphthalate	UG/L	50					0.50 J
Dimethylphthalate	UG/L	50	2.8 J	2.7 J		4.6 J	3.0 J
Fluoranthene	UG/L	50					
Fluorene	UG/L	50				0.82 J	
Naphthalene	UG/L	10			170 DJ	37	
Phenanthrene	UG/L	50			0.84 J	4.4 J	
Phenol	UG/L	1			0.64 J	1.3 J	1.1 J
Pyrene	UG/L	50					
Total Polynuclear Aromatic Hydrocarbons	UG/L	-	0.59	ND	172.34	52.12	0.89
Total Semivolatile Organic Compounds	UG/L	-	4.31	2.7	962.78	75.33	29.22
Metals							
Aluminum	UG/L	-			442,000	95,500	1,810
Arsenic	UG/L	25			47.6		

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-03	MWMF-03	MWMF-04	MWMF-05	MWMF-06
Sample ID			DUPLICATE-081315	MWMF-03	MWMF-04	WMMF-05	MWMF-06
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			08/13/15	08/13/15	08/13/15	08/12/15	08/12/15
Parameter	**Units**	**Criteria***	Field Duplicate (1-1)				
Metals							
Barium	UG/L	1000				29.0 J	59.3 J
Beryllium	UG/L	3			41.4	8.5	0.44 J
Cadmium	UG/L	5	1.4 J	1.3 J	10.4		
Calcium	UG/L	-	246,000	240,000	474,000	462,000	271,000
Chromium	UG/L	50			771	144	132
Cobalt	UG/L	-			930	148	102
Copper	UG/L	200	58.1	54.5	1,520	97.5	52.2
Iron	UG/L	300	2,770	2,840	261,000	1,430,000	594,000
Lead	UG/L	25	33.9	32.5	35.7	40.6	39.9
Magnesium	UG/L	35000	27,200	27,100	812,000	269,000	58,200
Manganese	UG/L	300	1,190	1,200	34,800	13,900	3,930
Mercury	UG/L	0.7			0.10 J		
Nickel	UG/L	100	125	124	3,610	2,340	1,150
Potassium	UG/L	-	38,600	38,400	24,100	82,500	58,800
Selenium	UG/L	10	22.0 J	12.7 J		36.7	44.2
Silver	UG/L	50				11.8 J	7.0 J
Sodium	UG/L	20000	261,000	264,000	5,850,000	1,940,000	462,000
Thallium	UG/L	0.5			37.8	56.2	18.0 J
Vanadium	UG/L	-	15.3 J	15.7 J	502	524	757
Zinc	UG/L	2000	641	608	4,040	4,780	800
Miscellaneous Parameters							
Cyanide, Total	UG/L	200	158	237			144

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-07D	MWMF-07S	MWMF-08
Sample ID			MWMF-07D	MWMF-07S	MWMF-08
Matrix			Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-
Date Sampled			08/11/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***			
Volatile Organic Compounds					
1,1,2,2-Tetrachloroethane	UG/L	5			
1,1,2-Trichloroethane	UG/L	1			
1,1-Dichloroethane	UG/L	5			
1,2-Dichloroethane	UG/L	0.6			39
1,2-Dichloroethene (cis)	UG/L	5	1.4		30
1,2-Dichloroethene (trans)	UG/L	5			1.7
1,2-Dichloropropane	UG/L	1			
Acetone	UG/L	50			140 J
Benzene	UG/L	1			1,700 D
Bromodichloromethane	UG/L	50			
Bromomethane	UG/L	5			
Carbon disulfide	UG/L	60			3.4
Chlorobenzene	UG/L	5			1.0
Chloroethane	UG/L	5			
Chloroform	UG/L	7			
Chloromethane	UG/L	5		1.4	
Cyclohexane	UG/L	-		4.4	2.2
Ethylbenzene	UG/L	5			2,600 D
Isopropylbenzene	UG/L	5		14	130
Methyl tert-butyl ether	UG/L	10			1.4
Methylcyclohexane	UG/L	-		3.7	1.9
Methylene chloride	UG/L	5			2.6

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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Concentration Exceeds Criteria

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J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-07D	MWMF-07S	MWMF-08
Sample ID			MWMF-07D	MWMF-07S	MWMF-08
Matrix			Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-
Date Sampled			08/11/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***			
Volatile Organic Compounds					
Styrene	UG/L	5			
Tetrachloroethene	UG/L	5			
Toluene	UG/L	5		1.5	450 D
Trichloroethene	UG/L	5			
Vinyl chloride	UG/L	2			15
Xylene (total)	UG/L	5			2,000 D
Total BTEX	UG/L	-	ND	1.5	6,750
Total Volatile Organic Compounds	UG/L	-	1.4	25	7,118.2
Semivolatile Organic Compounds					
1,1'-Biphenyl	UG/L	5			6.1
2,4,6-Trichlorophenol	UG/L	1			
2,4-Dichlorophenol	UG/L	5			
2,4-Dimethylphenol	UG/L	50		1.3 J	10
2-Chlorophenol	UG/L	1			
2-Methylnaphthalene	UG/L	-			140 DJ
2-Methylphenol (o-cresol)	UG/L	1		0.82 J	
2-Nitrophenol	UG/L	1			
3&4-Methylphenol (m,p-cresol)	UG/L	1		1.2 J	
4-Nitrophenol	UG/L	1			
Acenaphthene	UG/L	20			7.6
Acenaphthylene	UG/L	-			2.8 J
Acetophenone	UG/L	-			85 DJ

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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Concentration Exceeds Criteria

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Only Detected Results Reported.

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WHERE [MATRIX] = 'WG' AND [LOGDATE] >= #8/11/2015# AND NOT [LOCID] LIKE 'BW-*';

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-07D	MWMF-07S	MWMF-08
Sample ID			MWMF-07D	MWMF-07S	MWMF-08
Matrix			Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-
Date Sampled			08/11/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***			
Semivolatile Organic Compounds					
Anthracene	UG/L	50			
Benzaldehyde	UG/L	-			
Benzo(a)anthracene	UG/L	0.002			
Benzo(a)pyrene	UG/L	ND			
Benzo(b)fluoranthene	UG/L	0.002			
bis(2-Ethylhexyl)phthalate	UG/L	5	0.69 J	5.0	0.66 J
Carbazole	UG/L	-			0.92 J
Chrysene	UG/L	0.002			
Dibenzofuran	UG/L	-			1.0 J
Diethylphthalate	UG/L	50			
Dimethylphthalate	UG/L	50	3.2 J	3.1 J	4.3 J
Fluoranthene	UG/L	50			
Fluorene	UG/L	50			2.1 J
Naphthalene	UG/L	10		9.0	3,800 D
Phenanthrene	UG/L	50			1.5 J
Phenol	UG/L	1		0.77 J	6.9
Pyrene	UG/L	50			
Total Polynuclear Aromatic Hydrocarbons	UG/L	-	ND	9	3,954
Total Semivolatile Organic Compounds	UG/L	-	3.89	21.19	4,068.88
Metals					
Aluminum	UG/L	-	137 J		
Arsenic	UG/L	25			

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-3
SUMMARY OF DETECTED COMPOUNDS IN AUGUST 2015 OVERBURDEN GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			MWMF-07D	MWMF-07S	MWMF-08
Sample ID			MWMF-07D	MWMF-07S	MWMF-08
Matrix			Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-
Date Sampled			08/11/15	08/12/15	08/13/15
Parameter	**Units**	**Criteria***			
Metals					
Barium	UG/L	1000	643	63.8 J	
Beryllium	UG/L	3			
Cadmium	UG/L	5			
Calcium	UG/L	-	863,000	167,000	455,000
Chromium	UG/L	50			21.2
Cobalt	UG/L	-	31.3 J	1.1 J	
Copper	UG/L	200	5.7 J		16.7 J
Iron	UG/L	300	5,870	5,210	214,000
Lead	UG/L	25	11.6	10.5	18.4
Magnesium	UG/L	35000	217,000	95,100	631,000
Manganese	UG/L	300	37,300	650	38,300
Mercury	UG/L	0.7			
Nickel	UG/L	100	31.4 J	0.86 J	758
Potassium	UG/L	-	30,800	16,700	82,400
Selenium	UG/L	10		20.2 J	28.3 J
Silver	UG/L	50			
Sodium	UG/L	20000	2,480,000	151,000	3,340,000
Thallium	UG/L	0.5	22.3		38.0
Vanadium	UG/L	-		2.2 J	322
Zinc	UG/L	2000	17.0 J		7.0 J
Miscellaneous Parameters					
Cyanide, Total	UG/L	200	7.9 J	26.5 J	252

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value; D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

TABLE 3-4
SUMMARY OF DETECTED COMPOUNDS IN BEDROCK GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			BW-01	BW-01	BW-02	BW-02	BW-02
Sample ID			BW-01	BW-01	03122012-FD-1	BW-02	BW-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			03/12/12	08/13/15	03/12/12	03/12/12	08/13/15
Parameter	**Units**	**Criteria***			Field Duplicate (1-1)		
Volatile Organic Compounds							
1,1-Dichloroethene	UG/L	5					6.8
1,2-Dichloroethane	UG/L	0.6					730 D
1,2-Dichloroethene (cis)	UG/L	5	220	230 J	7,100	6,800	3,600 D
1,2-Dichloroethene (trans)	UG/L	5		3.1			46
4-Methyl-2-pentanone	UG/L	-					9.8 J
Acetone	UG/L	50		28 J			480 J
Benzene	UG/L	1	26,000 D	37,000 D	19,000	19,000	34,000 D
Carbon disulfide	UG/L	60					3.8
Chloromethane	UG/L	5					3.3
Cyclohexane	UG/L	-					3.7
Ethylbenzene	UG/L	5	1,200	2,000 D	1,200	1,100	750 D
Isopropylbenzene	UG/L	5		23			10
Methyl tert-butyl ether	UG/L	10		9.4			23
Methylcyclohexane	UG/L	-					3.4
Methylene chloride	UG/L	5					1.2
Styrene	UG/L	5	4,300				
Toluene	UG/L	5	12,000	13,000 D	14,000	13,000	2,600 D
Trichloroethene	UG/L	5					1.0
Vinyl chloride	UG/L	2		66	990	940	2,000 D
Xylene (total)	UG/L	5	5,700	5,000 D	8,600	8,300	4,300 D
Total BTEX	UG/L	-	44,900	57,000	42,800	41,400	41,650
Total Volatile Organic Compounds	UG/L	-	49,420	57,359.5	50,890	49,140	48,572

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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B (inoranics) - The reported concentration is an estimated value.

Only Detected Results Reported.

TABLE 3-4
SUMMARY OF DETECTED COMPOUNDS IN BEDROCK GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			BW-01	BW-01	BW-02	BW-02	BW-02
Sample ID			BW-01	BW-01	03122012-FD-1	BW-02	BW-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			03/12/12	08/13/15	03/12/12	03/12/12	08/13/15
Parameter	**Units**	**Criteria***			Field Duplicate (1-1)		
Semivolatile Organic Compounds							
1,1'-Biphenyl	UG/L	5	28	33	18	17	11
2,4-Dimethylphenol	UG/L	50		270 DJ	1,500 J		1,400 D
2-Methylnaphthalene	UG/L	-	510 DJ	480 DJ	330 DJ	310 DJ	220 DJ
2-Methylphenol (o-cresol)	UG/L	1	80 J	170 DJ	1,300 DJ	1,300 DJ	760 DJ
3&4-Methylphenol (m,p-cresol)	UG/L	1	21	47 J	1,300 DJ	2,400 D	1,200 D
3,3'-Dichlorobenzidine	UG/L	5					1.1 J
Acenaphthene	UG/L	20	11	29	5.9 J	5.6 J	3.9 J
Acenaphthylene	UG/L	-	190 DJ	140 J	5.1 J	5.2 J	4.7 J
Acetophenone	UG/L	-					
Anthracene	UG/L	50	7.5 J	4.9 J	5.2 J	5.4 J	2.1 J
bis(2-Chloroethyl)ether	UG/L	1	70 J				
bis(2-Ethylhexyl)phthalate	UG/L	5	0.94 J			0.93 J	2.5 J
Carbazole	UG/L	-	86 J	76 J	10	9.4 J	5.4
Dibenzofuran	UG/L	-	21	25	2.9 J	2.8 J	
Dimethylphthalate	UG/L	50					
Fluoranthene	UG/L	50	3.5 J	2.7 J	1.6 J	1.5 J	0.57 J
Fluorene	UG/L	50	31	35	11	11	0.57 J
Naphthalene	UG/L	10	6,800 D	6,100 D	7,300 D	6,800 D	3,700 D
Phenanthrene	UG/L	50	32	32	14	14	7.3
Phenol	UG/L	1	15	31	1,200 DJ	1,100 DJ	540 DJ
Pyrene	UG/L	50	2.7 J	2.3 J	1.6 J	1.6 J	0.85 J
Total Polynuclear Aromatic Hydrocarbons	UG/L	-	7,587.7	6,825.9	7,674.4	7,154.3	3,939.99
Total Semivolatile Organic Compounds	UG/L	-	7,909.64	7,477.9	13,005.3	11,984.43	7,859.99

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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Concentration Exceeds Criteria

- = No standard or guidance value.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis.

B (inoranics) - The reported concentration is an estimated value.

Only Detected Results Reported.

TABLE 3-4
SUMMARY OF DETECTED COMPOUNDS IN BEDROCK GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			BW-01	BW-01	BW-02	BW-02	BW-02
Sample ID			BW-01	BW-01	03122012-FD-1	BW-02	BW-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			03/12/12	08/13/15	03/12/12	03/12/12	08/13/15
Parameter	**Units**	**Criteria***			Field Duplicate (1-1)		
Metals							
Aluminum	UG/L	-	73.0 B			66.6 B	
Arsenic	UG/L	25			10.9 B	9.6 B	
Barium	UG/L	1000	41.0 B		79.3 B	79.8 B	
Cadmium	UG/L	5	1.4 B				
Calcium	UG/L	-	140,000	242,000	230,000	227,000	555,000
Chromium	UG/L	50	2.2 B		4.1 B	4.9 B	10.5 J
Cobalt	UG/L	-	1.8 B	3.2 J	10.9 B	11.0 B	
Copper	UG/L	200		6.9 J			47.6
Iron	UG/L	300	38,400	60,200	3,130	3,130	841,000
Lead	UG/L	25					27.0
Magnesium	UG/L	35000	74,100	136,000	9,580	9,440	315,000
Manganese	UG/L	300	1,780	2,650	45.3 B	44.8 B	68,700
Nickel	UG/L	100	2.1 B	1.5 J	16.6 B	16.7 B	562
Potassium	UG/L	-	28,900 J	35,000	96,000 J	96,100 J	320,000
Selenium	UG/L	10		22.8 J			28.5 J
Silver	UG/L	50					10.8 J
Sodium	UG/L	20000	401,000	569,000	218,000	220,000	2,820,000
Thallium	UG/L	0.5					69.0
Vanadium	UG/L	-		6.6 J	32.3 B	31.9 B	799
Zinc	UG/L	2000					16.7 J
Miscellaneous Parameters							
Cyanide, Total	UG/L	200	221	218	7,160 J	6,870 J	1,880

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis.

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Only Detected Results Reported.

TABLE 3-4
SUMMARY OF DETECTED COMPOUNDS IN BEDROCK GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			BW-03	BW-03	BW-04	BW-04	BW-04
Sample ID			BW-03	BW-03	BW-04	BW-04	DUPLICATE-081115
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			03/13/12	08/12/15	03/13/12	08/11/15	08/11/15
Parameter	**Units**	**Criteria***					Field Duplicate (1-1)
Volatile Organic Compounds							
1,1-Dichloroethene	UG/L	5					
1,2-Dichloroethane	UG/L	0.6				82	73
1,2-Dichloroethene (cis)	UG/L	5			1,200	56	54
1,2-Dichloroethene (trans)	UG/L	5					
4-Methyl-2-pentanone	UG/L	-					
Acetone	UG/L	50					
Benzene	UG/L	1	44,000 D	72,000 D	11,000	2,900 D	3,100 D
Carbon disulfide	UG/L	60		1.0 J			
Chloromethane	UG/L	5					
Cyclohexane	UG/L	-		7.0 J			1.0
Ethylbenzene	UG/L	5	2,700	2,600 D	780	1,100 D	1,100 D
Isopropylbenzene	UG/L	5		53 J		24	23
Methyl tert-butyl ether	UG/L	10				1.4	1.5
Methylcyclohexane	UG/L	-		4.5 J		1.5	1.4
Methylene chloride	UG/L	5		1.1 J			
Styrene	UG/L	5			2,600	380 D	410 D
Toluene	UG/L	5	300	100 J	8,000	2,500 D	2,600 D
Trichloroethene	UG/L	5		1.0 J			
Vinyl chloride	UG/L	2			200	12	12
Xylene (total)	UG/L	5	1,100	650 D	3,300	1,400 D	1,500 D
Total BTEX	UG/L	-	48,100	75,350	23,080	7,900	8,300
Total Volatile Organic Compounds	UG/L	-	48,100	75,417.6	27,080	8,456.9	8,875.9

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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- = No standard or guidance value.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis.

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Only Detected Results Reported.

