EAST RIVER PLAZA
MANHATTAN, NEW YORK

SITE MANAGEMENT PERIODIC REVIEW REPORT
MAY 14, 2018 THROUGH MAY 14, 2021

NYSDEC BCP Number: C231045

Prepared for:

Tiago Holdings, LLC
Tiago Parking Holdings, LLC
Tiago Development, LLC
300 Robbins Lane, Syosset, New York

Prepared by:

FPM group
An Olgoonik Company

640 JOHNSON AVENUE, SUITE 101
BOHEMIA, NEW YORK 11776

JULY 2021

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF ACRONYMS

Acronym	Definition
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Program
COC	Certification of Completion
CoC	chain-of-custody
ECs/ICs	Engineering and Institutional Controls
ELAP	Environmental Laboratory Approval Program
FEMA	Federal Emergency Management Agency
FER	Final Engineering Report
FPM	FPM Group, Ltd.
HASP	Health and Safety Plan
MS/MSD	Matrix spike/matrix spike duplicate
MSL	mean sea level
NYCDEP	New York City Department of Environmental Protection
NYCRR	New York Code of Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PE	Professional Engineer
PID	Photoionization detector
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
RCA	Recycled concrete aggregate
SCOs	Site-specific Cleanup Objectives
SMP	Site Management Plan
SoMP	Soil Management Plan
SPDES	State Pollutant Discharge Elimination System
SVOCs	semivolatile organic compounds
TAL	Target Analyte List
TCL	Target Compound List
ug/l	micrograms per liter
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
USTs	Underground Storage Tanks
VOCs	volatile organic compounds

SECTION 1.0
INTRODUCTION AND SITE OVERVIEW

1.1 INTRODUCTION

This Site Management Periodic Review Report (PRR) was prepared by FPM Group (FPM) to document ongoing site management activities at East River Plaza (Site) conducted between May 15, 2018 and May 14, 2021 under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with the Brownfield Cleanup Agreement (BCA) Index# W2-1068-05-06, Site No. C231045, issued on June 15, 2005. The remedial activities were documented in the Final Engineering Report (FER) in December 2007 and the Certificate of Completion (COC) was issued on December 28, 2007.

Site management activities have been ongoing in accordance with the Site Management Plan (SMP) since the completion of remedial activities in November/December 2006. A revision of the groundwater monitoring procedures in the SMP was requested by the NYSDEC in 2009 to incorporate the US Environmental Protection Agency (USEPA) low-flow sampling methodology to reduce sample turbidity so as to better evaluate metals concentrations in groundwater. These revised procedures have been used since late 2009. The pertinent portions of the SMP were revised in August 2009 and the NYSDEC approved the revisions in September 2009. The groundwater monitoring program was terminated in 2011, as approved by the NYSDEC in 2011 (June 29, 2011 correspondence). The pertinent portions of the SMP were revised in July 2011 and the NYSDEC approved the revisions in August 2011 (August 18, 2011 correspondence). Site management activities for the reporting period are summarized herein in accordance with guidelines provided by the NYSDEC in an April 2, 2021 correspondence (reminder notice).

NYSDEC correspondence received during the reporting period includes a July 12, 2018 letter accepting the prior PRR and associated certification and the April 2, 2021 reminder notice, copies of which are included in Appendix B.

1.2 PRR EXECUTIVE SUMMARY

The findings in this PRR are summarized as follows:

- The Site was a former wire manufacturing facility. Soil impacted with petroleum and/or metals was present onsite. Limited groundwater impacts were also present.
- Remediation was completed in 2006 and included removal of all soil exceeding Track 4 Site-specific Cleanup Objectives (SCOs).

- Residual soil remained present following remediation and was covered by an approved gravel cover prior to the NYSDEC's issuance of the COC in December 2007. This gravel cover has been replaced by a cover consisting of pavement and/or concrete slabs at the lowest level of the building.
- Engineering and Institutional Controls (ECs/ICs) are present, including a composite cover system, a vapor barrier, and an environmental easement that restricts Site usage to commercial and restricted residential (above the first floor).
- Groundwater monitoring has been performed to evaluate the effectiveness of the remedy. Revisions to the SMP were approved by the NYSDEC in 2009 to incorporate low-flow groundwater sampling procedures. This change was implemented in the 3rd quarter of 2009 and generally resulted in lower turbidity samples for all of the Site wells. The groundwater monitoring program was terminated in 2011, as approved by the NYSDEC in June 2011. The final groundwater monitoring performed in March 2011 continued to confirm that the remedy has been effective at eliminating Site-related impacts to groundwater quality. The groundwater monitoring well network has been maintained during the reporting period.
- Management of residual materials is governed by the SMP. No residual materials required management during the reporting period as there were no activities that impacted the cover system or vapor barrier.

➢ <u>Effectiveness of Remedial Program</u>

- The remedial program is effective, as evidenced by the continued improvement in downgradient groundwater quality observed in previous groundwater monitoring events.
- The final cover and vapor barrier remained in place throughout the reporting period and are effective at protecting the public from residual soil.

➢ <u>Compliance</u>

- All aspects of the Site are in compliance with the elements of the SMP.

➢ <u>Recommendation</u>

- No changes are recommended for the currently-approved monitoring, operation, or maintenance activities.

1.3 SITE OVERVIEW

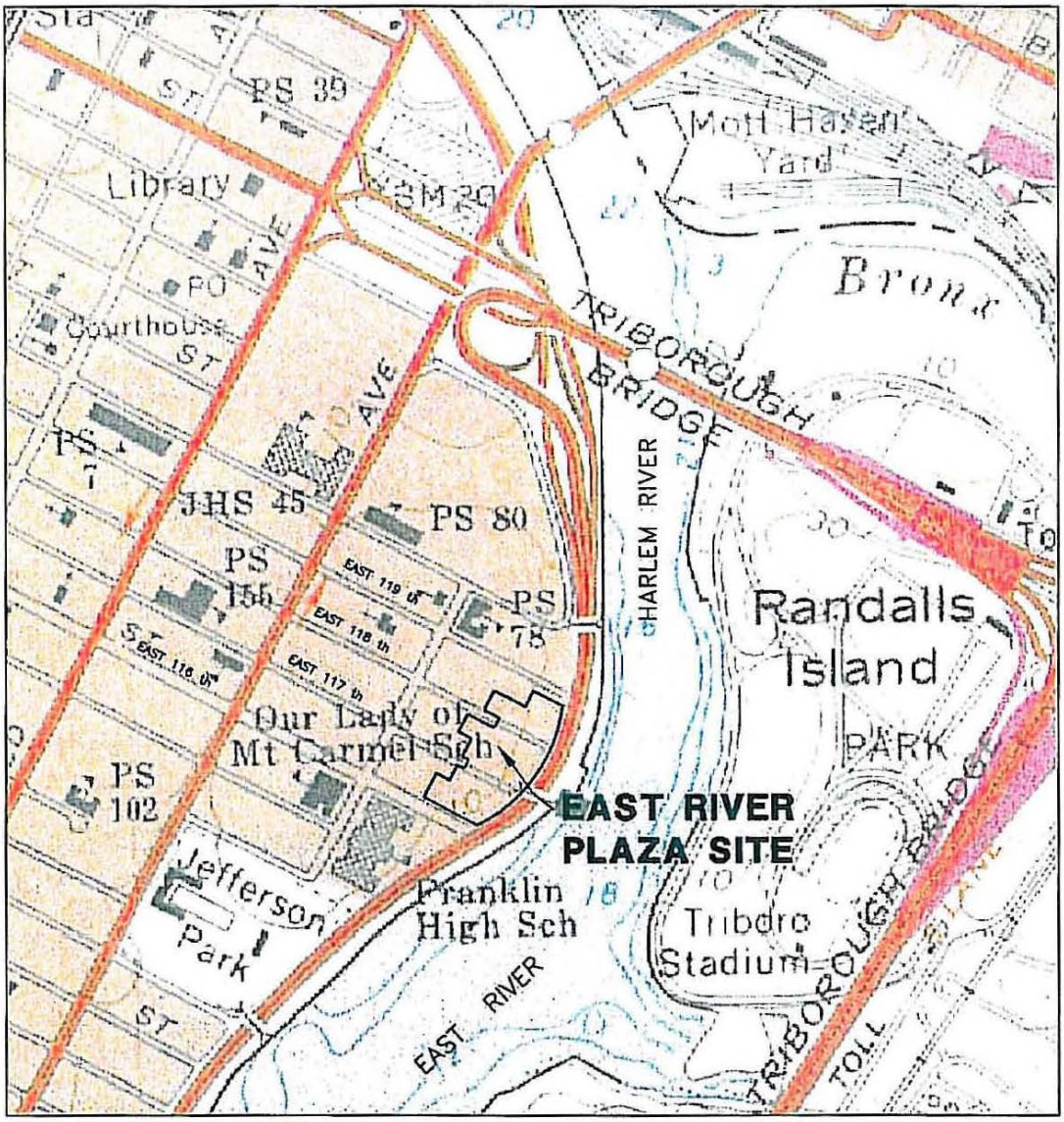
Tiago Holdings, LLC, Tiago Parking Holdings, LLC and Tiago Development, LLC (collectively Tiago) entered into a BCA with the NYSDEC for a 4.5-acre property located in a mixed commercial and residential area of East Harlem, Manhattan, New York. This BCA required Tiago to investigate and remediate contaminated media at the Site, which would be performed during redevelopment of the Site for commercial and residential use. A map of the Site location is shown in Figure 1.3.1; the Site boundary is shown overlain on an historic aerial view prior to redevelopment in Figure 1.3.2. The Site boundary is described in detail in the Environmental Easement, a copy of which is included in Appendix A.

The Site was initially developed prior to 1896 and was occupied by the Washburn Wire Company, which engaged in manufacturing of wire up until its closure in the 1980s. The Site was abandoned from the 1980s until remedial activities commenced in 2005. Prior to remediation, the parcels comprising the Site were purchased by Tiago, which is the current owner of the Site and the BCP Volunteer Applicant.

Investigations of the Site showed an area of petroleum-contaminated soil on the east side of the Site associated with former subsurface concrete vaults containing heating oil tanks. Floating product was also formerly present in this area. An area of metal-contaminated soil was identified on the east side of the Site in an area where acid tanks were formerly present. Each of these areas was addressed during the remedial action.

The topographic elevation of the Site, prior to remediation, was generally between 7 and 12 feet above mean sea level (MSL) and had been previously significantly modified from its original grade by placement of fill, presumably in conjunction with historic development. The remedial action removed the majority of the fill, lowering most of the Site to an elevation of approximately one foot above the existing water table. Groundwater at the Site is found at a depth of approximately 10 feet below the pre-redevelopment grade and flows to the southeast, toward the Harlem River.

The Site was remediated in accordance with the September 2005 NYSDEC-approved Remedial Work Plan. The remedial actions included excavation and disposal of soil, placement of a cover over residual soil, installation of a vapor barrier, and groundwater and soil vapor monitoring. Soil removal was conducted to the targeted depth in all areas of the Site. Remedial excavation work was completed on November 14, 2006. Subsequent soil excavation work performed for construction purposes was conducted using NYSDEC-approved soil management procedures.



FPM GROUP

FIGURE 1.3.1
SITE LOCATION
EAST RIVER PLAZA SITE
NEW YORK, N.Y.

Drawn By: H.C.	Checked By: S.D.	Date: 4/28/10

1"=200'

4-16-05

Clients\BDG\ERPBrownfields\CertificationRpt2011\Fig132-AerialSMR

Figure 1.3.2

Dewatering was routinely performed at the Site during remediation to allow access to submerged infrastructure to be removed for Site redevelopment. Stormwater accumulations were also removed as necessary. All removed fluids were discharged to the New York City combined sewer system in accordance with a NYCDEP sewer discharge permit.

The post-remediation samples confirmed that the remaining soil does not exceed the Track 4 SCOs. The remaining contaminated soil (residual soil) following remedial work was found generally at or below the water table and was covered by cover materials at the end of remedial activities. The cover materials at that time consisted of at least one foot of cover gravel underlain by a demarcation layer of Mirafi fabric. These cover materials have been replaced by a final cover during the ongoing redevelopment activities, as documented herein. The final cover was completed in 2009.

ECs and ICs have been implemented to protect public health and the environment from residual materials. There are two ECs: (1) a composite cover system consisting of asphalt and/or concrete pavement, concrete building slabs and walls, and/or one foot of gravel meeting the cover requirements in 6 NYCRR Part 375; and (2) vapor barrier materials consisting of a water-tight basement slab and wall sealing system. The composite cover system underwent modification during Site development. This modification included replacement of the cover gravel and Mirafi fabric demarcation layer with the asphalt and/or concrete pavement and concrete building slabs and walls.

A Soil Management Plan (SoMP) is included in the SMP for this Site. No soil management activities occurred during the reporting period as there were no activities beneath the cover system in this period.

The sub-grade portions of the Site building have been provided with a vapor barrier and seal system for waterproofing purposes during the development phase of this project; the vapor barrier was completed in 2009.

ICs are in place so as to implement, maintain, and monitor these ECs. The Site has ICs in the form of Site restrictions. Adherence to these ICs is required under the Environmental Easement, a copy of which is included in Appendix A. The ICs are discussed in detail in Section 2 of this PRR.

1.4 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

The remedy has been implemented in compliance with the Site-specific Remedial Work Plan and FER and continues to be managed in compliance with the SMP. This remedy continues to perform effectively and protect the public from the remaining residual materials at the Site.

Throughout the reporting period, the complete final cover system of asphalt and/or concrete pavement and concrete slabs and walls was present and in good condition in compliance with the SMP. The vapor barrier system was completed in 2009 in conjunction with the installation of the final cover system. The vapor barrier is confirmed to be in compliance with the SMP. The cover and vapor barrier systems are effective and protect the public from exposure to residual materials at the Site.

The approved Site usage is commercial and restricted residential (residential use above the first floor). The first commercial tenant occupancy occurred in November 2009 and commercial tenants have occupied the Site throughout the reporting period. No residential use occurred during the reporting period. The Site development and usage are consistent with these approved uses. These use restrictions are effective at protecting the public from residual materials that remain onsite.

Groundwater monitoring was not conducted during the reporting period as the NYSDEC approved the termination of the groundwater monitoring program in June 2011. Inspection and maintenance of the groundwater monitoring wells was conducted as necessary. Well M-10C was damaged in 2017 due to an auto accident. This well was repaired during the prior reporting period and continues to remain functional. Previous groundwater monitoring has demonstrated that the remedy has been effective in achieving the remedial goal of improving and protecting groundwater quality.

SECTION 2.0
ENGINEERING AND INSTITUTIONAL CONTROLS COMPLIANCE

Remedial activities were completed at the Site in November/December 2006 and included excavation and removal of soils exceeding Track 4 Soil Cleanup Objectives (SCOs). ECs and ICs were then implemented to control human exposure to residual materials such that the Site would be suitable for commercial and restricted residential use. A summary of the EC/ICs implemented at the Site are as follows:

- Maintenance of an engineered composite cover consisting of asphalt and/or concrete pavement, concrete building slabs, and/or one foot of gravel meeting the cover requirements in 6 NYCRR Part 375 to prevent human exposure to residual contaminated soils remaining under the Site;
- Recording of an Environmental Easement, including ICs, to prevent future exposure to any contamination remaining at the Site;
- Installation of vapor barrier materials consisting of a water-tight basement slab and wall sealing system; and
- A Soil Management Plan (SoMP) with procedures to manage residual materials that may be disturbed during intrusive work beneath the cover materials.

Monitoring of the ECs and ICs was performed during the reporting period (May 14, 2018 through May14, 2021) and the results are documented below. Certification of the ICs and ECs is discussed at the end of this section.

2.1 ENGINEERING CONTROL COMPONENTS

2.1.1 Composite Cover System

Exposure to residual contaminated soil is prevented by an engineered composite cover system comprised of asphalt and/or concrete pavement, concrete-covered sidewalks, concrete building slabs, and/or one foot of gravel meeting the cover requirements in 6 NYCRR Part 375. Performance of the cover system EC is monitored by inspection.

The final cover elements (pavement and building slabs) remained in place over the entire Site throughout the reporting period. A Site plan showing the cover system that was in place throughout the reporting period is presented in Appendix B. The completed cover system checklists for the reporting period are also included in Appendix B. FPM has no recommendations for changes in this EC.

2.1.2 Vapor Barrier System

The sub-grade portions of the building (slab and foundation walls) were provided with a barrier and seal system for waterproofing purposes during the Site construction. This barrier and seal system also functions as a vapor barrier. The barrier and seal system includes a water-tight basement slab and wall system designed with a positive side waterproofing membrane beneath the slab, pile caps, and elevator pits using a sheet membrane waterproofing material. The foundation walls were also waterproofed using a similar sheet membrane waterproofing material applicable for walls. Penetrations through the slab and/or wall for pipes and duct banks were sealed in accordance with approved manufacturer's details.

The waterproofing materials were installed in association with each building foundation and cover element as it was constructed. The performance of the vapor barrier system EC is monitored by inspection. FPM conducted vapor barrier system inspections in 2018, 2019, and 2020; the results are documented on the completed checklists in Appendix B. The vapor barrier system remained in place and undisturbed throughout the reporting period. No issues were identified with the completed vapor barrier system and FPM has no recommendations for changes to this EC.

2.2 INSTITUTIONAL CONTROLS COMPONENTS

ICs are required at this Site to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to residual contamination by controlling disturbances of the subsurface contamination; and, (3) restrict the use of the Site to commercial and restricted residential uses only. Adherence to these ICs on the Site is required under the Environmental Easement recorded with the Office of the City Register of New York, City of New York on December 24, 2007. A copy of the recorded Environmental Easement is included in Appendix A. Implementation, maintenance, and monitoring of the EC systems were discussed in Section 2.1 above. Management of residual materials and restrictions on Site usage are discussed below.

2.2.1 Management of Residual Materials

An SoMP is included in the approved SMP; intrusive work that will disturb the residual materials is performed in compliance with the SoMP. No intrusive work was performed during the reporting period and, therefore, no management of residual materials was required.

The SoMP should continue to be implemented at the Site whenever residual soil is managed. The SoMP procedures are effective at controlling public exposure to residual soil. FPM has no recommendations for changes to the SoMP.

2.2.2 Restrictions on Site Usage

The Site usage is restricted to commercial and restricted residential (restricted residential above the first floor only) uses. Confirmation of Site usage is provided by inspection. Notification of restrictions on Site usage is also provided by statements required in the property deed, instruments of conveyance, leases, licenses, and other instruments granting rights to use the Site.

Confirmation of Site usage is documented in the Site-wide inspection checklists, copies of which are included in Appendix B. The first tenant occupancy occurred in November 2009, other tenant spaces were occupied during 2010, and commercial usage continued during the reporting period. All usage is commercial in conformance with approved Site usage. No deficiencies are noted and FPM has no recommendations for changes in Site usage or confirmation procedures.

Notification of restrictions on Site usage is provided in various conveyance and lease/license documents. Tiago, the Site owner, has confirmed that each of the Site conveyance and lease/license documents prepared since the Site COC was issued contains the necessary language. This confirmation is included with the EC/IC Certification Form in Appendix B. No deficiencies are reported and FPM has no recommendations for changes to these notifications.

2.3 EC/IC CERTIFICATION

The EC/IC Certification Form provided by the NYSDEC in its April 2, 2021 correspondence has been completed in accordance with the associated certification instructions. The completed certification form is included in Appendix B.

SECTION 3.0
MONITORING PLAN COMPLIANCE

The monitoring plan for the Site includes measures for evaluating the performance and effectiveness of the implemented ECs (cover system, vapor barrier) in reducing or mitigating contamination at the Site and are documented below. Direct monitoring of the ECs is performed by inspection and is documented in Section 2 of this PRR.

3.1 GROUNDWATER MONITORING

Groundwater monitoring was not conducted during the reporting period as the NYSDEC approved the termination of the groundwater monitoring program in June 2011. Inspection and maintenance of the groundwater monitoring wells was conducted as necessary. This work is documented in the following sections.

3.1.1 Groundwater Monitoring System Components

The network of monitoring wells (M-8 through M-14, shown on Figure 3.1.1) was designed to monitor both upgradient and downgradient groundwater conditions at the Site. The wells were monitored for volatile and semivolatile organic compounds (VOCs and SVOCs) and metals on a quarterly basis starting in the first year following issuance of the COC (2008). The frequency of monitoring has since been modified, as approved by the NYSDEC. The network of Site wells has been located in the downgradient vicinity of the former area of petroleum-impacted soil, the downgradient vicinity of the former area of metals-impacted soil, and at upgradient locations. These wells are installed into the water table aquifer and a portion of each well screen spans the water table surface; groundwater flow is toward the Harlem River to the east.

3.1.2 Summary of Groundwater Monitoring

Groundwater monitoring did not occur during the reporting period; however, the monitoring well network was inspected in 2018, 2019, and 2020. The monitoring wells have been maintained and no issues were noted during the inspections. As previously reported, the above-grade portion of the casing of well M-10C was damaged in 2017 due to an auto accident. The well was determined to be otherwise undamaged and was repaired by cutting the casing to a level condition, installing an additional length of above-grade casing, and replacing the expansion-fit well plug. This work was documented in the prior PRR and well M-10C remained functional throughout this reporting period.

3.1.3 Groundwater Monitoring Deficiencies

No groundwater monitoring deficiencies were noted during the reporting period.

PLEASANT AVENUE

EAST 116th STREET

EAST 117th STREET

EAST 118th STREET

EAST 119th STREET

M-8B

M-9B

M-10C

M-11B

M-12C

FRANKLIN D. ROOSEVELT DRIVE (EAST RIVER DRIVE)

M-13B

M-14B

LEGEND:

BOUNDARY OF EAST RIVER PLAZA SITE

M-8B GROUNDWATER MONITORING WELL LOCATION

APPROX. SCALE: 0 40' 80'

FPM GROUP

FIGURE 3.1.1
GROUNDWATER MONITORING LOCATIONS
EAST RIVER PLAZA SITE
NEW YORK, N.Y.

Drawn By:H.C.	Checked By:S.D.	Date: 5/5/11

3.1.4 Groundwater Monitoring Conclusions

No groundwater monitoring was performed during the reporting period as the groundwater monitoring program was terminated, with NYSDEC approval, in June 2011. No deficiencies were noted and the monitoring well network was maintained as needed. FPM has no recommendations for changes to the current monitoring program.

3.2 VAPOR BARRIER SYSTEM MONITORING

No vapor barrier system monitoring was performed during the reporting period as no change of use has occurred in the subgrade portions of the Site building since the last report in the 2018 PRR.

SECTION 4.0
OPERATION AND MAINTENANCE PLAN COMPLIANCE

The Site has no mechanical remedial systems requiring operation and maintenance. Therefore, the Operation and Maintenance (O&M) Plan includes only measures necessary to operate and maintain the groundwater monitoring well network. The wells are inspected on an annual basis and any necessary minor repairs are completed and documented. If a well is damaged beyond repair, it is replaced.

4.1 SUMMARY OF O&M ACTIVITIES

During the reporting period the monitoring wells were inspected three times and no repairs were necessary.

4.2 EVALUATION OF O&M ACTIVITIES

The completed O&M activities enabled the groundwater monitoring well network to perform as intended.

4.3 O&M DEFICIENCIES

There were no O&M deficiencies noted during the reporting period.

4.4 O&M CONCLUSIONS AND RECOMMENDATIONS

The O&M activities in the SMP were conducted throughout the reporting period. The groundwater monitoring program was terminated, with NYSDEC approval, in 2011. The Site wells will be retained at this time in the event that additional monitoring is necessary. The monitoring wells will continue to be inspected on an annual basis.

SECTION 5.0
CONCLUSIONS AND RECOMMENDATIONS

The overall condition of the Site and compliance with the requirements of the SMP and Environmental Easement are evaluated in this section. This section also includes conclusions and any recommendations for changes to the SMP.

5.1 COMPLIANCE WITH SMP

Assessment of the overall Site condition and compliance with the SMP during the reporting period was performed during site-wide inspections completed in December 2018, December 2019, and December 2020, as well as throughout the reporting period during periodic inspections. Copies of the completed site-wide inspection checklists are included in Appendix B. The results of the site-wide inspections are summarized as follows:

- EC/IC Plan
  - The cover system EC was completed by the end of 2009. The vapor barrier system EC was also completed in 2009. The cover system and vapor barrier system were both completely in place and undisturbed throughout the reporting period. No change is recommended for the cover system or vapor barrier system ECs.
  - ICs required for the Site, as enumerated in the Environmental Easement, have been implemented, including restrictions on Site usage, inclusion of appropriate information in Site conveyance and lease documents, prohibition of groundwater use and prohibition of vegetable gardens. It was noted that the Site was occupied by commercial tenants throughout the reporting period; this usage is consistent with the allowed uses. All of the ICs remained fully implemented throughout the reporting period. No changes are recommended for the ICs.
- Monitoring and O&M Plans
  - Groundwater monitoring was not conducted during the reporting period as the NYSDEC approved the termination of the groundwater monitoring program in June 2011. Inspection and maintenance of the groundwater monitoring wells was conducted as necessary and in accordance with the SMP.

5.2 PERFORMANCE AND EFFECTIVENESS OF THE REMEDY

The remedy has been implemented in compliance with the Site-specific Remedial Work Plan and FER and continues to be managed in compliance with the SMP. This remedy continues to perform effectively and protect the public from the remaining residual materials at the Site.

Throughout the reporting period, the final cover system and vapor barrier were complete and in good condition. The completed cover system and vapor barrier effectively protect Site occupants from the remaining residual materials.

The approved Site usage is commercial and restricted residential (residential use above the first floor). Commercial tenants occupied the Site throughout the reporting period. The Site usage and development are consistent with the approved uses and are protective.

Groundwater monitoring was not conducted during the reporting period as the NYSDEC approved the termination of the groundwater monitoring program in June 2011. Previous groundwater monitoring has confirmed an improvement in downgradient groundwater quality following the completion of remedial action. The implemented remedy has been effective at eliminating Site-related impacts to groundwater quality. The monitoring well network remains in place and has been repaired as needed.

5.3 RECOMMENDATIONS

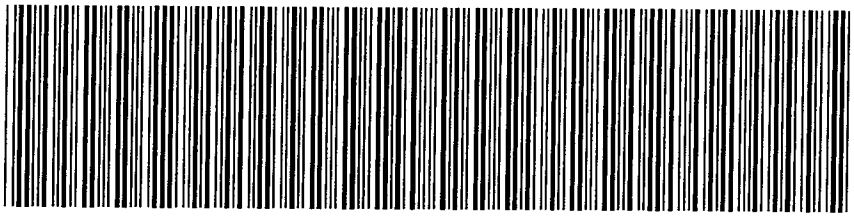
Based on the current Site conditions, FPM has no recommendations for changes to the PRR submittals, the remedy, or to the SMP.

APPENDIX A

ENVIRONMENTAL EASEMENT

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



2007122100054001002E9388

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 16**

Document ID: 2007122100054001 Document Date: 12-20-2007 Preparation Date: 12-21-2007
Document Type: EASEMENT
Document Page Count: 14

PRESENTER:
GUARDIAN LAND ABSTRACT CORP.
AS AGENT FOR COMMONWEALTH / G41112NY
1010 NORTHERN BOULEVARD, PO BOX 385
GREAT NECK, NY 11021
516-466-6050
glendarutter@title-team.com/ PICK UP RSR

RETURN TO:
DAVID KAPLAN, ESQ.
300 ROBBINS LANE
SYOSSET, NY 11791

PROPERTY DATA

Borough	Block	Lot	Unit	Address
MANHATTAN	1715	22	Entire Lot	517 EAST 116 STREET

Property Type: COMMERCIAL REAL ESTATE

Borough	Block	Lot	Unit	Address
MANHATTAN	1716	19	Partial Lot	539 EAST 117 STREET

Property Type: COMMERCIAL REAL ESTATE

x Additional Properties on Continuation Page

CROSS REFERENCE DATA

CRFN_____ *or* Document ID_____ *or* _____ Year____ Reel ___ Page____ *or* File Number_____

PARTIES

GRANTOR/SELLER:
TIAGO HOLDINGS, LLC
300 ROBBINS LANE
SYOSSET, NY 11791

GRANTEE/BUYER:
COMMISSIONER DEPT. ENVIRONMENTAL
CONSERVATION
625 BROADWAY
ALBANY, NY 12233

FEES AND TAXES

Mortgage		
Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	114.00
Affidavit Fee:	$	0.00

Filing Fee:	
$	165.00
NYC Real Property Transfer Tax:	
$	0.00
NYS Real Estate Transfer Tax:	
$	0.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK
Recorded/Filed 12-24-2007 13:58
City Register File No.(CRFN):
2007000625401

City Register Official Signature

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

2007122100054001002C9108

RECORDING AND ENDORSEMENT COVER PAGE (CONTINUATION) **PAGE 2 OF 16**

Document ID: 2007122100054001 Document Date: 12-20-2007 Preparation Date: 12-21-2007
Document Type: EASEMENT

PROPERTY DATA

Borough	Block	Lot		Unit	Address
MANHATTAN	1815	23	Entire Lot		527 EAST 118 STREET
Property Type:	COMMERCIAL REAL ESTATE				
Borough	**Block**	**Lot**		**Unit**	**Address**
MANHATTAN	1815	31	Entire Lot		540 EAST 119 STREET
Property Type:	COMMERCIAL REAL ESTATE				

County: New York Site No: C231045 Contract/Order No: W2-1068-05-06

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this AS OF 20 day of December, 2007, between Tiago Holdings, LLC ("Grantor Fee Owner" or "Grantor"), a New York limited liability company having an office at 300 Robbins Lane, Syosset, New York, and the People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and of ensuring the potential restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that environmental easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and;

WHEREAS, Grantor, is the owner of real property located in the City of New York, New York County, New York known and designated on the tax map of the Borough of Manhattan as 517-544 East 116th Street, Block 1715, Lot 22, 539-555 East 117th Street and 512-522 East 118th Street, Block 1716, Lot 19, 527-549 East 118th Street, Block 1815, Lot 23, and 540-546 East 119th Street, Block 1815, Lot 31, which is designated as Site No. C231045 under the Brownfield Cleanup Agreement which is comprised of approximately 4.5 hereinafter more fully described in Schedule A attached hereto and made a part hereof (the " Controlled Property"); and;

WHEREAS, the Commissioner does hereby acknowledge that the Department accepts this Environmental Easement in order to ensure the protection of human health and the environment and to achieve the requirements for remediation established at this Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36;and

NOW THEREFORE, in consideration of the covenants and mutual promises contained herein and the terms and conditions of **Brownfield Cleanup Agreement Number** W2-1068-05-06 Grantor grants, conveys and releases to Grantee a permanent Environmental Easement pursuant to Article 71, Title 36 of the ECL in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The following engineering and institutional controls ("Engineering and Institutional Controls") apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees, and any person using the Controlled Property:

A. The Controlled Property may be used for commercial use and restricted residential use (as defined in NYSDEC Regulations Subpart 375-1.8(g)(2) as long as the following long-term Engineering and Institutional Controls are employed:

a) all engineering controls must be operated and maintained as specified in the Site Management Plan submitted by Grantor and approved by the Department for the Controlled Property (the "Site Management Plan"). No Engineering and Institutional Controls may be discontinued without a NYSDEC-approved amendment or extinguishment of this Environmental Easement;

b) Annual inspections of the Controlled Property. certifications of Engineering and Institutional Controls and usage of Controlled Property, and Site Management Reporting to the Department must be conducted in accordance with the NYSDEC-approved Site Management Plan;

c) groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan;

d) on-site environmental monitoring devices, including but not limited to, groundwater monitor wells, must be protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Site Management Plan;

e) vegetable gardens are prohibited; and

f) residential habitation will not take place in the basement or first floor and shall only occur above the first floor.