TABLE 3-4
SUMMARY OF DETECTED COMPOUNDS IN BEDROCK GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			BW-03	BW-03	BW-04	BW-04	BW-04
Sample ID			BW-03	BW-03	BW-04	BW-04	DUPLICATE-081115
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			03/13/12	08/12/15	03/13/12	08/11/15	08/11/15
Parameter	**Units**	**Criteria***					Field Duplicate (1-1)
Semivolatile Organic Compounds							
1,1'-Biphenyl	UG/L	5	5.5 J	4.1 J	24	20	19
2,4-Dimethylphenol	UG/L	50		1.7 J		6.1	22
2-Methylnaphthalene	UG/L	-	8.2 J		380 DJ	220 DJ	220 DJ
2-Methylphenol (o-cresol)	UG/L	1	13		16	8.1	8.7
3&4-Methylphenol (m,p-cresol)	UG/L	1	23		12	7.9	8.4
3,3'-Dichlorobenzidine	UG/L	5					
Acenaphthene	UG/L	20	18	9.1	13	31	28
Acenaphthylene	UG/L	-	20	19	170 DJ	84 DJ	80 DJ
Acetophenone	UG/L	-	2.4 J	3.2 J	11	4.8 J	4.8 J
Anthracene	UG/L	50			8.1 J	7.2	6.7
bis(2-Chloroethyl)ether	UG/L	1					
bis(2-Ethylhexyl)phthalate	UG/L	5	0.54 J	0.91 J	0.87 J		0.70 J
Carbazole	UG/L	-	2.6 J	2.3 J	30	18	18
Dibenzofuran	UG/L	-	0.90 J	0.68 J	13	10	9.8
Dimethylphthalate	UG/L	50		2.4 J		3.0 J	5.3
Fluoranthene	UG/L	50			4.0 J	4.6 J	4.4 J
Fluorene	UG/L	50	4.4 J	3.8 J	31	23	21
Naphthalene	UG/L	10	1,200 D	370 D	3,800 D	1,900 D	2,000 D
Phenanthrene	UG/L	50	1.8 J	1.4 J	40 J	39	37
Phenol	UG/L	1	24	8.8	7.3 J	9.8	10
Pyrene	UG/L	50			4.0 J	5.3	5.3
Total Polynuclear Aromatic Hydrocarbons	UG/L	-	1,252.4	403.3	4,450.1	2,314.1	2,402.4
Total Semivolatile Organic Compounds	UG/L	-	1,324.34	427.39	4,564.27	2,401.8	2,509.1

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

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Only Detected Results Reported.

TABLE 3-4
SUMMARY OF DETECTED COMPOUNDS IN BEDROCK GROUNDWATER
EAST 138th STREET WORKS SITE

Location ID			BW-03	BW-03	BW-04	BW-04	BW-04
Sample ID			BW-03	BW-03	BW-04	BW-04	DUPLICATE-081115
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			03/13/12	08/12/15	03/13/12	08/11/15	08/11/15
Parameter	**Units**	**Criteria***					Field Duplicate (1-1)
Metals							
Aluminum	UG/L	-			155 B	529	674
Arsenic	UG/L	25					
Barium	UG/L	1000	97.5 B	60.6 J	139 B	195 J	199 J
Cadmium	UG/L	5					
Calcium	UG/L	-	496,000	474,000	55,100	113,000	114,000
Chromium	UG/L	50	125	0.65 J	1.3 B	2.6 J	3.1 J
Cobalt	UG/L	-	6.9 B	6.0 J	0.97 B		
Copper	UG/L	200		5.0 J			4.2 J
Iron	UG/L	300	3,680	4,240	2,940	5,400	5,590
Lead	UG/L	25		4.2 J			
Magnesium	UG/L	35000	189,000	198,000	48,300	80,100	80,100
Manganese	UG/L	300	434	386	588	1,000	995
Nickel	UG/L	100			7.6 B	3.6 J	3.8 J
Potassium	UG/L	-	49,200 J	40,600	21,100 J	14,500	14,400
Selenium	UG/L	10	18.3 B	26.7 J		15.7 J	15.9 J
Silver	UG/L	50					
Sodium	UG/L	20000	1,760,000	1,940,000	285,000	199,000	204,000
Thallium	UG/L	0.5					
Vanadium	UG/L	-			1.8 B	3.1 J	3.3 J
Zinc	UG/L	2000					21.8
Miscellaneous Parameters							
Cyanide, Total	UG/L	200	1,140	1,140	37.6	20.9	16.0 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

Flags assigned during chemistry validation are shown.

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B (inoranics) - The reported concentration is an estimated value.

Only Detected Results Reported.

Table 4-1
East 138 Street Works MGP Site
Summary of Remedial Actions

Section Block/ Lot #	Institutional Controls/ Engineering Controls and SMP	Proposed Environmental Easement	BCP	Basis of Remedy/ Rationale
Block 2590, Lot 51	Yes	Yes	Not Applicable	Site investigation access was limited only to perimter of property. Property was used for MGP operations. PAHs were detected above commercial use SCOs. There are groundwater impacts in proximity to former holders at adjacent Block 2591. ICs/ECs/EE/SMP therefore required.
Block 2591, Lot 46	None	None	Not Applicable	NYSDEC reviewed preliminary data. There are only petroleum impacts. NYSDEC requires no additional investigation, remedial action or ICs/ECs.
Block 2592, Lot 35	None	None	Not Applicable	No former MGP structures. Only minor petroleum impacts observed in groundwater monitoring wells. Remedial action, ICs/EE/SMP not necessary.
Block 2597, Lot 1	None	None	Not Applicable	Property is used as a Major Oil Storage Facility (MOSF). MOSF infrastructure is substantial and existing facility is conducting monitoring for petroleum impacts. No known MGP-related contamimnation was observed as part of either the overall RI or groundwater monitoring. Remedial action, ICs/EE/SMP not necessary.
Block 2598, Lot 1	Yes	Yes	Not Applicable	Former MGP structures contain MGP-related NAPL. Property entirely covered by structures/sidewalks/roadways and therefore, the potential for non-intrusive, uncontrolled exposure to contamination is minimal. Since only intrusive activities could cause exposure, only ICs/ECs/Deed Restrictions (EE)/SMP are warranted.
Block 2598, Lot 46	Not Applicable	Not Applicable	Yes	ICs/EE is authorized under BCP Index #C203053-05-12.

Table 4-1
East 138 Street Works MGP Site
Summary of Remedial Actions

Section Block/ Lot #	Institutional Controls/ Engineering Controls and SMP	Proposed Environmental Easement	BCP	Basis of Remedy/ Rationale
Block 2598, Lot 62	None	None	Not Applicable	No former MGP structures. Remedial action not necessary.
Block 2598, Lot 66	None	None	Not Applicable	No former MGP structures. Remedial action not necessary.

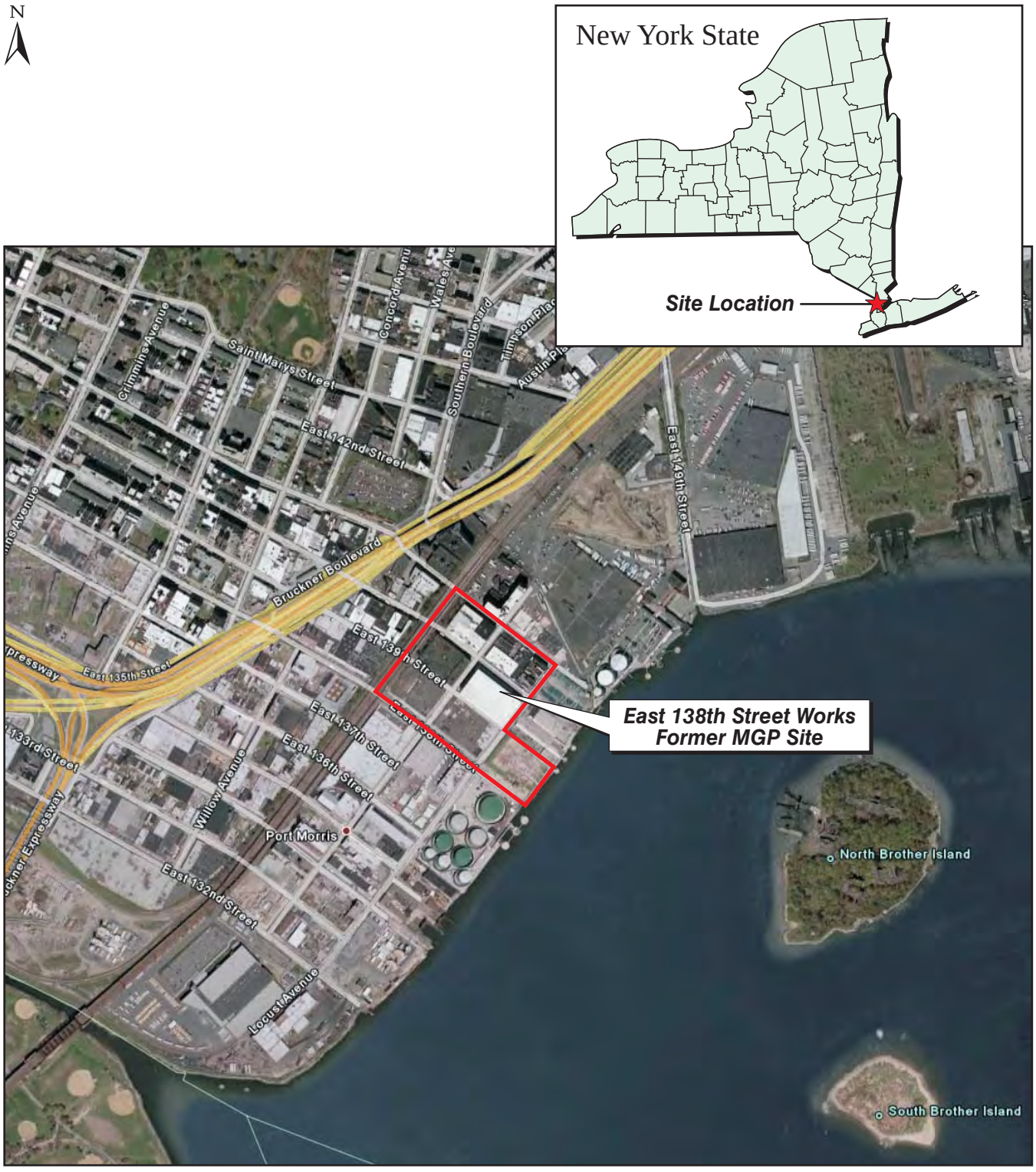
Table 4-2
Annual Monitoring Well Status/Program
East 138th Street Works Former MGP Site
Remedial Action Work Plan

Monitoring Well ID	Install Date	Block/Lot	Northing	Easting	Ground Elevation (Ft AMSL)	PVC Elevation (Ft AMSL)	Steel Casing Elevation (Ft AMSL)	Screen Setting (Ft bgs)	Well Depth (Ft bgs)	Included in Annual Monitoring (Y/N)	Decommission Well (Y/N)	Rationale for Annual Monitoring/NAPL Monitoring/Decommissioning
MW-01	3/26/2010	Block 2591, Lot 46	232350.2	1009728.4	8.11	7.86	8.11	3.0 to 13.0	15.0	N	Y	No MGP impacts and NYSDEC correspondence indicating parcel does not require furter action.
MW-02	4/30/2010	East 139th Street - Upgradient	232319.1	1009366.9	9.00	8.71	9.00	3.5 to 13.5	15.5	Y	N	Upgradient location.
MW-03	4/19/2010	Block 2592, Lot 35	232521.2	1009930.3	8.43	8.12	8.43	4.0 to 14.0	16.0	N	Y	No significant MGP structures on property. No MGP impacts.
MW-04	4/20/2010	Block 2598, Lot 62	232103.9	1010136.4	8.13	7.74	8.13	3.0 to 13.0	15.0	N	Y	No significant MGP structures on property. No MGP impacts.
MW-05	5/4/2010	Block 2598, Lot 1	231695.8	1009773.4	9.48	9.08	9.48	3.0 to 20.5	20.8	Y	N	MGP impacts.
MW-06	5/12/2010	Block 2598, Lot 1	231654.2	1009986.3	9.97	9.66	9.97	3.0 to 10.0	10.2	Y	N	MGP impacts.
MW-07 (URS)	12/16/2011	Block 2597, Lot 1	231355.2	1010153.7	8.30	7.90	N/A	4.6 to 9.6	10.0	N	Y	No MGP impacts.
MW-11	1/19/2011	Block 2591, Lot 46	232284.3	1009815	8.05	7.82	8.05	3.0 to 13.0	15.0	N	Y	No observed impacts and NYSDEC correspondence indicating parcel does not require furter action.
MWMF-01	6/16/2011	Block 2598, Lot 46	232141.8	1010003.9	8.33	8.01	8.33	3.0 to 13.0	15.0	N	Y	No significant MGP impacts.
MWMF-02	3/15/2011	Block 2598, Lot 46	231854	1010105.9	9.39	9.04	9.39	3.0 to 13.0	15.0	N	Y	No impacts or detections above groundwater standards.
MWMF-03	3/18/2011	Block 2598, Lot 46	231919.4	1009950.5	8.43	8.04	8.43	3.0 to 13.0	15.0	N	Y	No significant impacts.
MWMF-04	3/21/2011	Block 2598, Lot 46	231967.9	1009879.8	7.93	7.69	7.93	19.0 to 29.0	29.2	Y	N	Possible MGP impacts.
MWMF-05	3/17/2011	Block 2598, Lot 46	232146.8	1009903.1	7.94	7.70	7.94	3.0 to 13.0	15.0	Y	N	Petroleum impacts and possible MGP impacts.
MWMF-06	3/17/2011	Block 2598, Lot 46	232075.2	1009848.8	8.00	7.70	8.00	3.0 to 13.0	15.0	N	Y	No significant impacts.
MWMF-07S	3/16/2011	Block 2598, Lot 46	231992.1	1010198	8.95	8.69	8.95	3.2 to 9.2	11.2	N	Y	No significant impacts.
MWMF-07D	3/15/2011	Block 2598, Lot 46	231986.4	1010206.1	9.01	8.74	9.01	14.1 to 19.1	19.6	N	Y	No impacts or detections above groundwater standards.
MWMF-08	3/18/2011	Block 2598, Lot 46	231943.1	1009912.9	8.12	7.78	8.12	2.5 to 12.5	14.5	Y	N	MGP and petroleum impacts.
BW-01	2/3/2012	Block 2598, Lot 46	231866.5	1010013.6	8.89	8.59	8.89	22.0 to 32.0	34.0	Y	N	MGP impacts - monitor for NAPL only.
BW-02	2/2/2012	Block 2598, Lot 46	231948.9	1009906.6	8.13	7.58	8.13	37.0 to 47.0	49.0	Y	N	MGP impacts - monitor for NAPL only.
BW-03	2/2/2012	Block 2598, Lot 46	232140.8	1009898.2	8.01	7.46	8.01	46.0 to 56.0	58.0	Y	N	MGP impacts - monitor for NAPL only.
BW-04	2/1/2012	Block 2598, Lot 46	232007.9	1010179.3	8.79	8.34	8.79	27.5 to 37.5	39.5	Y	N	MGP impacts - monitor for NAPL only.

Ft AMSL - elevation in feet above mean sea level FT bgs - feet below ground surface

Note: All groundwater samples will be analyzed for Full Target Compound List, Target Analyte List and Cyanide Parameters

FIGURES

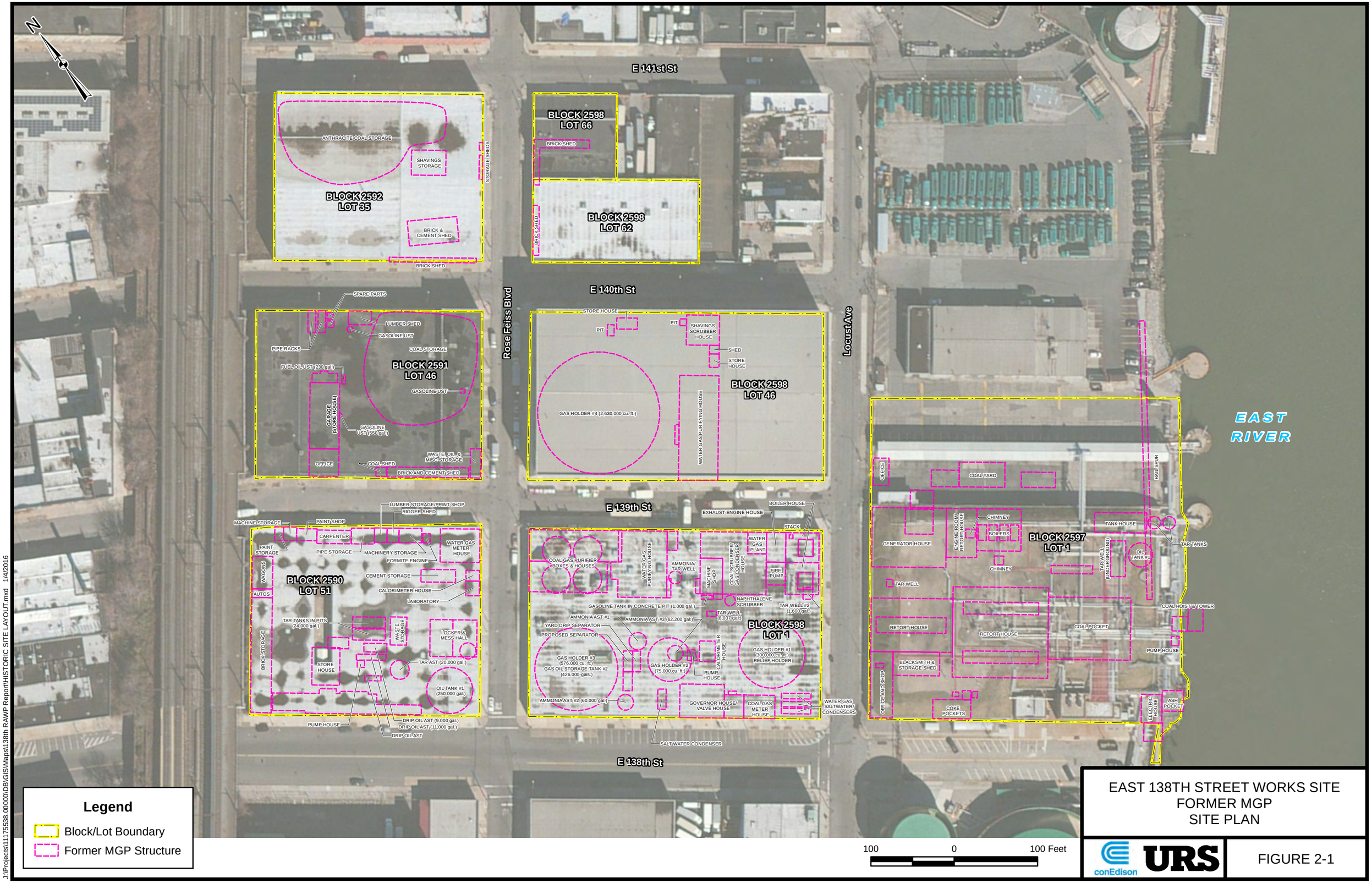


conEdison URS

SITE LOCATION MAP
EAST 138TH STREET WORKS FORMER MGP
BRONX, NEW YORK

FIGURE 1-1

AG20003A-1117553B-010416-GCM


N
E 141st St
BLOCK 2592
LOT 35
ANTHRACITE COAL STORAGE
SHAVINGS STORAGE
STORAGE SHEDS
BRICK & CEMENT SHED
BRICK SHED
BLOCK 2598
LOT 66
BRICK SHED
BLOCK 2598
LOT 62
BRICK SHED
E 140th St
Rose Feiss Blvd
Locust Ave
BLOCK 2591
LOT 46
SPARE PARTS
LUMBER SHED
GASOLINE UST
PIPE RACKS
COAL STORAGE
FUEL OIL UST (230 gal.)
GASOLINE UST
GARAGE (STORE HOUSE)
GASOLINE UST (550 gal.)
OFFICE
COAL SHED
WASTE OIL & MISC. STORAGE
BRICK AND CEMENT SHED
STORE HOUSE
PIT
PIT
SHAVINGS SCRUBBER HOUSE
SHED
STORE HOUSE
BLOCK 2598
LOT 46
GAS HOLDER #4 (2,630,000 cu. ft.)
WATER GAS PURIFYING HOUSE
E 139th St
EXHAUST ENGINE HOUSE
BOILER HOUSE
STACK
MACHINE STORAGE
PAINT SHOP
LUMBER STORAGE/PRINT SHOP
RIGGER SHED
CARPENTER
PAINT STORAGE
PIPE STORAGE
MACHINERY STORAGE
FORMITE ENGINE
WATER GAS METER HOUSE
WAGONS
BLOCK 2590
LOT 51
CEMENT STORAGE
CALORIMETER HOUSE
AUTOS
LABORATORY
TAR TANKS IN PITS (24,000 gal.)
WASTE STORAGE
LOCKER & MESS HALL
BRICK STORAGE
STORE HOUSE
TAR AST (20,000 gal.)
OIL TANK #1 (250,000 gal.)
PUMP HOUSE
DRIP OIL AST (9,000 gal.)
DRIP OIL AST (11,000 gal.)
DRIP OIL AST
COAL GAS PURIFIER BOXES & HOUSES
WATER GAS PURIFYING HOUSE
AMMONIA/ TAR WELL
MACHINE SHOP
COAL SCRUBBER/ GAS CONDENSER HOUSE
WATER GAS PLANT
FIRE PUMP
GASOLINE TANK IN CONCRETE PIT (1,000 gal.)
NAPHTHALENE SCRUBBER
TAR WELL #2 (1,600 gal.)
AMMONIA AST #1
AMMONIA AST #3 (62,200 gal.)
TAR WELL (8,037 gal.)
YARD DRIP SEPARATOR
PROPOSED SEPARATOR
BLOCK 2598
LOT 1
GAS HOLDER #3 (576,000 cu. ft.)
GAS OIL STORAGE TANK #2 (426,000 gals.)
GAS HOLDER #2 (75,000 cu. ft.)
CALORIMETER HOUSE
PUMP HOUSE
GAS HOLDER #1 (300,000 cu. ft.) RELIEF HOLDER
AMMONIA AST #2 (60,000 gal.)
GOVERNOR HOUSE/ VALVE HOUSE
COAL GAS METER HOUSE
WATER GAS, SALTWATER/ CONDENSERS
SALT WATER CONDENSER
E 138th St
EAST RIVER
OFFICE
COAL YARD
RAIL SPUR
CHIMNEY
ENGINE ROOM/ RETORT HOUSE
BOILERS
TANK HOUSE
GENERATOR HOUSE
BLOCK 2597
LOT 1
TAR WELL (UNDERGROUND)
OIL TANK #1
TAR TANKS
CHIMNEY
TAR WELL
COAL HOIST & TOWER
RETORT HOUSE
RETORT HOUSE
COAL POCKET
PUMP HOUSE
BLACKSMITH & STORAGE SHED
OFFICE AND SHOP
COKE POCKETS
ELECTRIC HOUSE
ASH POCKET
Legend
Block/Lot Boundary
Former MGP Structure
100
0
100 Feet
EAST 138TH STREET WORKS SITE
FORMER MGP
SITE PLAN
conEdison
URS
FIGURE 2-1
J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\HISTORIC SITE LAYOUT.mxd 1/4/2016

N

E 141st St

E 140th St

E 139th St

E 138th St

Rose Feiss Blvd

Locust Ave

BLOCK 2592
LOT 35

BLOCK 2598
LOT 66

BLOCK 2598
LOT 62

BLOCK 2591
LOT 46

BLOCK 2598 LOT 46

BLOCK 2590
LOT 51

BLOCK 2598
LOT 1

BLOCK 2597
LOT 1

EAST
RIVER

MW-03
SB-06
MWRX-05
MW-04
BW-04
MW-01
SB-32
MW-11
SB-33
SB-40
SB-39
B-07
SB-03
SB-34
SB-38
SB-02
SB-35
SB-37
SB-36
SB-01
SB-05
SB-04
MW-02
MWMF-01
MWRX-04
SBMF-03
MWMF-07S
MWMF-07D
SBMF-12
SBMF-13
SBMF-14
MWMF-05
BW-03
SBMF-23
SBMF-15
SBMF-22
SBMF-20
SBMF-09
SBMF-11
MWRX-01
MWRX-03
SBMF-10
SBMF-19
SBMF-17
SBMF-16
SBMF-02
MWMF-06
SBMF-18
SBMF-21
SBMF-04
SBMF-01
MWMF-02
MWRX-02
BW-02
MWMF-03
BW-01
SBMF-05
SBMF-08
SBMF-07
MWMF-08
SBMF-06
MWMF-04
SBRX-01
SB-21
SB-22
SB-18
SB-07
SB-14
SB-09
SB-17
SB-12
MW-06
SB-43
SB-13
SB-44
SB-11
SB-41
SB-42
SB-19
MW-05
SB-16
SB-08
SB-10
SB-15
SB-20
MW-07-URS

Legend

- Soil Boring
- Monitoring Well

NOTE:
Boring locations depicted in Block 2598 Lot 46 are shown for reference only. Refer to the RI Report for the 295 Locust Avenue Site (URS, April 2012)

100 0 100 Feet

EAST 138TH STREET WORKS SITE
REMEDIAL INVESTIGATION
SAMPLING LOCATIONS

conEdison URS

FIGURE 3-1

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\SB AND MW.mxd 3/20/2017

N

E 141st St

E 140th St

E 139th St

E 138th St

Rose Feiss Blvd

Locust Ave

BLOCK 2592
LOT 35

BLOCK 2598
LOT 66

BLOCK 2598
LOT 62

BLOCK 2591
LOT 46

BLOCK 2598 LOT 46

BLOCK 2590
LOT 51

BLOCK 2598
LOT 1

BLOCK 2597
LOT 1

EAST
RIVER

MW-03
SB-06
MW-04
MWRX-05
BW-04
MWMF-07S
MWMF-07D
MW-01
SB-32
MW-11
SB-33
SB-34
SB-35
SB-40
SB-39
SB-03
SB-38
SB-02
SB-37
SB-36
SB-01
SB-05
SB-04
MW-02
MWMF-01
MWRX-04
SBMF-03
SBMF-12
SBMF-13
SBMF-14
MWMF-05
BW-03
SBMF-22
SBMF-23
SBMF-15
SBMF-20
SBMF-09
SBMF-11
MWRX-03
SBMF-19
MWRX-01
SBMF-10
SBMF-17
SBMF-02
MWMF-06
SBMF-18
SBMF-16
SBMF-21
SBMF-04
SBMF-01
MWMF-02
MWRX-02
BW-02
MWMF-03
BW-01
SBMF-05
SBMF-08
SBMF-07
MWMF-08
SBMF-06
MWMF-04
SBRX-01
SB-07
SB-14
SB-09
SB-12
SB-13
SB-11
SB-17
SB-43
MW-06
SB-41
SB-42
SB-44
MW-05
SB-16
SB-08
SB-10
SB-15
SB-18
SB-22
SB-21
SB-19
SB-20
MW-07-URS

A
A'
B
B'
C
C'
D
D'

Legend

- Soil Boring
- Monitoring Well
- Cross-Section

NOTE:
Boring locations depicted in Block 2598 Lot 46 are shown for reference only. Refer to the RI Report for the 295 Locust Avenue Site (URS, April 2012)

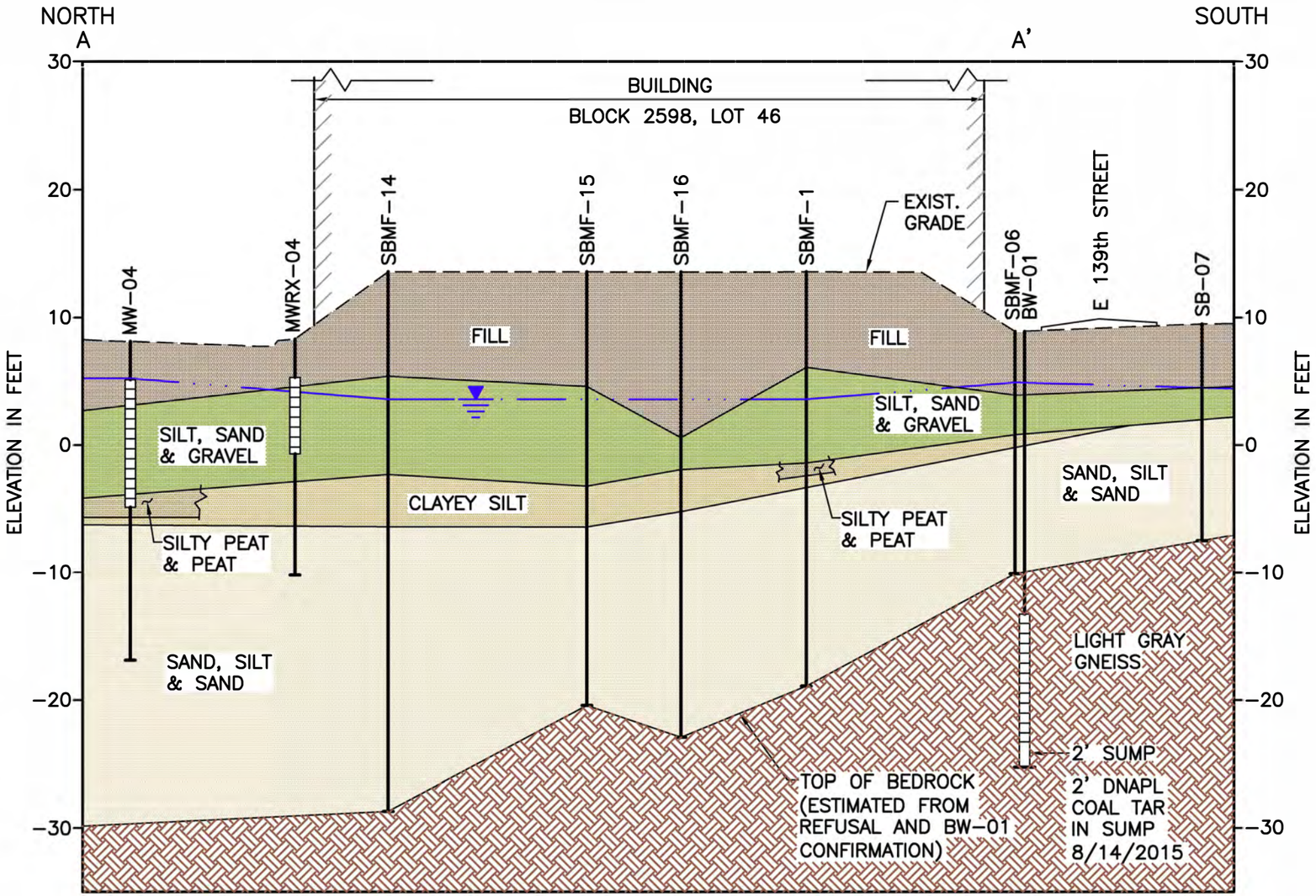
100 0 100 Feet

EAST 138TH STREET WORKS SITE
CROSS-SECTION LOCATIONS

conEdison URS

FIGURE 3-2

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\XSECTIONS.mxd 3/20/2017



NOTES:

1. GEOLOGIC CONDITIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS ENCOUNTERED AT EACH BORING LOCATION TO THE DEPTH DRILLED. EXTRAPOLATIONS BETWEEN BORINGS HAVE BEEN INTERPRETED USING STANDARDLY ACCEPTED GEOLOGIC PRACTICES AND PRINCIPLES. ACTUAL CONDITIONS MAY VARY BETWEEN BORINGS FROM THOSE SHOWN.
2. ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM, 1988.
3. THE DEPTH TO WATER WAS MEASURED IN ALL WELLS ON MAY 4, 2011.

40' 0 40'
HORIZ. SCALE IN FEET

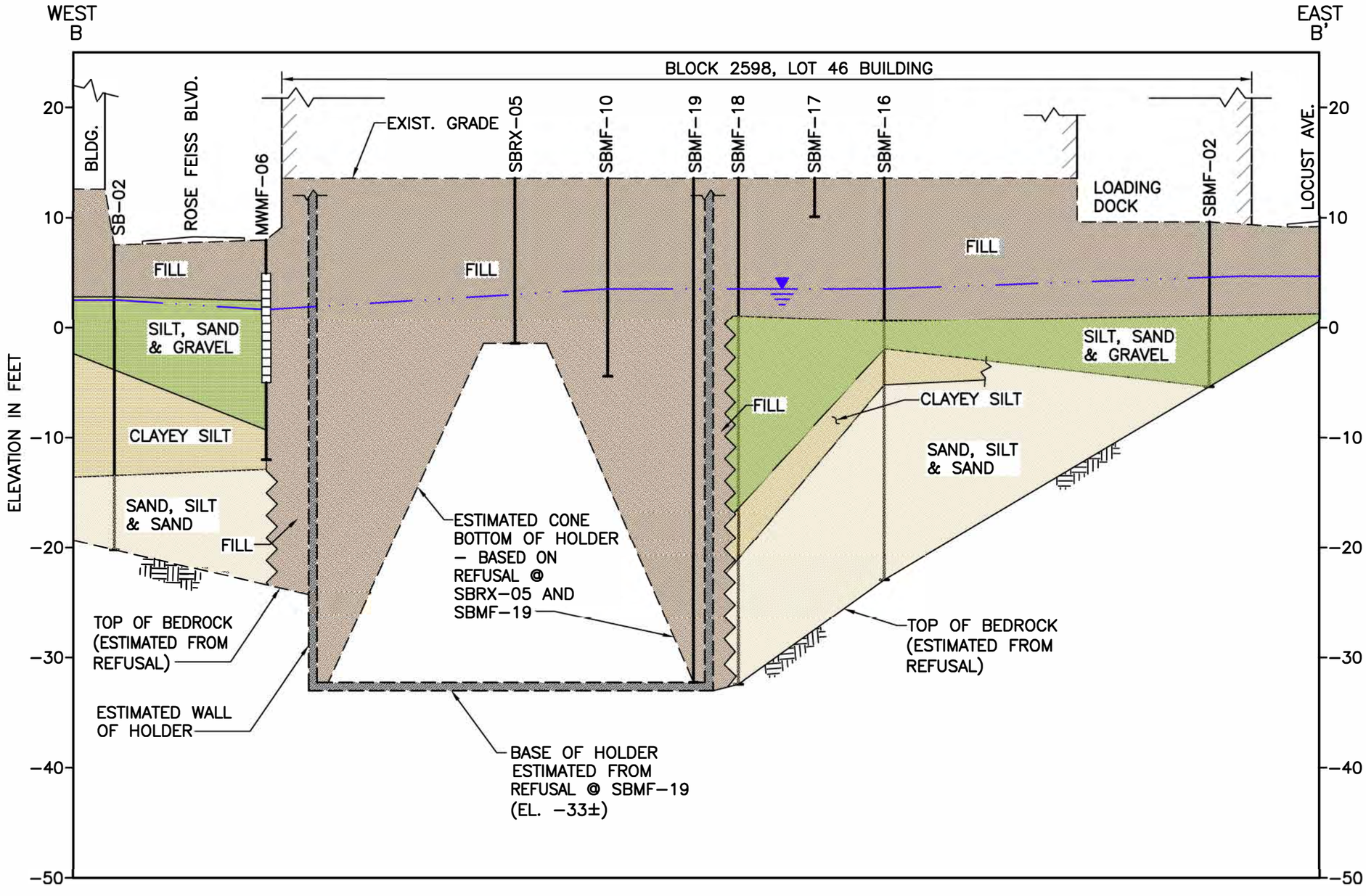
10' 0 10'
VERT. SCALE IN FEET

EAST 138th STREET WORKS SITE
BLOCK 2598, LOT 46
CROSS-SECTION A-A'

conEdison URS

FIGURE 3-3

J:\Projects\11175538.00000\CAD\DEC 2015 SUBMITTAL\FIGURE 3-2.dwg, FIG 3-2, 1:1, 12/22/15 -1-RAL



NOTES:

1. GEOLOGIC CONDITIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS ENCOUNTERED AT EACH BORING LOCATION TO THE DEPTH DRILLED. EXTRAPOLATIONS BETWEEN BORINGS HAVE BEEN INTERPRETED USING STANDARDLY ACCEPTED GEOLOGIC PRACTICES AND PRINCIPLES. ACTUAL CONDITIONS MAY VARY BETWEEN BORINGS FROM THOSE SHOWN.
2. ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM, 1988.
3. THE DEPTH TO WATER WAS MEASURED IN ALL WELLS ON MAY 4, 2011.