The Grantor hereby acknowledges receipt of a copy of the NYSDEC-approved Site Management Plan, dated December 2007 ("SMP"). The SMP describes obligations that Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system on the Controlled Property, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. Upon notice of not less than thirty (30) days the Department in exercise of its discretion and consistent with applicable law may revise the SMP. The notice shall be a final agency determination. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Regional Remediation Engineer
Region Two
NYS Department of Environmental Conservation
Hunters Point Plaza
47-40 21st Street
Long Island City, New York 11101-5401

or:

Site Control Section
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233

B. The Controlled Property may not be used for a higher level of use such as **unrestricted** use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 to Article 71 of the Environmental Conservation Law.

D. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

E. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Controlled Property, including:

1. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

2. The right to give, sell, assign, or otherwise transfer the underlying fee interest to the Controlled Property by operation of law, by deed, or by indenture, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches,

estoppel, or waiver. It is not a defense in any action to enforce this environmental easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person intentionally violates this environmental easement, the Grantee may revoke the Certificate of Completion provided under ECL Article 27, Title 14, or Article 56, Title 5 with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach. Grantor shall then have a reasonable amount of time from receipt of such notice to cure. At the expiration of said second period, Grantee may commence any proceedings and take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement in accordance with applicable law to require compliance with the terms of this Environmental Easement.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar its enforcement rights in the event of a subsequent breach of or noncompliance with any of the terms of this Environmental Easement.

6. Notice. Whenever notice to the State (other than the annual certification) or approval from the State is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information: County, NYSDEC Site Number, NYSDEC Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Environmental Easement Attorney
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

Such correspondence shall be delivered by hand, or by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. This Environmental Easement may be amended only by an amendment executed by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. Conflict with Reciprocal Easement. Any conflicts between the terms and provisions of that certain Reciprocal Easement, Restriction and Common Area Maintenance Declaration made as of January 31, 2007 by Tiago Holdings, LLC recorded in CRFN 2007000097184 and the terms and provisions of this environmental easement, shall be resolved in favor of this environmental easement.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Tiago Holdings, LLC

By: FC East River Associates, LLC

By: RRG East River, LLC

By: _____

Name: DAVID L. BERLINER
Title: SR. VICE PRESIDENT
Date: 12/10/2007

By: DWD Associates, LLC

By: _____

Name: DAVID BLUMENFELD
Title: MANAGER
Date: DEC. 7, 2007

County: New York Site No: C 230145 Contract/Order No: W2-1068-05-06

Grantor's Acknowledgment

State of New York)
) ss.:
County of Kings)

On the 10th day of Dec., 2007 before me, the undersigned, personally appeared David L. Bellinger, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

SEAL

Jeanne Mucci
JEANNE MUCCI
Notary Public, State of New York
No. 30-4834577
Qualified in Nassau County
Commission Expires March 30, 2011

State of New York)
) ss.:
County of NASSAU)

On the 7th day of DECEMBER 2007, before me, the undersigned, personally appeared DAVID BLUMENFELD, personally known to me who or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

DAVID J. KAPLAN
Notary Public, State of New York
No. 02KA6010914
Qualified in Nassau County
Commission Expires July 27, 2009

SEAL

County: New York Site No: C231045 Contract/Order No: W2-1068-05-06

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation

by: _____
Alexander B. Grannis, Commissioner

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

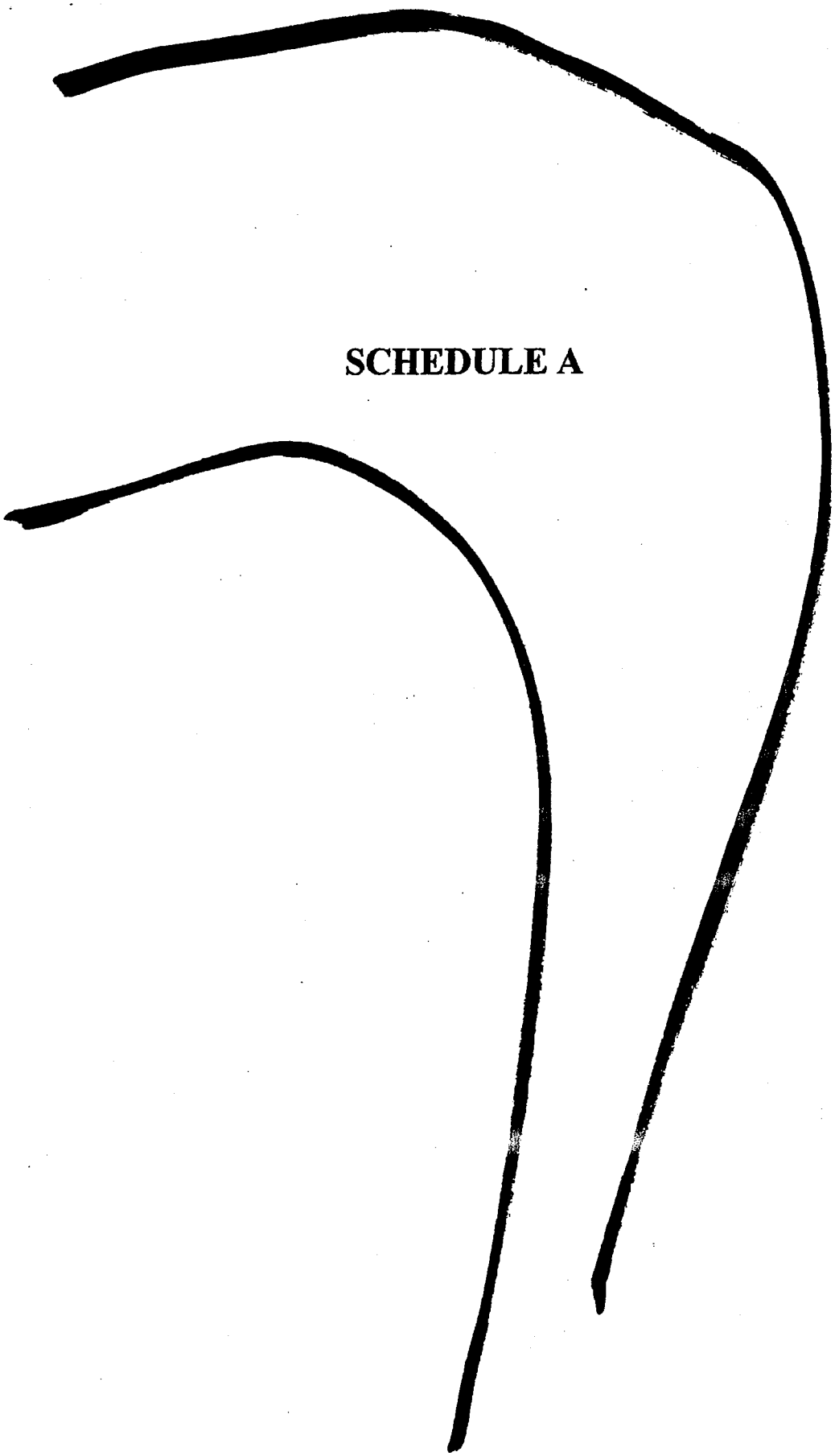
On the 20 day of Dec, in the year 07, before me, the undersigned, personally appeared ALEXANDER B. GRANNIS, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

SCOTT OWENS
Notary Public, State of New York
No. 02OW6108092
Qualified In Albany County
Commission Expires April 12, 2008

SEAL

SCHEDULE A



NOVEMBER 22, 2006
REVISED SEPTEMBER 13, 2007
REVISED DECEMBER 7, 2007
C96511

METES & BOUNDS DESCRIPTION
BROWNFIELDS PARCEL
LANDS OF TIAGO HOLDINGS, LLC
LOT 22, BLOCK 1715, LOT 19, BLOCK 1716
AND LOTS 23 & 31, BLOCK 1815
BOROUGH OF MANHATTAN
CITY, COUNTY AND STATE OF NEW YORK

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH THE BUILDINGS AND IMPROVEMENTS THEREON ERECTED, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERLY SIDE OF EAST 116TH STREET (100 FOOT WIDE RIGHT OF WAY), SAID POINT BEING DISTANT 248.00 FEET FROM THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF EAST 116TH STREET WITH THE EASTERLY SIDE OF PLEASANT AVENUE (A.K.A. AVENUE "A", A.K.A. PALADINO AVENUE, 100 FOOT WIDE RIGHT OF WAY) AND FROM SAID POINT OF BEGINNING RUNNING, THENCE;

1. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1715, THENCE;

2. EASTERLY, PARALLEL WITH THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 106.92 FEET (106 FEET, 11 INCHES) TO A POINT, THENCE;

3. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO A POINT ON THE SOUTHERLY SIDE OF EAST 117TH STREET (60 FOOT WIDE RIGHT OF WAY), THENCE;

4. EASTERLY, ALONG THE SOUTHERLY SIDE OF EAST 117TH STREET, A DISTANCE OF 30.00 FEET TO A POINT, THENCE;

5. NORTHERLY, ALONG THE EASTERLY TERMINUS OF EAST 117TH STREET AND BEING PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 60.00 FEET TO A POINT ON THE NORTHERLY SIDE OF EAST 117TH STREET, THENCE;

6. WESTERLY, ALONG THE NORTHERLY SIDE OF EAST 117TH STREET, A DISTANCE OF 61.92 FEET (61 FEET, 11 INCHES) TO A POINT, THENCE;

7. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1716, THENCE;

8. WESTERLY, PARALLEL WITH THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 125.00 FEET TO A POINT, THENCE;

9. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE SOUTHERLY SIDE OF EAST 118TH STREET (60 FOOT WIDE RIGHT OF WAY), THENCE;

10. EASTERLY, ALONG THE SOUTHERLY SIDE OF EAST 118TH STREET, A DISTANCE OF 196.98 FEET (196 FEET, 11 3/4 INCHES) TO A POINT, THENCE;

11. NORTHERLY, ALONG THE EASTERLY TERMINUS OF EAST 118TH STREET AND BEING PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 60.00 FEET TO A POINT ON THE NORTHERLY SIDE OF EAST 118TH STREET, THENCE;

12. WESTERLY, ALONG THE NORTHERLY SIDE OF EAST 118TH STREET, A DISTANCE OF 40.04 FEET (40 FEET, 1/2 INCH) TO A POINT, THENCE;

13. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1815, THENCE;

14. EASTERLY, PARALLEL WITH THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 125.20 FEET (125 FEET, 2 3/8 INCHES) TO A POINT, THENCE;

15. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE SOUTHERLY SIDE OF EAST 119TH STREET (60 FOOT WIDE RIGHT OF WAY), THENCE;

16. EASTERLY, ALONG THE SOUTHERLY SIDE OF EAST 119TH STREET, A DISTANCE OF 129.70 FEET (129 FEET, 8 3/8 INCHES) TO THE CORNER FORMED BY THE INTERSECTION OF THE SOUTHERLY SIDE OF EAST 119TH STREET AND THE NEW WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE (A.K.A. EAST RIVER DRIVE, A.K.A. AVENUE "B", VARIABLE WIDTH RIGHT OF WAY), THENCE; THE FOLLOWING FOUR (4) COURSES ALONG SAID NEW WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE:

17. SOUTHERLY, A DISTANCE OF 77.74 FEET (77 FEET, 8 7/8 INCHES) TO A POINT OF CURVATURE, THENCE;

18. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 1,000.00 FEET, A CENTRAL ANGLE OF 25 DEGREES - 27 MINUTES - 37 SECONDS, AN ARC LENGTH OF 444.37 FEET (444 FEET, 4½ INCHES), TO A POINT OF TANGENCY, THENCE;

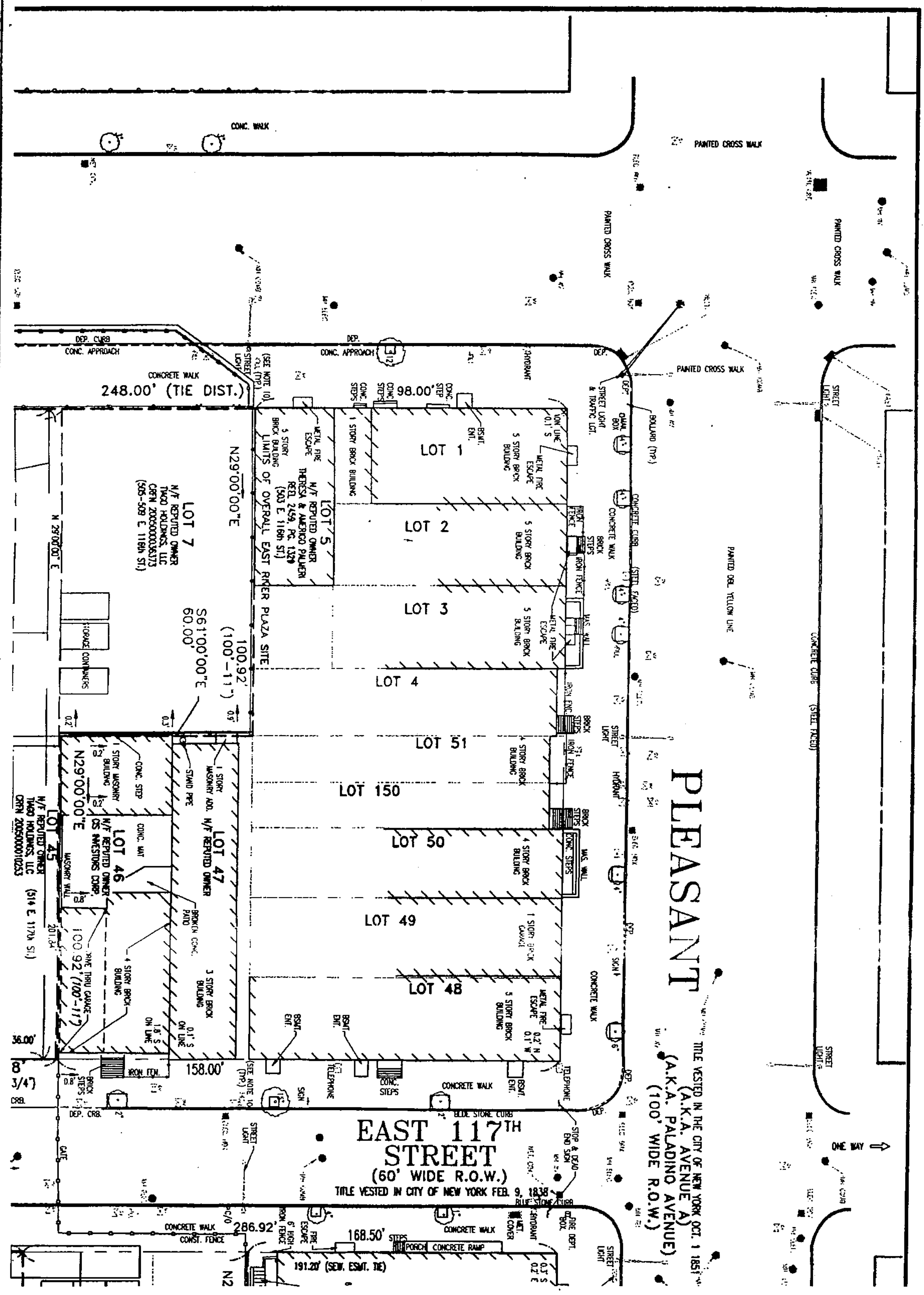
19. SOUTHWESTERLY, A DISTANCE OF 87.41 FEET (87 FEET, 4 7/8 INCHES) TO A POINT, THENCE;

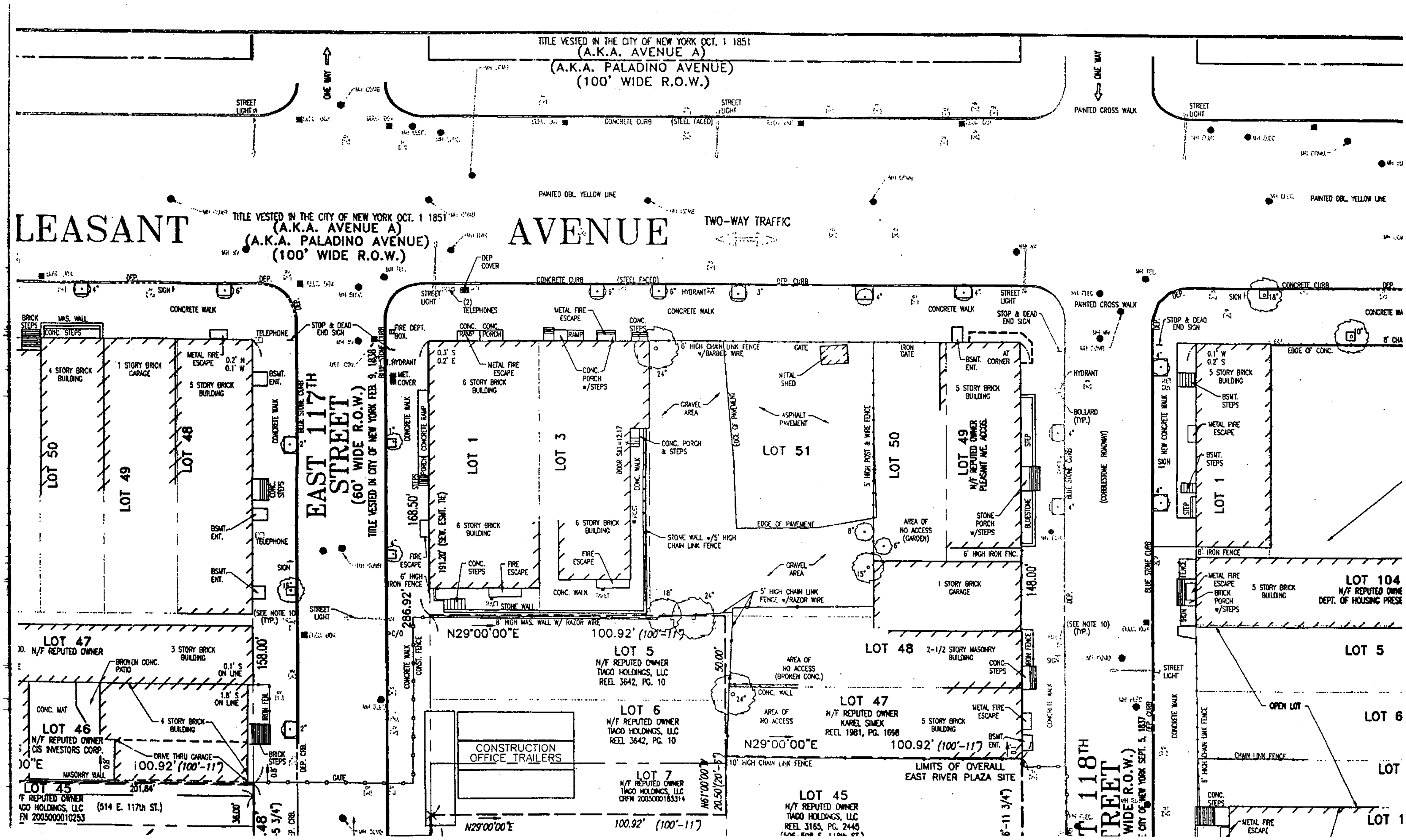
20. SOUTHWESTERLY, A DISTANCE OF 138.35 FEET (138 FEET, 4 1/4 INCHES) TO THE CORNER FORMED BY THE INTERSECTION OF THE WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE AND THE NORTHERLY SIDE OF EAST 116TH STREET, THENCE;

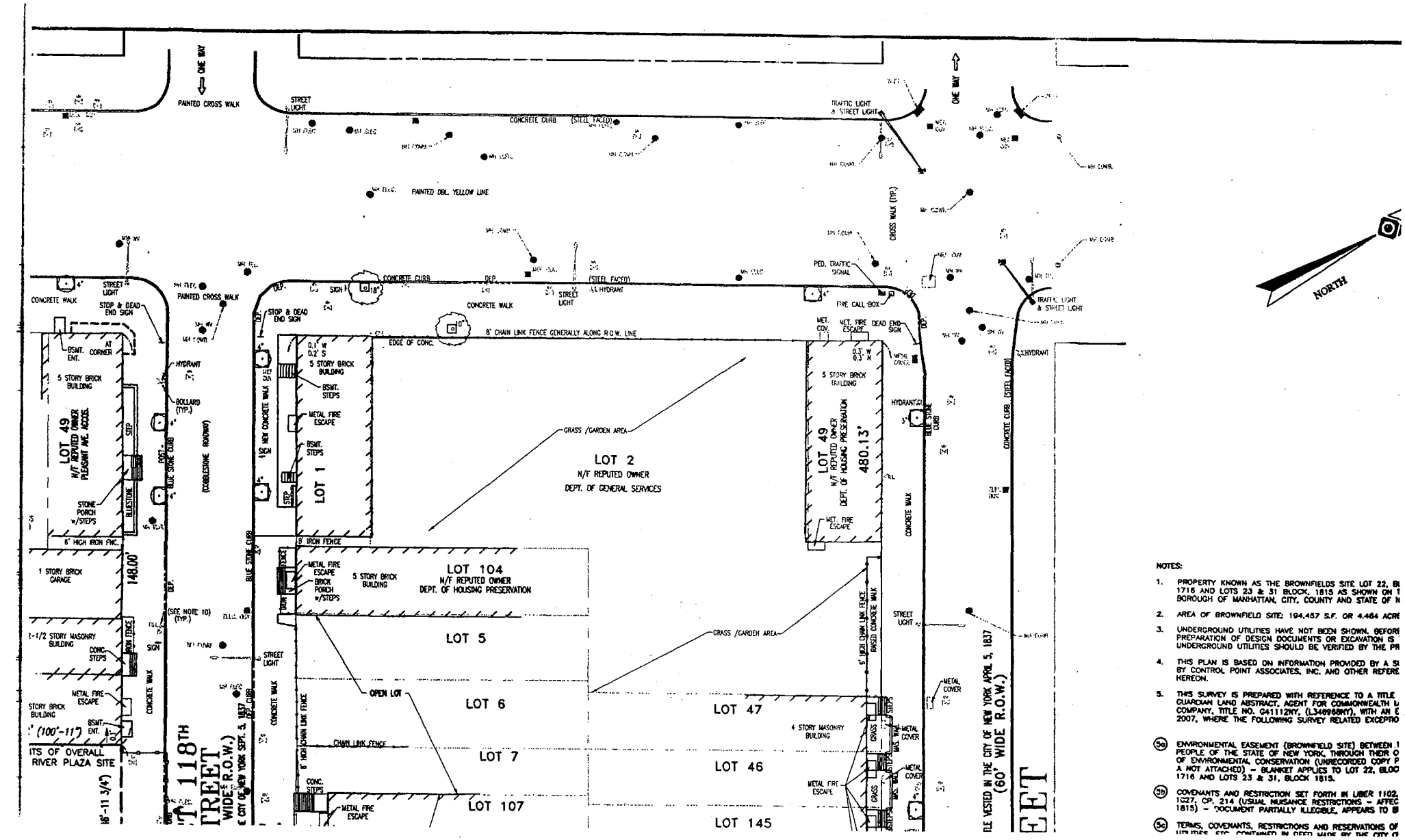
21. WESTERLY, ALONG THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 263.62 FEET (263 FEET, 7 ½ INCHES) TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 194,457 SQUARE FEET OR 4.464 ACRES

CONTROL POINT ASSOCIATES, INC.


PLEASANT
(A.K.A. AVENUE A)
(A.K.A. PALADINO AVENUE)
(100' WIDE R.O.W.)
TITLE VESTED IN THE CITY OF NEW YORK OCT. 1 1851
EAST 117TH STREET
(60' WIDE R.O.W.)
TITLE VESTED IN CITY OF NEW YORK FEB. 9, 1838
248.00' (TIE DIST.)
98.00'
158.00'
286.92'
168.50'
191.20' (SEW. ESMT. TIE)
LIMITS OF OVERALL EAST RIVER PLAZA SITE
N29°00'00"E
S61°00'00"E
60.00'
100.92'
(100'-11")
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 7
LOT 51
LOT 150
LOT 50
LOT 49
LOT 48
LOT 47
LOT 46
LOT 45
CONCRETE WALK
CONC. WALK
PAINTED CROSS WALK
CONC. APPROACH
ONE WAY
36.00'


TITLE VESTED IN THE CITY OF NEW YORK OCT. 1 1851
(A.K.A. AVENUE A)
(A.K.A. PALADINO AVENUE)
(100' WIDE R.O.W.)
LEASANT
AVENUE
TWO-WAY TRAFFIC
PAINTED DBL. YELLOW LINE
ONE WAY
PAINTED CROSS WALK
EAST 117TH
STREET
(60' WIDE R.O.W.)
TITLE VESTED IN CITY OF NEW YORK FEB. 9, 1838
118TH
TREET
WIDE R.O.W.)
CITY OF NEW YORK SEPT. 5, 1837
(COBBLESTONE ROADWAY)
LOT 50
LOT 49
LOT 48
LOT 47
N/F REPUTED OWNER
LOT 46
N/F REPUTED OWNER
CIS INVESTORS CORP.
LOT 45
N/F REPUTED OWNER
AGO HOLDINGS, LLC
FN 2005000010253
(514 E. 117th ST.)
LOT 1
LOT 3
LOT 51
LOT 50
LOT 49
N/F REPUTED OWNER
PLEASANT AVE. ACCOS.
LOT 48
2-1/2 STORY MASONRY BUILDING
LOT 47
N/F REPUTED OWNER
KAREL SIMEK
REEL 1981, PG. 1698
LOT 45
N/F REPUTED OWNER
TIAGO HOLDINGS, LLC
REEL 3165, PG. 2445
LOT 5
N/F REPUTED OWNER
TIAGO HOLDINGS, LLC
REEL 3642, PG. 10
LOT 6
N/F REPUTED OWNER
TIAGO HOLDINGS, LLC
REEL 3642, PG. 10
LOT 7
N/F REPUTED OWNER
TIAGO HOLDINGS, LLC
CRFN 2005000183314
CONSTRUCTION
OFFICE TRAILERS
LIMITS OF OVERALL
EAST RIVER PLAZA SITE
N29°00'00"E
100.92' (100'-11")
286.92'
168.50'
191.20' (SEW. ESMT. TIE)
148.00'
158.00'
50.00'
20.50' (20'-6")
N61°00'00"W
LOT 104
N/F REPUTED OWNER
DEPT. OF HOUSING PRESE
LOT 1
LOT 5
LOT 6
LOT
LOT 1
OPEN LOT
6 STORY BRICK BUILDING
5 STORY BRICK BUILDING
4 STORY BRICK BUILDING
3 STORY BRICK BUILDING
1 STORY BRICK GARAGE
ASPHALT PAVEMENT
EDGE OF PAVEMENT
GRAVEL AREA
METAL SHED
5' HIGH POST & WIRE FENCE
6' HIGH CHAIN LINK FENCE w/BARBED WIRE
STONE WALL w/5' HIGH CHAIN LINK FENCE
8' HIGH MAS. WALL W/ RAZOR WIRE
AREA OF NO ACCESS (GARDEN)
AREA OF NO ACCESS (BROKEN CONC.)
CONCRETE WALK
CONCRETE CURB
BLUE STONE CURB
STREET LIGHT
STOP & DEAD END SIGN
HYDRANT
TELEPHONE
FIRE DEPT. BOX
(SEE NOTE 10) (TYP.)