40' 0 40'
HORIZ. SCALE IN FEET

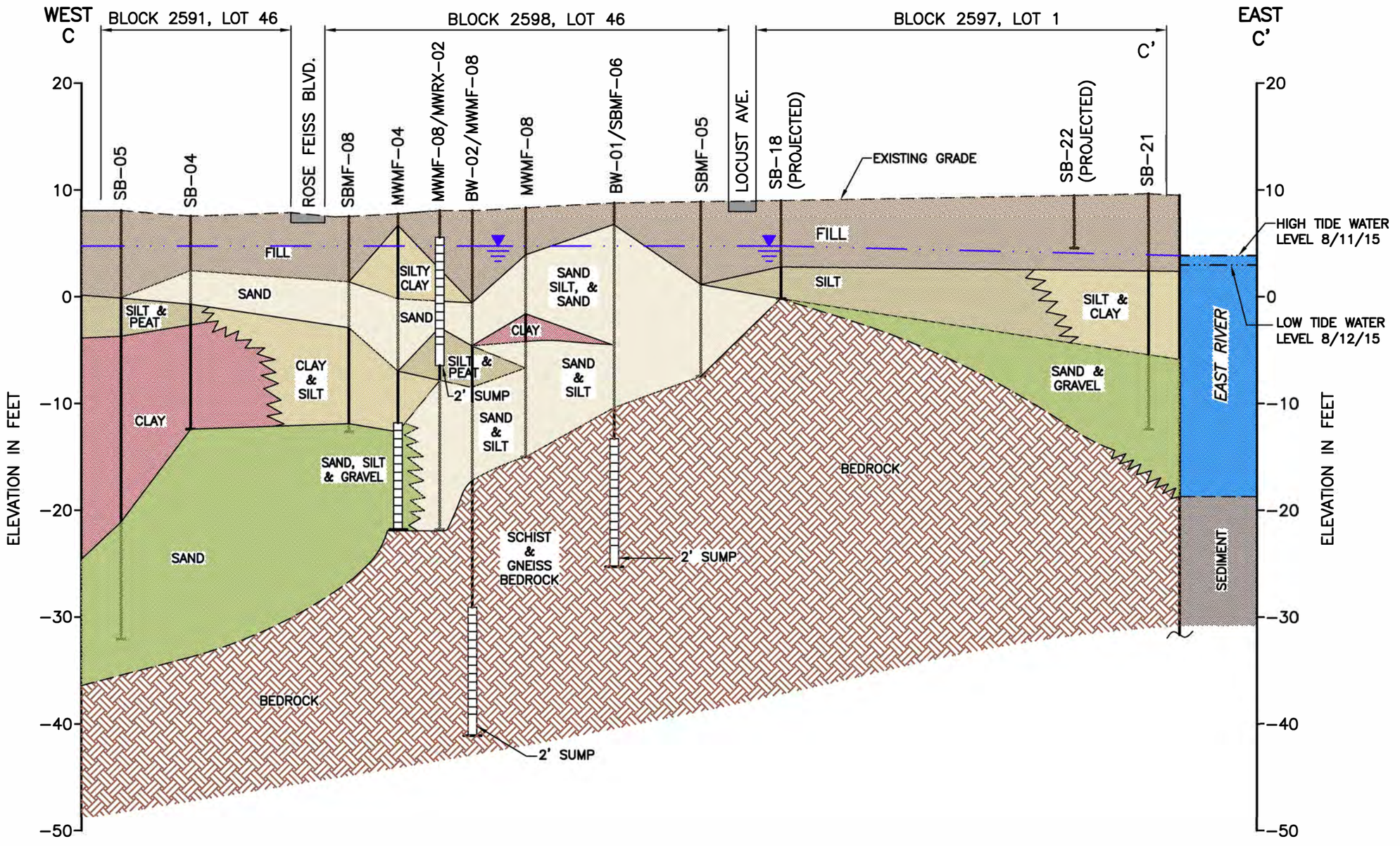
10' 0 10'
VERT. SCALE IN FEET

EAST 138th STREET WORKS SITE
BLOCK 2598, LOT 46
CROSS-SECTION B-B'

conEdison URS

FIGURE 3-4

J:\Projects\11175538.00000\CAD\DEC 2015 SUBMITTAL\FIGURE 3-3.dwg, FIG 3-3, 1:1, 12/22/15 -1-RAL



NOTES:

1. GEOLOGIC CONDITIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS ENCOUNTERED AT EACH BORING LOCATION TO THE DEPTH DRILLED. EXTRAPOLATIONS BETWEEN BORINGS HAVE BEEN INTERPRETED USING STANDARDLY ACCEPTED GEOLOGIC PRACTICES AND PRINCIPLES. ACTUAL CONDITIONS MAY VARY BETWEEN BORINGS FROM THOSE SHOWN.
2. ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM, 1988.
3. THE DEPTH TO WATER WAS MEASURED IN ALL WELLS ON 8/11/2015.

100' 0 100'
HORIZ. SCALE IN FEET

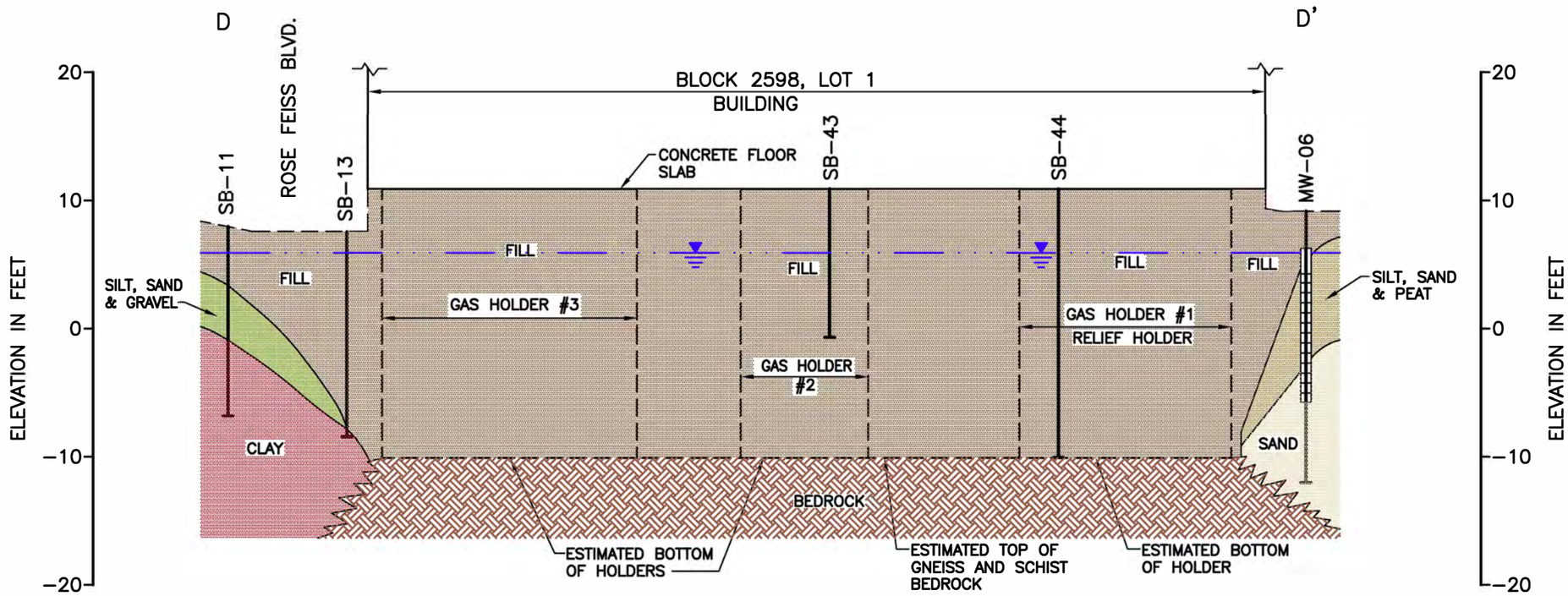
10' 0 10'
VERT. SCALE IN FEET

EAST 138th STREET WORKS SITE
BLOCK 2591, LOT 46
BLOCK 2598, LOT 46
BLOCK 2597, LOT 1
CROSS-SECTION C-C'

conEdison URS

FIGURE 3-5

J:\Projects\11175538.00000\CAD\DEC 2015 SUBMITTAL\FIGURE 3-4 & 3-5.dwg, FIG 3-4, 1:1, 1/13/16 -1-RAL



NOTES:

1. GEOLOGIC CONDITIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS ENCOUNTERED AT EACH BORING LOCATION TO THE DEPTH DRILLED. EXTRAPOLATIONS BETWEEN BORINGS HAVE BEEN INTERPRETED USING STANDARDLY ACCEPTED GEOLOGIC PRACTICES AND PRINCIPLES. ACTUAL CONDITIONS MAY VARY BETWEEN BORINGS FROM THOSE SHOWN.
2. ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM, 1988.
3. THE DEPTH TO WATER WAS MEASURED IN ALL WELLS ON 8/11/2015.

50' 0 50'
HORIZ. SCALE IN FEET

10' 0 10'
VERT. SCALE IN FEET

EAST 138th STREET WORKS SITE
BLOCK 2598, LOT 1
CROSS-SECTION D-D'

conEdison URS

FIGURE 3-6

J:\Projects\11175538.00000\CAD\DEC 2015 SUBMITTAL\FIGURE 3-4 & 3-5.dwg, FIG 3-5, 1:1, 1/8/16 -1-RAL

N

E 141st St

MW-03

BLOCK 2598
LOT 66

BLOCK 2592
LOT 35

BLOCK 2593
LOT 62

Locust Ave

SB-06, -22.21

MWRX-05

MW-04

SBMF-03, -21.38

BW-04, -16.21

E 140th St

SB-32, -6.91

MW-01

MW-11

MWMF-01

MWRX-04, -29.04

MWMF-07D, -10.79

SBMF-12, -24.61

SBMF-13, -30.41

SBMF-14, -28.70

MWMF-07S

SB-33, -7.63

BLOCK 2591
LOT 46

MWMF-05

BW-03, -31.99

SBMF-20, -33.00

BLOCK 2598
LOT 46

SB-40, -7.37

SB-39, -17.27

SBMF-09, -31.40

SBMF-15, -20.40

SB-03, -21.36

SBMF-22

SBMF-11

MWRX-01

SB-34, -12.65

SB-38, -7.34

MWRX-03

SBMF-23

SBMF-17

SB-35, -7.43

SB-02, -20.44

SBMF-10

SBMF-16, -22.91

SBMF-02, -5.37

SB-37, -7.50

MWMF-06

SBMF-19, -33.00

SBMF-18, -32.41

SB-36, -12.58

SBMF-04, -33.00

SBMF-01, -18.90

MWMF-02, -6.61

SBMF-21

SB-01, -26.77

MWRX-02

BW-02, -22.87

MWMF-03

SBRX-01

BW-01, -10.11

SB-05, -31.96

SB-04, -12.21

SBMF-08

SBMF-05, -7.37

SB-21, -12.03

MW-02

E 139th St

SBMF-07

MWMF-08

SBMF-06, -10.08

SB-22, 4.75

MWMF-04

SB-18, 0.11

SB-14, -7.42

SB-07, -7.49

SB-09, -7.47

SB-17, -2.63

BLOCK 2590
LOT 51

SB-12, -7.00

Rose Felss Blvd

BLOCK 2593
LOT 1

BLOCK 2597
LOT 1

MW-06, -1.03

SB-43, -0.79

SB-13, -8.13

SB-44, -9.80

SB-11, -6.82

SB-41, -5.81

SB-42, -8.80

SB-19, 4.29

SB-16, -8.30

SB-08, -1.28

SB-10, -6.12

SB-20, -3.75

SB-15, -13.97

MW-05, -11.52

E 138th St

MW-07-URS

EAST
RIVER

-10
-15
-20
-25
-30
-5
0

100 0 100 Feet

Legend

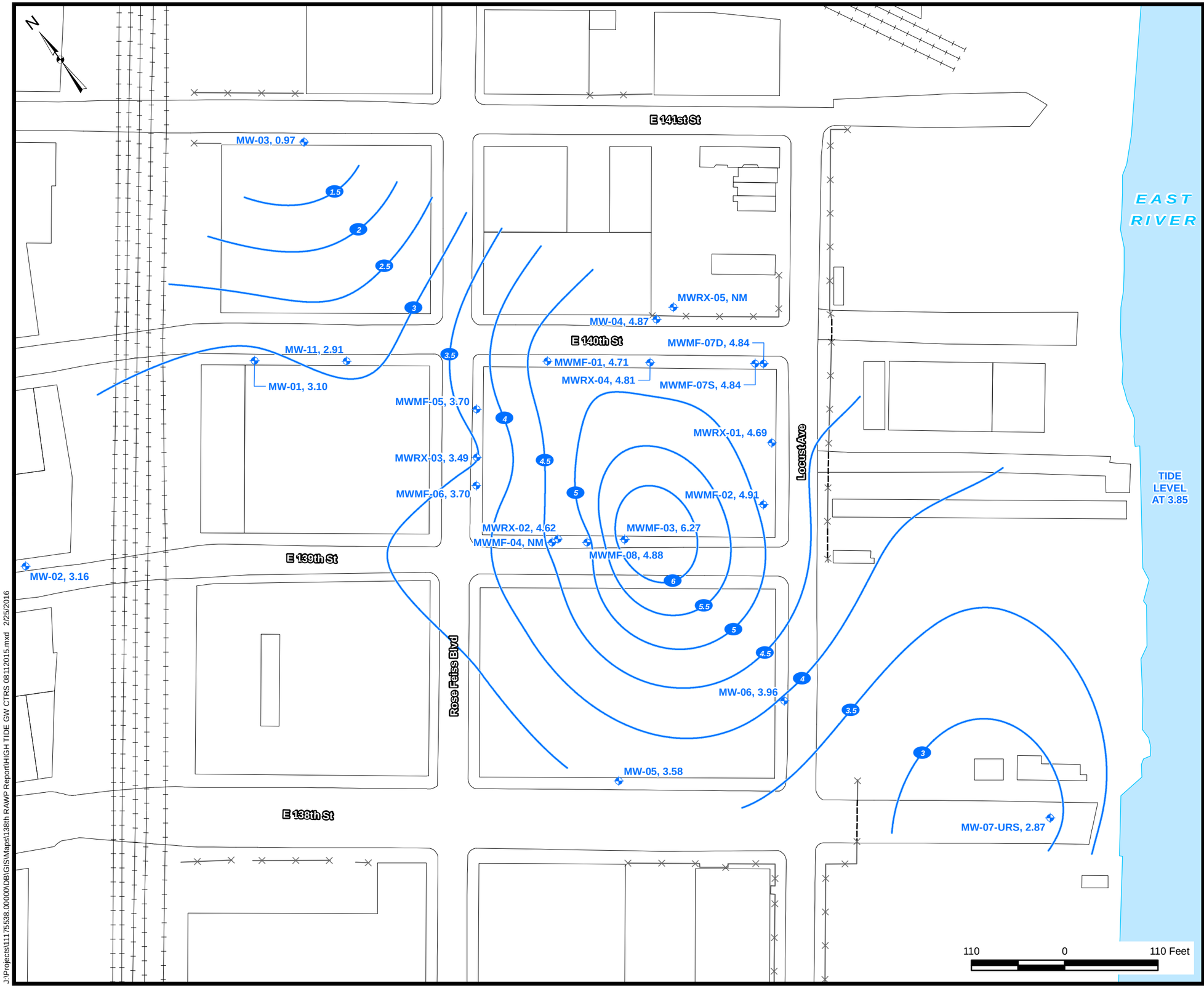
- Soil Boring
- Monitoring Well
- -10 Top of Bedrock Contour (ft amsl)

EAST 138TH STREET WORKS SITE
ESTIMATED TOP OF
BEDROCK CONTOURS

conEdison URS

FIGURE 3-7

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\BEDROCK CONTOURS.mxd 3/21/2017



Legend

- Monitoring Well
- Groundwater Elevation Contours (FT AMSL)

High/Low Tides (8/11/2015)

Tide	Time (Local)	FT AMSL
Lower Low Water (LL):	04:42	-3.25
Lower High Water (H):	09:00	3.85
Higher Low Water (L):	16:18	-3.04
Higher High Water (HH):	22:30	4.82

Source: NOAA, Center for Operational Oceanographic Products and Services (CO-OPS), Tides & Currents Website data (verified) for Kings Point, NY (Station ID: 8516945)

NOTES:
1. Sampling Event Times: 08:22 - 13:33
2. FT AMSL = Feet Above Mean Sea Level
3. Kings Point NOAA Station is approximately 7.5 miles east of East 138th Street Works site.