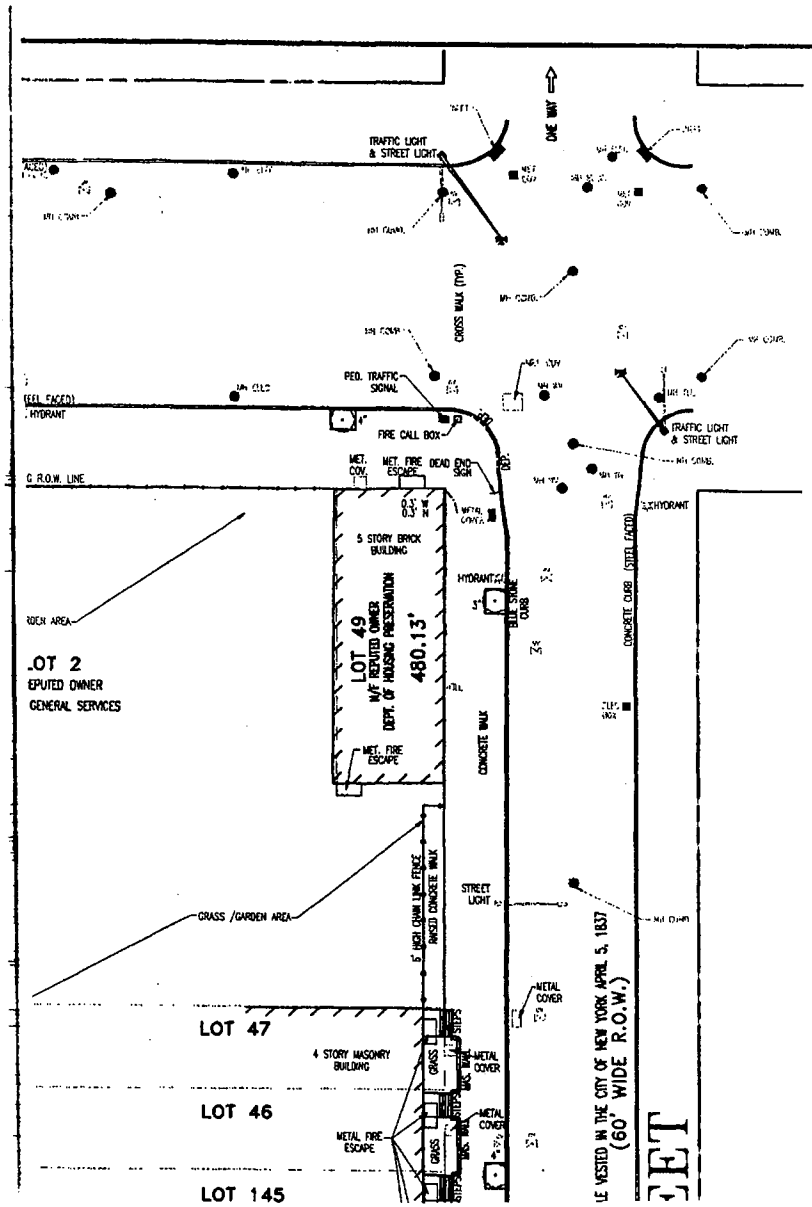
NOTES:

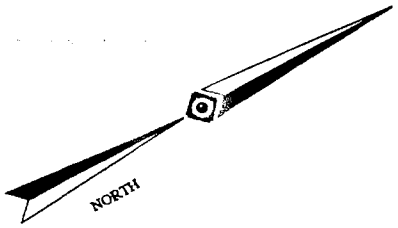
1. PROPERTY KNOWN AS THE BROWNFIELDS SITE LOT 22, BL 1716 AND LOTS 23 & 31 BLOCK, 1815 AS SHOWN ON T BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF N
2. AREA OF BROWNFIELD SITE: 194,457 S.F. OR 4.464 ACRE
3. UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN. BEFORE PREPARATION OF DESIGN DOCUMENTS OR EXCAVATION IS UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE PR
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SI BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERE HEREON.
5. THIS SURVEY IS PREPARED WITH REFERENCE TO A TITLE GUARDIAN LAND ABSTRACT, AGENT FOR COMMONWEALTH U COMPANY, TITLE NO. G41112NY, (L340988NY), WITH AN E 2007, WHERE THE FOLLOWING SURVEY RELATED EXCEPTIO

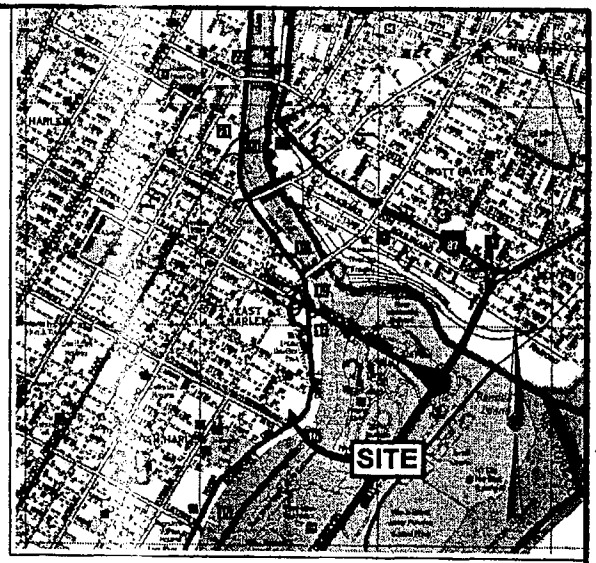
(3a) ENVIRONMENTAL EASEMENT (BROWNFIELD SITE) BETWEEN T PEOPLE OF THE STATE OF NEW YORK, THROUGH THEIR C OF ENVIRONMENTAL CONSERVATION (UNRECORDED COPY P A NOT ATTACHED) – BLANKET APPLIES TO LOT 22, BLOC 1716 AND LOTS 23 & 31, BLOCK 1815.

(3b) COVENANTS AND RESTRICTION SET FORTH IN LIBER 1102, 1227, CP. 214 (USUAL NUISANCE RESTRICTIONS – AFFEC 1815) – "DOCUMENT PARTIALLY ILLEGIBLE, APPEARS TO BI

(3c) TERMS, COVENANTS, RESTRICTIONS AND RESERVATIONS OF UTILITIES, ETC. CONTAINED IN DEED MADE BY THE CITY O







VICINITY MAP

NOTES:

1. PROPERTY KNOWN AS THE BROWNFIELDS SITE LOT 22, BLOCK 1715, LOT 19, BLOCK 1716 AND LOTS 23 & 31 BLOCK, 1815 AS SHOWN ON THE TAX MAPS OF THE BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK
2. AREA OF BROWNFIELD SITE: 194,457 S.F. OR 4.464 ACRES
3. UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN, BEFORE ANY SITE EVALUATION, PREPARATION OF DESIGN DOCUMENTS OR EXCAVATION IS TO BEGIN, THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE PROPER UTILITY COMPANIES.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
5. THIS SURVEY IS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY GUARDIAN LAND ABSTRACT, AGENT FOR COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NO. G41112NY, (L3469684NY), WITH AN EFFECTIVE DATE OF AUGUST 1, 2007, WHERE THE FOLLOWING SURVEY RELATED EXCEPTIONS APPEAR IN SCHEDULE B:

(5a) ENVIRONMENTAL EASEMENT (BROWNFIELD SITE) BETWEEN TIAGO HOLDINGS, LLC AND THE PEOPLE OF THE STATE OF NEW YORK, THROUGH THEIR COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (UNRECORDED COPY PROVIDED REFERENCED SCHEDULE A NOT ATTACHED) – BLANKET APPLIES TO LOT 22, BLOCK 1715, PART OF LOT 19, BLOCK 1716 AND LOTS 23 & 31, BLOCK 1815.

(5b) COVENANTS AND RESTRICTION SET FORTH IN LIBER 1102, CP. 582 AND REPEATED IN LIBER 1027, CP. 214 (USUAL NUISANCE RESTRICTIONS – AFFECTS PART OF LOT 23, BLOCK 1815) – DOCUMENT PARTIALLY ILLEGIBLE, APPEARS TO BE BLANKET.

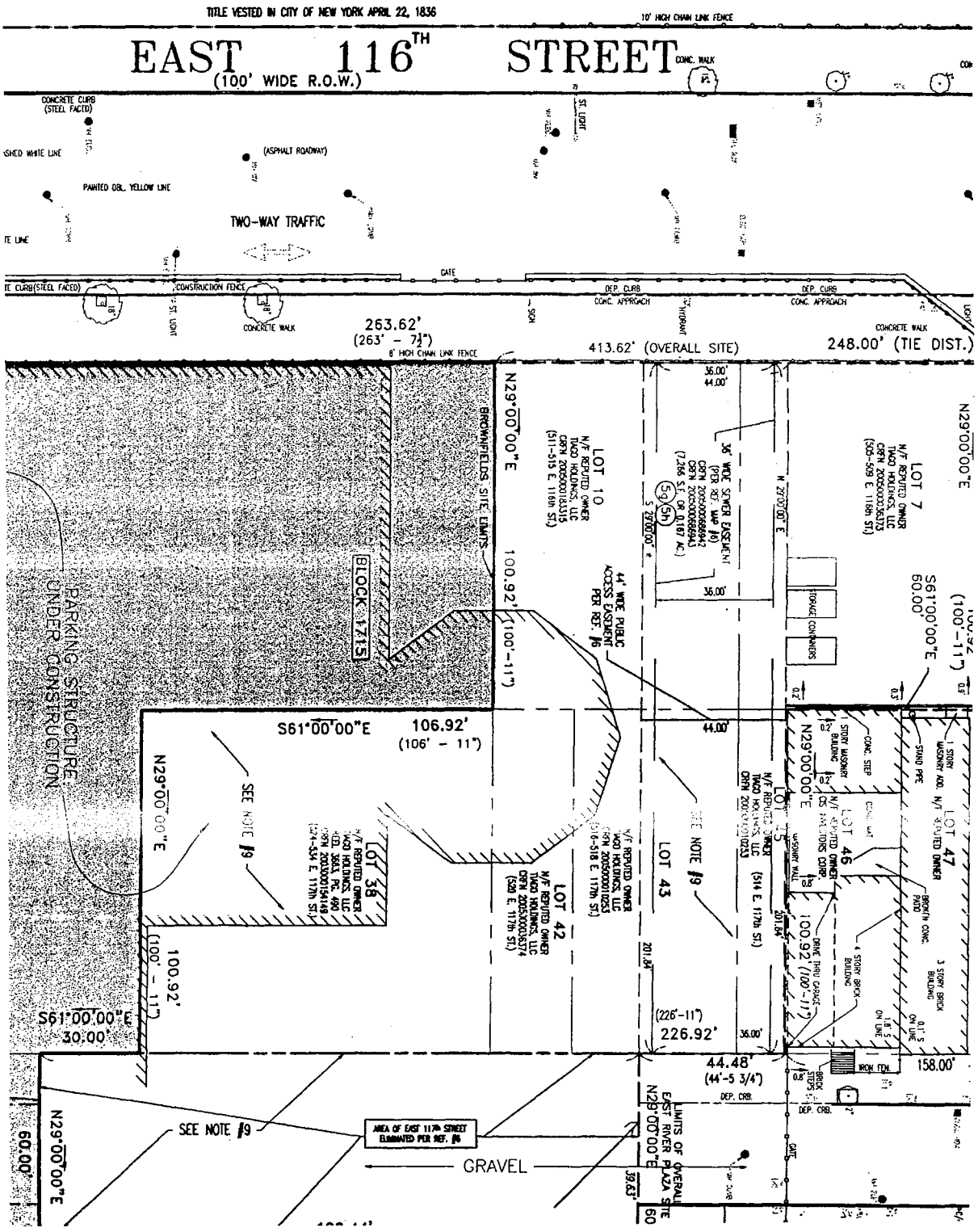
(5c) TERMS, COVENANTS, RESTRICTIONS AND RESERVATIONS OF EASEMENTS FOR POWER

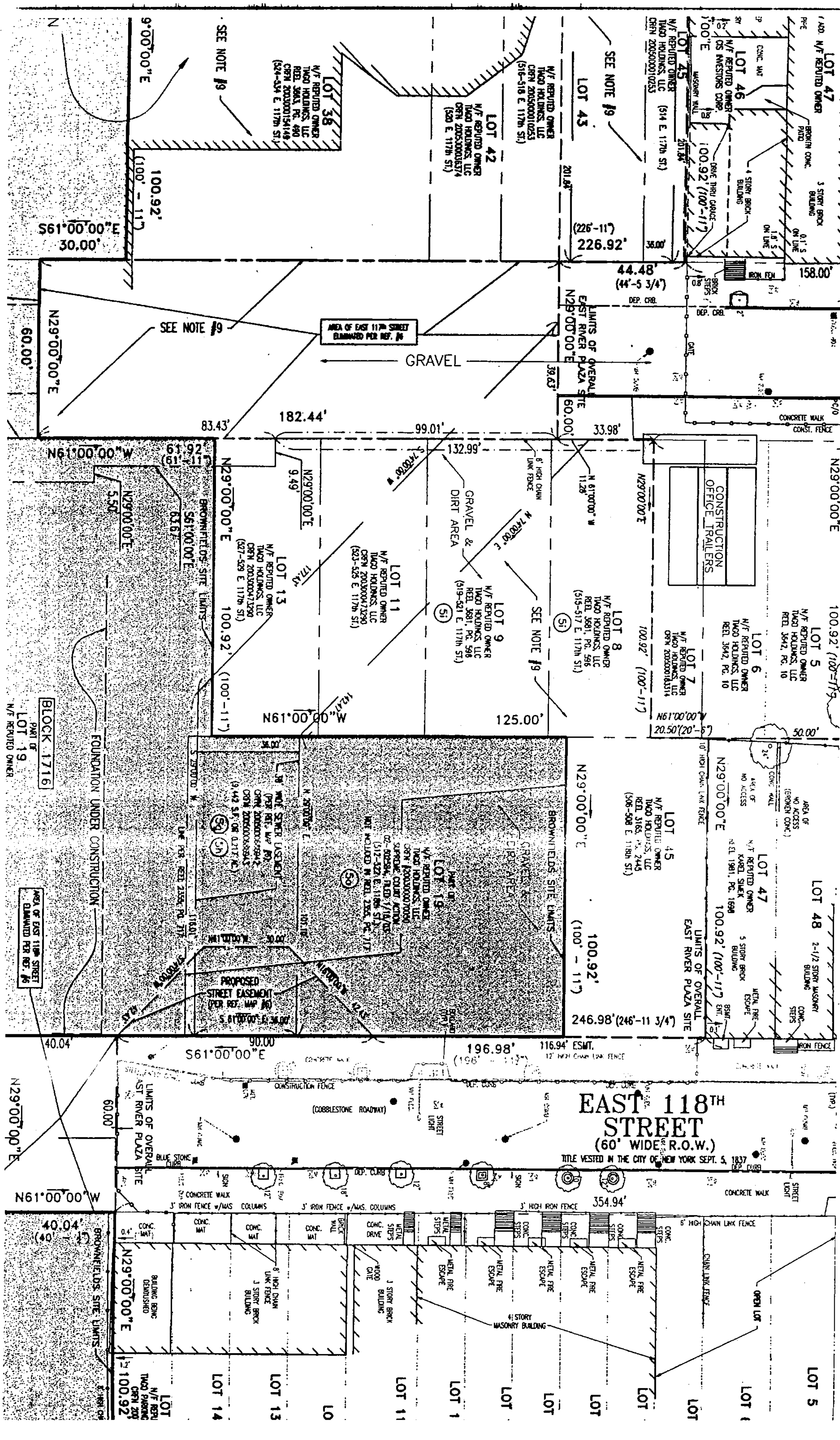
METES & BOUNDS DESCRIPTION
BROWNFIELDS PARCEL
LANDS OF TIAGO HOLDINGS, LLC
LOT 22, BLOCK 1715, LOT 19, BLOCK 1716
AND LOTS 23 & 31, BLOCK 1815
BOROUGH OF MANHATTAN
CITY, COUNTY AND STATE OF NEW YORK

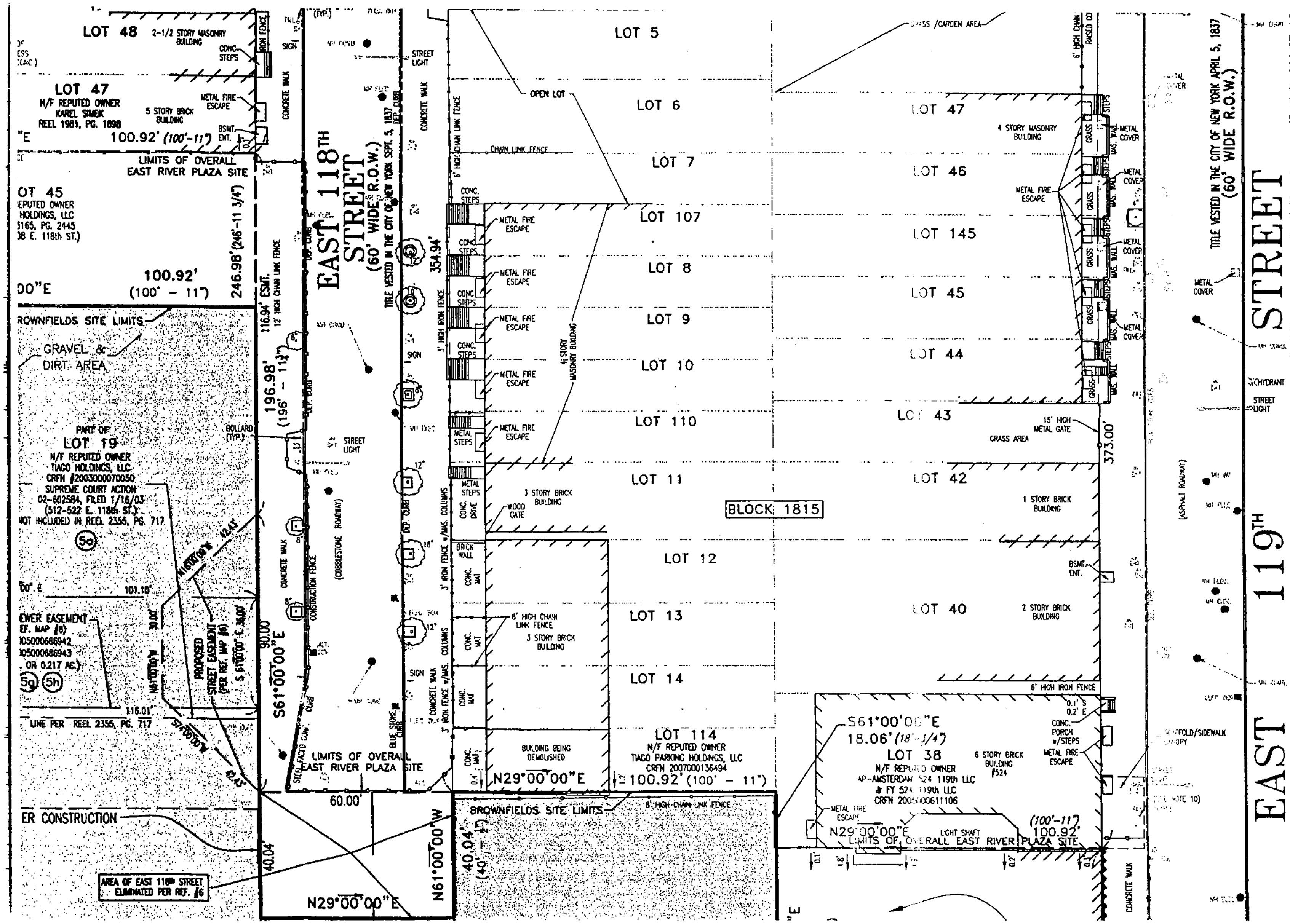
ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH THE BUILDINGS AND IMPROVEMENTS THEREON ERECTED, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERLY SIDE OF EAST 116TH STREET (100 FOOT WIDE RIGHT OF WAY), SAID POINT BEING DISTANT 248.00 FEET FROM THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF EAST 116TH STREET WITH THE EASTERLY SIDE OF PLEASANT AVENUE (A.K.A. AVENUE "A", A.K.A. PALADINO AVENUE, 100 FOOT WIDE RIGHT OF WAY) AND FROM SAID POINT OF BEGINNING RUNNING, THENCE;

1. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1715, THENCE;


TITLE VESTED IN CITY OF NEW YORK APRIL 22, 1836
10' HIGH CHAIN LINK FENCE
EAST 116TH STREET
(100' WIDE R.O.W.)
CONC. WALK
CONCRETE CURB (STEEL FACED)
(ASPHALT ROADWAY)
PAINTED DBL. YELLOW LINE
TWO-WAY TRAFFIC
GATE
CONSTRUCTION FENCE
DEP. CURB CONC. APPROACH
CONCRETE WALK
263.62' (263' - 7½")
8' HIGH CHAIN LINK FENCE
413.62' (OVERALL SITE)
248.00' (TIE DIST.)
BROWNFIELDS SITE LIMITS
BLOCK 1715
PARKING STRUCTURE UNDER CONSTRUCTION
LOT 10
N/F REPUTED OWNER
TAGO HOLDINGS, LLC
CRFN 2005000183315
(511-515 E. 116th ST.)
LOT 7
N/F REPUTED OWNER
TAGO HOLDINGS, LLC
CRFN 2005000356373
(505-509 E. 116th ST.)
36' WIDE SEWER EASEMENT (PER REF. MAP #9)
44' WIDE PUBLIC ACCESS EASEMENT PER REF. #6
STORAGE CONTAINERS
N29°00'00"E
S61°00'00"E 106.92' (106' - 11")
100.92' (100'-11")
S61°00'00"E 60.00'
LOT 38
N/F REPUTED OWNER
TAGO HOLDINGS, LLC
LIBER 3683, PG. 490
CRFN 2003000154149
(1274-334 E. 117th ST.)
LOT 42
N/F REPUTED OWNER
TAGO HOLDINGS, LLC
CRFN 2005000345774
(520 E. 117th ST.)
LOT 43
N/F REPUTED OWNER
TAGO HOLDINGS, LLC
CRFN 2005000012253
(516-518 E. 117th ST.)
LOT 5
N/F REPUTED OWNER
TAGO HOLDINGS, LLC
CRFN 2005000010253
(514 E. 117th ST.)
LOT 46
N/F REPUTED OWNER
LOS PANTIONS CORP.
LOT 47
N/F REPUTED OWNER
SEE NOTE #9
1 STORY MASONRY ADD.
STAND PPE
CONC. STEP
BROKEN CONC. PAD
3 STORY BRICK BUILDING
4 STORY BRICK BUILDING
DRIVE THRU GARAGE
201.84'
100.92' (100'-11")
(226'-11")
226.92'
36.00'
44.48' (44'-5 3/4")
158.00'
IRON FEN.
BRICK STEPS
DEP. CRB.
AREA OF EAST 117th STREET ELIMINATED PER REF. #6
GRAVEL
LIMITS OF OVERALL EAST RIVER PLAZA SITE
N29°00'00"E 39.63'
60.00'
S61°00'00"E 30.00'
SEE NOTE #9


EAST 118TH STREET
(60' WIDE R.O.W.)
TITLE VESTED IN THE CITY OF NEW YORK SEPT. 5, 1837
(COBBLESTONE ROADWAY)
LIMITS OF OVERALL EAST RIVER PLAZA SITE
BROWNFIELDS SITE LIMITS
FOUNDATION UNDER CONSTRUCTION
BLOCK 1716
CONSTRUCTION OFFICE TRAILERS
GRAVEL
GRAVEL & DIRT AREA
SEE NOTE #9
AREA OF EAST 117th STREET ELIMINATED PER REF. #6
AREA OF EAST 118th STREET ELIMINATED PER REF. #6
PROPOSED STREET EASEMENT (PER REF. MAP #6)
4 STORY MASONRY BUILDING
OPEN LOT
CONCRETE WALK
6' HIGH CHAIN LINK FENCE
3' HIGH IRON FENCE



3. UNDERGROUND UTILITIES HA[...] PREPARATION OF DESIGN DO[...] UNDERGROUND UTILITIES SH[...]

4. THIS PLAN IS BASED ON IN[...] BY CONTROL POINT ASSOCIA[...] HEREON.

5. THIS SURVEY IS PREPARED [...] GUARDIAN LAND ABSTRACT, [...] COMPANY, TITLE NO. G4111[...] 2007, WHERE THE FOLLOWIN[...]

(5a) ENVIRONMENTAL EASEMENT [...] PEOPLE OF THE STATE OF [...] OF ENVIRONMENTAL CONSER[...] A NOT ATTACHED) – BLANK[...] 1716 AND LOTS 23 & 31, [...]

(5b) COVENANTS AND RESTRICTIO[...] 1027, CP. 214 (USUAL NU[...] 1815) – DOCUMENT PARTIA[...]

(5c) TERMS, COVENANTS, RESTRI[...] UTILITIES, ETC. CONTAINED I[...] COMPANY, DATED 4/14/65, [...] PORTION OF LOT 22, BLOCK [...] OF LOT 18, BLOCK 1716 F[...] PLOTTABLE EASEMENT AREAS [...] TWENTY FEET FROM PRESEN[...] PLOTTABLE.

(5d) TERMS, COVENANTS, RESTRI[...] BETWEEN THE CITY OF NEW [...] RECORDED 4/26/65 IN LIBE[...] 1715 AND A PORTION OF L[...] AREAS SHOWN PER PRIOR [...] AGREEMENT IN LIBER 5323, [...]

(5e) EASEMENT GRANT TO CONS[...] 4/18/94, RECORDED 5/4/[...] BLOCK 1716) – SHOWN.

(5f) RESERVATIONS AS TO GOLD [...] LIBER 1632, CP. 72 – SU[...]

(5g) DECLARATION OF EASEMENT [...]

(5h) DECLARATION OF EASEMENT [...]

(5i) DECLARATION OF MODIFICATI[...] AS AMENDED AND RESTATED [...] 1716 – ADJACENT PROPERT[...]

(5j) COORDINATION AGREEMENT [...] ENTIRE EAST RIVER PLAZA [...]

(5k) RECIPROCAL EASEMENT, RE[...] CRFN 2007000097184 – B[...]

6. NUMEROUS FILL CAPS WERE [...] THE TIME OF THE FIELD SU[...]

7. THERE ARE NO VISIBLE STR[...] SHOWN.

8. PROPERTY IS LOCATED PRE[...] YEAR FLOOD; BASE FLOOD [...] ELEV. 13) AND ALSO LOCAT[...] OF THE 100 YEAR FLOOD A[...] 100 YEAR FLOODING WITH A[...] CONTRIBUTING DRAINAGE AR[...] BY LEVEES FROM THE BASE [...]

9. HEAVY DIRT MOVEMENT ACTI[...] FIELD SURVEY.

10. ENCROACHMENTS AND VAULT[...]

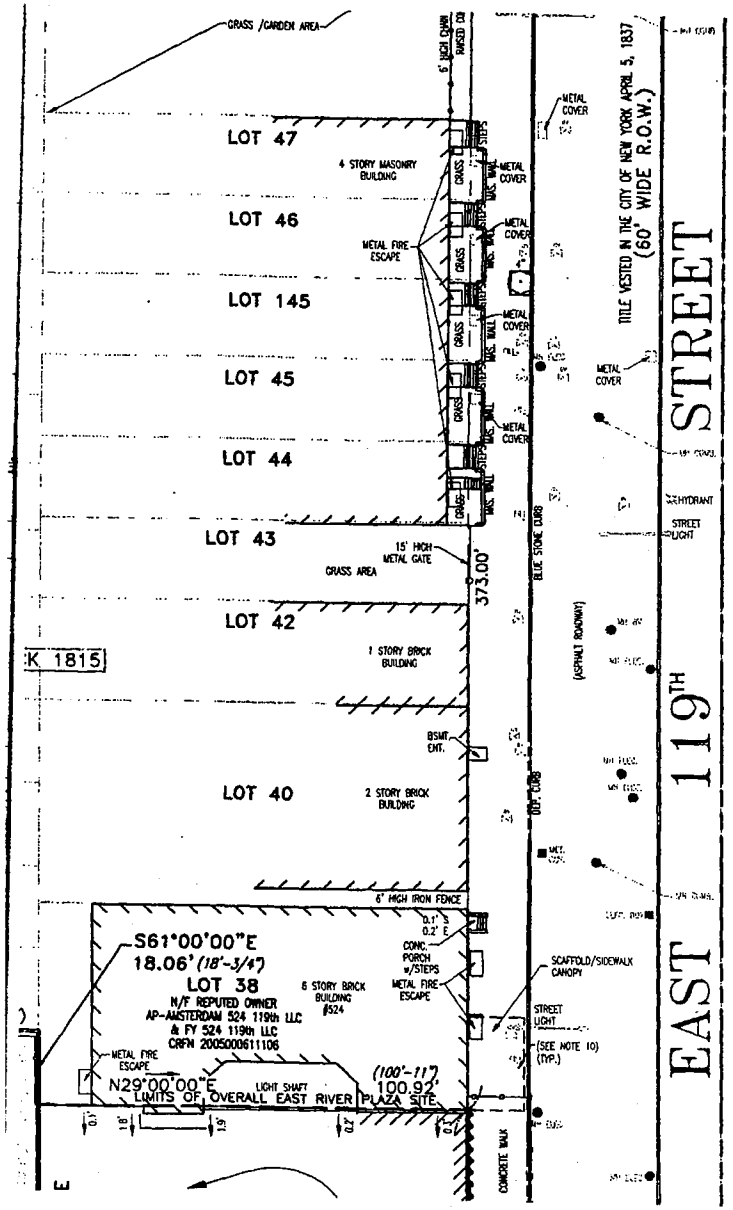
11. THE OFFSETS SHOWN ARE [...] STRUCTURE, FENCE, PERMAN[...]

12. THE EXISTENCE OF UNDERG[...] HAVE NOT BEEN SHOWN ON [...]

REFERENCES:

1. THE OFFICIAL TAX MAPS OF T[...] YORK, SHEETS 17 & 30.

2. MAP ENTITLED "SURVEY OF P[...] OF NEW YORK, CITY OF NEW [...]



3. UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN. BEFORE ANY EXCAVATION OR PREPARATION OF DESIGN DOCUMENTS OR EXCAVATION IS TO BEGIN, THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE PROPER UTILITY COMPANIES.

4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.

5. THIS SURVEY IS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY GUARDIAN LAND ABSTRACT, AGENT FOR COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NO. C41112NY, (L346968NY), WITH AN EFFECTIVE DATE OF AUGUST 1, 2007, WHERE THE FOLLOWING SURVEY RELATED EXCEPTIONS APPEAR IN SCHEDULE B:

(5a) ENVIRONMENTAL EASEMENT (BROWNFIELD SITE) BETWEEN TIAGO HOLDINGS, LLC AND THE PEOPLE OF THE STATE OF NEW YORK, THROUGH THEIR COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (UNRECORDED COPY PROVIDED REFERENCED SCHEDULE A NOT ATTACHED) – BLANKET APPLIES TO LOT 22, BLOCK 1715, PART OF LOT 19, BLOCK 1716 AND LOTS 23 & 31, BLOCK 1815.

(5b) COVENANTS AND RESTRICTION SET FORTH IN LIBER 1102, CP. 582 AND REPEATED IN LIBER 1027, CP. 214 (USUAL NUISANCE RESTRICTIONS – AFFECTS PART OF LOT 23, BLOCK 1815) – DOCUMENT PARTIALLY ILLEGIBLE, APPEARS TO BE BLANKET.

(5c) TERMS, COVENANTS, RESTRICTIONS AND RESERVATIONS OF EASEMENTS FOR SEWERS, UTILITIES, ETC. CONTAINED IN DEED MADE BY THE CITY OF NEW YORK TO WASHBURN WIRE COMPANY, DATED 4/14/65, RECORDED 4/15/65 IN LIBER 5322, CP. 62 (AFFECTS PORTION OF LOT 22, BLOCK 1715 FORMERLY BED OF EAST 117TH STREET AND A PORTION OF LOT 19, BLOCK 1716 FORMERLY BED OF EAST 118TH STREET) – APPROXIMATE PLOTTABLE EASEMENT AREAS SHOWN, DOCUMENT ALSO STATES A MINIMUM CLEARANCE OF TWENTY FEET FROM PRESENT GRADE, ALONG WITH OTHER RESTRICTIONS THAT ARE NOT PLOTTABLE.