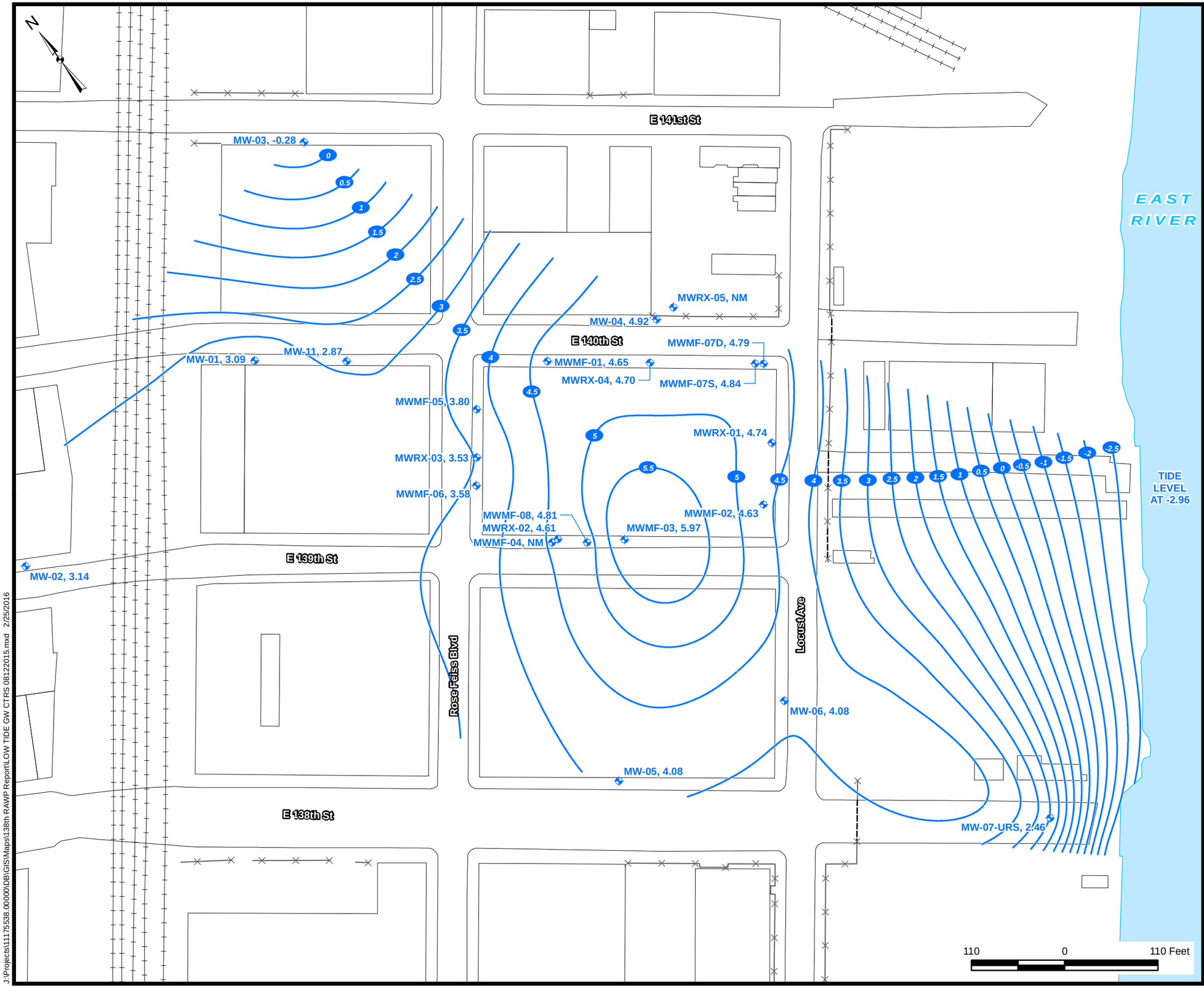
SOURCE:
ESRI World Street Map

EAST 138TH STREET WORKS SITE GROUNDWATER ELEVATION CONTOURS AT HIGH TIDE (AUGUST 11, 2015)

conEdison URS

FIGURE 3-8

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\HIGH TIDE GW CTRS 08112015.mxd 2/25/2016



Legend

- Monitoring Well
- Groundwater Elevation Contours (FT AMSL)

High/Low Tides (8/12/2015)

Tide	Time (Local)	FT AMSL
Lower Low Water (LL):	05:24	-3.33
Lower High Water (H):	11:06	4.00
Higher Low Water (L):	16:54	-2.96
Higher High Water (HH):	23:00	4.64

Source: NOAA, Center for Operational Oceanographic Products and Services (CO-OPS), Tides & Currents Website data (verified) for Kings Point, NY (Station ID: 8516945)

NOTES:
1. Sampling Event Times: 14:26 - 18:05
2. FT AMSL = Feet Above Mean Sea Level
3. Kings Point NOAA Station is approximately 7.5 miles east of East 138th Street Works site.

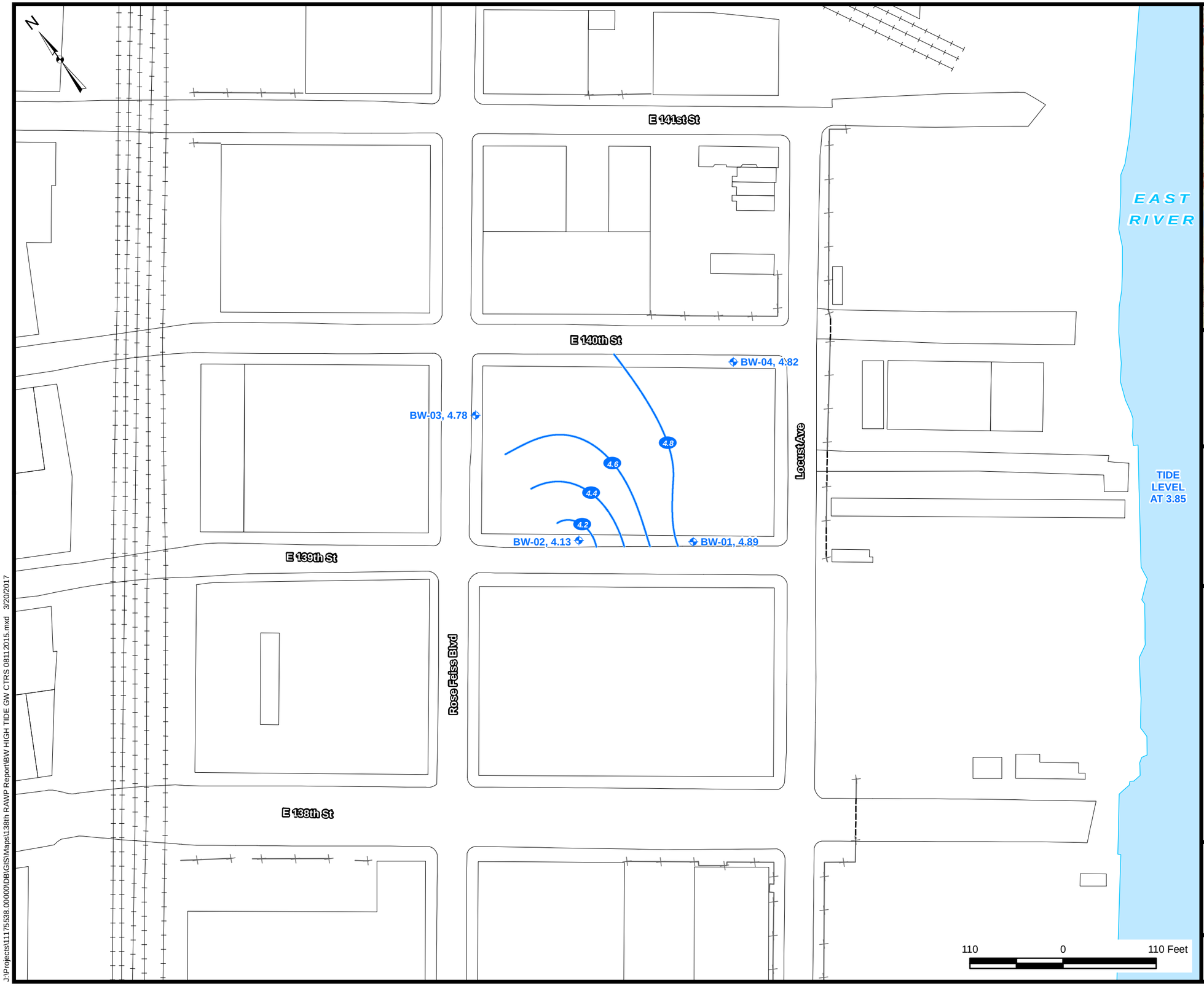
SOURCE:
ESRI World Street Map

EAST 138TH STREET WORKS SITE GROUNDWATER ELEVATION CONTOURS AT LOW TIDE (AUGUST 12, 2015)

conEdison URS

FIGURE 3-9

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\LOW TIDE GW CTRS 08122015.mxd 2/25/2016



Legend

- Monitoring Well
- Groundwater Elevation Contours (FT AMSL)

High/Low Tides (8/11/2015)

Tide	Time (Local)	FT AMSL
Lower Low Water (LL):	04:42	-3.25
Lower High Water (H):	09:00	3.85
Higher Low Water (L):	16:18	-3.04
Higher High Water (HH):	22:30	4.82

Source: NOAA, Center for Operational Oceanographic Products and Services (CO-OPS), Tides & Currents Website data (verified) for Kings Point, NY (Station ID: 8516945)

NOTES:

1. Sampling Event Times: 08:22 - 13:33
2. FT AMSL = Feet Above Mean Sea Level
3. Kings Point NOAA Station is approximately 7.5 miles east of East 138th Street Works site.

SOURCE:

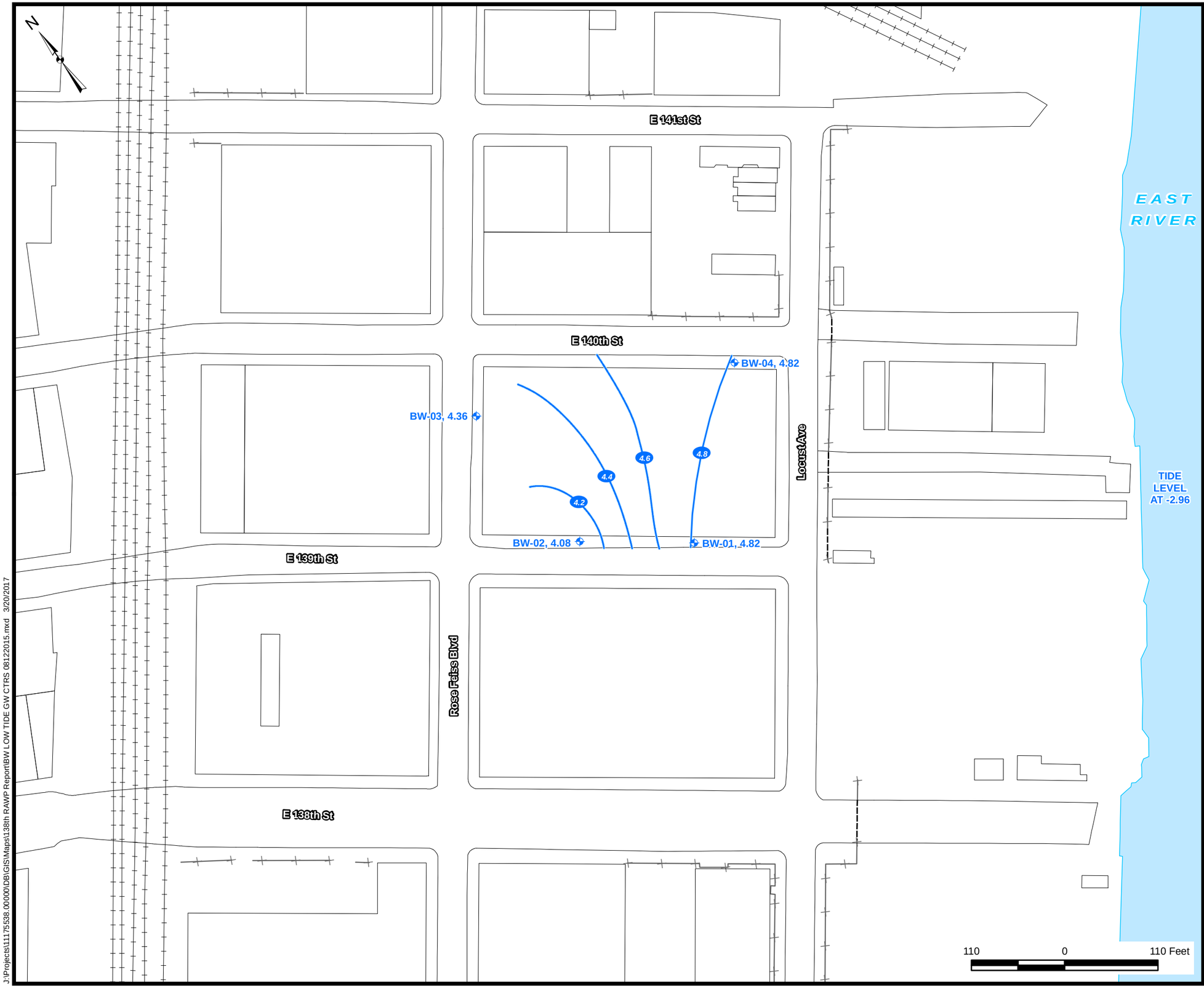
ESRI World Street Map

EAST 138TH STREET WORKS SITE BEDROCK GROUNDWATER ELEVATION CONTOURS AT HIGH TIDE (AUGUST 11, 2015)

conEdison URS

FIGURE 3-10

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\BW HIGH TIDE GW CTRS 08112015.mxd 3/20/2017



Legend

- Monitoring Well
- Groundwater Elevation Contours (FT AMSL)

High/Low Tides (8/12/2015)

Tide	Time (Local)	FT AMSL
Lower Low Water (LL):	05:24	-3.33
Lower High Water (H):	11:06	4.00
Higher Low Water (L):	16:54	-2.96
Higher High Water (HH):	23:00	4.64

Source: NOAA, Center for Operational Oceanographic Products and Services (CO-OPS), Tides & Currents Website data (verified) for Kings Point, NY (Station ID: 8516945)

NOTES:
1. Sampling Event Times: 14:26 - 18:05
2. FT AMSL = Feet Above Mean Sea Level
3. Kings Point NOAA Station is approximately 7.5 miles east of East 138th Street Works site.