(5d) TERMS, COVENANTS, RESTRICTIONS, PROVISIONS AND EASEMENTS OF AGREEMENT MADE BETWEEN THE CITY OF NEW YORK AND WASHBURN WIRE COMPANY, DATED 8/26/64, RECORDED 4/26/65 IN LIBER 5323, CP. 129, (AFFECTS PORTION OF LOT 22, BLOCK 1715 AND A PORTION OF LOT 19, BLOCK 1716) – APPROXIMATE PLOTTABLE EASEMENT AREAS SHOWN PER PRIOR DOCUMENTATION. DOCUMENT NOT PROVIDED. (AMENDED BY AGREEMENT IN LIBER 5323, CP. 143 PER PRIOR TITLE REPORT.)

(5e) EASEMENT GRANT TO CONSOLIDATED EDISON COMPANY OF NEW YORK, INC., DATED 4/18/94, RECORDED 5/4/94 IN REEL 2088, PAGE 2192 (AFFECTS PORTION OF LOT 19, BLOCK 1716) – SHOWN.

(5f) RESERVATIONS AS TO GOLD AND SILVER MINES, SET FORTH IN LIBER 1632, CP. 70 AND LIBER 1632, CP. 72 – SUPPLIED DOCUMENT ILLEGIBLE, NOT PLOTTED.

(5g) DECLARATION OF EASEMENT IN CRFN 2005000686942 – SHOWN

(5h) DECLARATION OF EASEMENT IN CRFN 2005000686943 – SHOWN

(5i) DECLARATION OF MODIFICATION OF COVENANTS AND RESTRICTIONS IN CRFN 2005000204531, AS AMENDED AND RESTATED IN CRFN 2008000675452. – AFFECTS LOTS 8 & 9, BLOCK 1716 – ADJACENT PROPERTY IDENTIFIED IN DOCUMENT ENCOMPASSES BROWNFIELDS SITE.

(5j) COORDINATION AGREEMENT IN CRFN 2007000129093 – MORTGAGE DOCUMENT, APPLIES TO ENTIRE EAST RIVER PLAZA SITE.

(5k) RECIPROCAL EASEMENT, RESTRICTION AND COMMON AREA MAINTENANCE DECLARATION IN CRFN 2007000097184 – BLANKET, APPLIES TO ENTIRE EAST RIVER PLAZA SITE.

6. NUMEROUS FILL CAPS WERE FOUND ALONG THE ROADWAYS. THEIR USE IS UNKNOWN AT THE TIME OF THE FIELD SURVEY.

7. THERE ARE NO VISIBLE STREAMS OR NATURAL WATERCOURSES IN THE PROPERTY AS SHOWN.

8. PROPERTY IS LOCATED PREDOMINATELY IN FLOOD HAZARD ZONE A7 (AREAS OF 100 YEAR FLOOD; BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS DETERMINED, ELEV. 13) AND ALSO LOCATED IN FLOOD HAZARD ZONE B (AREAS BETWEEN THE LIMITS OF THE 100 YEAR FLOOD AND THE 500 YEAR FLOOD, OF CERTAIN AREAS SUBJECT TO 100 YEAR FLOODING WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN ONE SQUARE MILE; OR AREAS PROTECTED BY LEVEES FROM THE BASE FLOOD.) PER REF. NO. 4.

9. HEAVY DIRT MOVEMENT ACTIVITIES AND CONSTRUCTION WERE TAKING PLACE AT TIME OF FIELD SURVEY.

10. ENCROACHMENTS AND VAULTS, IF ANY, BELOW SURFACE NOT SHOWN HEREON.

11. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

12. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, CONCRETE STRUCTURES AND PIPES HAVE NOT BEEN SHOWN ON THIS SURVEY.

REFERENCES:

1. THE OFFICIAL TAX MAPS OF THE BOROUGH OF MANHATTAN, CITY & STATE OF NEW YORK, SHEETS 17 & 30.

2. MAP ENTITLED "SURVEY OF PROPERTY SITUATED IN BOROUGH OF MANHATTAN, COUNTY OF NEW YORK, CITY OF NEW YORK, STATE OF NEW YORK" PREPARED BY FRANK F. [illegible]

LOT 22, BLOCK 1715, LOT 19, BLOCK 1716
AND LOTS 23 & 31, BLOCK 1815
BOROUGH OF MANHATTAN
CITY, COUNTY AND STATE OF NEW YORK

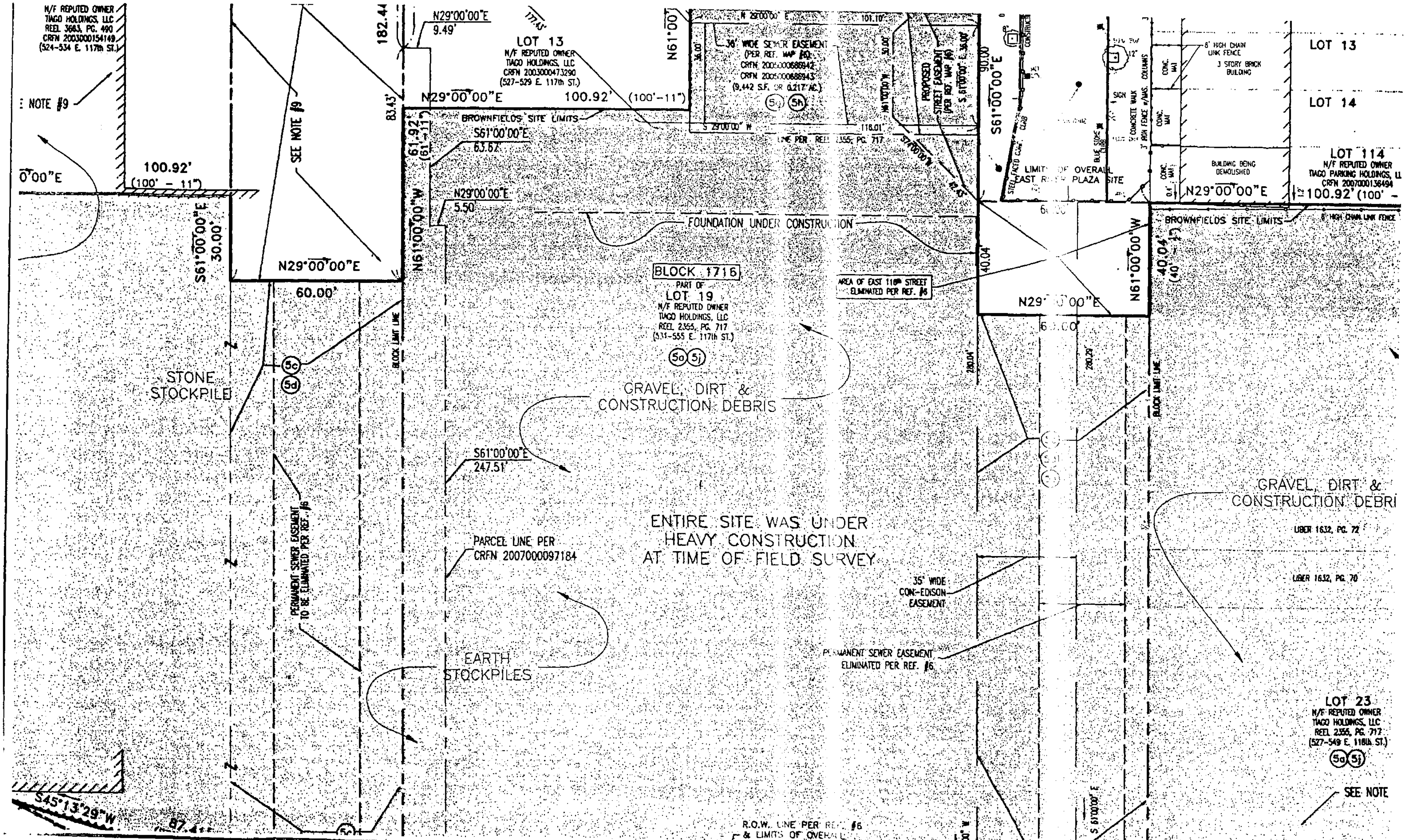
ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH THE BUILDINGS AND IMPROVEMENTS THEREON ERECTED, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

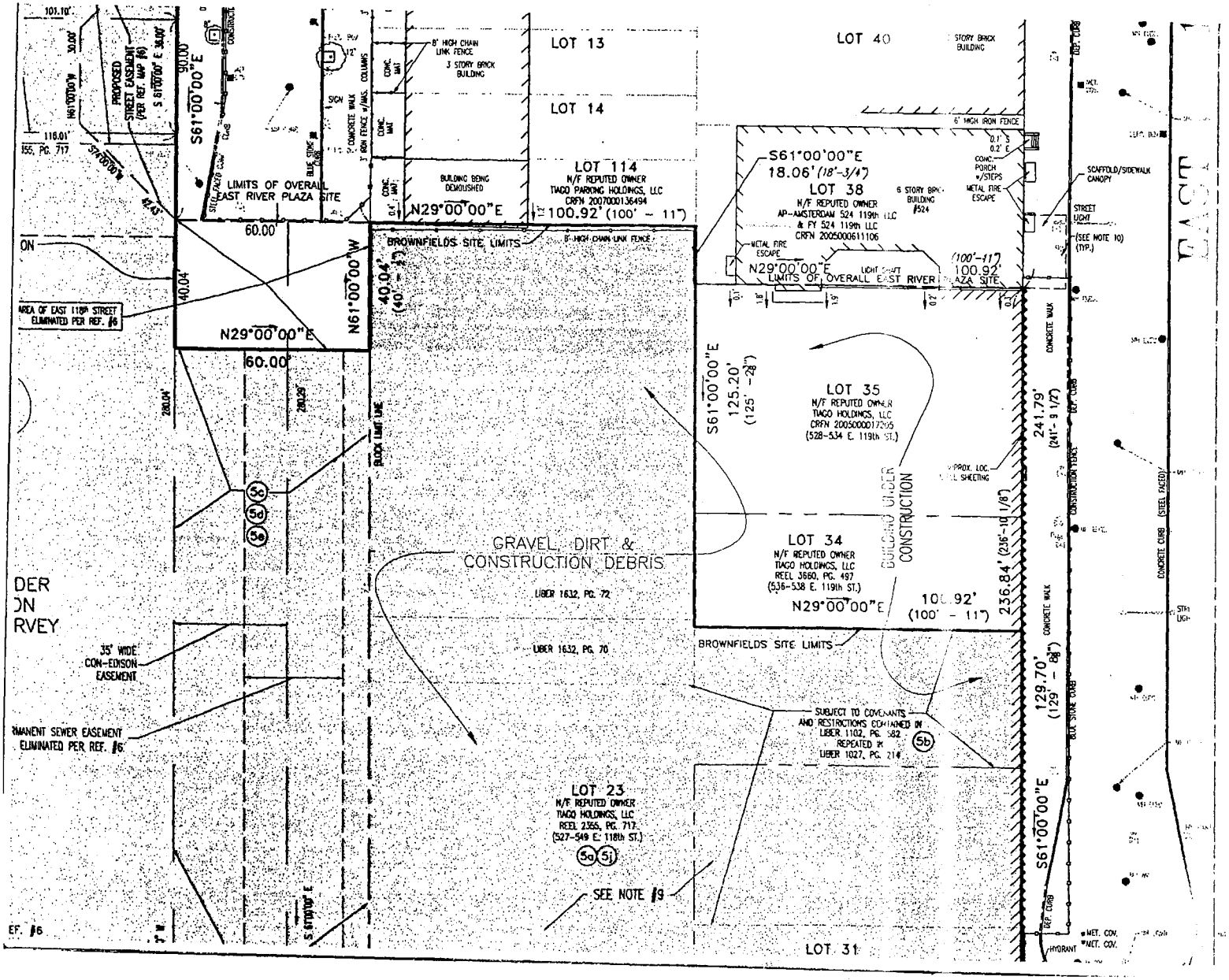
BEGINNING AT A POINT ON THE NORTHERLY SIDE OF EAST 116TH STREET (100 FOOT WIDE RIGHT OF WAY), SAID POINT BEING DISTANT 248.00 FEET FROM THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF EAST 116TH STREET WITH THE EASTERLY SIDE OF PLEASANT AVENUE (A.K.A. AVENUE "A", A.K.A. PALADINO AVENUE, 100 FOOT WIDE RIGHT OF WAY) AND FROM SAID POINT OF BEGINNING RUNNING, THENCE;

1. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1715, THENCE;
2. EASTERLY, PARALLEL WITH THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 106.92 FEET (106 FEET, 11 INCHES) TO A POINT, THENCE;
3. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO A POINT ON THE SOUTHERLY SIDE OF EAST 117TH STREET (60 FOOT WIDE RIGHT OF WAY), THENCE;
4. EASTERLY, ALONG THE SOUTHERLY SIDE OF EAST 117TH STREET, A DISTANCE OF 50.00 FEET TO A POINT, THENCE;
5. NORTHERLY, ALONG THE EASTERLY TERMINUS OF EAST 117TH STREET AND BEING PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 60.00 FEET TO A POINT ON THE NORTHERLY SIDE OF EAST 117TH STREET, THENCE;
6. WESTERLY, ALONG THE NORTHERLY SIDE OF EAST 117TH STREET, A DISTANCE OF 61.92 FEET (61 FEET, 11 INCHES) TO A POINT, THENCE;
7. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1716, THENCE;
8. WESTERLY, PARALLEL WITH THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 125.00 FEET TO A POINT, THENCE;
9. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE SOUTHERLY SIDE OF EAST 118TH STREET (60 FOOT WIDE RIGHT OF WAY), THENCE;
10. EASTERLY, ALONG THE SOUTHERLY SIDE OF EAST 118TH STREET, A DISTANCE OF 196.98 FEET (196 FEET, 11 3/4 INCHES) TO A POINT, THENCE;
11. NORTHERLY, ALONG THE EASTERLY TERMINUS OF EAST 118TH STREET AND BEING PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 60.00 FEET TO A POINT ON THE NORTHERLY SIDE OF EAST 118TH STREET, THENCE;
12. WESTERLY, ALONG THE NORTHERLY SIDE OF EAST 118TH STREET, A DISTANCE OF 40.04 FEET (40 FEET, 1/2 INCH) TO A POINT, THENCE;
13. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1815, THENCE;
14. EASTERLY, PARALLEL WITH THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 125.20 FEET (125 FEET, 2 3/8 INCHES) TO A POINT, THENCE;
15. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE SOUTHERLY SIDE OF EAST 119TH STREET (60 FOOT WIDE RIGHT OF WAY), THENCE;
16. EASTERLY, ALONG THE SOUTHERLY SIDE OF EAST 119TH STREET, A DISTANCE OF 129.70 FEET (129 FEET, 8 3/8 INCHES) TO THE "ORNER" FORMED BY THE INTERSECTION OF THE SOUTHERLY SIDE OF EAST 119TH STREET AND THE NORTHWESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE (A.K.A. EAST RIVER DRIVE, A.K.A. AVENUE "B", VARIABLE WIDTH RIGHT OF WAY), THENCE; THE FOLLOWING FOUR (4) COURSES ALONG SAID NEW WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE:
17. SOUTHERLY, A DISTANCE OF 77.74 FEET (77 FEET, 8 7/8 INCHES) TO A POINT OF CURVATURE, THENCE;
18. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 1,000.00 FEET, A CENTRAL ANGLE OF 25 DEGREES – 27 MINUTES – 37 SECONDS, AN ARC LENGTH OF 444.37 FEET (444 FEET, 4½ INCHES), TO A POINT OF TANGENCY, THENCE;
19. SOUTHWESTERLY, A DISTANCE OF 87.41 FEET (87 FEET, 4 7/8 INCHES) TO A POINT, THENCE;
20. SOUTHWESTERLY, A DISTANCE OF 138.35 FEET (138 FEET, 4 1/4 INCHES) TO THE CORNER FORMED BY THE INTERSECTION OF THE WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE AND THE NORTHERLY SIDE OF EAST 116TH STREET, THENCE;

CHIBITED.

TITLE VESTED IN CITY OF NEW YORK A
EAST 11
(100' WIDE R.O.W.)
CONCRETE CURB (STEEL FACED)
PAINTED DASHED WHITE LINE
(ASPHALT ROADWAY)
PAINTED DBL. YELLOW LINE
TWO-WAY TRAFFIC
PAINTED DASHED WHITE LINE
DEP. CURB
CONC. APPROACH
CONCRETE CURB(STEEL FACED)
CONSTRUCTION FENCE
CONCRETE WALK
CONCRETE WALK
N61°00'00"W
8' HIGH CHAIN LINK FENCE
PARKING STRUCTURE UNDER CONSTRUCTION
BLOCK 1715
LOT 22
N/F REPUTED OWNER
S61°00'00"E
N29°00'00"E
SEE NOTE #9
100.92'
(100' - 11")
S61°00'00"E
30.00'
STONE STOCKPILE
N29°00'00"E
60.00'
SEE NOTE #9
PERMANENT SEWER EASEMENT TO BE ELIMINATED PER REF. #6


N/F REPUTED OWNER TIAGO HOLDINGS, LLC REEL 3663, PG. 490 CRFN 2003000154149 (524-534 E. 117th ST.)
NOTE #9
SEE NOTE #9
100.92'
(100' - 11")
S61°00'00"E
30.00'
N29°00'00"E
60.00'
182.44
83.43'
N29°00'00"E
9.49'
LOT 13
N/F REPUTED OWNER TIAGO HOLDINGS, LLC CRFN 2003000473290 (527-529 E. 117th ST.)
N29°00'00"E
100.92'
(100'-11")
BROWNFIELDS SITE LIMITS
S61°00'00"E
63.62'
N61°00'00"W
61.92'
(61'-11")
N29°00'00"E
5.50'
36' WIDE SEWER EASEMENT (PER REF. MAP #6) CRFN 2005000686942 CRFN 2005000686943 (9,442 S.F. OR 0.217 AC.)
PROPOSED STREET EASEMENT (PER REF. MAP #6)
S61°00'00"E
LIMITS OF OVERALL EAST RIVER PLAZA SITE
FOUNDATION UNDER CONSTRUCTION
BLOCK 1716
PART OF LOT 19
N/F REPUTED OWNER TIAGO HOLDINGS, LLC REEL 2355, PG. 717 (531-555 E. 117th ST.)
AREA OF EAST 116th STREET ELIMINATED PER REF. #6
40.04'
N61°00'00"W
40.04'
STONE STOCKPILE
BLOCK LIMIT LINE
GRAVEL, DIRT & CONSTRUCTION DEBRIS
S61°00'00"E
247.51'
PARCEL LINE PER CRFN 2007000097184
ENTIRE SITE WAS UNDER HEAVY CONSTRUCTION AT TIME OF FIELD SURVEY
PERMANENT SEWER EASEMENT TO BE ELIMINATED PER REF. #6
EARTH STOCKPILES
35' WIDE CON-EDISON EASEMENT
PERMANENT SEWER EASEMENT ELIMINATED PER REF. #6
R.O.W. LINE PER REF. #6
S45°13'29"W
LOT 13
8' HIGH CHAIN LINK FENCE
3 STORY BRICK BUILDING
LOT 14
BUILDING BEING DEMOLISHED
LOT 114
N/F REPUTED OWNER TIAGO PARKING HOLDINGS, LLC CRFN 2007000136494
N29°00'00"E
100.92' (100'
BROWNFIELDS SITE LIMITS
8' HIGH CHAIN LINK FENCE
CONCRETE WALK
3' IRON FENCE w/MAS. COLUMNS
GRAVEL, DIRT & CONSTRUCTION DEBRI
LIBER 1632, PG. 72
LIBER 1632, PG. 70
LOT 23
N/F REPUTED OWNER TIAGO HOLDINGS, LLC REEL 2355, PG. 717 (527-549 E. 118th ST.)
SEE NOTE



7. THERE ARE NO VISIBLE STREAMS OR NATURAL WATERC SHOWN.

8. PROPERTY IS LOCATED PREDOMINATELY IN FLOOD HAZ YEAR FLOOD; BASE FLOOD ELEVATIONS AND FLOOD H ELEV. 13) AND ALSO LOCATED IN FLOOD HAZARD ZON OF THE 100 YEAR FLOOD AND THE 500 YEAR FLOOD; 100 YEAR FLOODING WITH AVERAGE DEPTHS LESS THA CONTRIBUTING DRAINAGE AREA IS LESS THAN ONE SQ BY LEVEES FROM THE BASE FLOOD.) PER REF. NO. 4

9. HEAVY DIRT MOVEMENT ACTIVITIES AND CONSTRUCTION FIELD SURVEY.

10. ENCROACHMENTS AND VAULTS, IF ANY, BELOW SURFA

11. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

12. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, C HAVE NOT BEEN SHOWN ON THIS SURVEY.

REFERENCES:

1. THE OFFICIAL TAX MAPS OF THE BOROUGH OF MANHAT YORK, SHEETS 17 & 30.

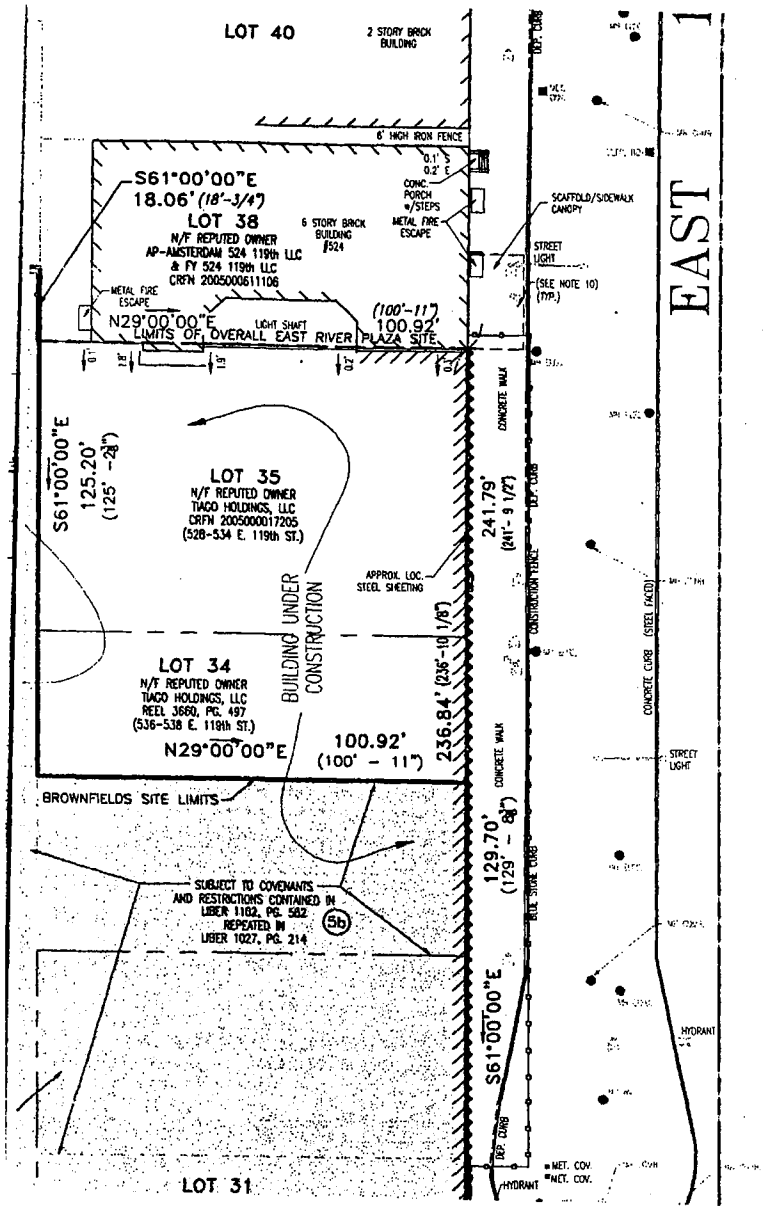
2. MAP ENTITLED "SURVEY OF PROPERTY SITUATED IN BO OF NEW YORK, CITY OF NEW YORK, STATE OF NEW YO HUNGER.

3. MAP ENTITLED "SECTIONAL MAP, BOROUGH OF MANHATT NEW YORK, PRESIDENT OF THE BOROUGH OF MANHATT SHEET NO. 98.

4. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, MAP, CITY OF NEW YORK, NEW YORK, BRONX, RICHMO KINGS COUNTIES, PANEL 91 OF 457 MAP NO. 360497 5, 2007.

5. MAP ENTITLED "BROWNFIELDS PARCEL SKETCH, EAST R BOROUGH OF MANHATTAN, CITY, COUNTY & STATE OF CONTROL POINT ASSOCIATES, INC., DATED 11-22-200 REVISION NO. 1, FILE NO. C965118R.

6. MAP ENTITLED "CITY OF NEW YORK OFFICE OF THE PR MANHATTAN TOPOGRAPHICAL BUREAU, MAP ACC. NO. 3 CITY MAP BY THE ELIMINATION, DISCONTINUANCE AND 118TH STREET BETWEEN PLEASANT AVENUE AND THE F DISCONTINUANCE AND CLOSING OF A PORTION OF EAS PLEASANT AVENUE AND THE FDR DRIVE; THE WIDENING DRIVE ON ITS WESTERLY SIDE FROM EAST 119TH STRE OF EAST 116TH STREET, THE EXTINGUISHMENT OF A P THE FORMER BED OF EAST 117TH STREET WEST OF T EXTINGUISHMENT OF A PERMANENT SEWER EASEMENT I 118TH STREET WEST OF THE FDR DRIVE, THE DELINEA ONLY OF 1. A SEWER EASEMENT EXTENDING FROM EA STREET; 2. A SEWER EASEMENT EXTENDING FROM EAS STREET; 3. A STREET EASEMENT AT THE NEW EASTERL STREET; 4. A PUBLIC ACCESS EASEMENT EXTENDING F 116TH STREET, AND THE ADJUSTMENT OF GRADES AN NECESSITATED THEREBY ALL WITHIN THE AREA BOUNDE STREET, FRANKLIN D. ROOSEVELT DRIVE AND E. 116TH HABIB & ASSOCIATES, DATED: MARCH 9, 1998, DWG. (C.P.C. NO. 980699 MMM).



7. THERE ARE NO VISIBLE STREAMS OR NATURAL WATERCOURSES IN THE PROPERTY AS SHOWN.

8. PROPERTY IS LOCATED PREDOMINATELY IN FLOOD HAZARD ZONE A7 (AREAS OF 100 YEAR FLOOD; BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS DETERMINED, ELEV. 13) AND ALSO LOCATED IN FLOOD HAZARD ZONE B (AREAS BETWEEN THE LIMITS OF THE 100 YEAR FLOOD AND THE 500 YEAR FLOOD; OF CERTAIN AREAS SUBJECT TO 100 YEAR FLOODING WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN ONE SQUARE MILE; OR AREAS PROTECTED BY LEVEES FROM THE BASE FLOOD.) PER REF. NO. 6.

9. HEAVY DIRT MOVEMENT ACTIVITIES AND CONSTRUCTION WERE TAKING PLACE AT TIME OF FIELD SURVEY.

10. ENCROACHMENTS AND VAULTS, IF ANY, BELOW SURFACE NOT SHOWN HEREON.

11. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

12. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, CONCRETE STRUCTURES AND PIPES HAVE NOT BEEN SHOWN ON THIS SURVEY.

REFERENCES:

1. THE OFFICIAL TAX MAPS OF THE BOROUGH OF MANHATTAN, CITY & STATE OF NEW YORK, SHEETS 17 & 30.

2. MAP ENTITLED "SURVEY OF PROPERTY SITUATED IN BOROUGH OF MANHATTAN, COUNTY OF NEW YORK, CITY OF NEW YORK, STATE OF NEW YORK" PREPARED BY FRANK F. HUNGER.

3. MAP ENTITLED "SECTIONAL MAP, BOROUGH OF MANHATTAN" PREPARED BY THE CITY OF NEW YORK, PRESIDENT OF THE BOROUGH OF MANHATTAN, TOPOGRAPHICAL BUREAU, SHEET NO. 9B.

4. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, CITY OF NEW YORK, NEW YORK, BRONX, RICHMOND, NEW YORK, QUEENS AND KINGS COUNTIES, PANEL 91 OF 457 MAP NO. 36049C 091F, MAP REVISED SEPTEMBER 5, 2007.

5. MAP ENTITLED "BROWNFIELDS PARCEL SKETCH, EAST RIVER PLAZA, BROWNFIELD SITE, BOROUGH OF MANHATTAN, CITY, COUNTY & STATE OF NEW YORK", PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 11-22-2006, REVISED 11-01-2007 AS REVISION NO. 1, FILE NO. C985118R.

6. MAP ENTITLED "CITY OF NEW YORK OFFICE OF THE PRESIDENT, BOROUGH OF MANHATTAN TOPOGRAPHICAL BUREAU, MAP ACC. NO. 30206 SHOWING A CHANGE IN THE CITY MAP BY THE ELIMINATION, DISCONTINUANCE AND CLOSING OF A PORTION OF EAST 118TH STREET BETWEEN PLEASANT AVENUE AND THE FDR DRIVE; THE ELIMINATION, DISCONTINUANCE AND CLOSING OF A PORTION OF EAST 117TH STREET BETWEEN PLEASANT AVENUE AND THE FDR DRIVE; THE WIDENING OF A PORTION OF THE FDR DRIVE ON ITS WESTERLY SIDE FROM EAST 119TH STREET TO A POINT 138.35' NORTH OF EAST 116TH STREET, THE EXTINGUISHMENT OF A PERMANENT SEWER EASEMENT IN THE FORMER BED OF EAST 117TH STREET WEST OF THE FDR DRIVE, THE EXTINGUISHMENT OF A PERMANENT SEWER EASEMENT IN THE FORMER BED OF EAST 118TH STREET WEST OF THE FDR DRIVE, THE DELINEATION, FOR INFORMATION PURPOSES ONLY OF 1. A SEWER EASEMENT EXTENDING FROM EAST 118TH STREET TO EAST 117TH STREET; 2. A SEWER EASEMENT EXTENDING FROM EAST 117TH STREET TO EAST 116TH STREET; 3. A STREET EASEMENT AT THE NEW EASTERLY TERMINUS OF EAST 118TH STREET; 4. A PUBLIC ACCESS EASEMENT EXTENDING FROM EAST 117TH STREET TO EAST 116TH STREET, AND THE ADJUSTMENT OF GRADES AND BLOCK DIMENSIONS NECESSITATED THEREBY ALL WITHIN THE AREA BOUNDED BY PLEASANT AVENUE, E. 119TH STREET, FRANKLIN D. ROOSEVELT DRIVE AND E. 116TH STREET" PREPARED BY PHILIP HABIB & ASSOCIATES, DATED: MARCH 9, 1999, DWG. NO. 1 & 2 OF 2, ACC NO. 30206 (C.P.C. NO. 980699 MMM).

13. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE CENTER LINE OF BLOCK 1815, THENCE;

14. EASTERLY, PARALLEL WITH THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 125.20 FEET (125 FEET, 2 3/8 INCHES) TO A POINT, THENCE;

15. NORTHERLY, PARALLEL WITH THE EASTERLY SIDE OF PLEASANT AVENUE, A DISTANCE OF 100.92 FEET (100 FEET, 11 INCHES) TO THE SOUTHERLY SIDE OF EAST 119TH STREET (60 FOOT WIDE RIGHT OF WAY), THENCE;

16. EASTERLY, ALONG THE SOUTHERLY SIDE OF EAST 119TH STREET, A DISTANCE OF 129.70 FEET, (129 FEET, 8 3/8 INCHES) TO THE CORNER FORMED BY THE INTERSECTION OF THE SOUTHERLY SIDE OF EAST 119TH STREET AND THE NEW WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE (A.K.A. EAST RIVER DRIVE, A.K.A. AVENUE "B", VARIABLE WIDTH RIGHT OF WAY), THENCE; THE FOLLOWING FOUR (4) COURSES ALONG SAID NEW WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE;

17. SOUTHERLY, A DISTANCE OF 77.74 FEET (77 FEET, 8 7/8 INCHES) TO A POINT OF CURVATURE, THENCE;

18. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 1,000.00 FEET, A CENTRAL ANGLE OF 25 DEGREES – 27 MINUTES – 37 SECONDS, AN ARC LENGTH OF 444.37 FEET (444 FEET; 4½ INCHES), TO A POINT OF TANGENCY, THENCE;

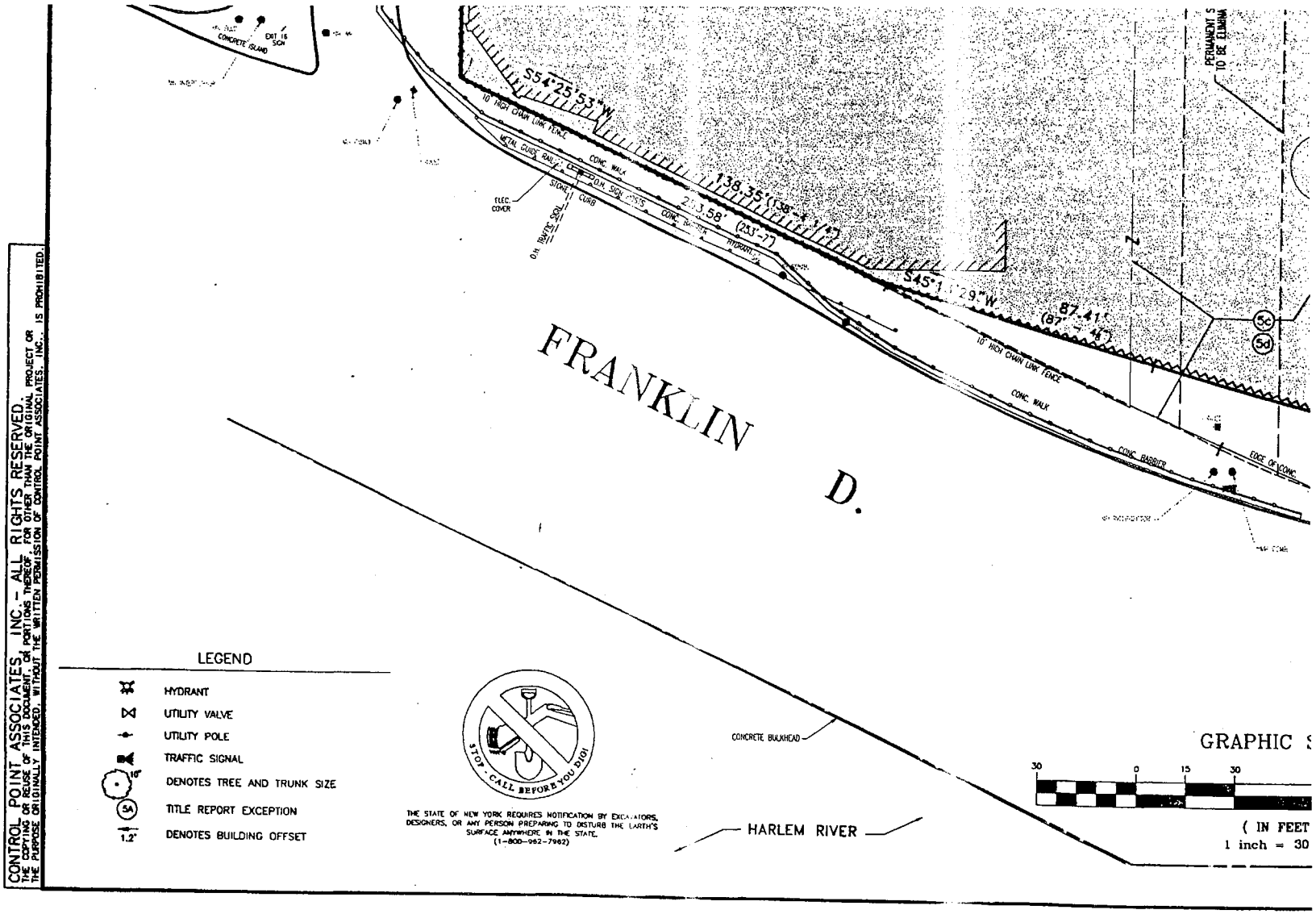
19. SOUTHWESTERLY, A DISTANCE OF 87.41 FEET (87 FEET, 4 7/8 INCHES) TO A POINT, THENCE;

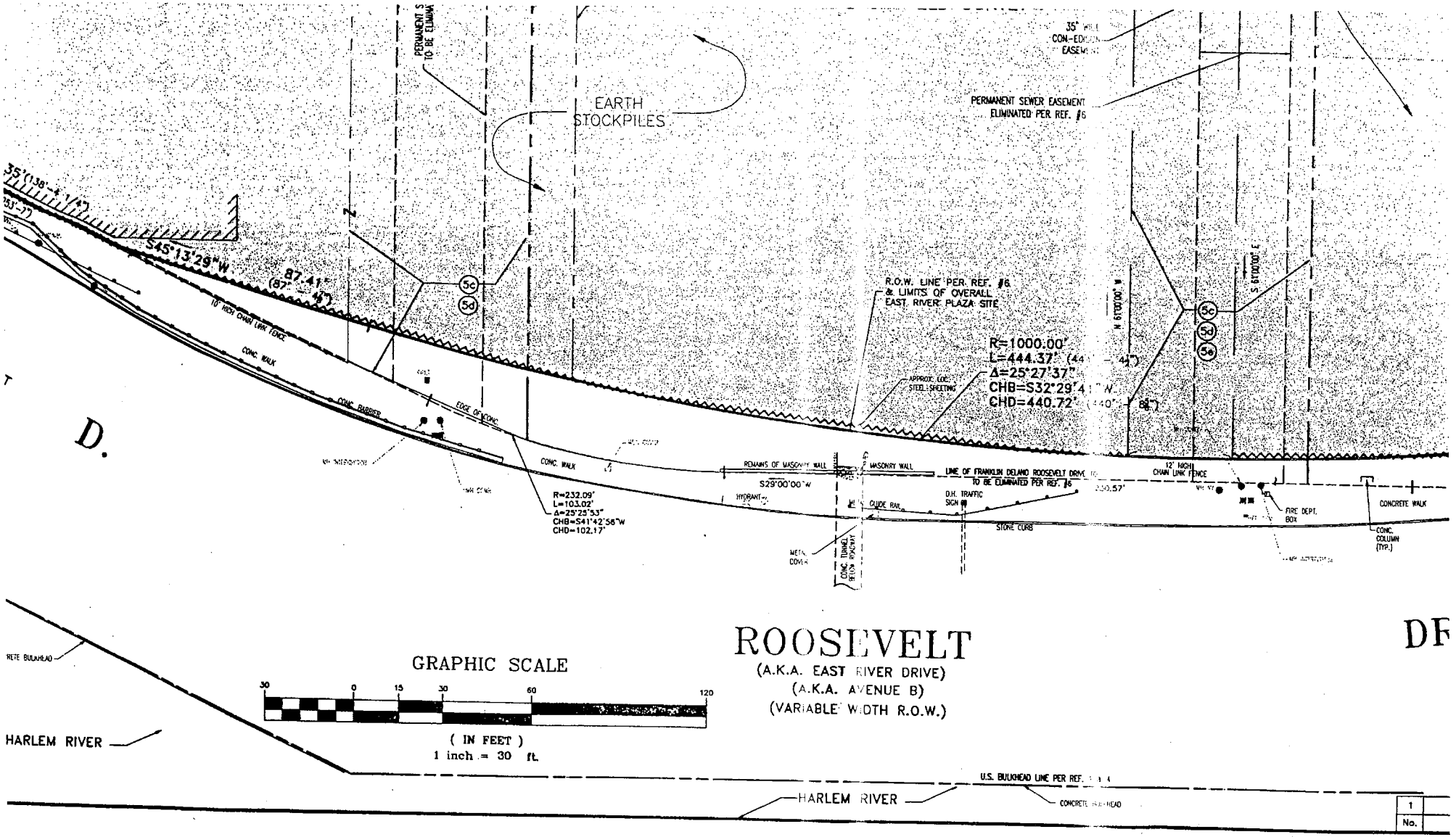
20. SOUTHWESTERLY, A DISTANCE OF 138.35 FEET (138 FEET, 4 1/4 INCHES) TO THE CORNER FORMED BY THE INTERSECTION OF THE WESTERLY SIDE OF FRANKLIN D. ROOSEVELT DRIVE AND THE NORTHERLY SIDE OF EAST 116TH STREET, THENCE;

21. WESTERLY, ALONG THE NORTHERLY SIDE OF EAST 116TH STREET, A DISTANCE OF 263.62 FEET (263 FEET, 7 ½ INCHES) TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 194,457 SQUARE FEET OR 4.464 ACRES

THIS DESCRIPTION IS PREPARED WITH REFERENCE TO A TITLE COMMITMENT REPORT PREPARED BY GUARDIAN LAND ABSTRACT, AGENT FOR COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NO. C41112NY, (L346968NY), WITH AN EFFECTIVE DATE OF AUGUST 1, 2007.





ROOSEVELT

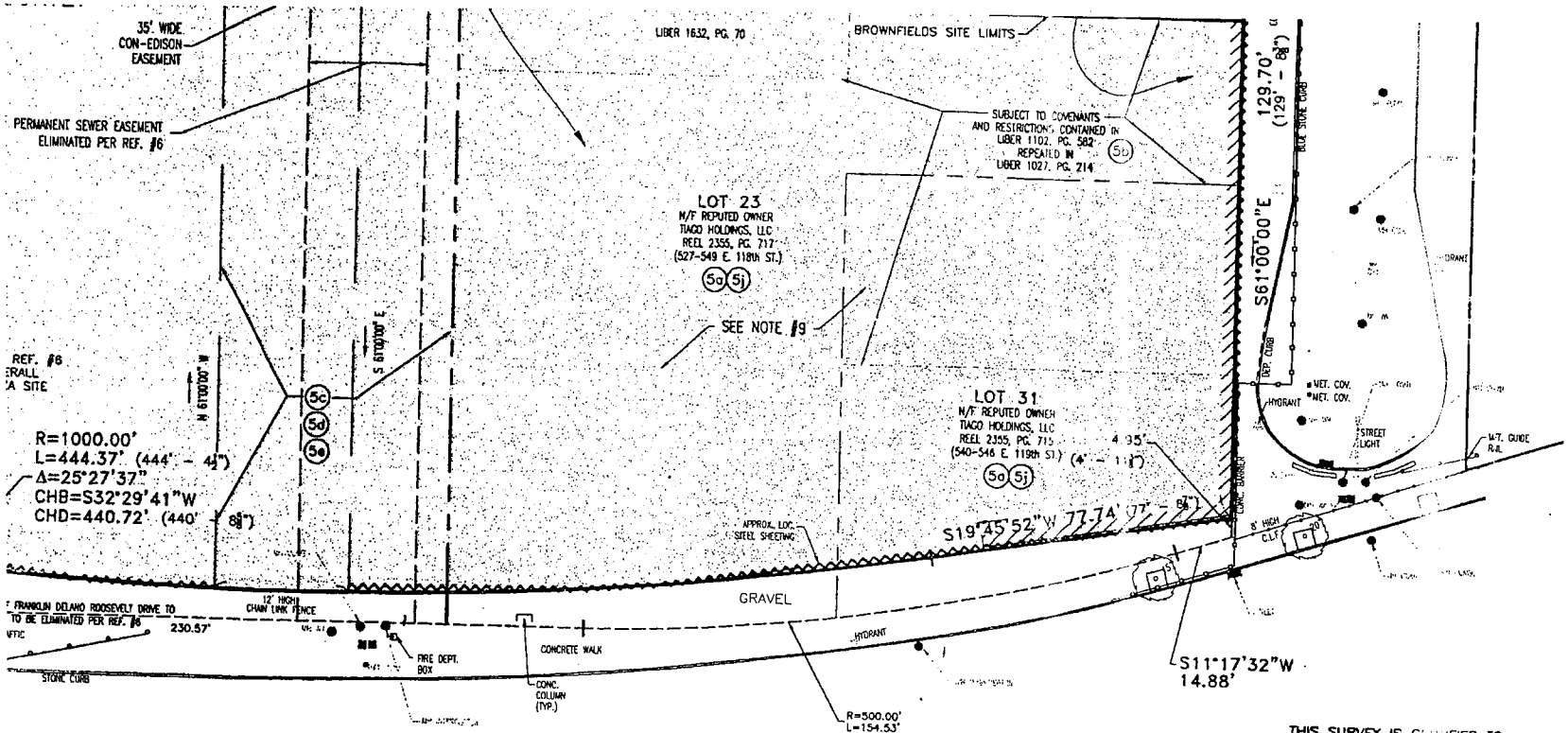
(A.K.A. EAST RIVER DRIVE)
(A.K.A. AVENUE B)
(VARIABLE WIDTH R.O.W.)

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

No.	
1	



STREET; 2. A SEWER EASEMENT EXTENDING FRO
STREET; 3. A STREET EASEMENT AT THE NEW EA
STREET; 4. A PUBLIC ACCESS EASEMENT EXTENDI
116TH STREET, AND THE ADJUSTMENT OF GRADES
NECESSITATED THEREBY ALL WITHIN THE AREA BO
STREET, FRANKLIN D. ROOSEVELT DRIVE AND E.
HABIB & ASSOCIATES, DATED: MARCH 9, 1999, D
(C.P.C. NO. 980699 MMM).

THIS SURVEY IS CERTIFIED TO:
THE STATE OF NEW YORK

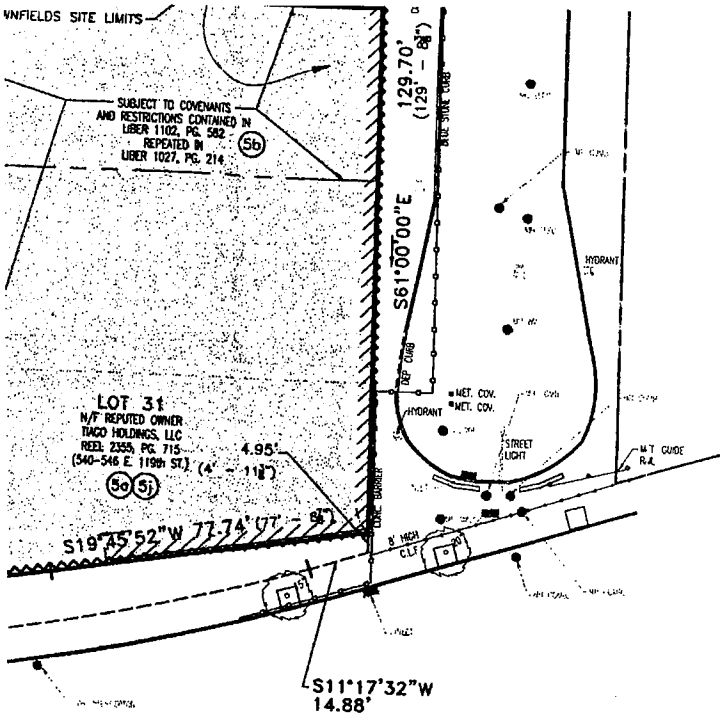
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WA
BASED WERE MADE IN ACCORDANCE WITH "MINIMUM STANDARD DETAIL REQUIREMENTS
ALTA/ACSM LAND TITLE SURVEYS", JOINTLY ESTABLISHED AND ADOPTED BY ALTA, AN
NSPS IN 2005, AND INCLUDES ITEMS 2, 3, 4, 8, 9, 10, 13, 14 & 17 OF TABLE A THI
PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN
EFFECT ON THE DATE OF THIS CERTIFICATION. UNDERSIGNED FURTHER CERTIFIES THAT
MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF NEW
YORK, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THA
WHICH IS SPECIFIED THEREIN.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR BLUE INK

GREGORY S. GALLAS
NEW YORK PROFESSIONAL LAND SURVEYOR #50124

12-07-07
DATE

No.	DESCRIPTION OF REVISION	DRAWN:	APPROVED:	DATE
1	REVISE DISTANCE ALONG EAST 119th STREET	D.A.H.	G.S.G.	12-07-07



STREET; 2. A SEWER EASEMENT EXTENDING FROM EAST 117TH STREET TO EAST 116TH STREET; 3. A STREET EASEMENT AT THE NEW EASTERLY TERMINUS OF EAST 118TH STREET; 4. A PUBLIC ACCESS EASEMENT EXTENDING FROM EAST 117TH STREET TO EAST 116TH STREET, AND THE ADJUSTMENT OF GRADES AND BLOCK DIMENSIONS NECESSITATED THEREBY ALL WITHIN THE AREA BOUNDED BY PLEASANT AVENUE, E. 119TH STREET, FRANKLIN D. ROOSEVELT DRIVE AND E. 116TH STREET" PREPARED BY PHILIP HABIB & ASSOCIATES, DATED: MARCH 9, 1999, DWG. NO. 1 & 2 OF 2, ACC NO. 30206 (C.P.C. NO. 980699 MMM).

0'
3'
'28"
7'08"46"W
3.92'

THIS SURVEY IS CERTIFIED TO:
THE STATE OF NEW YORK

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WAS BASED WERE MADE IN ACCORDANCE WITH "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS", JOINTLY ESTABLISHED AND ADOPTED BY ALTA, AND NSPS IN 2005, AND INCLUDES ITEMS 2, 3, 4, 8, 9, 10, 13, 14 & 17 OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF NEW YORK, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR BLUE INK SEAL

GREGORY S. GALLAS — 12-07-2007
NEW YORK PROFESSIONAL LAND SURVEYOR #50124 — DATE

STREET	D.A.H.	G.S.G.	12-07-07
	DRAWN:	APPROVED:	DATE

FIELD DATE: 11-17-05, 9-12-06, 11-06-07
F/B NO.: 07-20
F/B PG.: 136
DRAWN: E.C.R./D.A.H.
CHECKED: F.B.L.
APPROVED: G.S.G.

ALTA/ACSM LAND TITLE SURVEY
EAST RIVER PLAZA
BROWNFIELDS PARCEL

BETWEEN FRANKLIN D. ROOSEVELT DRIVE & PLEASANT AVENUE, FROM E. 116th STREET TO E. 119th STREET
LOT 22, BLOCK 1715, LOT 19, BLOCK 1716 AND
LOTS 23 & 31, BLOCK 1815
BOROUGH OF MANHATTAN, CITY, COUNTY & STATE OF NEW YORK

CONTROL POINT ASSOCIATES, INC.
35 TECHNOLOGY DRIVE
WARREN, NJ 07059
908.668.0099 - 908.668.9595 FAX
NEW BRITAIN CORPORATE CENTER
1600 MANOR DRIVE, SUITE 120
CHALFONT, PA 18914
215.412.9055 - 215.412-0851 FAX

DATE	SCALE	FILE NO.	DWG. NO.
11-15-2007	1"=30'	C96511.04G	1 OF 1

APPENDIX B

EC/IC DOCUMENTATION

- NYSDEC Letter Approving Groundwater Monitoring Termination
- Addendum to SMP – July 28, 2011
- NYSDEC Letter Approving SMP Addendum, August 18, 2011
- NYSDEC Letter Approving 2018 PRR
- NYSDEC April 2, 2021 PRR and Certification Reminder Notice
- Final Cover System throughout Reporting Period
- Site-Wide Inspection Checklist – 2018
- Cover System and Vapor Barrier System Checklist – 2018
- Photolog - 2018
- Site-Wide Inspection Checklist – 2019
- Cover System and Vapor Barrier System Checklist – 2019
- Photolog - 2019
- Site-Wide Inspection Checklist – 2020
- Cover System and Vapor Barrier System Checklist – 2020
- Photolog - 2020
- NYSDEC Institutional and Engineering Controls Certification Form

NYSDEC LETTER APPROVING GROUNDWATER MONITORING TERMINATION

New York State Department of Environmental Conservation
Division of Environmental Remediation
Hunters Point Plaza, 47-40 21 St , Long Island City, New York 11101
Phone: (718) 482-6454 • **Fax:** 718-482-6358
Website: www.dec.ny.gov

Joe Martens
Commissioner

David Blumenfeld
TIAGO PARKING HOLDINGS, LLC
300 Robbins Lane
Syosset, NY 11791

Re: Site Management (SM) Periodic Review Report (PRR) Response Letter
East River Plaza, New York
New York County, Site No.: C231045

Dear David Blumenfeld:

The Department has reviewed your Periodic Review Report (PRR) and IC/EC Certification for following period: 01/01/2010 to 12/31/2010.

The Department hereby accepts the PRR and associated Certification. The frequency of Periodic Reviews for this site is 1 year(s), your next PRR is due on June 13, 2012. You will receive a reminder letter and updated certification form 45-days prior to the due date.

Based on a review of the groundwater monitoring reports, the Department and New York State Department of Health concur with recommendation to terminate quarterly groundwater monitoring. Please provide modified sections of the SMP reflecting this change within 30 days of the date of this letter.

If you have any questions, or need additional forms, please contact me at 718-482-4905 or e-mail: yywong@gw.dec.state.ny.us.

Sincerely,

Bryan Wong
Project Manager

ec: Jane O'Connell, Lou Oliva – NYSDEC
Albert DeMarco – NYSDOH
Stephanie Davis – FPM
Rafaella Petrasek – Tiago Holdings, LLC
James Rigano, Esq. – Certilman Balin Adler & Hyman, LLP

ADDENDUM TO SMP JULY 28, 2011

FPM group — Engineering and Environmental Science

FPM Group, Ltd.
FPM Engineering Group, P.C.
formerly Fanning, Phillips and Molnar

VIA MAIL AND EMAIL

CORPORATE HEADQUARTERS
909 Marconi Avenue
Ronkonkoma, NY 11779
631/737-6200
Fax 631/737-2410

July 28, 2011

Mr. Bryan Wong
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21st Street
Long Island City, NY 11101-5407

Re: **Addendum to Site Management Plan**
East River Plaza, New York, NY
NYSDEC #C231045
FPM File No. 492-11-115

Dear Mr. Wong:

On behalf of Tiago Holdings, LLC, the property owner, FPM Group (FPM) is acknowledging the request in your June 29, 2011 correspondence to modify the Site Management Plan (SMP) for the above-referenced site to reflect New York State Department of Environmental Conservation (NYSDEC) approval of the termination of quarterly groundwater monitoring.

The affected portions of the SMP include Section 3.0 Monitoring Plan and Section 4.0 Operation and Maintenance Plan. These portions of the SMP have been modified to reflect the termination of quarterly groundwater monitoring and the change in frequency of groundwater monitoring well inspections, as shown on the attached revised sections. Please note that the recent revisions and previous revisions are denoted in italics in these sections. These revisions will be implemented immediately.

Please confirm that the revised SMP sections are approved by the NYSDEC. If you have any comments or questions, please do not hesitate to contact us at (631) 737-6200.

Very truly yours,

Ben T. Cancemi
Senior Hydrogeologist

Stephanie O. Davis
Senior Hydrogeologist
Department Manager

SOD:tac
Attachments

cc: Gary Litwin, NYSDOH
Raffaela Petrasek, Tiago Holdings
Greg Lowe, Tiago Holdings
James Rigano, Esq.

S:\BDG\East River Plaza Brownfields\Summary Report 2010\SMP Modifications\NYSDEC SMP Addendum-Ltr.Docx

3.0 MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the implemented ECs in reducing or mitigating contamination at the Site. ECs at the Site include a composite cover system and vapor barrier. This Monitoring Plan is subject to revision by NYSDEC.

3.1.2 Purpose

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of groundwater;
- Evaluating Site information periodically to confirm that the remedy continues to be effective as per the design; and
- Preparing the necessary reports for the various monitoring activities.
- Assessing compliance with NYSDEC groundwater standards and Track 4 SCOs for soil;
- Assessing achievement of the remedial performance criteria.

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

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;

- Inspection and maintenance requirements for monitoring wells;
- Monitor well decommissioning procedures; and
- Annual inspection and certification.

Quarterly groundwater monitoring of the performance of the remedy and overall reduction in contamination on-Site will be conducted for the first year. Frequency thereafter will be determined by NYSDEC. *The NYSDEC approved the termination of quarterly groundwater monitoring on June 29, 2011.* Trends in contaminant levels in groundwater in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. The monitoring program is summarized in Table 3.1.2.1 and outlined in detail in Sections 3.2 through 3.3 below.

Table 3.1.2.1: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Groundwater**	Quarterly, first year	Groundwater	TCL VOCs, TCL BN SVOCs, TAL metals
Cover	Annual	Cover	-
Vapor Barrier	Annual	Vapor Barrier	-

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.
** *The NYSDEC approved the termination of quarterly groundwater monitoring on June 29, 2011.*

3.2 ENGINEERING CONTROL SYSTEM MONITORING

3.2.1 Composite Cover System

Exposure to residual contaminated soils is prevented by an engineered, composite cover system that is has been built on the Site and is undergoing modification during Site development. This composite cover system is comprised of cover gravel with a Mirafi fabric demarcation layer that was installed in November 2006. Following the completion of Site redevelopment, the cover system will consist of asphalt and concrete covered roads, concrete covered sidewalks, and concrete building slabs. The Pavement Plan in Appendix P shows the NYSDEC-approved design for the final composite cover to be used on this Site. An as-built survey in Appendix P shows the location of the current cover system built at the Site.

3.2.1.1 Cover System Monitoring Schedule

The cover will be inspected daily during its modification by an environmental professional. Following final modification, the cover will be inspected annually at a minimum and whenever site activities with the potential to breach the cover are conducted.

Inspection frequency is subject to change by NYSDEC and NYSDOH. Unscheduled inspections and/or sampling may take place when a suspected failure of the composite cover system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Monitoring deliverables for the composite cover system are specified later in this Plan.

3.2.1.2 Cover System General Equipment Monitoring

A visual inspection of the complete final cover system will be conducted during the monitoring event. Cover system components to be monitored include, but are not limited to, the following:

- Gravel thickness and continuity
- Nature of gravel materials
- Asphalt continuity and condition
- Concrete continuity and condition

A complete list of components to be checked is provided in the Cover System and Vapor Barrier System Inspection Checklist, presented in Attachment 5. If any portions of the system are not performing within specifications, maintenance and repair as per the Operation and Maintenance Plan are required immediately.

3.2.2 Vapor Barrier System

The sub-grade portions of the building (slab and foundation walls) are being provided with a barrier and seal system for water proofing purposes during the development phase of this project. This barrier and seal system will also function as a vapor barrier. The design for this project includes a water-tight basement slab and wall system designed in accordance with Federal Emergency Management Agency (FEMA) flood levels. This will be accomplished by providing a positive side waterproofing membrane beneath the slab, pile caps, and elevator pits using a sheet membrane waterproofing material. The foundation walls will also be waterproofed using a similar sheet membrane waterproofing material applicable for walls. Penetrations through the slab and/or wall for pipes and duct banks will be detailed in accordance with approved manufacturer's details. The waterproofing elements to be used are specified in the

construction contract documents; copies of pertinent portions of these documents are included in Appendix Q and placement of these materials is shown on the typical foundation detail plan in Appendix Q.

3.2.2.1 Monitoring Schedule

The vapor barrier components are inspected daily during installation by a construction professional. Following building construction, the vapor barrier system will be inspected annually at a minimum and whenever site activities with the potential to breach the vapor barrier are conducted.

Inspection frequency is subject to change by NYSDEC and NYSDOH. Unscheduled inspections and/or sampling may take place when a suspected failure of the vapor barrier system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Sampling will be conducted in the event that basement space is contemplated to be used for retail purposes. Monitoring deliverables for the vapor barrier system are specified later in this Plan.

3.2.2.2 Vapor Barrier General Equipment Monitoring

A visual inspection of the complete vapor barrier system will be conducted during the monitoring event. It should be noted that the vapor barrier system is installed beneath the concrete cover, where it is inaccessible and not visible. Therefore, monitoring of the vapor barrier system is contingent on monitoring of the concrete cover components. Vapor barrier system monitoring will include the following:

- Concrete continuity and condition

A complete list of components to be checked is provided in the Cover System and Vapor Barrier System Inspection Checklist, presented in Attachment 5. If any portions of the system are not performing within specifications, maintenance and repair as per the Operation and Maintenance Plan are required immediately.

3.2.2.3 Vapor Barrier System Sampling

The sub-grade areas of the site building are planned to be used for parking, mechanical equipment, and storage. If retail use is contemplated for a portion of the sub-grade area, then indoor air sampling will be performed for the retail space. Prior to retail use, a sampling plan will be developed and submitted to the NYSDEC and NYSDOH for their approval. The sampling plan will include the following provisions:

- Indoor air sampling to be performed in accordance with NYSDEC and/or NYSDOH guidance;
- Sampling duration will be comparable to potential exposure duration (e.g. 8-hour to 24-hour samples);
- The HVAC system for the retail space would be operated in the same manner as when the retail space is occupied; and
- Samples will be collected using methods and equipment in accordance with NYSDEC/NYSDOH guidance and analyzed by a NYSDOH ELAP-approved laboratory in accordance with approved methods; and
- Sample results will be reported in an interim report and/or in the Annual Site Management Report for the time that the sampling is performed.