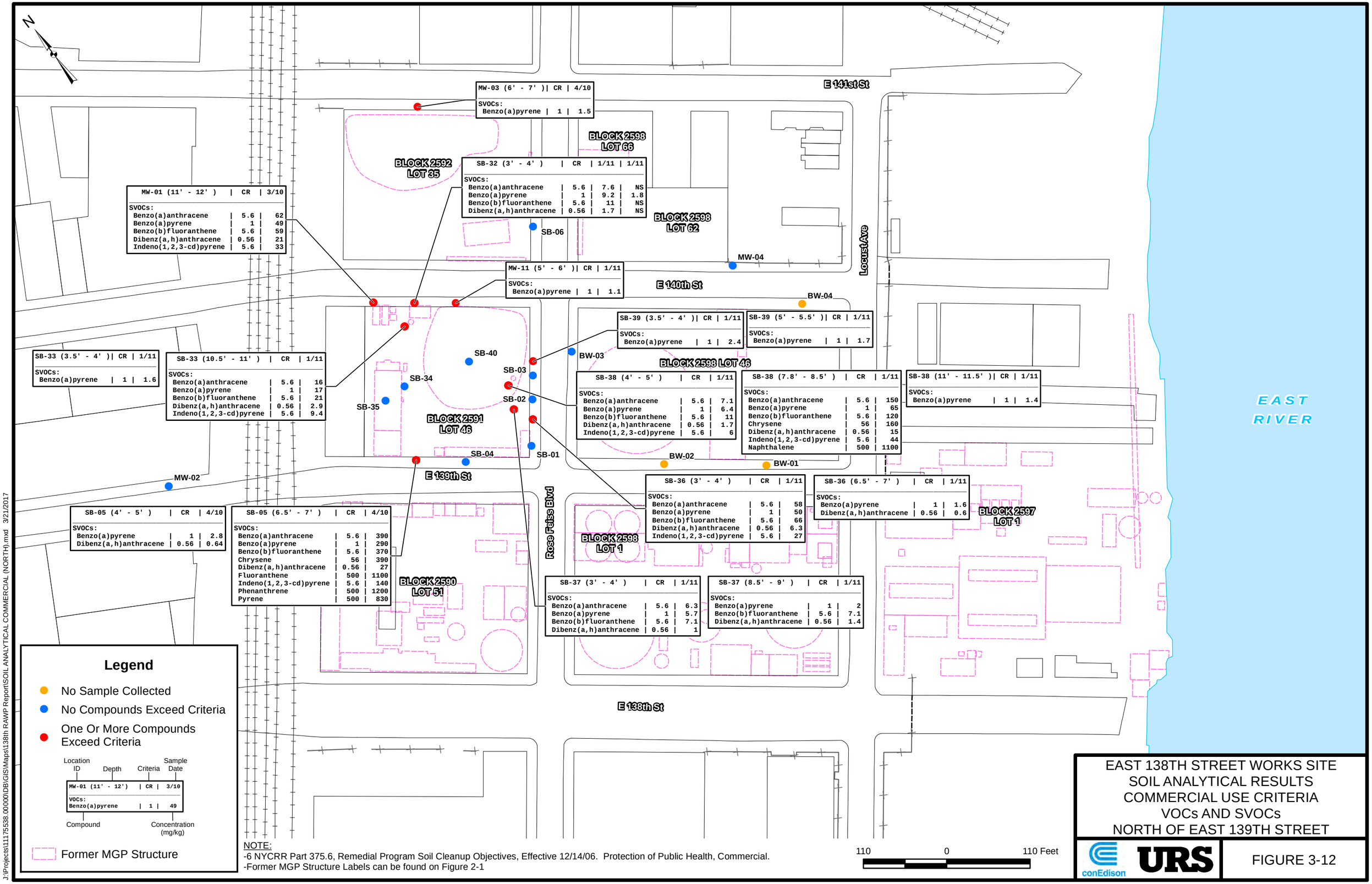
SOURCE:
ESRI World Street Map

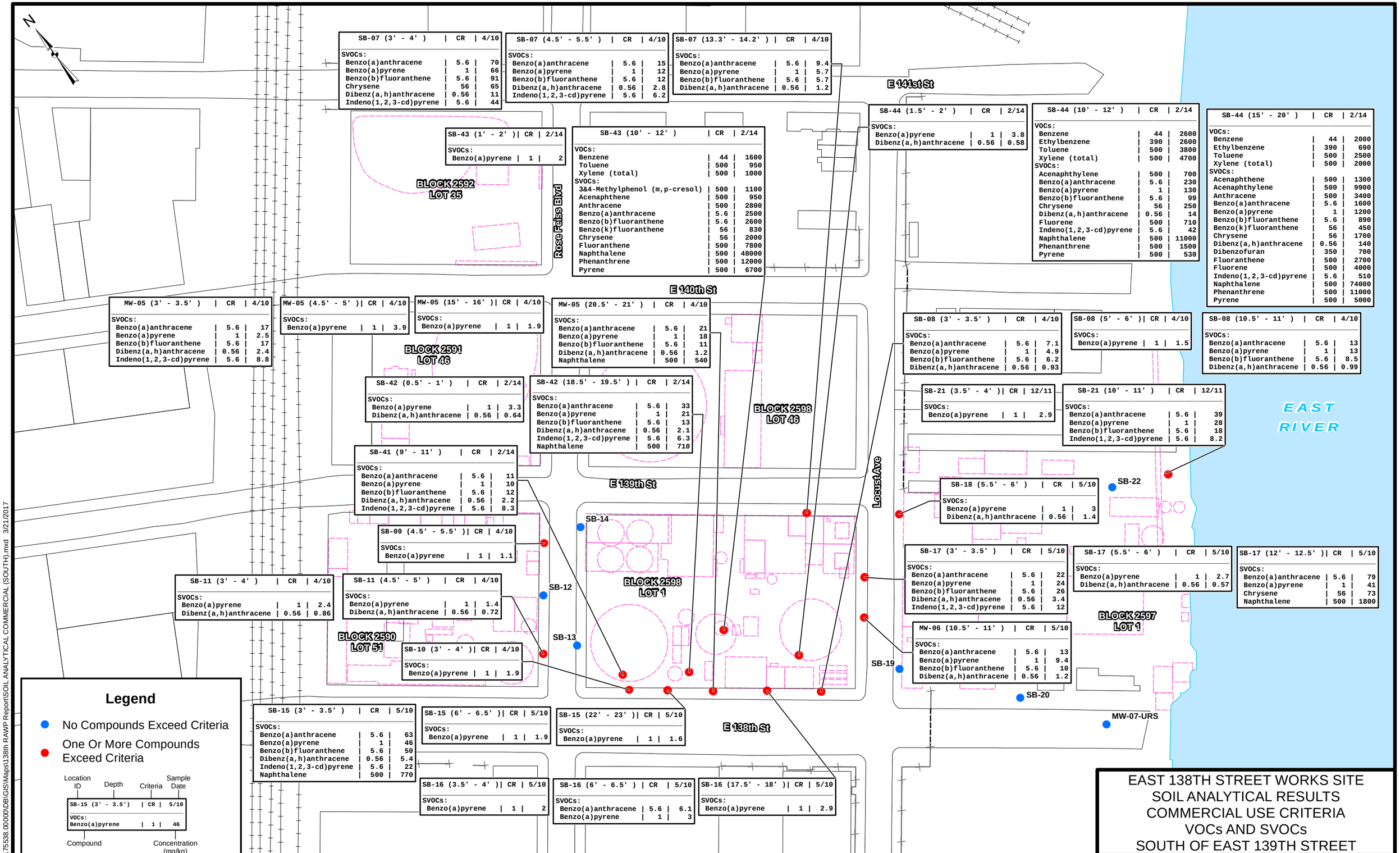
EAST 138TH STREET WORKS SITE BEDROCK GROUNDWATER ELEVATION CONTOURS AT LOW TIDE (AUGUST 12, 2015)

conEdison URS

FIGURE 3-11

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\BW LOW TIDE GW CTRS 08122015.mxd 3/20/2017


N
MW-03 (6' - 7')| CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 1.5
E 141st St
BLOCK 2598 LOT 66
BLOCK 2592 LOT 35
SB-32 (3' - 4') | CR | 1/11 | 1/11
SVOCs:
Benzo(a)anthracene | 5.6 | 7.6 | NS
Benzo(a)pyrene | 1 | 9.2 | 1.8
Benzo(b)fluoranthene | 5.6 | 11 | NS
Dibenz(a,h)anthracene | 0.56 | 1.7 | NS
MW-01 (11' - 12') | CR | 3/10
SVOCs:
Benzo(a)anthracene | 5.6 | 62
Benzo(a)pyrene | 1 | 49
Benzo(b)fluoranthene | 5.6 | 59
Dibenz(a,h)anthracene | 0.56 | 21
Indeno(1,2,3-cd)pyrene | 5.6 | 33
SB-06
BLOCK 2598 LOT 62
MW-04
Locust Ave
MW-11 (5' - 6')| CR | 1/11
SVOCs:
Benzo(a)pyrene | 1 | 1.1
E 140th St
BW-04
SB-39 (3.5' - 4')| CR | 1/11
SVOCs:
Benzo(a)pyrene | 1 | 2.4
SB-39 (5' - 5.5')| CR | 1/11
SVOCs:
Benzo(a)pyrene | 1 | 1.7
BW-03
BLOCK 2598 LOT 46
SB-33 (3.5' - 4')| CR | 1/11
SVOCs:
Benzo(a)pyrene | 1 | 1.6
SB-33 (10.5' - 11') | CR | 1/11
SVOCs:
Benzo(a)anthracene | 5.6 | 16
Benzo(a)pyrene | 1 | 17
Benzo(b)fluoranthene | 5.6 | 21
Dibenz(a,h)anthracene | 0.56 | 2.9
Indeno(1,2,3-cd)pyrene | 5.6 | 9.4
SB-40
SB-03
SB-34
SB-35
SB-02
BLOCK 2591 LOT 46
SB-38 (4' - 5') | CR | 1/11
SVOCs:
Benzo(a)anthracene | 5.6 | 7.1
Benzo(a)pyrene | 1 | 6.4
Benzo(b)fluoranthene | 5.6 | 11
Dibenz(a,h)anthracene | 0.56 | 1.7
Indeno(1,2,3-cd)pyrene | 5.6 | 6
SB-38 (7.8' - 8.5') | CR | 1/11
SVOCs:
Benzo(a)anthracene | 5.6 | 150
Benzo(a)pyrene | 1 | 65
Benzo(b)fluoranthene | 5.6 | 120
Chrysene | 56 | 160
Dibenz(a,h)anthracene | 0.56 | 15
Indeno(1,2,3-cd)pyrene | 5.6 | 44
Naphthalene | 500 | 1100
SB-38 (11' - 11.5')| CR | 1/11
SVOCs:
Benzo(a)pyrene | 1 | 1.4
EAST RIVER
SB-04
SB-01
BW-02
BW-01
MW-02
E 139th St
SB-05 (4' - 5') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 2.8
Dibenz(a,h)anthracene | 0.56 | 0.64
SB-05 (6.5' - 7') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 390
Benzo(a)pyrene | 1 | 290
Benzo(b)fluoranthene | 5.6 | 370
Chrysene | 56 | 390
Dibenz(a,h)anthracene | 0.56 | 27
Fluoranthene | 500 | 1100
Indeno(1,2,3-cd)pyrene | 5.6 | 140
Phenanthrene | 500 | 1200
Pyrene | 500 | 830
Rose Fatss Blvd
SB-36 (3' - 4') | CR | 1/11
SVOCs:
Benzo(a)anthracene | 5.6 | 58
Benzo(a)pyrene | 1 | 50
Benzo(b)fluoranthene | 5.6 | 66
Dibenz(a,h)anthracene | 0.56 | 6.3
Indeno(1,2,3-cd)pyrene | 5.6 | 27
SB-36 (6.5' - 7') | CR | 1/11
SVOCs:
Benzo(a)pyrene | 1 | 1.6
Dibenz(a,h)anthracene | 0.56 | 0.6
BLOCK 2597 LOT 1
BLOCK 2598 LOT 1
BLOCK 2590 LOT 51
SB-37 (3' - 4') | CR | 1/11
SVOCs:
Benzo(a)anthracene | 5.6 | 6.3
Benzo(a)pyrene | 1 | 5.7
Benzo(b)fluoranthene | 5.6 | 7.1
Dibenz(a,h)anthracene | 0.56 | 1
SB-37 (8.5' - 9') | CR | 1/11
SVOCs:
Benzo(a)pyrene | 1 | 2
Benzo(b)fluoranthene | 5.6 | 7.1
Dibenz(a,h)anthracene | 0.56 | 1.4
E 138th St
Legend
No Sample Collected
No Compounds Exceed Criteria
One Or More Compounds Exceed Criteria
Location ID
Depth
Criteria
Sample Date
MW-01 (11' - 12') | CR | 3/10
VOCs:
Benzo(a)pyrene | 1 | 49
Compound
Concentration (mg/kg)
Former MGP Structure
NOTE:
-6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.
-Former MGP Structure Labels can be found on Figure 2-1
110
0
110 Feet
EAST 138TH STREET WORKS SITE
SOIL ANALYTICAL RESULTS
COMMERCIAL USE CRITERIA
VOCs AND SVOCs
NORTH OF EAST 139TH STREET
conEdison
URS
FIGURE 3-12
J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\SOIL ANALYTICAL COMMERCIAL (NORTH).mxd 3/21/2017


N
SB-07 (3' - 4') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 70
Benzo(a)pyrene | 1 | 66
Benzo(b)fluoranthene | 5.6 | 91
Chrysene | 56 | 65
Dibenz(a,h)anthracene | 0.56 | 11
Indeno(1,2,3-cd)pyrene | 5.6 | 44
SB-07 (4.5' - 5.5') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 15
Benzo(a)pyrene | 1 | 12
Benzo(b)fluoranthene | 5.6 | 12
Dibenz(a,h)anthracene | 0.56 | 2.8
Indeno(1,2,3-cd)pyrene | 5.6 | 6.2
SB-07 (13.3' - 14.2') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 9.4
Benzo(a)pyrene | 1 | 5.7
Benzo(b)fluoranthene | 5.6 | 5.7
Dibenz(a,h)anthracene | 0.56 | 1.2
E 141st St
SB-44 (1.5' - 2') | CR | 2/14
SVOCs:
Benzo(a)pyrene | 1 | 3.8
Dibenz(a,h)anthracene | 0.56 | 0.58
SB-44 (10' - 12') | CR | 2/14
VOCs:
Benzene | 44 | 2600
Ethylbenzene | 390 | 2600
Toluene | 500 | 3800
Xylene (total) | 500 | 4700
SVOCs:
Acenaphthylene | 500 | 700
Benzo(a)anthracene | 5.6 | 230
Benzo(a)pyrene | 1 | 130
Benzo(b)fluoranthene | 5.6 | 99
Chrysene | 56 | 250
Dibenz(a,h)anthracene | 0.56 | 14
Fluorene | 500 | 710
Indeno(1,2,3-cd)pyrene | 5.6 | 42
Naphthalene | 500 | 11000
Phenanthrene | 500 | 1500
Pyrene | 500 | 530
SB-44 (15' - 20') | CR | 2/14
VOCs:
Benzene | 44 | 2000
Ethylbenzene | 390 | 690
Toluene | 500 | 2500
Xylene (total) | 500 | 2000
SVOCs:
Acenaphthene | 500 | 1300
Acenaphthylene | 500 | 9900
Anthracene | 500 | 3400
Benzo(a)anthracene | 5.6 | 1600
Benzo(a)pyrene | 1 | 1200
Benzo(b)fluoranthene | 5.6 | 890
Benzo(k)fluoranthene | 56 | 450
Chrysene | 56 | 1700
Dibenz(a,h)anthracene | 0.56 | 140
Dibenzofuran | 350 | 700
Fluoranthene | 500 | 2700
Fluorene | 500 | 4000
Indeno(1,2,3-cd)pyrene | 5.6 | 510
Naphthalene | 500 | 74000
Phenanthrene | 500 | 11000
Pyrene | 500 | 5000
SB-43 (1' - 2') | CR | 2/14
SVOCs:
Benzo(a)pyrene | 1 | 2
SB-43 (10' - 12') | CR | 2/14
VOCs:
Benzene | 44 | 1600
Toluene | 500 | 950
Xylene (total) | 500 | 1000
SVOCs:
3&4-Methylphenol (m,p-cresol) | 500 | 1100
Acenaphthene | 500 | 950
Anthracene | 500 | 2800
Benzo(a)anthracene | 5.6 | 2500
Benzo(b)fluoranthene | 5.6 | 2600
Benzo(k)fluoranthene | 56 | 830
Chrysene | 56 | 2000
Fluoranthene | 500 | 7800
Naphthalene | 500 | 48000
Phenanthrene | 500 | 12000
Pyrene | 500 | 6700
BLOCK 2592
LOT 35
Rose Felss Blvd
E 140th St
MW-05 (3' - 3.5') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 17
Benzo(a)pyrene | 1 | 2.5
Benzo(b)fluoranthene | 5.6 | 17
Dibenz(a,h)anthracene | 0.56 | 2.4
Indeno(1,2,3-cd)pyrene | 5.6 | 8.8
MW-05 (4.5' - 5') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 3.9
MW-05 (15' - 16') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 1.9
MW-05 (20.5' - 21') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 21
Benzo(a)pyrene | 1 | 18
Benzo(b)fluoranthene | 5.6 | 11
Dibenz(a,h)anthracene | 0.56 | 1.2
Naphthalene | 500 | 540
BLOCK 2591
LOT 46
BLOCK 2598
LOT 46
SB-08 (3' - 3.5') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 7.1
Benzo(a)pyrene | 1 | 4.9
Benzo(b)fluoranthene | 5.6 | 6.2
Dibenz(a,h)anthracene | 0.56 | 0.93
SB-08 (5' - 6') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 1.5
SB-08 (10.5' - 11') | CR | 4/10
SVOCs:
Benzo(a)anthracene | 5.6 | 13
Benzo(a)pyrene | 1 | 13
Benzo(b)fluoranthene | 5.6 | 8.5
Dibenz(a,h)anthracene | 0.56 | 0.99
SB-42 (0.5' - 1') | CR | 2/14
SVOCs:
Benzo(a)pyrene | 1 | 3.3
Dibenz(a,h)anthracene | 0.56 | 0.64
SB-42 (18.5' - 19.5') | CR | 2/14
SVOCs:
Benzo(a)anthracene | 5.6 | 33
Benzo(a)pyrene | 1 | 21
Benzo(b)fluoranthene | 5.6 | 13
Dibenz(a,h)anthracene | 0.56 | 2.1
Indeno(1,2,3-cd)pyrene | 5.6 | 6.3
Naphthalene | 500 | 710
SB-21 (3.5' - 4') | CR | 12/11
SVOCs:
Benzo(a)pyrene | 1 | 2.9
SB-21 (10' - 11') | CR | 12/11
SVOCs:
Benzo(a)anthracene | 5.6 | 39
Benzo(a)pyrene | 1 | 28
Benzo(b)fluoranthene | 5.6 | 18
Indeno(1,2,3-cd)pyrene | 5.6 | 8.2
EAST RIVER
SB-41 (9' - 11') | CR | 2/14
SVOCs:
Benzo(a)anthracene | 5.6 | 11
Benzo(a)pyrene | 1 | 10
Benzo(b)fluoranthene | 5.6 | 12
Dibenz(a,h)anthracene | 0.56 | 2.2
Indeno(1,2,3-cd)pyrene | 5.6 | 8.3
E 139th St
Locust Ave
SB-18 (5.5' - 6') | CR | 5/10
SVOCs:
Benzo(a)pyrene | 1 | 3
Dibenz(a,h)anthracene | 0.56 | 1.4
SB-22
SB-14
SB-09 (4.5' - 5.5') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 1.1
SB-17 (3' - 3.5') | CR | 5/10
SVOCs:
Benzo(a)anthracene | 5.6 | 22
Benzo(a)pyrene | 1 | 24
Benzo(b)fluoranthene | 5.6 | 26
Dibenz(a,h)anthracene | 0.56 | 3.4
Indeno(1,2,3-cd)pyrene | 5.6 | 12
SB-17 (5.5' - 6') | CR | 5/10
SVOCs:
Benzo(a)pyrene | 1 | 2.7
Dibenz(a,h)anthracene | 0.56 | 0.57
SB-17 (12' - 12.5') | CR | 5/10
SVOCs:
Benzo(a)anthracene | 5.6 | 79
Benzo(a)pyrene | 1 | 41
Chrysene | 56 | 73
Naphthalene | 500 | 1800
SB-11 (3' - 4') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 2.4
Dibenz(a,h)anthracene | 0.56 | 0.86
SB-11 (4.5' - 5') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 1.4
Dibenz(a,h)anthracene | 0.56 | 0.72
SB-12
BLOCK 2598
LOT 1
BLOCK 2597
LOT 1
BLOCK 2590
LOT 51
SB-13
SB-10 (3' - 4') | CR | 4/10
SVOCs:
Benzo(a)pyrene | 1 | 1.9
MW-06 (10.5' - 11') | CR | 5/10
SVOCs:
Benzo(a)anthracene | 5.6 | 13
Benzo(a)pyrene | 1 | 9.4
Benzo(b)fluoranthene | 5.6 | 10
Dibenz(a,h)anthracene | 0.56 | 1.2
SB-19
SB-20
MW-07-URS
SB-15 (3' - 3.5') | CR | 5/10
SVOCs:
Benzo(a)anthracene | 5.6 | 63
Benzo(a)pyrene | 1 | 46
Benzo(b)fluoranthene | 5.6 | 50
Dibenz(a,h)anthracene | 0.56 | 5.4
Indeno(1,2,3-cd)pyrene | 5.6 | 22
Naphthalene | 500 | 770
SB-15 (6' - 6.5') | CR | 5/10
SVOCs:
Benzo(a)pyrene | 1 | 1.9
SB-15 (22' - 23') | CR | 5/10
SVOCs:
Benzo(a)pyrene | 1 | 1.6
E 138th St
SB-16 (3.5' - 4') | CR | 5/10
SVOCs:
Benzo(a)pyrene | 1 | 2
SB-16 (6' - 6.5') | CR | 5/10
SVOCs:
Benzo(a)anthracene | 5.6 | 6.1
Benzo(a)pyrene | 1 | 3
SB-16 (17.5' - 18') | CR | 5/10
SVOCs:
Benzo(a)pyrene | 1 | 2.9
Legend
No Compounds Exceed Criteria
One Or More Compounds Exceed Criteria
Location ID
Depth
Criteria
Sample Date
SB-15 (3' - 3.5') | CR | 5/10
VOCs:
Benzo(a)pyrene | 1 | 46
Compound
Concentration (mg/kg)
Former MGP Structure
NOTE:
-6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Commercial.
-Former MGP Structure Labels can be found on Figure 2-1
110
0
110 Feet
EAST 138TH STREET WORKS SITE
SOIL ANALYTICAL RESULTS
COMMERCIAL USE CRITERIA
VOCs AND SVOCs
SOUTH OF EAST 139TH STREET
conEdison
URS
FIGURE 3-13
J:\Projects\11175538.00000\DBIGIS\Maps\138th RAWP Report\SOIL ANALYTICAL COMMERCIAL (SOUTH).mxd 3/21/2017