Following NYSDEC and NYSDOH approval of the sampling plan, the sampling will be conducted and reported in accordance with the plan.

Vapor barrier system monitoring was conducted in 2010 for two sub-grade spaces that were targeted for retail use. Sampling was conducted in accordance with a NYSDEC and NYSDOH-approved Indoor Air Sampling Work Plan. The results were reported in the Site Management Periodic Review Report for 2010 and indicated that there is no concern for indoor air quality in the retail warehouse space and that tetrachloroethene (PCE) detected in indoor air in the retail kennel space resulted from construction activities. This PCE was confirmed to have dissipated below the NYSDOH air guideline value by December 2010.

The vapor barrier system monitoring results show no concerns for soil vapor intrusion, which is consistent with previous soil vapor, soil, and groundwater monitoring data, all of which show no concerns for soil vapor intrusion. As reported in the Site Management Periodic Review Report for 2010, no further vapor barrier system monitoring was indicated or recommended. The NYSDEC and NYSDOH agreed with this conclusion.

3.3 GROUNDWATER MONITORING PROGRAM

Groundwater monitoring will be performed on a regular basis to assess the performance of the remedy. *The NYSDEC approved the termination of the quarterly groundwater monitoring program on June 29, 2011.*

3.3.1 Monitoring System Design

The network of monitoring wells is designed to monitor both up-gradient and down-gradient groundwater conditions at the Site. The network of on-Site wells has been located in

the downgradient vicinity of the former area of petroleum-impacted soil, the downgradient vicinity of the former area of metals-impacted soil, and at upgradient locations. These wells include MW-8 through MW-14, as shown on the Site Plan in Appendix N. These wells are installed approximately five feet into the water table aquifer and a portion of each well screen spans the water table surface. Groundwater flow is toward the Harlem River to the east. It should be noted that historic Site wells M-1 through M-7 were lost prior to or during Site demolition activities. These wells no longer exist and, therefore, cannot be monitored.

A groundwater sampling matrix is shown in Table 3.3.1.1 and indicates the wells to be sampled, the rationale for sampling, the types of sample containers, preservatives, and handling, the analyses to be performed, and the laboratory deliverables. This sampling matrix will be used to guide groundwater sampling activities in the field and will be adjusted as necessary as wells are removed from the monitoring program. *Please note that termination of the groundwater monitoring program was approved by the NYSDEC on June 29, 2011.*

3.3.2 Groundwater Well Construction

Well installation procedures and well construction are documented in the FER. Copies of the well installation logs are also included in Appendix R herein.

3.3.3 Monitoring Schedule

Quarterly groundwater monitoring will be performed on wells M-8 through M-14 for the first year. Following the initial two monitoring events, if it is determined that the quality of ambient groundwater migrating onto the Site has been established, a request may be made to the NYSDEC to abandon upgradient wells. No wells will be abandoned without NYSDEC approval. Quarterly monitoring will be performed at the downgradient wells to confirm groundwater conditions following remediation. Following evaluation of post-remediation groundwater quality, a request may be made to the NYSDEC to abandon the downgradient monitoring wells. No wells will be abandoned without NYSDEC approval.

The sampling frequency may be modified by NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC. Deliverables for the groundwater-monitoring program are specified below.

The Site Management Periodic Review Report for 2010 documented that no Site-related groundwater impacts had been observed downgradient of a former area of petroleum-impacted soil for three years and that groundwater conditions at all Site wells were consistent with ambient groundwater conditions in the Site vicinity. Termination of quarterly groundwater monitoring was requested and was approved by the NYSDEC on June 29, 2011.

3.3.4 Sampling Event Protocol

All well sampling activities will be recorded in a field book and a groundwater sampling log presented in Attachment 6. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network.

During the initial sampling event under this SMP, or at any time a replacement monitoring well is installed, the top of casing elevation shall be surveyed to the nearest 0.01 foot such that an elevation reference point for each well is established.

Well purging and sampling procedures will conform to USEPA low-flow groundwater sampling procedures (EPA/540/S-95/504, April 1996). At each well to be sampled, the depth to the static water level and the depth to any non-aqueous-phase liquids (petroleum) will be measured using an interface probe. The probe will be carefully inserted and withdrawn so as to least disturb the water in the well. The depth of the well will be confirmed after sampling is complete. Any well(s) exhibiting free-phase petroleum will not be sampled. A decontaminated low-flow pump with dedicated tubing will then be used to purge the well at a rate of up to 0.5 liters per minute (<0.13 gallon per minute). The pump will be installed with the intake at the desired sampling point (within the screen interval). The depth to water will be monitored during purging and the flow rate will be adjusted so as to result in minimal drawdown (<0.1 meter or <0.33 feet). Water quality parameters, including pH, turbidity, specific conductivity, and temperature, will be monitored using an in-line meter during purging at a frequency of once every three to five minutes. When all parameters have stabilized for three successive readings, the well will be sampled.

Well sampling forms documenting the well purging and sampling procedures will be completed and provided in the Annual Site Management Report. During well purging, groundwater will be disposed in accordance with the discharge permit(s) for the Site.

Following purging, the in-line monitoring meter will be removed and the groundwater samples will be collected directly from the pump tubing. As per the USEPA low-flow sampling procedures, sample filtration to remove excess turbidity, if necessary due to turbidity levels exceeding 50 NTU, will be performed using an in-line 0.45 µm filter. The retrieved samples will be placed directly into laboratory-supplied sample containers. A groundwater sampling matrix is shown in Table 3.3.1.1 and indicates the wells to be sampled, the rationale for sampling, the types of sample containers, preservatives, and handling, the analyses to be performed, and the laboratory deliverables. This sampling matrix will be used to guide groundwater sampling

activities in the field and will be adjusted as necessary as wells are removed from the monitoring program.

Groundwater monitoring procedures and results will be reported in the Annual Site Management Report. This report shall include a groundwater flow direction map developed from the well elevations and depth-to-water measurements.

All non-disposable downhole sampling equipment will be decontaminated by washing in a potable water and Alconox solution and rinsing in potable water prior to use at each location to reduce the potential for cross-contamination. All sampling equipment will be either dedicated disposable equipment or will be decontaminated prior to use at each location. The decontamination procedures utilized for all non-disposable sampling equipment will be as follows:

- The equipment will be scrubbed in a bath of potable water and low-phosphate detergent;
- The equipment will then be rinsed with potable water; and
- The equipment will be allowed to air dry, if feasible, and wrapped for storage and transportation.

In the event that petroleum or other materials are encountered that may not be amenable to decontamination with water-based decontamination fluids, then lab-grade methanol and/or hexane may be utilized as necessary to properly decontaminate the equipment. Use of methanol and/or hexane will be documented in the field logbook.

All samples will be consistently identified in all field documentation, chain-of-custody documents and laboratory reports using an alphanumeric code. The designation "MS" will be added at the end of the designation for matrix spike/matrix spike duplicate samples. The field duplicate samples will be labeled with a dummy sample location to ensure that they are submitted as blind samples to the laboratory. The dummy identification will consist of the sample type followed by a letter. Trip blanks and field blanks will be identified with "TB" and "FB", respectively.

All sample containers will be provided with labels containing the following information:

- Project identification
- Sample identification
- Date and time of collection
- Analyses to be performed

- Sampler's initials

Once the groundwater samples are collected and labeled, they will be placed in ice-filled coolers and stored in a cool area away from direct sunlight to await shipment to the laboratory. The completed COC form will accompany the cooler. Samples will be shipped overnight (e.g., via Federal Express) or transported by a laboratory courier. All coolers shipped to the laboratory will be sealed with mailing tape and a COC seal to ensure that the coolers remain sealed during delivery.

Field personnel will be responsible for maintaining the sample coolers in a secured location until they are delivered to the laboratory. The record of possession of samples from the time they are obtained in the field to the time they are delivered to the laboratory or shipped off-site will be documented on COC forms. The COC forms will contain the following information: project name; names of sampling personnel; sample number; date and time of collection and matrix; and signatures of individuals involved in sample transfer, and the dates and times of transfers. Laboratory personnel will note the condition of the custody seal at sample check-in.

All groundwater samples collected during monitoring activities will be analyzed using the most recent NYSDEC ASP. Analytical data will be submitted in complete ASP Category B data packages including documentation of laboratory QA/QC procedures that will provide legally defensible data in a court of law.

The laboratory proposed to perform the analyses will be certified through the NYSDOH ELAP to perform CLP analyses and Solid Waste and Hazardous Waste analytical testing on all media to be sampled.

Where appropriate, trip blanks, field blanks, field duplicates, and MS/MSD samples will be collected at a frequency of 5% (1 set of QA/QC samples per 20 field samples), and will be used to assess the quality of the data.

3.4 WELL REPLACEMENT/REPAIRS AND DECOMMISSIONING

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance. Well decommissioning, for the purpose of replacement, should be reported to NYSDEC prior to performance and in the annual report. Well decommissioning without replacement must receive prior approval by NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC and NYSDOH.

3.5 SITE-WIDE INSPECTION

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections should also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Attachment 7). The form will compile sufficient information to assess the following:

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

3.6 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the Site (Attachment 8). Main components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
    - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
    - Sample holding times will be in accordance with the NYSDEC ASP requirements.
    - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:

- All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
- The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.

- Analytical Procedures;
- Data Reduction and Validation:
  - Data validation will be performed in accordance with the USEPA validation guidelines for organic and inorganic data review. Validation will include the following:
    - Verification of 100% of all QC sample results (both qualitative and quantitative);
    - Verification of the identification of 100% of all sample results (both positive hits and non-detects);
    - Recalculation of 10% of all investigative sample results; and
    - A Data Usability Summary Report (DUSR) which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.
- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

3.7 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file with the Remedial Engineer. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Annual Site Management Report, as specified in the Reporting Plan of the SMP.

All monitoring results will be reported to NYSDEC on an Annual basis in the Site Management Report. A report or letter will be prepared for submission, if required by NYSDEC, subsequent to each sampling event. The report (or letter) will include, at a minimum:

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

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 3.7.1 below.

Table 3.7.1: Monitoring/Inspection Deliverables

Task	Frequency*	Annual Reporting Requirement
Groundwater Monitoring**	Quarterly**	X**
Cover System Inspection	Annual	X
Vapor Barrier Inspection	Annual	X
Site-Wide Inspection	Annual, and after emergencies	X

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.
** *The NYSDEC approved the termination of quarterly groundwater monitoring on June 29, 2011.*

3.8 CERTIFICATIONS

Site inspections and sampling activities will take place as outlined above. Frequency of inspection is subject to change by NYSDEC. Inspection certification for all ICs and ECs will be submitted to NYSDEC on a calendar year basis and must be submitted by March 1 of the following year. A qualified environmental professional, as determined by NYSDEC, will perform inspection and certification. Further information on the certification requirements are outlined in the Reporting Plan of the SMP.

SITE MANAGEMENT PLAN
EAST RIVER PLAZA, C231045
Revised: July 2011 (termination of groundwater monitoring, implementation of annual well inspections)

4.0 OPERATION AND MAINTENANCE PLAN

4.1 INTRODUCTION

An Operation and Maintenance Plan describes the measures necessary to operate and maintain any mechanical components of the remedy selected for the Site (i.e., sub-slab depressurization systems, air sparge/soil vapor extraction systems). An Operation and Maintenance Plan:

- Includes the steps necessary to allow individuals unfamiliar with the Site to operate and maintain the systems;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in Site conditions or the manner in which the systems are operated and maintained.

There are no mechanical remedial systems requiring operation or maintenance at the East River Plaza Site. However, the Site has groundwater monitoring wells that may require periodic maintenance. This Operation and Maintenance Plan describes the measures necessary to operate and maintain this monitoring well network.

Information on the non-mechanical Engineering Controls installed at this Site (i.e. composite cover and vapor barrier) can be found in Section 3 - Engineering and Institutional Control Plan.

4.2 GROUNDWATER MONITORING WELL MAINTENANCE

The groundwater monitoring wells will *initially* be inspected on a quarterly basis. *On June 29, 2011 the NYSDEC approved termination of quarterly groundwater monitoring. Thereafter, the groundwater monitoring wells will be inspected on an annual basis in conjunction with the Site-wide inspection.* Inspection will consist of lowering a weighted measuring tape to the bottom of the well to ensure that it has not been filled in with silt, and a visual assessment of the well casing, cap, and protective standpipe. Any minor damage (e.g., missing well cap, cracked riser) will be repaired and documented.

If biofouling or silt accumulation has occurred in the on-Site monitoring wells, the wells will be physically agitated/surged and redeveloped *prior to any sampling*. Additionally, monitoring wells will be properly decommissioned and replaced (as per Section 3.4 of the Monitoring Plan), if an event renders the wells unusable. If a replacement well is installed, the elevation of the top of the casing shall be surveyed to the nearest 0.01 foot.

4.3 MAINTENANCE REPORTING REQUIREMENTS

Maintenance reports and any other information generated during regular operations at the Site will be kept on-file at the office of the Remedial Engineer. Duplicates of certain information may be maintained onsite if relevant for site operation. All reports, forms, and other relevant information generated will be available upon request to the NYSDEC and submitted as part of the Annual Site Management Report, as specified in the Section 5 of this SMP.

4.3.1 Routine Maintenance Reports

Checklists or forms (see Attachment 6) will be completed during each routine well maintenance event. Checklists/forms will include, but not be limited to the following information:

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

4.3.2 Non-Routine Maintenance Reports

During each non-routine maintenance event, a form will be completed which will include, but not be limited to, the following information:

- Date;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Nature of non-routine maintenance/repair;

- Resolution of non-routine maintenance/repair;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and,
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

4.4 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions. Emergencies that may occur during groundwater monitoring or associated maintenance events will be managed in accordance with the procedures outlined below.

4.4.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance, the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to the Remedial Engineer, as shown below. These emergency contact lists must be maintained in an easily accessible location at the Site.

Table 4.4.1.1: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362
Stephanie Davis, FPM Group Project Manager	(631) 737-6200, ext. 228
Bryan Wong, NYSDEC Project Manager	*(718) 482-4905* (office)

***Note**: Contact numbers are subject to change and will be updated as necessary and, at a minimum, in the Annual Site Management Report.

4.4.2 Map and Directions to Nearest Health Facility

Site Location: East River Plaza, 527 East 118th Street, New York, NY

Nearest Hospital Name: Metropolitan Hospital

Hospital Location: East 97th Street, between First and Second Avenues

Hospital Telephone: (212) 423-6166 (emergency room)

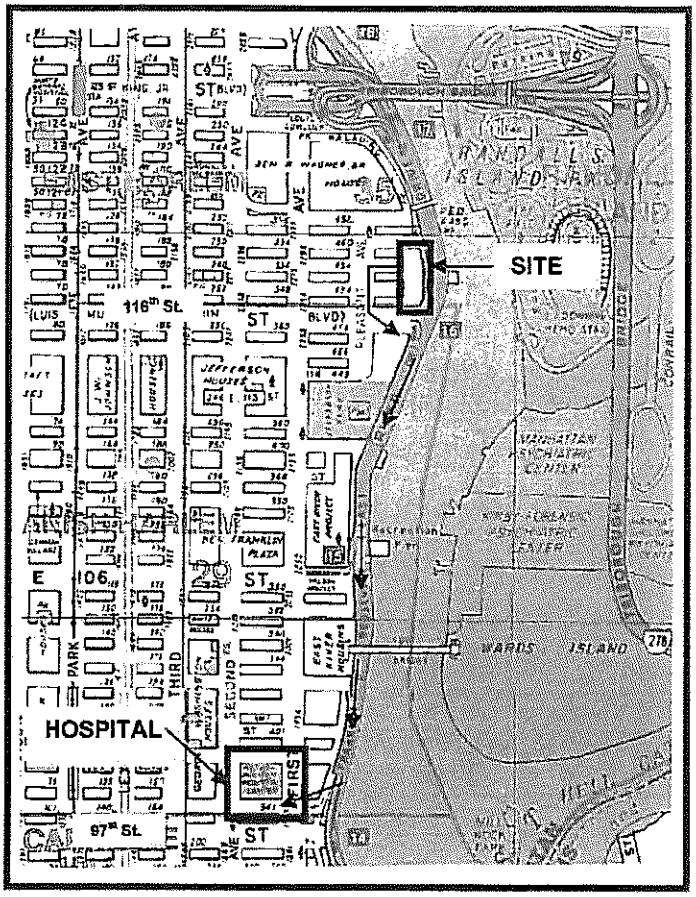
Directions to the Hospital:

1. Travel west from the Site to Pleasant Avenue and turn Left.
2. Travel south on Pleasant Avenue to East 116th Street and turn Left.
3. Travel east on East 16th Street to southbound FDR Drive, turn Right onto FDR Drive.
4. Travel south on the FDR Drive to 97th Street. Exit FDR Drive at 97th Street.
5. Travel one-half block west on 97th Street to the Emergency Room entrance.

Total Distance: approximately one-half mile.

Total Estimated Time: approximately five minutes.

Map Showing Route from the Site to the Hospital:



FPM

4.4.3 Response Procedures

4.4.3.1 Emergency Contacts/Notification System

As appropriate, the fire department and other emergency response groups will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 4.4.1.1). The list is also posted prominently at the Site and made readily available to all personnel at all times.

If a petroleum spill occurs on the Site the following procedures will be implemented:

- Spill reporting to the NYSDEC Spill Hotline (800-457-7362) will be conducted as necessary;
- The petroleum will be contained and removed from the Site surface by a petroleum remediation contractor in accordance with federal, state and local regulations;
- If Site soil is affected, then grossly contaminated soil will be excavated, stockpiled, and managed in accordance with the procedures presented in the Contingency Plan in Section 2.3.2.11;

Copies of correspondence with disposal facilities concerning classification of materials, testing results, and permits/approvals will be maintained by the project manager and will be submitted to the NYSDEC as part of a close-out report, as described in Section 5.

This Contingency Plan may be amended if Site conditions change. Amendments to the Contingency Plan will be made as needed and approved by the NYSDEC and will be included in the Annual Site Management Report.

NYSDEC LETTER APPROVING SMP ADDENDUM, AUGUST 18, 2011

New York State Department of Environmental Conservation
Division of Environmental Remediation
Hunters Point Plaza, 47-40 21st St , Long Island City, NY 11101
Phone: (718) 482-6454 • **Fax:** 718-482-6358
Website: www.dec.ny.gov

Joe Martens
Commissioner

August 18, 2011

Stephanie O. Davis
Senior Hydrogeologist
FPM Group Engineering and Environmental Science
909 Marconi Avenue
Ronkonkoma, NY 11779

Re: Modification to Site Management Plan
East River Plaza, New York
New York County, Site No.: C231045

Dear Ms. Davis:

The New York State Department of Environmental Conservation, in consultation with New York State Department of Health, has reviewed your letter dated July 28, 2011 regarding modifications to the approved Site Management Plan (SMP). Based on the review, the modification to the SMP is hereby approved.

Please place a copy of the updated SMP in the document repository, including an updated cover page documenting the revision. Only the most updated version of the SMP should be in the repository. Please provide certification that the repository has been populated with the updated SMP, and include a copy of the revised cover page for our file.

If you have any questions, or need additional forms, please contact me at 718-482-4905 or e-mail: yywong@gw.dec.state.ny.us.

Sincerely,

Bryan Wong
Project Manager

ec: J. O'Connell, L. Oliva – NYSDEC
A. DeMarco – NYSDOH
D. Blumenfeld – Tiago Development, LLC
J. Rigano, Esq. – Certilman Balin Adler & Hyman, LLP

NYSDEC LETTER APPROVING 2018 PRR

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

July 12, 2018

TIAGO PARKING HOLDINGS, LLC
DAVID BLEMENFELD
300 Robbins Lane
Syosset, NY 11791

Re: Site Management (SM) Periodic Review Report (PRR) Response Letter
East River Plaza, New York
New York County, Site No.: C231045

Dear David Blumenfeld (as the Certifying Party):

The Department has reviewed your Periodic Review Report (PRR) and IC/EC Certification for following period: May14, 2015 to May 14, 2018.

The Department hereby accepts the PRR and associated Certification. The frequency of Periodic Reviews for this site is 3 year(s), your next PRR is due on June 13, 2021. You will receive a reminder letter and updated certification form 45-days prior to the due date.

If you have any questions, or need additional forms, please contact me at 718-482-4905 or e-mail: yukyin.wong@dec.ny.gov

Sincerely,

Bryan Wong
Project Manager

ec: Jane O'Connell – NYSDEC
Justin Deming – NYSDOH
Stephanie Davis – FPM

NYSDEC April 2, 2021
PRR and Certification Reminder Notice

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

4/2/2021

David Blumenfeld
TIAGO PARKING HOLDINGS, LLC
300 ROBBINS LANE
Syosset, NY 11791
DBlumenfeld@BDG.NET

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: East River Plaza
Site No.: C231045
Site Address: FDR Drive btwn East 116th & East 119th Streets
New York, NY 10035

Dear David Blumenfeld:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **June 13, 2021**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

https://www.dec.ny.gov/chemical/62440.html

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

https://fts.dec.state.ny.us/fts/

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact Bryan Wong, the Project Manager, at 718-482-4905 or yukyin.wong@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures
Bryan Wong, Project Manager
Jane O'Connell, Hazardous Waste Remediation Supervisor, Region 2

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7**):**

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the 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. C231045

Site Name East River Plaza

Site Address: FDR Drive btwn East 116th & East 119th Streets Zip Code: 10035
City/Town: New York
County: New York
Site Acreage: 4.500

Reporting Period: May 14, 2018 to May 14, 2021

	YES	NO
1. Is the information above correct?	☐	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site 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.		
5. Is the site currently undergoing development?	☐	☐

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☐	☐
7. Are all ICs 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

	Box 2A	
	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☐
If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☐	☐
If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C231045 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
1715-22	Tiago Holdings, LLC	
		Ground Water Use Restriction Building Use Restriction Site Management Plan

The Controlled Property may be used for commercial use and restricted residential use as long as the following long-term Engineering and Institutional Controls are employed:
a) all engineering controls must be operated and maintained as specified in the Site Management Plan submitted by Grantor and approved by the Department for the Controlled Property (the "Site Management Plan"). No Engineering and Institutional Controls may be discontinued without a NYSDEC-approved amendment or extinguishment of this Environmental Easement;
b) Annual inspections of the Controlled Property, certifications of Engineering and Institutional Controls and usage of Controlled Property, and Site Management Reporting to the Department must be conducted in accordance with the NYSDEC-approved Site Management Plan;
c) groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan;
d) onsite environmental monitoring devices, including but not limited to, groundwater monitor wells, must be protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Site Management Plan;
e) vegetable gardens are prohibited; and
f) residential habitation will not take place in the basement or first floor and shall only occur above the first floor.

The Controlled Property may not be used for a higher level of use such as unrestricted use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

1716-8	Tiago Holdings, LLC	
		Site Management Plan
		Ground Water Use Restriction Building Use Restriction

The Controlled Property may be used for commercial use and restricted residential use as long as the following long-term Engineering and Institutional Controls are employed:
a) all engineering controls must be operated and maintained as specified in the Site Management Plan submitted by Grantor and approved by the Department for the Controlled Property (the "Site Management Plan"). No Engineering and Institutional Controls may be discontinued without a NYSDEC-approved amendment or extinguishment of this Environmental Easement;
b) Annual inspections of the Controlled Property, certifications of Engineering and Institutional Controls and usage of Controlled Property, and Site Management Reporting to the Department must be conducted in accordance with the NYSDEC-approved Site Management Plan;
c) groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan;
d) onsite environmental monitoring devices, including but not limited to, groundwater monitor wells, must be protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Site Management Plan;
e) vegetable gardens are prohibited; and
f) residential habitation will not take place in the basement or first floor and shall only occur above the first floor.

The Controlled Property may not be used for a higher level of use such as unrestricted use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
1715-22	Subsurface Barriers Cover System
1716-8	Cover System Subsurface Barriers

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 Engineering Control 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 engineering practices; and the information presented is accurate and compete.

YES	NO
☐	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The 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 Site Management 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. C231045

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

EC CERTIFICATIONS

Box 7

Professional Engineer 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 Professional Engineer for the _____
(Owner or Remedial Party)

_____ _____ _____
Signature of Professional Engineer, 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.

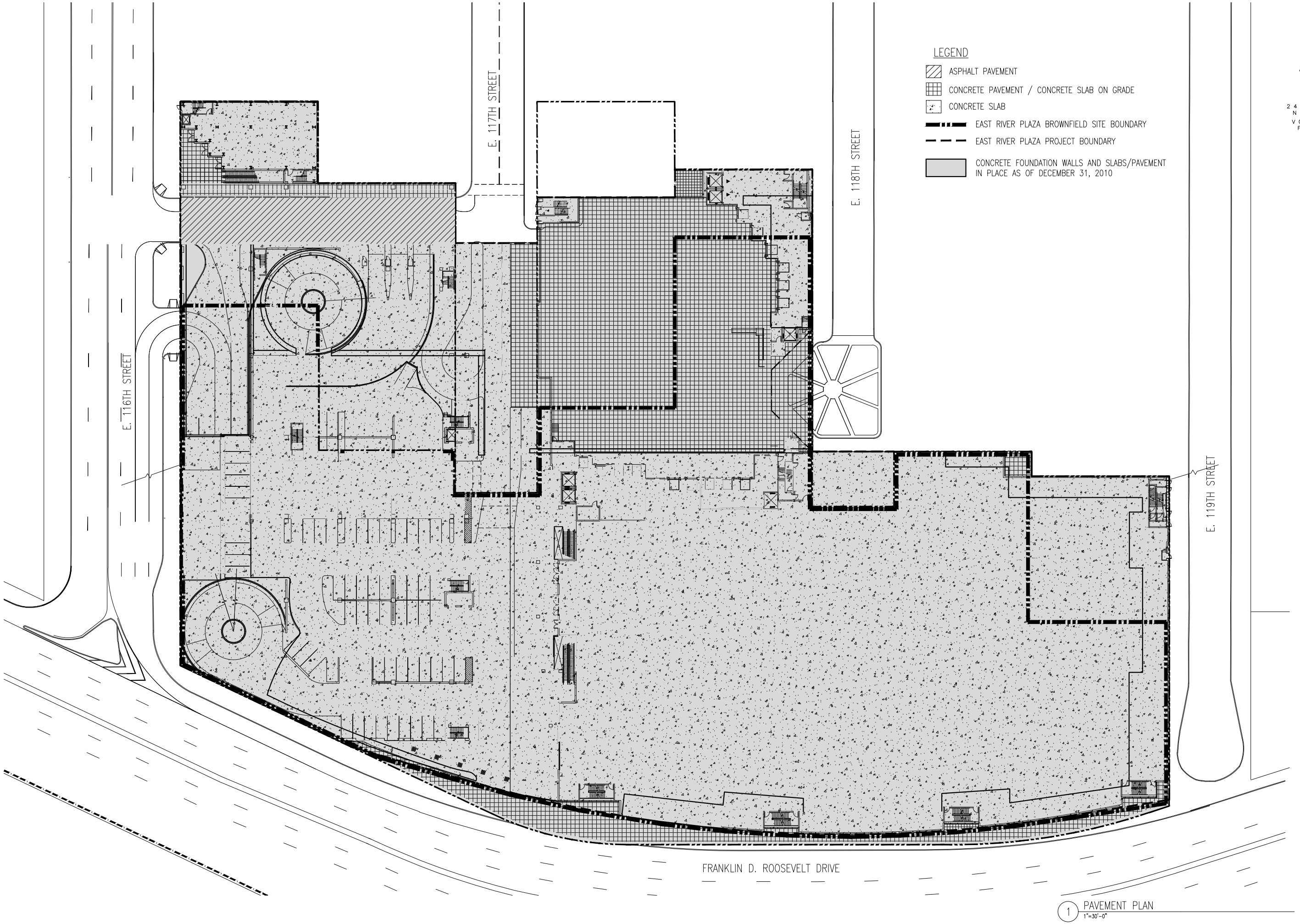
B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

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.

FINAL COVER SYSTEM THROUGHOUT REPORTING PERIOD



1 PAVEMENT PLAN
1"=30'-0"

GREENBERG FARROW
ARCHITECTURE
ENGINEERING
PLANNING

245 5TH AVE, 26TH FL
NEW YORK, NY 10016
VOICE 212.725.9530
FAX 212.725.9552

CANTOR SEINUK
STRUCTURE ENGINEER, CONSULTANT
228 E. 45th Street 3rd Steet
New York, NY 10017
Phone: 212-687-9888
Fax: 646-487-5501

JB & B
MEC. ELEC. & PLUMBING ENG. CONSULTANT
80 Pine Street
New York, NY 10005
Phone: 212-530-9300
Fax: 212-269-5894

VOLLMUTH & BRUSH
CIVIL ENGINEER
CONSULTANT 200 Blue Point Avenue
Blue Point, NY 11715-1204
Phone: 631-363-2683
Fax: 631-363-2062

MEUSER RUTLEDGE
CONSULTING ENGINEERS
GEOTECHNICAL ENGINEER, CONSULTANT
225 West 34th Street, 2 Fl., New York, NY 10122
Phone: 917-339-9300
Fax: 917-339-9400

VAN DEUSEN & ASSOCIATES
VERTICAL TRANSPORTATION CONSULTANT
5 Regent Street Suite 524
Livingston, New Jersey 07039
Phone: 888-994-9220
Fax: 973-994-2539

PHILIP HABIB & ASSOCIATES
TRANSPORTATION, DESIGN CONSULTANT
226 W. 26TH Street
New York, NY 10001
Phone: 212-929-5656
Fax: 212-929-5605

DRAWING ISSUE RECORD

DATE	DESCRIPTION
06-10-05	

REVISION RECORD

NO.	DATE	DESCRIPTION

PROFESSIONAL SEAL

PRINCIPAL IN CHARGE

SITE DEVELOPMENT COORDINATOR

PROJECT MANAGER

QUALITY CONTROL

PROJECT NAME

EAST RIVER PLAZA

116th STREET & F.D.R. DRIVE
EAST HARLEM, NEW YORK

TIAGO HOLDINGS, LLC
6800 JERICHO TURNPIKE

PROJECT NUMBER
20010370

SHEET TITLE

PAVEMENT PLAN SHOWING FINAL COVER ELEMENTS IN PLACE AS OF DECEMBER 31, 2009

SHEET NUMBER
EN-2

SITE-WIDE INSPECTION CHECKLIST - 2018

Site-Wide Inspection List
East River Plaza
East Harlem, Manhattan, New York

Date of Inspection: December 17, 2018

Site-wide inspections will be performed annually, at a minimum. A site-wide inspection shall also be performed after severe events that may affect the Engineering Controls (ECs) or monitoring wells.

The following inspection form shall be completed during each site-wide inspection. Supporting documentation shall be attached, as necessary. The completed site-wide inspection checklist and supporting documentation shall be included in the associated Annual Site Management Report.

Compliance with Institutional Controls

Institutional Controls (ICs) are required under the Remedial Work Plan to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to residual contamination by controlling disturbances of the subsurface materials; and, (3) restrict the use of the Site to commercial and restricted residential uses only. Adherence to these ICs on the Site (Controlled Property) is required under the Environmental Easement. These ICs are described in Section 2.3 of the Site Management Plan. Please complete the following checklist to confirm compliance with the Site ICs:

- The Controlled Property may be used for commercial use. Confirm whether commercial use is occurring: Commercial use of the property occurred throughout the reporting period.

- The Controlled Property may be used for restricted residential use only above the first floor. Confirm the current locations of residential use: No residential use occurred during the reporting period. The Site development is consistent with future residential use only above the first floor.

- All Engineering Controls (cover system and vapor barrier system) must be operated and maintained as specified in the Site Management Plan for the Controlled Property. Confirm operation and maintenance of ECs and attach checklists: Throughout the reporting period

the cover system and vapor barrier system were completely installed. No penetrations of these systems occurred during the reporting period. The completed EC checklist is attached.

- Annual inspections and certifications must be conducted in accordance with the Site Management Plan. Confirm compliance with annual inspections and certifications: The annual inspections, including the cover system inspection, vapor barrier inspection, and site-wide inspection, were completed. The certification is included in the Site Management Periodic Review Report (PRR).

- Groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan (SMP). Confirm that the required monitoring and reporting are in accordance with the SMP: Groundwater monitoring and periodic public health monitoring (i.e. vapors, dust, noise during intrusive activities) are conducted in accordance with the SMP. Groundwater monitoring has been reported in the PRRs. No groundwater monitoring occurred during the reporting period as the NYSDEC approved termination of groundwater monitoring in 2011. No periodic public health monitoring occurred during the reporting period as no intrusive activities occurred in the period.

- Onsite environmental monitoring devices, including but not limited to groundwater monitoring wells, will be protected and replaced as necessary to ensure continued functioning in the manner specified in the Site Management Plan. Confirm that monitoring devices have been protected and/or replaced: All environmental monitoring devices have been maintained in accordance with the SMP and are protected. The monitoring wells were observed during the site-wide inspection and no issues were noted.

- Vegetable gardens are prohibited. Confirm the absence of vegetable gardens: There are no vegetable gardens onsite.

- All soil disturbance activities that will impact residual contaminated material, including building renovation/expansion, subgrade utility line repair/relocation, and new construction must be conducted in accordance with the NYSDEC-approved Site

Management Plan. Confirm that these activities are in compliance with the SMP: No soil disturbance activities occurred during the reporting period.

- Use of the groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for the intended purpose. Confirm that groundwater use has not occurred: No use of the groundwater underlying the Site has occurred.

- The Controlled Property may not be used for a higher level of use, such as unrestricted use, and the above-stated engineering controls may not be discontinued without proper notification of the NYSDEC of the change and approval of that use by the NYSDEC, and an amendment of the Site Management Plan approved by the NYSDEC. Confirm continued compliance with the Environmental Easement: The Site is in compliance with the use restrictions and engineering controls in the Environmental Easement.

- Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 to Article 71 of the Environmental Conservation Law.

Confirm that property deed and all subsequent instruments of conveyance are in compliance: The property deed and instruments of conveyance are in compliance with the Environmental Easement. A statement from the Site owner (Grantor) to this effect is included in the applicable PRR.

- Grantor covenants and agrees that the Environmental Easement shall be incorporated in full or by reference in any leases, license, or other instruments granting a right to use the Controlled Property. Confirm that leases, licenses or other right-to-use documents

incorporate or reference the Environmental Easement: The leases and other right-to-use documents for the Site incorporate or reference the Environmental Easement. A statement for the Site owner (Grantor) to this effect is included in the applicable PRR.

- Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls. Confirm the submittal of the Certification Statement: The Certification Statement is included in the applicable PRR.

Compliance with Engineering Controls

Using the completed checklists from Attachment 5 of the Site Management Plan, provide a written evaluation of the condition and continued effectiveness of the ECs: The checklists in Attachment 5 of the SMP were completed and are attached. They document the following condition and effectiveness of the ECs:

- The final cover system EC was completed in 2009 in accordance with the Pavement Plan in the FER and remained in place throughout the reporting period. The cover system continues to minimize potential hazards to the safety and health of the public and is in compliance with the SMP.

- The vapor barrier system EC was completed in 2009 in coordination with the installation of the final elements of the cover system and remained in place throughout the reporting period. The vapor barrier system effectively minimizes potential hazards to the safety and health of the public.

General Site Conditions

Provide a written description of the Site conditions at the time of the site-wide inspection. Attach digital photographs or other supporting information as needed: Each level of the above-grade Site building was occupied throughout the reporting period by a retail tenant. Retail tenants also occupied two sub-grade areas during the reporting period. A digital Photolog is attached showing conditions representative of the reporting period and at the time of the site-wide inspection.

Site Management Activities

Provide a discussion and assessment of ongoing site management activities including, but not limited to, soil/materials management, groundwater monitoring, community air monitoring, nuisance control, well replacement/repair, health and safety monitoring, and other applicable and pertinent activities. Attach supporting documentation as necessary: No groundwater monitoring was conducted as groundwater monitoring was terminated in 2011, as approved by the NYSDEC in June 2011. The monitoring wells remain present onsite. No soil/materials management, community air monitoring, nuisance control or health and safety monitoring were conducted in the reporting period as no intrusive activities (below the Site cover) were conducted.

Compliance with Permits and Schedules

The Operation and Maintenance Plan included in Section 4 of the Site Management Plan does not include any permit requirements but does include a schedule for groundwater monitoring well maintenance. Discuss compliance with the groundwater monitoring well maintenance schedule: The groundwater monitoring wells are checked during each monitoring event as per the SMP and were also checked during the Site-wide inspection. No maintenance was required to the monitoring wells during the reporting period.

Site Records

The Site records include, but are not limited to, groundwater monitoring reports, EC inspection checklists, site-wide inspection checklists, soil management documents, community air monitoring documents, regulatory agency correspondence, reports, and the Annual Site Management PRR. Confirm that each type of Site record is up to date and provide comments:

Each of the referenced documents that was applicable to activities during the reporting period has been kept up to date. Copies of the completed documents are included in the PRR.

Inspector Information

Name and Affiliation of Inspector(s): Chris Linkletter, Hydrogeologist I, FPM Group.

Date of Inspection: December 17, 2018.

Reason for Inspection: Annual Site-Wide Inspection.

List additional inspections or activities conducted in association with this inspection: See Attachments.

Attachments:

- Cover System and Vapor Barrier System Inspection Checklist and supporting documents.
- Photolog.

S:\BDG\East River Plaza Brownfields\Summary Report 2019\Appb-Sitewideinspectchecklist12172018.Docx

COVER SYSTEM AND VAPOR BARRIER SYSTEM CHECKLIST - 2018

Cover System and Vapor Barrier System
Inspection Checklist
East River Plaza, Manhattan, New York

Date of Inspection: December 17, 2018

Description of Cover System and Vapor Barrier System

This property is equipped with a surface cover system, including pavement, concrete slabs at the lowest level of the building, and/or at least one foot of cover gravel underlain by Mirafi fabric. The Pavement Plan in Appendix P of the Final Engineering Report (FER) shows the approved design for the final concrete/asphalt cover at this Site. An as-built survey in Appendix P shows the gravel cover system.

The property building is also equipped with a vapor barrier and seal system. This system includes a positive-side waterproofing membrane beneath the slab, pile caps and elevator pits. The foundation walls are also waterproofed using a similar sheet membrane material. Penetrations through the slab and walls for pipes and duct banks are also sealed. Vapor barrier and seal materials are specified in the foundation construction documents included in Appendix Q of the FER.

Activities that have the potential to disrupt the cover system and/or vapor barrier system must be reported in advance to the property owner such that they can be monitored and documented and any necessary repairs made. Examples of activities that may disturb the cover and/or vapor barrier systems include:

- Cutting or removal of pavement
- Breakup or significant deterioration of pavement/slab
- Cutting or removal of concrete slab or foundation materials on lowest level of building
- Planting or removal of vegetation (trees/shrubs) through the pavement or slab
- Excavations for subsurface utilities or other purposes
- Any activities that may disturb the ground

The cover and vapor barrier systems must be inspected at least annually. More frequent inspections may be conducted during construction activities with the potential to affect these

systems. An inspection shall also be conducted following a severe condition (flood, fire, etc.) with the potential to affect the cover and/or vapor barrier systems. The following checklist shall be used during each inspection. Supplemental information should be attached to the checklist, if needed. Copies of completed checklists and any supplemental information will be included in the Annual Site Management Report.

Notifications to the NYSDEC are required for the following conditions:

- 10-day advance notice of any significant proposed ground-intrusive activities;
- 48-hour notice of any damage or defect to the foundation structures that reduces or has the potential to reduce the effectiveness of the cover system and/or vapor barrier system; and
- 48-hour notification following any severe condition with the potential to affect the cover system and/or vapor barrier system.

Follow-up status reports for the above conditions must be submitted to the NYSDEC within 45 days. Additional information concerning notifications is included in Section 2.4.2 of the Site Management Plan (SMP).

Cover System Inspection Checklist:

A visual inspection of the entire cover system throughout the Site must be conducted, to include the gravel, asphalt, concrete pavement and/or concrete slab. Representative digital photographs must be taken showing the cover extent, nature and condition. The following questions must be answered. Please attach supporting information as necessary.

- If gravel is present, note and describe its thickness and continuity: Throughout the reporting period 100 percent of the Site was covered with asphalt or concrete pavement and/or concrete slab.

- The approved gravel cover is constructed of ¾-inch washed RCA provided by Tilcon of New York. What is the nature of the observed gravel cover? Is it consistent with the approved gravel cover? The gravel cover is presently covered by the final asphalt/concrete cover and could not generally be observed.

- The gravel is underlain by Mirafi fabric. Is any of the fabric visible? If so, describe the condition: No Mirafi fabric is currently visible as it is covered by the asphalt/concrete pavement and/or slab.

- Asphalt and/or concrete pavement provide cover for the on-grade portions of the site. Are these materials continuous or are there penetrations? Describe: All previous penetrations in the concrete slab, and walls and pavement have been properly sealed in accordance with the waterproofing/vapor barrier specifications. The asphalt/concrete pavement were continuous throughout the reporting period and no unsealed penetrations were observed.

- Comment on the condition of the asphalt/concrete pavement. All asphalt/concrete pavement is completed and in good condition.

- Concrete slabs and foundation walls provide cover within the lower levels of the Site building. Are these materials continuous? Describe: Yes, the concrete slabs and foundation walls in the lower levels of the Site building are continuous.

- Comment on the condition of the concrete slabs and foundation walls. The concrete slabs and foundation walls are completed and in good condition.

- Provide any other pertinent information regarding the condition of the cover system here: Photographs representative of conditions during the reporting period are attached to the Site-wide Inspection Checklist and show the location, nature and condition of the cover materials.

Vapor Barrier System Inspection Checklist

A visual inspection must be conducted to confirm that the vapor barrier system remains in place. The vapor barrier system is installed beneath the concrete slabs and foundation walls and, therefore, cannot be directly observed. Therefore, monitoring of the vapor barrier system is largely contingent on monitoring of the concrete slab and foundation components. Foundation penetrations should be observed where feasible. The following questions must be answered. Attach additional supporting information as necessary.

- Are the concrete slab and foundation components intact? Describe: Yes, these components were completed during 2009 and all components were observed to be intact during the reporting period.

- Are there any conditions associated with the concrete slab and/or foundation components that suggest the possibility of damage to the vapor barrier system? No. No conditions were observed that suggest damage to the vapor barrier system.

- Do the foundation penetrations exhibit indications of water leakage, soil penetration or other conditions suggesting problems with the foundation seals? Describe: No. No conditions were observed that suggest problems with the foundation seals.

- Is water infiltration observed through any lower-level floors or walls, suggesting possible problems with the vapor barrier system? Describe: No.

- Provide any other pertinent information regarding the condition of the vapor barrier system here: The vapor barrier system was completed during 2009 in conjunction with building construction. The system components were inspected and the outstanding items were addressed in 2009 and 2010. The vapor barrier system was not penetrated during the reporting period.

Inspector Information

Name and Affiliation of Inspector: Chris Linkletter, Hydrogeologist I, FPM Group

Date of Inspection: December 17, 2018

Reason for Inspection: Annual cover system and vapor barrier system inspection.

List additional inspections or activities conducted in association with this inspection: See Attachments to Site-wide inspection.

PHOTOLOG - 2018

Photo #1 – View of the Site building looking east down East 117th Street. Site garage is on the right in the background and the Site building is on the left.

Photo #2 – View looking west up East 119th Street. The Site building occupies most of the south side of East 119th Street.

Photo #3 – View of the Site building looking north up FDR Drive.

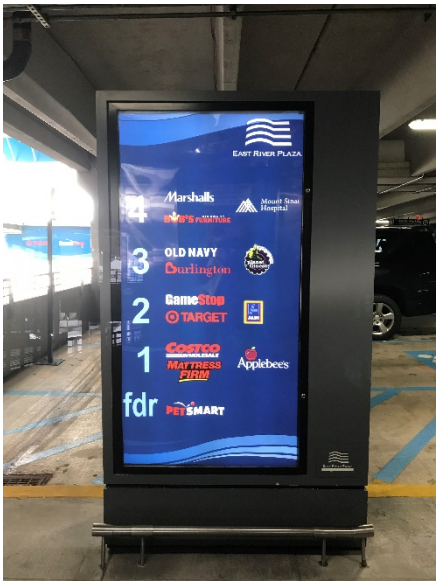


Photo #4 – View of sign in parking garage showing commercial tenants occupying the Site

FPM

Photo #5 – View of well M-12 (representative of other site monitoring wells).

SITE-WIDE INSPECTION CHECKLIST - 2019

Site-Wide Inspection List
East River Plaza
East Harlem, Manhattan, New York

Date of Inspection: December 16, 2019

Site-wide inspections will be performed annually, at a minimum. A site-wide inspection shall also be performed after severe events that may affect the Engineering Controls (ECs) or monitoring wells.

The following inspection form shall be completed during each site-wide inspection. Supporting documentation shall be attached, as necessary. The completed site-wide inspection checklist and supporting documentation shall be included in the associated Annual Site Management Report.

Compliance with Institutional Controls

Institutional Controls (ICs) are required under the Remedial Work Plan to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to residual contamination by controlling disturbances of the subsurface materials; and, (3) restrict the use of the Site to commercial and restricted residential uses only. Adherence to these ICs on the Site (Controlled Property) is required under the Environmental Easement. These ICs are described in Section 2.3 of the Site Management Plan. Please complete the following checklist to confirm compliance with the Site ICs:

- The Controlled Property may be used for commercial use. Confirm whether commercial use is occurring: Commercial use of the property occurred throughout the reporting period.

- The Controlled Property may be used for restricted residential use only above the first floor. Confirm the current locations of residential use: No residential use occurred during the reporting period. The Site development is consistent with future residential use only above the first floor.

- All Engineering Controls (cover system and vapor barrier system) must be operated and maintained as specified in the Site Management Plan for the Controlled Property. Confirm operation and maintenance of ECs and attach checklists: Throughout the reporting period

the cover system and vapor barrier system were completely installed. No penetrations of these systems occurred during the reporting period. The completed EC checklist is attached.

- Annual inspections and certifications must be conducted in accordance with the Site Management Plan. Confirm compliance with annual inspections and certifications: The annual inspections, including the cover system inspection, vapor barrier inspection, and site-wide inspection, were completed. The certification is included in the Site Management Periodic Review Report (PRR).

- Groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan (SMP). Confirm that the required monitoring and reporting are in accordance with the SMP: Groundwater monitoring and periodic public health monitoring (i.e. vapors, dust, noise during intrusive activities) are conducted in accordance with the SMP. Groundwater monitoring has been reported in the PRRs. No groundwater monitoring occurred during the reporting period as the NYSDEC approved termination of groundwater monitoring in 2011. No periodic public health monitoring occurred during the reporting period as no intrusive activities occurred in the period.

- Onsite environmental monitoring devices, including but not limited to groundwater monitoring wells, will be protected and replaced as necessary to ensure continued functioning in the manner specified in the Site Management Plan. Confirm that monitoring devices have been protected and/or replaced: All environmental monitoring devices have been maintained in accordance with the SMP and are protected. The monitoring wells were observed during the site-wide inspection and no issues were noted.

- Vegetable gardens are prohibited. Confirm the absence of vegetable gardens: There are no vegetable gardens onsite.

- All soil disturbance activities that will impact residual contaminated material, including building renovation/expansion, subgrade utility line repair/relocation, and new construction must be conducted in accordance with the NYSDEC-approved Site

Management Plan. Confirm that these activities are in compliance with the SMP: No soil disturbance activities occurred during the reporting period.

- Use of the groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for the intended purpose. Confirm that groundwater use has not occurred: No use of the groundwater underlying the Site has occurred.

- The Controlled Property may not be used for a higher level of use, such as unrestricted use, and the above-stated engineering controls may not be discontinued without proper notification of the NYSDEC of the change and approval of that use by the NYSDEC, and an amendment of the Site Management Plan approved by the NYSDEC. Confirm continued compliance with the Environmental Easement: The Site is in compliance with the use restrictions and engineering controls in the Environmental Easement.

- Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 to Article 71 of the Environmental Conservation Law.

Confirm that property deed and all subsequent instruments of conveyance are in compliance: The property deed and instruments of conveyance are in compliance with the Environmental Easement. A statement from the Site owner (Grantor) to this effect is included in the applicable PRR.

- Grantor covenants and agrees that the Environmental Easement shall be incorporated in full or by reference in any leases, license, or other instruments granting a right to use the Controlled Property. Confirm that leases, licenses or other right-to-use documents

incorporate or reference the Environmental Easement: The leases and other right-to-use documents for the Site incorporate or reference the Environmental Easement. A statement for the Site owner (Grantor) to this effect is included in the applicable PRR.

- Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls. Confirm the submittal of the Certification Statement: The Certification Statement is included in the applicable PRR.

Compliance with Engineering Controls

Using the completed checklists from Attachment 5 of the Site Management Plan, provide a written evaluation of the condition and continued effectiveness of the ECs: The checklists in Attachment 5 of the SMP were completed and are attached. They document the following condition and effectiveness of the ECs:

- The final cover system EC was completed in 2009 in accordance with the Pavement Plan in the FER and remained in place throughout the reporting period. The cover system continues to minimize potential hazards to the safety and health of the public and is in compliance with the SMP.

- The vapor barrier system EC was completed in 2009 in coordination with the installation of the final elements of the cover system and remained in place throughout the reporting period. The vapor barrier system effectively minimizes potential hazards to the safety and health of the public.

General Site Conditions

Provide a written description of the Site conditions at the time of the site-wide inspection. Attach digital photographs or other supporting information as needed: Each level of the above-grade Site building was occupied throughout the reporting period by a retail tenant. Retail tenants also occupied two sub-grade areas during the reporting period. A digital Photolog is attached showing conditions representative of the reporting period and at the time of the site-wide inspection.

Site Management Activities

Provide a discussion and assessment of ongoing site management activities including, but not limited to, soil/materials management, groundwater monitoring, community air monitoring, nuisance control, well replacement/repair, health and safety monitoring, and other applicable and pertinent activities. Attach supporting documentation as necessary: No groundwater monitoring was conducted as groundwater monitoring was terminated in 2011, as approved by the NYSDEC in June 2011. The monitoring wells remain present onsite. No soil/materials management, community air monitoring, nuisance control or health and safety monitoring were conducted in the reporting period as no intrusive activities (below the Site cover) were conducted.

Compliance with Permits and Schedules

The Operation and Maintenance Plan included in Section 4 of the Site Management Plan does not include any permit requirements but does include a schedule for groundwater monitoring well maintenance. Discuss compliance with the groundwater monitoring well maintenance schedule: The groundwater monitoring wells are checked during each monitoring event as per the SMP and were also checked during the Site-wide inspection. No maintenance was required to the monitoring wells during the reporting period.

Site Records

The Site records include, but are not limited to, groundwater monitoring reports, EC inspection checklists, site-wide inspection checklists, soil management documents, community air monitoring documents, regulatory agency correspondence, reports, and the Annual Site Management PRR. Confirm that each type of Site record is up to date and provide comments:

Each of the referenced documents that was applicable to activities during the reporting period has been kept up to date. Copies of the completed documents are included in the PRR.

Inspector Information

Name and Affiliation of Inspector(s): Chris Linkletter, Hydrogeologist I, FPM Group.

Date of Inspection: December 16, 2019.

Reason for Inspection: Annual Site-Wide Inspection.

List additional inspections or activities conducted in association with this inspection: See Attachments.

Attachments:

- Cover System and Vapor Barrier System Inspection Checklist and supporting documents.
- Photolog.

S:\BDG\East River Plaza Brownfields\Summary Report 2018and2019\2019documents\Appb-Sitewideinspectchecklistdec2019.Docx

COVER SYSTEM AND VAPOR BARRIER SYSTEM CHECKLIST - 2019

Cover System and Vapor Barrier System
Inspection Checklist
East River Plaza, Manhattan, New York

Date of Inspection: December 16, 2019

Description of Cover System and Vapor Barrier System

This property is equipped with a surface cover system, including pavement, concrete slabs at the lowest level of the building, and/or at least one foot of cover gravel underlain by Mirafi fabric. The Pavement Plan in Appendix P of the Final Engineering Report (FER) shows the approved design for the final concrete/asphalt cover at this Site. An as-built survey in Appendix P shows the gravel cover system.

The property building is also equipped with a vapor barrier and seal system. This system includes a positive-side waterproofing membrane beneath the slab, pile caps and elevator pits. The foundation walls are also waterproofed using a similar sheet membrane material. Penetrations through the slab and walls for pipes and duct banks are also sealed. Vapor barrier and seal materials are specified in the foundation construction documents included in Appendix Q of the FER.

Activities that have the potential to disrupt the cover system and/or vapor barrier system must be reported in advance to the property owner such that they can be monitored and documented and any necessary repairs made. Examples of activities that may disturb the cover and/or vapor barrier systems include:

- Cutting or removal of pavement
- Breakup or significant deterioration of pavement/slab
- Cutting or removal of concrete slab or foundation materials on lowest level of building
- Planting or removal of vegetation (trees/shrubs) through the pavement or slab
- Excavations for subsurface utilities or other purposes
- Any activities that may disturb the ground

The cover and vapor barrier systems must be inspected at least annually. More frequent inspections may be conducted during construction activities with the potential to affect these

systems. An inspection shall also be conducted following a severe condition (flood, fire, etc.) with the potential to affect the cover and/or vapor barrier systems. The following checklist shall be used during each inspection. Supplemental information should be attached to the checklist, if needed. Copies of completed checklists and any supplemental information will be included in the Annual Site Management Report.

Notifications to the NYSDEC are required for the following conditions:

- 10-day advance notice of any significant proposed ground-intrusive activities;
- 48-hour notice of any damage or defect to the foundation structures that reduces or has the potential to reduce the effectiveness of the cover system and/or vapor barrier system; and
- 48-hour notification following any severe condition with the potential to affect the cover system and/or vapor barrier system.

Follow-up status reports for the above conditions must be submitted to the NYSDEC within 45 days. Additional information concerning notifications is included in Section 2.4.2 of the Site Management Plan (SMP).

Cover System Inspection Checklist:

A visual inspection of the entire cover system throughout the Site must be conducted, to include the gravel, asphalt, concrete pavement and/or concrete slab. Representative digital photographs must be taken showing the cover extent, nature and condition. The following questions must be answered. Please attach supporting information as necessary.

- If gravel is present, note and describe its thickness and continuity: Throughout the reporting period 100 percent of the Site was covered with asphalt or concrete pavement and/or concrete slab.

- The approved gravel cover is constructed of ¾-inch washed RCA provided by Tilcon of New York. What is the nature of the observed gravel cover? Is it consistent with the approved gravel cover? The gravel cover is presently covered by the final asphalt/concrete cover and could not generally be observed.

- The gravel is underlain by Mirafi fabric. Is any of the fabric visible? If so, describe the condition: No Mirafi fabric is currently visible as it is covered by the asphalt/concrete pavement and/or slab.

- Asphalt and/or concrete pavement provide cover for the on-grade portions of the site. Are these materials continuous or are there penetrations? Describe: All previous penetrations in the concrete slab, and walls and pavement have been properly sealed in accordance with the waterproofing/vapor barrier specifications. The asphalt/concrete pavement were continuous throughout the reporting period and no unsealed penetrations were observed.

- Comment on the condition of the asphalt/concrete pavement. All asphalt/concrete pavement is completed and in good condition.

- Concrete slabs and foundation walls provide cover within the lower levels of the Site building. Are these materials continuous? Describe: Yes, the concrete slabs and foundation walls in the lower levels of the Site building are continuous.

- Comment on the condition of the concrete slabs and foundation walls. The concrete slabs and foundation walls are completed and in good condition.

- Provide any other pertinent information regarding the condition of the cover system here: Photographs representative of conditions during the reporting period are attached to the Site-wide Inspection Checklist and show the location, nature and condition of the cover materials.

Vapor Barrier System Inspection Checklist

A visual inspection must be conducted to confirm that the vapor barrier system remains in place. The vapor barrier system is installed beneath the concrete slabs and foundation walls and, therefore, cannot be directly observed. Therefore, monitoring of the vapor barrier system is largely contingent on monitoring of the concrete slab and foundation components. Foundation penetrations should be observed where feasible. The following questions must be answered. Attach additional supporting information as necessary.

- Are the concrete slab and foundation components intact? Describe: Yes, these components were completed during 2009 and all components were observed to be intact during the reporting period.

- Are there any conditions associated with the concrete slab and/or foundation components that suggest the possibility of damage to the vapor barrier system? No. No conditions were observed that suggest damage to the vapor barrier system.

- Do the foundation penetrations exhibit indications of water leakage, soil penetration or other conditions suggesting problems with the foundation seals? Describe: No. No conditions were observed that suggest problems with the foundation seals.

- Is water infiltration observed through any lower-level floors or walls, suggesting possible problems with the vapor barrier system? Describe: No.

- Provide any other pertinent information regarding the condition of the vapor barrier system here: The vapor barrier system was completed during 2009 in conjunction with building construction. The system components were inspected and the outstanding items were addressed in 2009 and 2010. The vapor barrier system was not penetrated during the reporting period.

Inspector Information

Name and Affiliation of Inspector: Chris Linkletter, Hydrogeologist I, FPM Group

Date of Inspection: December 16, 2019

Reason for Inspection: Annual cover system and vapor barrier system inspection.

List additional inspections or activities conducted in association with this inspection: See Attachments to Site-wide inspection.

PHOTOLOG - 2019

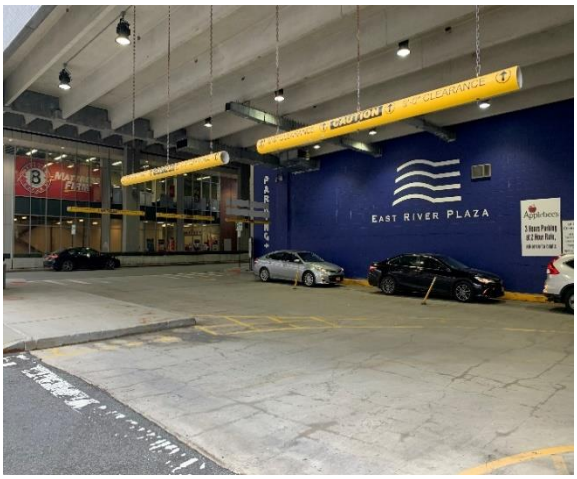


Photo 1: View of parking garage entrance showing cover system in place.

Photo 2: View of south side of Site looking west along East 116th Street.

Photo 3: View of east side of Site looking north along FDR Drive.

Photo 4: View of well M-10C showing repaired casing.

FPM

SITE-WIDE INSPECTION CHECKLIST - 2020

Site-Wide Inspection List
East River Plaza
East Harlem, Manhattan, New York

Date of Inspection: December 22, 2020

Site-wide inspections will be performed annually, at a minimum. A site-wide inspection shall also be performed after severe events that may affect the Engineering Controls (ECs) or monitoring wells.

The following inspection form shall be completed during each site-wide inspection. Supporting documentation shall be attached, as necessary. The completed site-wide inspection checklist and supporting documentation shall be included in the associated Annual Site Management Report.

Compliance with Institutional Controls

Institutional Controls (ICs) are required under the Remedial Work Plan to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to residual contamination by controlling disturbances of the subsurface materials; and, (3) restrict the use of the Site to commercial and restricted residential uses only. Adherence to these ICs on the Site (Controlled Property) is required under the Environmental Easement. These ICs are described in Section 2.3 of the Site Management Plan. Please complete the following checklist to confirm compliance with the Site ICs:

- The Controlled Property may be used for commercial use. Confirm whether commercial use is occurring: Commercial use of the property occurred throughout the reporting period.

- The Controlled Property may be used for restricted residential use only above the first floor. Confirm the current locations of residential use: No residential use occurred during the reporting period. The Site development is consistent with future residential use only above the first floor.

- All Engineering Controls (cover system and vapor barrier system) must be operated and maintained as specified in the Site Management Plan for the Controlled Property. Confirm operation and maintenance of ECs and attach checklists: Throughout the reporting period

the cover system and vapor barrier system were completely installed. No penetrations of these systems occurred during the reporting period. The completed EC checklist is attached.