N

MW-03	CRIT	8/15
VOCs:		
1,2-Dichloroethene (cis)	5	3800
Benzene	1	7.8
Vinyl chloride	2	2700
Xylene (total)	5	29
SVOCs:		
Benzo(a)anthracene	0.002	0.97
Benzo(b)fluoranthene	0.002	0.92
Chrysene	0.002	1
Miscellaneous:		
Cyanide, Total	200	470

MW-11	CRIT	8/15
SVOCs:		
bis(2-Ethylhexyl)phthalate	5	6.6

MWMF-05	CRIT	8/15
VOCs:		
1,1,2-Trichloroethane	1	2.4
1,2-Dichloroethane	0.6	14
1,2-Dichloroethene (cis)	5	120
Acetone	50	62
Benzene	1	190
Carbon disulfide	60	110
Chloromethane	5	11
Ethylbenzene	5	110
Isopropylbenzene	5	11
Methyl tert-butyl ether	10	13
Methylene chloride	5	20
Toluene	5	8.5
Vinyl chloride	2	190
Xylene (total)	5	49
SVOCs:		
2-Methylphenol (o-cresol)	1	1.6
3&4-Methylphenol (m,p-cresol)	1	1.1
Naphthalene	10	37
Phenol	1	1.3

MW-01	CRIT	8/15
VOCs:		
Benzene	1	18
Ethylbenzene	5	5.5
Xylene (total)	5	15
SVOCs:		
1,1'-Biphenyl	5	11
Acenaphthene	20	67
Naphthalene	10	570

MWMF-07S	CRIT	8/15
VOCs:		
Isopropylbenzene	5	14
SVOCs:		
3&4-Methylphenol (m,p-cresol)	1	1.2

MWMF-06	CRIT	8/15
VOCs:		
1,2-Dichloroethane	0.6	2
1,2-Dichloroethene (cis)	5	13
Benzene	1	26
Methylene chloride	5	7.8
Vinyl chloride	2	6.4
SVOCs:		
2-Chlorophenol	1	1.2
2-Methylphenol (o-cresol)	1	1.5
3&4-Methylphenol (m,p-cresol)	1	2
Phenol	1	1.1

MWMF-01	CRIT	8/15
VOCs:		
1,2-Dichloroethane	0.6	7.4
Benzene	1	340
Isopropylbenzene	5	15
Methyl tert-butyl ether	10	25
Vinyl chloride	2	3.2
SVOCs:		
Acenaphthene	20	30
Phenol	1	2
Miscellaneous:		
Cyanide, Total	200	898

MWMF-04	CRIT	8/15
VOCs:		
1,1,2,2-Tetrachloroethane	5	22
1,1,2-Trichloroethane	1	120
1,1-Dichloroethane	5	9.4
1,2-Dichloroethane	0.6	150
1,2-Dichloroethene (cis)	5	450
1,2-Dichloroethene (trans)	5	140
1,2-Dichloropropane	1	5.2
Acetone	50	280
Benzene	1	120
Bromomethane	5	140
Carbon disulfide	60	97
Chloroethane	5	80
Chloroform	7	77
Chloromethane	5	720
Methylene chloride	5	320
Tetrachloroethene	5	20
Trichloroethene	5	9.6
Vinyl chloride	2	52
SVOCs:		
2-Nitrophenol	1	3.5
3&4-Methylphenol (m,p-cresol)	1	1.7
4-Nitrophenol	1	2.3
Naphthalene	10	170

MWMF-03	CRIT	8/15
VOCs:		
Benzene	1	26
Miscellaneous:		
Cyanide, Total	200	237

MW-06	CRIT	8/15
VOCs:		
Benzene	1	11
Ethylbenzene	5	47
Isopropylbenzene	5	15
Xylene (total)	5	37
SVOCs:		
1,1'-Biphenyl	5	6.5
Acenaphthene	20	30
Naphthalene	10	34
Miscellaneous:		
Cyanide, Total	200	234

MWMF-08	CRIT	8/15
VOCs:		
1,2-Dichloroethane	0.6	39
1,2-Dichloroethene (cis)	5	30
Acetone	50	140
Benzene	1	1700
Ethylbenzene	5	2600
Isopropylbenzene	5	130
Toluene	5	450
Vinyl chloride	2	15
Xylene (total)	5	2000
SVOCs:		
1,1'-Biphenyl	5	6.1
Naphthalene	10	3800
Phenol	1	6.9
Miscellaneous:		
Cyanide, Total	200	252

MW-05	CRIT	8/15
VOCs:		
1,2-Dichloroethane	0.6	14
1,2-Dichloroethene (cis)	5	6.8
Benzene	1	480
Ethylbenzene	5	640
Isopropylbenzene	5	64
Toluene	5	150
Xylene (total)	5	600
SVOCs:		
1,1'-Biphenyl	5	32
3&4-Methylphenol (m,p-cresol)	1	5.8
Acenaphthene	20	67
Benzo(a)anthracene	0.002	0.95
Benzo(b)fluoranthene	0.002	0.71
Chrysene	0.002	0.92
Naphthalene	10	5700
Phenol	1	3.2
Miscellaneous:		
Cyanide, Total	200	482

E 141st St
E 140th St
E 139th St
E 138th St
Locust Ave
Rose Fales Blvd
BLOCK 2592 LOT 35
BLOCK 2598 LOT 66
BLOCK 2598 LOT 62
BLOCK 2591 LOT 46
BLOCK 2598 LOT 46
BLOCK 2598 LOT 1
BLOCK 2590 LOT 51
BLOCK 2597 LOT 1
MW-01
MW-02
MW-03
MW-04
MW-05
MW-06
MW-07-URS
MWMF-01
MWMF-02
MWMF-03
MWMF-04
MWMF-05
MWMF-06
MWMF-07D
MWMF-07S
MWMF-08
EAST RIVER

Legend

- No Compounds Exceed Criteria
- One Or More Compounds Exceed Criteria

Location ID | Criteria | Sample Date

MWMF-03	CRIT	8/15
VOCs:		
Benzene	1	26

Compound | Concentration (µg/L)

NOTE: NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

110 0 110 Feet

EAST 138TH STREET WORKS SITE OVERBURDEN GROUNDWATER ANALYTICAL RESULTS (AUGUST 2015)

conEdison URS

FIGURE 3-14

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N

E 141st St

BLOCK 2592
LOT 35

BLOCK 2598
LOT 66

BLOCK 2598
LOT 62

E 140th St

BLOCK 2598
LOT 46

BLOCK 2591
LOT 46

Rose Feiss Blvd

Locust Ave

EAST
RIVER

E 139th St

BLOCK 2590
LOT 51

BLOCK 2598
LOT 1

BLOCK 2597
LOT 1

BW-03	CRIT	3/12	8/15
VOCs:			
Benzene	1	44000	72000
Ethylbenzene	5	2700	2600
Isopropylbenzene	5	ND	53
Toluene	5	300	100
Xylene (total)	5	1100	650
SVOCs:			
1,1'-Biphenyl	5	5.5	BC
2-Methylphenol (o-cresol)	1	13	ND
3&4-Methylphenol (m,p-cresol)	1	23	ND
Naphthalene	10	1200	370
Phenol	1	24	8.8
Metals:			
Chromium	50	125	BC
Iron	300	3680	4240
Magnesium	35000	189000	198000
Manganese	300	434	386
Selenium	10	18.3	26.7
Sodium	20000	1760000	1940000
Miscellaneous:			
Cyanide, Total	200	1140	1140

BW-04	CRIT	3/12	8/15
VOCs:			
1,2-Dichloroethane	0.6	ND	82
1,2-Dichloroethene (cis)	5	1200	56
Benzene	1	11000	3100
Ethylbenzene	5	780	1100
Isopropylbenzene	5	ND	24
Styrene	5	2600	410
Toluene	5	8000	2600
Vinyl chloride	2	200	12
Xylene (total)	5	3300	1500
SVOCs:			
1,1'-Biphenyl	5	24	20
2-Methylphenol (o-cresol)	1	16	8.7
3&4-Methylphenol (m,p-cresol)	1	12	8.4
Acenaphthene	20	BC	31
Naphthalene	10	3800	2000
Phenol	1	7.3	10
Metals:			
Iron	300	2940	5590
Magnesium	35000	48300	80100
Manganese	300	588	1000
Selenium	10	ND	15.9
Sodium	20000	285000	204000

BW-02	CRIT	3/12	8/15
VOCs:			
1,1-Dichloroethene	5	ND	6.8
1,2-Dichloroethane	0.6	ND	730
1,2-Dichloroethene (cis)	5	7100	3600
1,2-Dichloroethene (trans)	5	ND	46
Acetone	50	ND	480
Benzene	1	19000	34000
Ethylbenzene	5	1200	750
Isopropylbenzene	5	ND	10
Methyl tert-butyl ether	10	ND	23
Toluene	5	14000	2600
Vinyl chloride	2	990	2000
Xylene (total)	5	8600	4300
SVOCs:			
1,1'-Biphenyl	5	18	11
2,4-Dimethylphenol	50	1500	1400
2-Methylphenol (o-cresol)	1	1300	760
3&4-Methylphenol (m,p-cresol)	1	2400	1200
Naphthalene	10	7300	3700
Phenol	1	1200	540
Metals:			
Iron	300	3130	841000
Lead	25	ND	27
Magnesium	35000	BC	315000
Manganese	300	BC	68700
Nickel	100	BC	562
Selenium	10	ND	28.5
Sodium	20000	220000	2820000
Thallium	0.5	ND	69
Miscellaneous:			
Cyanide, Total	200	7160	1880

BW-01	CRIT	3/12	8/15
VOCs:			
1,2-Dichloroethene (cis)	5	220	230
Benzene	1	26000	37000
Ethylbenzene	5	1200	2000
Isopropylbenzene	5	ND	23
Styrene	5	4300	ND
Toluene	5	12000	13000
Vinyl chloride	2	ND	66
Xylene (total)	5	5700	5000
SVOCs:			
1,1'-Biphenyl	5	28	33
2,4-Dimethylphenol	50	ND	270
2-Methylphenol (o-cresol)	1	80	170
3&4-Methylphenol (m,p-cresol)	1	21	47
Acenaphthene	20	BC	29
bis(2-Chloroethyl)ether	1	70	ND
Naphthalene	10	6800	6100
Phenol	1	15	31
Metals:			
Iron	300	38400	60200
Magnesium	35000	74100	136000
Manganese	300	1780	2650
Selenium	10	ND	22.8
Sodium	20000	401000	569000
Miscellaneous:			
Cyanide, Total	200	221	218

Legend

- No Compounds Exceed Criteria
- One Or More Compounds Exceed Criteria

Location ID | Criteria | Sample Date

BW-03	CRIT	3/12	8/15
VOCs:			
Benzene	1	44000	72000

Compound | Concentration (µg/L)

ND - Not Detected
BC - Below Criteria

NOTE: NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (including April 2000 and June 2004 addenda). Class GA.

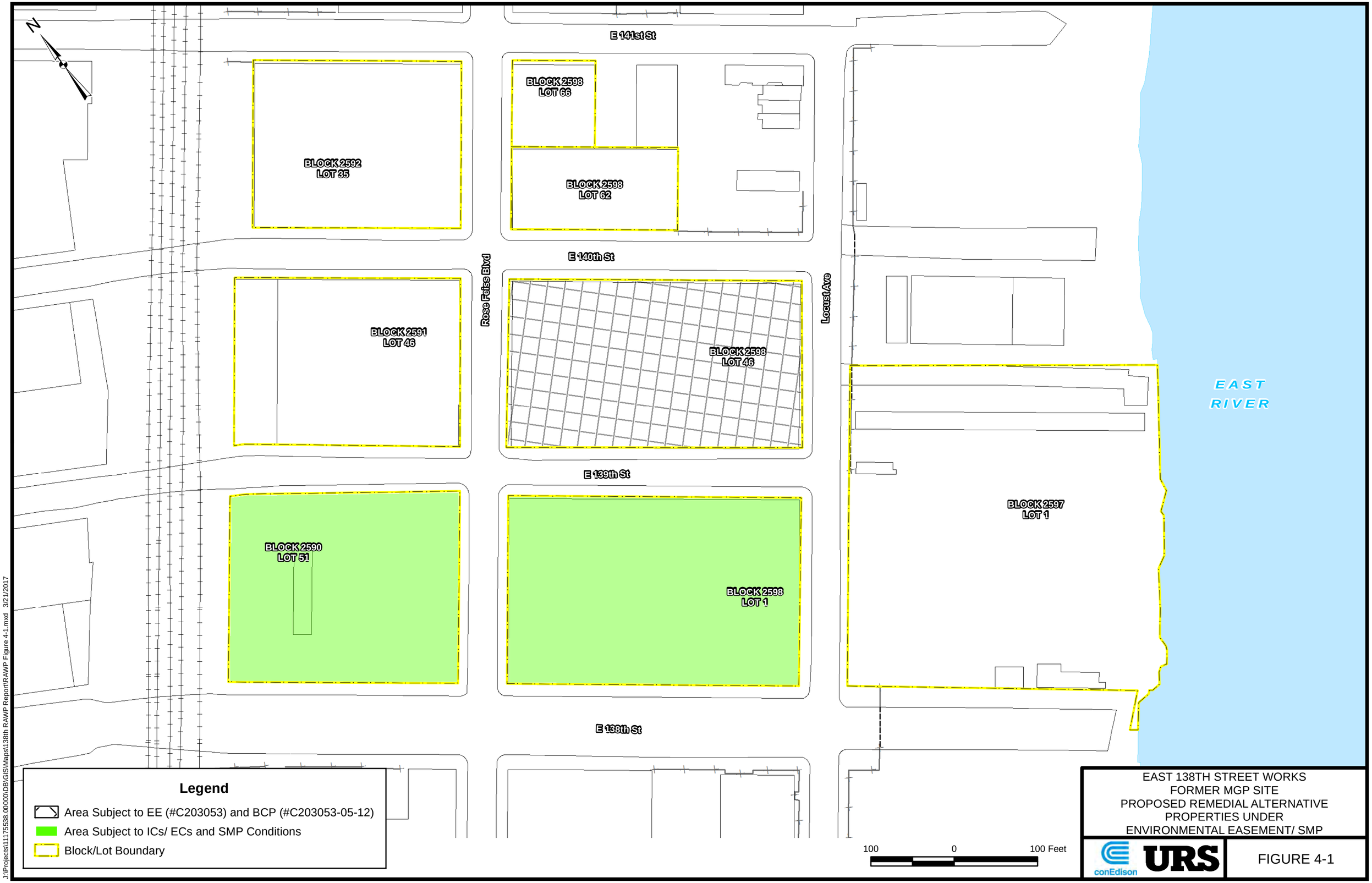
110 0 110 Feet

EAST 138TH STREET WORKS SITE
BEDROCK GROUNDWATER ANALYTICAL RESULTS
(MARCH 2012 & AUGUST 2015)

conEdison URS

FIGURE 3-15

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\BEDROCK GW ANALYTICAL.mxd 3/20/2017


N
E 141st St
BLOCK 2592
LOT 35
BLOCK 2593
LOT 66
BLOCK 2593
LOT 62
E 140th St
Rose Feiss Blvd
Locust Ave
BLOCK 2591
LOT 46
BLOCK 2593
LOT 46
EAST
RIVER
E 139th St
BLOCK 2597
LOT 1
BLOCK 2590
LOT 51
BLOCK 2593
LOT 1
E 138th St
Legend
Area Subject to EE (#C203053) and BCP (#C203053-05-12)
Area Subject to ICs/ ECs and SMP Conditions
Block/Lot Boundary
100
0
100 Feet
EAST 138TH STREET WORKS
FORMER MGP SITE
PROPOSED REMEDIAL ALTERNATIVE
PROPERTIES UNDER
ENVIRONMENTAL EASEMENT/ SMP
conEdison
URS
FIGURE 4-1
J:\Projects\111\75538.00000\DB\GIS\Maps\138th RAWP Report\RAWP Figure 4-1.mxd 3/21/2017

N

E 141st St

MW-03

BLOCK 2592
LOT 35

Rose Feiss Blvd

BLOCK 2598
LOT 66

BLOCK 2598
LOT 62

Locust Ave

MW-04

E 140th St

MW-01

MW-11

BLOCK 2591
LOT 46

MWMF-01

BW-04

MWMF-07D

MWMF-07S

MWMF-05

BW-03

BLOCK 2598
LOT 46

MWMF-06

MWMF-02

MWMF-08

MWMF-03

BW-01

MWMF-04

BW-02

MW-02

E 139th St

BLOCK 2590
LOT 51

BLOCK 2598
LOT 1

MW-06

MW-05

BLOCK 2597
LOT 1

MW-07-URS

E 138th St

EAST
RIVER

100 0 100 Feet

Legend

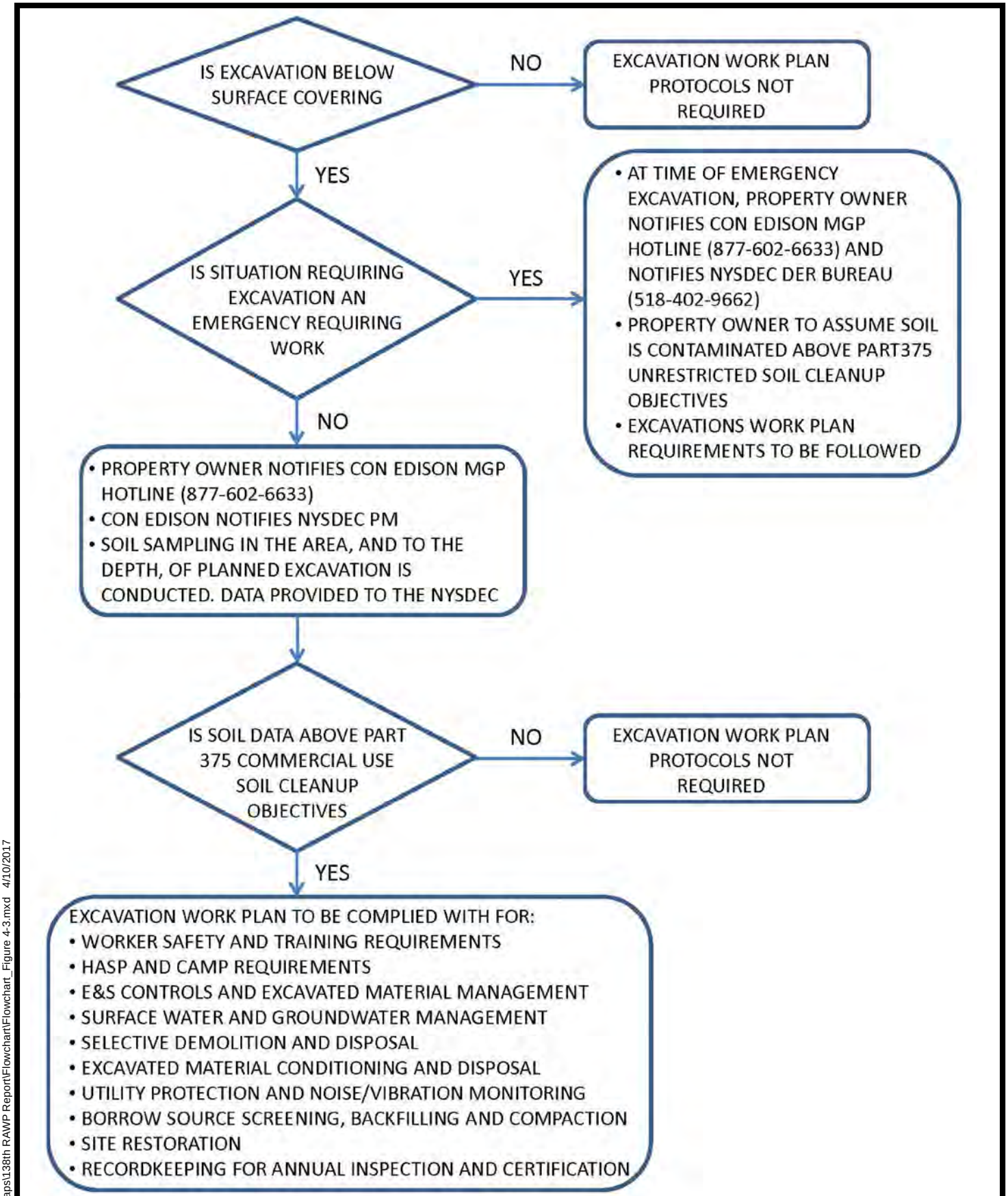
- MW-02 Existing Monitoring Well to be included in Annual Groundwater Monitoring
- MW-01 Proposed Monitoring Well to be Decommissioned
- BW-01 Existing Becrock Monitoring Well - NAPL Measurements Only
- Block/Lot Boundary

EAST 138TH STREET WORKS SITE
ANNUAL GROUNDWATER MONITORING
PROGRAM WELLS

conEdison URS

FIGURE 4-2

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\RAWP Figure 4-2.mxd 4/6/2017



EAST 138TH STREET WORKS
FORMER MGP SITE
REMEDIAL ACTION WORK PLAN
INTRUSIVE ACTIVITES GUIDELINES

conEdison URS

FIGURE 4-3

J:\Projects\11175538.00000\DB\GIS\Maps\138th RAWP Report\Flowchart\Flowchart_Figure 4-3.mxd 4/10/2017

APPENDIX A

NYSDEC CORRESPONDENCE – BLOCK 2591, LOT 46

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9662 • **Fax:** (518) 402-9679
Website: www.dec.ny.gov

Joe Martens
Commissioner

August 22, 2011

Richard Rienzo
Project Manager
Remediation, EH&S
31-02 20th Avenue
Long Island City, NY 11105-2048

RE: East 138th Street Works Former MGP Site
Voluntary Cleanup Program Site No. V-00551
Paper Enterprises Building
Site Characterization

Dear Mr. Rienzo,

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the data collected around and within the Paper Enterprises building portion of the East 138th Street Works Former MGP Site (E. 138th). At this time, no additional investigation is needed to characterize MGP wastes at the Paper Enterprises building as a part of ConEd's Site Characterization (SC).

The data indicates that no significant source of MGP contamination was found on the parcel. Contamination found at the Paper Enterprises property is associated with a number 4 fuel oil spill and historical fill. The number 4 fuel oil spill, Spill Number 0903483, will be addressed through the Department's Region 2 Spills Section.

The Paper Enterprises portion of the E. 138th site SC should be reported on within the E. 138th site SC report. A separate report for the Paper Enterprises portion is not needed.

If you have any questions concerning this matter, please contact me at (518) 402-9662.

Sincerely,

Randy Whitcher
Project Manager
Remedial Bureau C
Division of Environmental Remediation

Ec: G. Heitzman
R. Whitcher
C. Doroski - NYSDOH
eDocs

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9662 • **Fax:** (518) 402-9679
Website: www.dec.ny.gov

Joe Martens
Commissioner

September 20, 2011

Richard Rienzo
Project Manager
Remediation, EH&S
31-02 20th Avenue
Long Island City, NY 11105-2048

RE: East 138th Street Works Former MGP Site
Voluntary Cleanup Program Site No. V00551
Paper Enterprises Building
Site Characterization

Dear Mr. Rienzo,

The New York State Department of Environmental Conservation (Department) has reviewed the data collected around and within the Paper Enterprises building portion of the East 138th Street Works Former MGP Site (E. 138th). The data presented by Con Edison indicates that the subject property does not contain a significant quantity of wastes from the former manufactured gas plant. The Department will not require remedial action or an institutional control at this property to address MGP-related wastes. As noted in Randy Whitcher's August 22, 2011 letter, contamination found at the Paper Enterprises property appears to be associated with a number 4 fuel oil spill (DEC Spill Number 0903483) and historical fill. Actions may be necessary to properly close the open petroleum spill.

Because this parcel comprises only a portion of the larger MGP site, a Release and Covenant Not to Sue, as defined in the Voluntary Cleanup Agreement, will not be issued until the remainder of the site has been addressed. If you need further assistance with this matter, please contact me or Mr. Randy Whitcher at 518-402-9662.

Sincerely,

George W. Heitzman, P.E.
Chief, Remedial Section A
Remedial Bureau C
Division of Environmental Remediation

INTERNATIONAL YEAR OF FORESTS 2011

ec: E. Louie, ConEd
M. Ryan
G. Heitzman
R. Whitcher

APPENDIX B

SITE INSPECTION, MONITORING WELL INSPECTION/MAINTENANCE AND MONITORING WELL DECOMMISSIONING RECORD FORMS

URS
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NEW YORK 14202-2657
PHONE: (716) 856-5636

East 138th Street Works Former MGP Site Annual Site Inspection

Inspected by: _____ Date: _____

SBL #	Current Site Owner	Current Property Use & Comments
Block 2590 Lot 51		
Block 2598 Lot 1		

URS

257 WEST GENESEE STREET, SUITE 400
BUFFALO, NEW YORK 14202-2657
PHONE: (716) 856-5636

MONITORING WELL INSPECTION FORM

SITE NAME: East 138th Street Works Former MGP Site

JOB#: 60537238

DATE:

TIME:

WELL ID:

INSPECTOR (PRINT):

EXTERIOR INSPECTION CONDITION

PROTECTIVE CASING/ CURB BOX:

LOCK/HASP CONDITION: LOCK KEY #: N/A

HINGE/ LID: GASKET/SEAL :

SECURITY BOLTS TYPE:

SECURITY BOLTS : THREAD CONDITION:

WELL PAD: BOLLARDS: NA

LABEL/ ID CONDITION:

MAINTENANCE PERFORMED (e.g., anti seize applied, re-tapping bolt holes, bolt replacement, gasket replacement, etc.)

INTERIOR INSPECTION CONDITION

WELL CASING INTERIOR:

WELL RISER:

ANNULAR SPACE:

J PLUG:

WATER LEVEL: DEPTH TO BOTTOM:

HARD/SOFT BOTTOM:

MAINTENANCE PERFORMED (e.g., removed water, removed bentonite, sorbed sheen, replaced J plug, etc.)

ADDITIONAL COMMENTS:

INSPECTOR (SIGNATURE):

PROJECT MANAGER APPROVAL:

URS
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NEW YORK 14202-2657
PHONE: (716) 856-5636

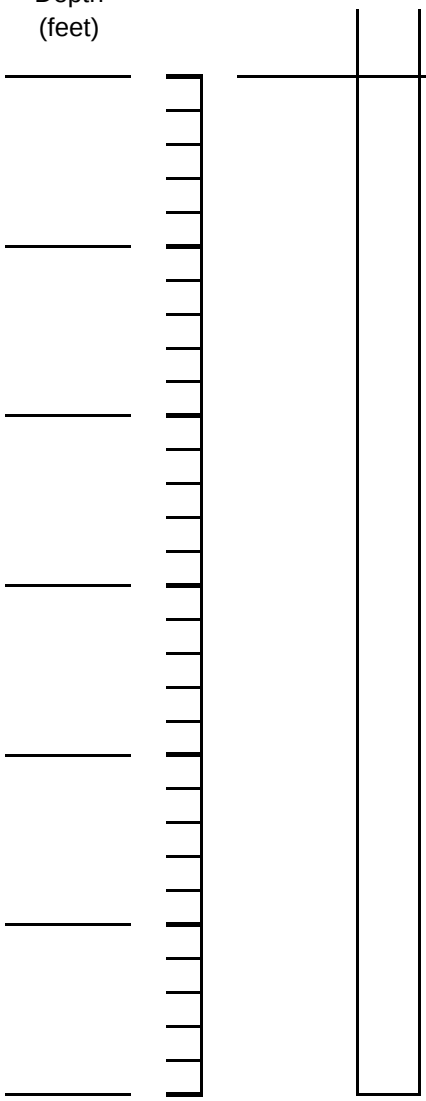
WELL DECOMMISSIONING RECORD

Site Name: East 138th Street Works Former MGP Site	Well I.D.:
Site Location: East 138th St. to East 140th St., Bronx, NY	Driller:
Drilling Co.:	Inspector:
	Date:

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	
# of batches prepared	
For each batch record:	
Quantity of water used (gal.)	
Quantity of cement used (lbs.)	
Cement type	
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	

WELL SCHEMATIC*



COMMENTS:

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor

Department Representative

APPENDIX C

EAST 138TH STREET WORKS FORMER MGP SITE

CERTIFICATION FORM

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. V00551

Site Name East 138th Street Works Former MGP Site
Site Address: East 138th Street to East 140th Street
City/Town: Bronx Zip Code: 10454
County: Bronx
Site Acreage: 12.2

Reporting Period:

	YES	NO	N/A
1. Is the information above correct? If NO, include handwritten above or on a separate sheet.	☐	☐	☐
2. Has some or all of the property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☐	☐
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☐	✔
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☐	☐

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

	YES	NO	N/A
5. Is the property currently undergoing development?	☐	☐	☐

Box 2

	YES	NO	N/A
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☐	☐	☐
7. Are all ICs/ECs in place and functioning as designed?	☐	☐	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____
Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. V00551 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control

Description of Engineering Controls **Box 4**

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) 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

YES	NO
☐	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) 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;

(d) nothing has occurred that would constitute a violation or failure to comply with the Operation and Maintenance Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☐	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. V00551

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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 _____ at _____,
print name print business address

am certifying as _____(Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

_____ _____
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification Date

IC/EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 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 _____ at _____,
print name print business address

am certifying as a for the _____
(Owner or Remedial Party)

Signature of , for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
- A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
- B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
  1. progress made during the reporting period toward meeting the remedial objectives for the site
  2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
- C. Compliance
  1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
  2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
- D. Recommendations
  1. recommend whether any changes to the SMP are needed
  2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
  3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)

A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.

B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
- A. IC/EC Requirements and Compliance
  1. Describe each control, its objective, and how performance of the control is evaluated.
  2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
  3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
  4. Conclusions and recommendations for changes.
- B. IC/EC Certification
  1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)

A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.

B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.

C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.

D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.

E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)

A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.

B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.

C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;

1. whether all requirements of each plan were met during the reporting period
2. any requirements not met
3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals

1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.