- Annual inspections and certifications must be conducted in accordance with the Site Management Plan. Confirm compliance with annual inspections and certifications: The annual inspections, including the cover system inspection, vapor barrier inspection, and site-wide inspection, were completed. The certification is included in the Site Management Periodic Review Report (PRR).

- Groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan (SMP). Confirm that the required monitoring and reporting are in accordance with the SMP: Groundwater monitoring and periodic public health monitoring (i.e. vapors, dust, noise during intrusive activities) are conducted in accordance with the SMP. Groundwater monitoring has been reported in the PRRs. No groundwater monitoring occurred during the reporting period as the NYSDEC approved termination of groundwater monitoring in 2011. No periodic public health monitoring occurred during the reporting period as no intrusive activities occurred in the period.

- Onsite environmental monitoring devices, including but not limited to groundwater monitoring wells, will be protected and replaced as necessary to ensure continued functioning in the manner specified in the Site Management Plan. Confirm that monitoring devices have been protected and/or replaced: All environmental monitoring devices have been maintained in accordance with the SMP and are protected. The monitoring wells were observed during the site-wide inspection and no issues were noted.

- Vegetable gardens are prohibited. Confirm the absence of vegetable gardens: There are no vegetable gardens onsite.

- All soil disturbance activities that will impact residual contaminated material, including building renovation/expansion, subgrade utility line repair/relocation, and new construction must be conducted in accordance with the NYSDEC-approved Site

Management Plan. Confirm that these activities are in compliance with the SMP: No soil disturbance activities occurred during the reporting period.

- Use of the groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for the intended purpose. Confirm that groundwater use has not occurred: No use of the groundwater underlying the Site has occurred.

- The Controlled Property may not be used for a higher level of use, such as unrestricted use, and the above-stated engineering controls may not be discontinued without proper notification of the NYSDEC of the change and approval of that use by the NYSDEC, and an amendment of the Site Management Plan approved by the NYSDEC. Confirm continued compliance with the Environmental Easement: The Site is in compliance with the use restrictions and engineering controls in the Environmental Easement.

- Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 to Article 71 of the Environmental Conservation Law.

Confirm that property deed and all subsequent instruments of conveyance are in compliance: The property deed and instruments of conveyance are in compliance with the Environmental Easement. A statement from the Site owner (Grantor) to this effect is included in the applicable PRR.

- Grantor covenants and agrees that the Environmental Easement shall be incorporated in full or by reference in any leases, license, or other instruments granting a right to use the Controlled Property. Confirm that leases, licenses or other right-to-use documents

incorporate or reference the Environmental Easement: The leases and other right-to-use documents for the Site incorporate or reference the Environmental Easement. A statement for the Site owner (Grantor) to this effect is included in the applicable PRR.

- Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls. Confirm the submittal of the Certification Statement: The Certification Statement is included in the applicable PRR.

Compliance with Engineering Controls

Using the completed checklists from Attachment 5 of the Site Management Plan, provide a written evaluation of the condition and continued effectiveness of the ECs: The checklists in Attachment 5 of the SMP were completed and are attached. They document the following condition and effectiveness of the ECs:

- The final cover system EC was completed in 2009 in accordance with the Pavement Plan in the FER and remained in place throughout the reporting period. The cover system continues to minimize potential hazards to the safety and health of the public and is in compliance with the SMP.

- The vapor barrier system EC was completed in 2009 in coordination with the installation of the final elements of the cover system and remained in place throughout the reporting period. The vapor barrier system effectively minimizes potential hazards to the safety and health of the public.

General Site Conditions

Provide a written description of the Site conditions at the time of the site-wide inspection. Attach digital photographs or other supporting information as needed: Each level of the above-grade Site building was occupied throughout the reporting period by a retail tenant. Retail tenants also occupied one of the two sub-grade areas during the reporting period. A digital Photolog is attached showing conditions representative of the reporting period and at the time of the site-wide inspection.

Site Management Activities

Provide a discussion and assessment of ongoing site management activities including, but not limited to, soil/materials management, groundwater monitoring, community air monitoring, nuisance control, well replacement/repair, health and safety monitoring, and other applicable and pertinent activities. Attach supporting documentation as necessary: No groundwater monitoring was conducted as groundwater monitoring was terminated in 2011, as approved by the NYSDEC in June 2011. The monitoring wells remain present onsite. No soil/materials management, community air monitoring, nuisance control or health and safety monitoring were conducted in the reporting period as no intrusive activities (below the Site cover) were conducted.

Compliance with Permits and Schedules

The Operation and Maintenance Plan included in Section 4 of the Site Management Plan does not include any permit requirements but does include a schedule for groundwater monitoring well maintenance. Discuss compliance with the groundwater monitoring well maintenance schedule: The groundwater monitoring wells are checked during each monitoring event as per the SMP and were also checked during the Site-wide inspection. No maintenance was required to the monitoring wells during the reporting period.

Site Records

The Site records include, but are not limited to, groundwater monitoring reports, EC inspection checklists, site-wide inspection checklists, soil management documents, community air monitoring documents, regulatory agency correspondence, reports, and the Annual Site Management PRR. Confirm that each type of Site record is up to date and provide comments:

Each of the referenced documents that was applicable to activities during the reporting period has been kept up to date. Copies of the completed documents are included in the PRR.

Inspector Information

Name and Affiliation of Inspector(s): Adib Rahman, Hydrogeologist I, FPM Group.

Date of Inspection: December 22, 2020.

Reason for Inspection: Annual Site-Wide Inspection.

List additional inspections or activities conducted in association with this inspection: See Attachments.

Attachments:

- Cover System and Vapor Barrier System Inspection Checklist and supporting documents.
- Photolog.

S:\BDG\East River Plaza Brownfields\Summary Report 2020\Appb-Sitewideinspectchecklistdec2020.Docx

COVER SYSTEM AND VAPOR BARRIER SYSTEM CHECKLIST - 2020

Cover System and Vapor Barrier System
Inspection Checklist
East River Plaza, Manhattan, New York

Date of Inspection: December 22, 2020

Description of Cover System and Vapor Barrier System

This property is equipped with a surface cover system, including pavement, concrete slabs at the lowest level of the building, and/or at least one foot of cover gravel underlain by Mirafi fabric. The Pavement Plan in Appendix P of the Final Engineering Report (FER) shows the approved design for the final concrete/asphalt cover at this Site. An as-built survey in Appendix P shows the gravel cover system.

The property building is also equipped with a vapor barrier and seal system. This system includes a positive-side waterproofing membrane beneath the slab, pile caps and elevator pits. The foundation walls are also waterproofed using a similar sheet membrane material. Penetrations through the slab and walls for pipes and duct banks are also sealed. Vapor barrier and seal materials are specified in the foundation construction documents included in Appendix Q of the FER.

Activities that have the potential to disrupt the cover system and/or vapor barrier system must be reported in advance to the property owner such that they can be monitored and documented and any necessary repairs made. Examples of activities that may disturb the cover and/or vapor barrier systems include:

- Cutting or removal of pavement
- Breakup or significant deterioration of pavement/slab
- Cutting or removal of concrete slab or foundation materials on lowest level of building
- Planting or removal of vegetation (trees/shrubs) through the pavement or slab
- Excavations for subsurface utilities or other purposes
- Any activities that may disturb the ground

The cover and vapor barrier systems must be inspected at least annually. More frequent inspections may be conducted during construction activities with the potential to affect these

systems. An inspection shall also be conducted following a severe condition (flood, fire, etc.) with the potential to affect the cover and/or vapor barrier systems. The following checklist shall be used during each inspection. Supplemental information should be attached to the checklist, if needed. Copies of completed checklists and any supplemental information will be included in the Annual Site Management Report.

Notifications to the NYSDEC are required for the following conditions:

- 10-day advance notice of any significant proposed ground-intrusive activities;
- 48-hour notice of any damage or defect to the foundation structures that reduces or has the potential to reduce the effectiveness of the cover system and/or vapor barrier system; and
- 48-hour notification following any severe condition with the potential to affect the cover system and/or vapor barrier system.

Follow-up status reports for the above conditions must be submitted to the NYSDEC within 45 days. Additional information concerning notifications is included in Section 2.4.2 of the Site Management Plan (SMP).

Cover System Inspection Checklist:

A visual inspection of the entire cover system throughout the Site must be conducted, to include the gravel, asphalt, concrete pavement and/or concrete slab. Representative digital photographs must be taken showing the cover extent, nature and condition. The following questions must be answered. Please attach supporting information as necessary.

- If gravel is present, note and describe its thickness and continuity: Throughout the reporting period 100 percent of the Site was covered with asphalt or concrete pavement and/or concrete slab.

- The approved gravel cover is constructed of ¾-inch washed RCA provided by Tilcon of New York. What is the nature of the observed gravel cover? Is it consistent with the approved gravel cover? The gravel cover is presently covered by the final asphalt/concrete cover and could not generally be observed.

- The gravel is underlain by Mirafi fabric. Is any of the fabric visible? If so, describe the condition: No Mirafi fabric is currently visible as it is covered by the asphalt/concrete pavement and/or slab.

- Asphalt and/or concrete pavement provide cover for the on-grade portions of the site. Are these materials continuous or are there penetrations? Describe: All previous penetrations in the concrete slab, and walls and pavement have been properly sealed in accordance with the waterproofing/vapor barrier specifications. The asphalt/concrete pavement were continuous throughout the reporting period and no unsealed penetrations were observed.

- Comment on the condition of the asphalt/concrete pavement. All asphalt/concrete pavement is completed and in good condition.

- Concrete slabs and foundation walls provide cover within the lower levels of the Site building. Are these materials continuous? Describe: Yes, the concrete slabs and foundation walls in the lower levels of the Site building are continuous.

- Comment on the condition of the concrete slabs and foundation walls. The concrete slabs and foundation walls are completed and in good condition.

- Provide any other pertinent information regarding the condition of the cover system here: Photographs representative of conditions during the reporting period are attached to the Site-wide Inspection Checklist and show the location, nature and condition of the cover materials.

Vapor Barrier System Inspection Checklist

A visual inspection must be conducted to confirm that the vapor barrier system remains in place. The vapor barrier system is installed beneath the concrete slabs and foundation walls and, therefore, cannot be directly observed. Therefore, monitoring of the vapor barrier system is largely contingent on monitoring of the concrete slab and foundation components. Foundation penetrations should be observed where feasible. The following questions must be answered. Attach additional supporting information as necessary.

- Are the concrete slab and foundation components intact? Describe: Yes, these components were completed during 2009 and all components were observed to be intact during the reporting period.

- Are there any conditions associated with the concrete slab and/or foundation components that suggest the possibility of damage to the vapor barrier system? No. No conditions were observed that suggest damage to the vapor barrier system.

- Do the foundation penetrations exhibit indications of water leakage, soil penetration or other conditions suggesting problems with the foundation seals? Describe: No. No conditions were observed that suggest problems with the foundation seals.

- Is water infiltration observed through any lower-level floors or walls, suggesting possible problems with the vapor barrier system? Describe: No.

- Provide any other pertinent information regarding the condition of the vapor barrier system here: The vapor barrier system was completed during 2009 in conjunction with building construction. The system components were inspected and the outstanding items were addressed in 2009 and 2010. The vapor barrier system was not penetrated during the reporting period.

Inspector Information

Name and Affiliation of Inspector: Adib Rahman, Hydrogeologist I, FPM Group

Date of Inspection: December 22, 2020

Reason for Inspection: Annual cover system and vapor barrier system inspection.

List additional inspections or activities conducted in association with this inspection: See Attachments to Site-wide inspection.

PHOTOLOG - 2020

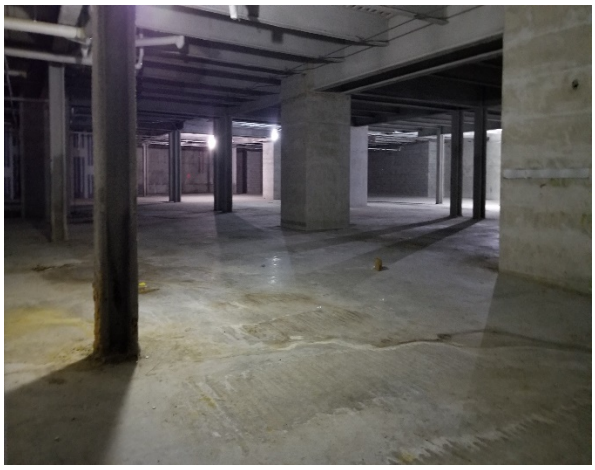


Photo 1: View of basement-level building interior (vacant at this time) showing cover system in place.

Photo 2: View of east side of Site looking south along the FDR Drive.

Photo 3: Typical monitoring well in active area of the Site.

Photo 4: Well M-10C remains intact with repaired casing.

NYSDEC INSTITUTIONAL AND ENGINEERING CONTROLS 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. **C231045**

Site Name East River Plaza

Site Address: FDR Drive btwn East 116th & East 119th Streets Zip Code: 10035
City/Town: New York
County: New York
Site Acreage: 4.500

Reporting Period: May 14, 2018 to May 14, 2021

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

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

	Box 2A	
	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	X
If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	X	☐
If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C231045	**Box 3**
Description of Institutional Controls	

Parcel	Owner	Institutional Control
1715-22	Tiago Holdings, LLC	
		Ground Water Use Restriction Building Use Restriction Site Management Plan

The Controlled Property may be used for commercial use and restricted residential use as long as the following long-term Engineering and Institutional Controls are employed:
a) all engineering controls must be operated and maintained as specified in the Site Management Plan submitted by Grantor and approved by the Department for the Controlled Property (the "Site Management Plan"). No Engineering and Institutional Controls may be discontinued without a NYSDEC-approved amendment or extinguishment of this Environmental Easement;
b) Annual inspections of the Controlled Property, certifications of Engineering and Institutional Controls and usage of Controlled Property, and Site Management Reporting to the Department must be conducted in accordance with the NYSDEC-approved Site Management Plan;
c) groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan;
d) onsite environmental monitoring devices, including but not limited to, groundwater monitor wells, must be protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Site Management Plan;
e) vegetable gardens are prohibited; and
f) residential habitation will not take place in the basement or first floor and shall only occur above the first floor.

The Controlled Property may not be used for a higher level of use such as unrestricted use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

1716-8	Tiago Holdings, LLC	
		Site Management Plan
		Ground Water Use Restriction Building Use Restriction

The Controlled Property may be used for commercial use and restricted residential use as long as the following long-term Engineering and Institutional Controls are employed:
a) all engineering controls must be operated and maintained as specified in the Site Management Plan submitted by Grantor and approved by the Department for the Controlled Property (the "Site Management Plan"). No Engineering and Institutional Controls may be discontinued without a NYSDEC-approved amendment or extinguishment of this Environmental Easement;
b) Annual inspections of the Controlled Property, certifications of Engineering and Institutional Controls and usage of Controlled Property, and Site Management Reporting to the Department must be conducted in accordance with the NYSDEC-approved Site Management Plan;
c) groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan;
d) onsite environmental monitoring devices, including but not limited to, groundwater monitor wells, must be protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Site Management Plan;
e) vegetable gardens are prohibited; and
f) residential habitation will not take place in the basement or first floor and shall only occur above the first floor.

The Controlled Property may not be used for a higher level of use such as unrestricted use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
1715-22	Subsurface Barriers Cover System
1716-8	Cover System Subsurface Barriers

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 Engineering Control 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 engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The 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 Site Management 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
X	☐

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. C231045

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 David Blumenfeld at 300 Robbins Lane, Syosset, NY.
print name print business address

am certifying as Owner (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: 7-20-2021

EC CERTIFICATIONS

Box 7

Professional Engineer 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 KEVIN LOYST at PIM GROUP, 640 JOHNSON AVE STE 101, BOHEMIA NY 11716
print name print business address

am certifying as a Professional Engineer for the Tiago Holdings LLC
(Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

7-15-21
Date

TIAGO HOLDINGS, LLC
c/o BLUMENFELD DEVELOPMENT GROUP, LTD.
300 ROBBINS LANE
SYOSSET, NEW YORK 11791

July 19, 2021

Mr. Yuk-Yin (Bryan) Wong
New York State Department of Environmental Conservation
Region 2 Office
47-40 21st Street
Long Island City, NY 11101

Re: Site Management Periodic Review Report for 2021
East River Plaza
Brownfield Cleanup Agreement Index # W2-1068-05-06
Site No. C231045

Dear Mr. Wong:

I am writing in reference to the above-referenced project and reporting requirements relative to the permits that were issued for various activities, including construction-related activities and leasing during the reporting period. Pursuant to the Site Management Plan ("SMP"), Tiago Holdings, LLC ("Tiago") is required to report these certain activities at the site. It should be noted that no permits were issued or activities in the brownfield area. In addition, there were no new leases executed during the reporting period.

If you have any questions or concerns, please do not hesitate to contact Raffaela Petrasek at (516) 624-1973.

Very truly yours,
TIAGO HOLDINGS, LLC

David Blumenfeld

Sworn before me this 20th day of July, 2021

Notary Public

LAURIE MC CAFFREY
Notary Public – State of New York
NO. 01MC6291372
Qualified in Nassau County
My Commission Expires Oct 15. 2021

APPENDIX C

RESUMES OF ENVIRONMENTAL PROFESSIONALS

FPM group

An Olgoonik Company

Christopher J. Linkletter

Engineering and Environmental Science

Mr. Linkletter has a diversified experience in geology and hydrogeology. His professional experience includes groundwater and soil investigations, routine landfill gas monitoring, Phase I Environmental Site Assessments, soil remediation projects, soil vapor intrusion evaluation, maintenance of groundwater, soil and soil vapor remediation systems, and evaluation of site compliance with environmental regulations.

Functional Role	Title	Years of Experience
Hydrogeologist	Hydrogeologist	3

Personal Data

Education
B.S./2015/Geology/SUNY Oneonta, NY

Registration and Certifications
OSHA 40-hour HAZWOPER Health & Safety Training
Current OSHA 8-hour HAZWOPER Health & Safety Refresher

Employment History
2015-Present FPM Group

Detailed Experience

Site Investigation and Monitoring

- Performs soil, soil vapor, indoor air and groundwater monitoring and sampling at commercial, industrial, and municipal sites throughout Long Island and the New York metropolitan area. Monitoring and sampling activities are conducted in accordance with NYSDEC-approved work plans, Phase II work plans, and regulatory agency requirements.
- Conducts Phase I and II Environmental Site Assessments (ESAs) for various residential, commercial, industrial and vacant sites in New York State in accordance with the ASTM Standard. Phase I ESA tasks included site inspections, interviews, evaluation of state and federal databases, record reviews at local and state government agencies, and reports.
- Skilled in use and calibration of field equipment including photoionization detectors (PID), Landtec Infrared Gas Analyzer, combustible gas indicator (CGI), water-level meters, interface probes, groundwater quality instrumentation, and survey equipment.
- Performs data tabulation and evaluation relative to established regulatory agency criteria including USEPA, NYSDEC, NCDOH, and SCDHS.
- Conducted Phase II ESAs for several sites in the New York City Office of Environmental Restoration (NYC OER) e-designations. Responsibilities include soil, groundwater, and soil vapor sampling, as well as frequent correspondence and coordination of NYC OER personnel.
- Performed long-term monitoring projects at several landfills at McGuire AFB, New Hanover, NJ for AFCEE. Collected groundwater, leachate, and surface water samples.
- Assisted in a groundwater, soil, and soil vapor investigation at a Brownfield Cleanup Program (BCP) Site in Far Rockaway, NY including petroleum compounds. Responsibilities included groundwater, soil, and soil vapor sampling for characterization and delineation, subcontractor coordination and oversight, and report preparation.
- Performed sediment sampling for the Town of Brookhaven, including sample collection, grain size analysis, and report preparation.

Remediation

- Field Technician - Operates and maintains remediation systems, including soil vapor extraction, air sparge systems, groundwater pump and treat, and sub-slab depressurization systems.
- Field Technician, East Harlem, NY - Assisted in remedial activities at a Voluntary Cleanup Program (VCP) and NYC OER e-designated redevelopment site. Responsibilities included the collection of waste characterization and endpoint samples, oversight and documentation of the excavation and removal of impacted soils to various disposal facilities, and daily air monitoring to evaluate the effect of site activities on the surrounding community.
- Environmental Scientist, Brooklyn, NY - Assisted in remedial activities at a NYS Superfund Site in Greenpoint, NY. Responsibilities included

collection of waste, monitoring product thickness and recovery, and documentation.

- Field Technician, Queens, NY - Assisted in remedial activities at a VCP and NYC OER e-designated redevelopment site in Woodside, NY. Responsibilities included the collection of waste characterization and endpoint samples, oversight and documentation of the excavation and removal of impacted soils to various disposal facilities, and daily air monitoring to evaluate the effect of site activities on the surrounding community.

Landfills

- Hydrogeologist, Town of East Hampton - Conducts ongoing groundwater and methane monitoring programs for the Springs-Fireplace and Montauk town landfills. Responsibilities include collection of routine and baseline groundwater samples, methane monitoring and operating, tabulation of analytical data, and report preparation.
- Hydrogeologist, Town of Islip, NY - Conducts ongoing landfill gas monitoring projects at three Town of Islip landfills. Monitoring program includes monthly collection of landfill gas data from onsite and offsite methane wells, methane collection systems (extraction wells), and flare systems, volatile organic compound (VOC) monitoring, greenhouse gas monitoring, and report preparation.
- Hydrogeologist, Town of Islip, NY - Manages ongoing field and reporting activities for the U.S. Environmental Protection Agency (EPA) Greenhouse Gas (GHG) Reporting Program at the Blydenburgh Landfill in the Town of Islip. Program includes weekly GHG data collection, usage and maintenance of a dedicated data logging system, data management, and report preparation in accordance with EPA specifications.

Health and Safety

- Performed health and safety monitoring at investigation and remediation sites during intrusive activities. Monitoring included calibration and operation of photoionization detectors (PIDs), flame-ionization detectors (FIDs), dust monitors, and combustible gas indicators (CGI). Compared results to applicable action levels and undertook preventative/protective measures as necessary.
- Performed community air monitoring (CAMP), including monitoring for noise, particulates (dust), and organic vapors at several sites throughout New York State. Recorded observations and compared to applicable action levels.

FPM group

An Olgoonik Company

Adib Rahman

Engineering and Environmental Science

Mr. Rahman has diversified experience in environmental sciences. His professional experience includes Phase I/II groundwater, soil, and soil vapor investigations; field supervision and management of soil remediation projects; evaluation of site compliance with environmental regulations and environmental permitting.

Functional Role	Title	Years of Experience
Environmental Scientist	Environmental Scientist	5

Personal Data

Education

B.A./2015/Environmental Studies/CUNY Queens
A.A./2012/ Liberal Arts, Science General Studies/ SUNY Suffolk

Registration and Certifications

OSHA 40-hour HAZWOPER and Current 8-hour Health and Safety Training
OSHA 30-hour Construction Safety and Health
OSHA 10-hour Construction Safety and Health
NYC Office of Environmental Remediation Gold Certification

Employment History

2020-Present	FPM Group
2016-2020	Athenica Environmental Services
2015-2015	Grow NYC

Detailed Experience

Site Investigations

- **Environmental Scientist** with experience in conducting site investigations throughout the New York metropolitan area for remedial projects at several NYC Voluntary Cleanup Program (VCP) sites and NYC OER E-Designation sites. Investigations have included Remedial Investigations, waste characterizations for soil disposal, and hazardous soil delineations.

Phase I Environmental Site Assessments

- **Environmental Scientist, High-Rise Residential Building, Manhattan, NY.** Conducted and prepared a Phase I ESA for environmental due diligence in accordance with applicable ASTM standards, including but not limited to the review of all pertinent current and historical environmental database entries for the subject property and surrounding land usage to assess potential environmental concerns.

- **Environmental Scientist, Commercial/Office Building, Brooklyn, NY.** Conducted and prepared a Phase I ESA in accordance with applicable ASTM standards, including but not limited to the physical identification of Recognized Environmental Conditions during a site inspection, leading to a thorough investigation of subsurface conditions to asses potential risk for occupants.

Phase II Environmental Site Assessments

- **Environmental Scientist, Residential Building, Manhattan, NY.** Performed sub-slab soil vapor, indoor air, and outdoor air sampling in accordance with regulatory standards, and prepared a Phase II ESA Report subsequent to the analysis of air samples in order to assess safe occupancy of building residents based on regulatory guidelines.

- **Environmental Scientist, Industrial /Manufacturing Building, Brooklyn, NY.** Oversaw the advancement of soil borings, performed the collection of soil samples, and prepared Phase II ESA report based on laboratory analysis in order to determine the extent of soil contamination due to the historical petroleum-related use of the Newtown Creek area of Brooklyn.

- **Environmental Scientist, Commercial/Office Building, Queens, NY.** Oversaw the installation of groundwater monitoring wells, reviewed the monitoring well survey, and performed the groundwater sampling from the monitoring wells to determine localized groundwater flow direction and assess potential off-site migration of groundwater contaminants.

Adib Rahman

Remediation (NYC OER)

- **Environmental Scientist, Residential Building, Brooklyn, NY.** Performed Community Air Monitoring Program (CAMP) to mitigate off-site migration of contaminated media (soil, vapor), prepared daily and monthly reports as necessary for submission to the NYC OER detailing the progress of remedial actions.
- **Environmental Scientist, Mixed-Use Commercial & Residential Building, Queens, NY.** Performed waste characterization sampling in accordance with soil disposal facility guidelines, served as a point-of-contact to coordinate between the client, the NYC OER, disposal facility, soil broker, trucking company, and general contractor for the proper disposal of impacted material from the E-Designated property in accordance with regulatory guidelines.

- **Environmental Scientist, Commercial/Office Building, Queens, NY.** Conducted the initial Remedial Investigation (RI) to determine the extent of soil contamination, prepared Remedial Action Work Plan to address the findings of the RI for NYC OER's review and approval, oversaw the implementation of Remedial Actions, including the proper disposal of contaminated soil and the installation of engineering controls such as a sub-slab depressurization system (SSDS) and Vapor Barrier System (VBS), and subsequently prepared the final Remedial Action Report for NYC OER's review and approval.

NYC SCA

- **Environmental Scientist, NYC Public School, Queens, NY.** Prepared an Excavated Materials Disposal Plan (EMDP) and its accompanying Health and Safety Plan (HASP) under the purview of a PE for the excavation and disposal of historic fill in accordance with NYC SCA guidelines.

- **Environmental Scientist, NYC Public School, Bronx, NY.** Oversaw the advancement of soil borings and collected soil samples for analysis to conduct the characterization of soil to be excavated and disposed of in accordance with NYC SCA guidelines.

- **Environmental Scientist, NYC Public School, Brooklyn, NY.** Oversaw the disinfection of new piping and fixtures; and documented the subsequent collection of bacteriological samples in accordance with NYC SCA guidelines.

FPM group

An Olgoonik Company

Ben T. Cancemi, PG, CPG

Engineering and Environmental Science

Mr. Cancemi has diversified experience in geology and hydrogeology. His professional experience includes groundwater and soil investigations, design and management of soil remediation projects, installation and maintenance of groundwater containment and remediation systems, aquifer testing and interpretation, geotechnical studies, evaluation of site compliance with environmental regulations and environmental permitting.

Functional Role	Title	Years of Experience
Senior Hydrogeologist	**Department Manager - Hydrogeology**	**25**

Personal Data

Education

M.S./2001/Hydrogeology/SUNY Stony Brook
B.S./1995/Geology/SUNY Stony Brook

Registration and Certifications

New York State Professional Geologist, #7051
Certified Professional Geologist – American Institute of Professional Geologists
NYC Office of Environmental Remediation – Gold Certified Professional
OSHA 40-hour HAZWOPER and Current 8-hour Health and Safety Training and Current Annual Physical
OSHA 8-hour HAZWOPER Supervisor
OSHA 10-hour Construction Safety and Health
OSHA Permit-Required Confined Space Training
Long Island Geologists
National Groundwater Association

Employment History

2001-Present	FPM Group
1998-2001	Burns & McDonnell Engineering Company
1997-1998	Groundwater and Environmental Services
1996-1997	Advanced Cleanup Technologies

Detailed Experience

Hydrogeologic Evaluations

- **Project Manager, Lower Manhattan, NY. NYCT.** Coordinated and performed constant head hydraulic conductivity (packer) testing in boreholes located in fractured bedrock in lower Manhattan, NY to evaluate fracture connectivity with the nearby Hudson and East Rivers and determine hydraulic conductivity and related parameters such that water management procedures could be implemented for redevelopment of the New South Ferry Subway Station.
- **Project Manager, Manhattan, NY. NYCT** Coordinated and performed a hydrogeologic investigation, including utility clearing, soil borings, rock coring, packer testing, aquifer pumping testing, data collection, and interpretation, to evaluate subsurface conditions and determine geologic parameters for a proposed subway extension of the NYC Transit No.7 Subway Line.
- **Project Manager, Various Sites Long Island, NYC, and Westchester County, NY** Performed aquifer pumping and slug tests and evaluated hydrologic properties using the computer program AQTESOLV.

Site Investigations

- **Program Manager** for ongoing investigation and remedial projects at several New York State Inactive Hazardous Waste Disposal sites, Voluntary Cleanup Program (VCP) sites, and NYC OER e-designated sites. Investigations have included site characterization, Remedial Investigations/Feasibility Studies (RI/FS), and Resource Conservation and Recovery Act (RCRA) facility investigations and closures. Remedial services have included contaminated soil removal; design, installation, and operation of air sparge/soil vapor extraction (AS/SVE) systems and sub-slab depressurization systems (SSDS), capping, and other remedial services.
- **Program Manager NYSDEC BCP Site, Brooklyn, NY** Coordinated and performed an investigation, implemented remedial measures and regulatory reporting at a former dry-cleaning facility in Brooklyn, NY, including soil, groundwater and soil vapor sampling to assess onsite chlorinated solvent impacts. Remedial actions included conducting pilot testing for installation of a sub-slab depressurization system (SSDS), coordinating the installation of vapor barrier and SSDS. Prepared a Final Engineering Report documenting remedial activities and a Site Management Plan for continued site monitoring. Site monitoring is currently being performed and includes SSDS operation and maintenance (O & M), annual air monitoring and periodic reporting.

- **Program Manager NYSDEC Inactive Hazardous Waste Site, Garden City, NY** Coordinated and performed an investigation, implemented remedial measures and regulatory reporting for a former printing facility in Garden City, NY, including soil, groundwater and soil vapor sampling to assess onsite chlorinated solvent impacts. Remedial actions included pilot testing and installation of an air sparge/soil vapor extraction (AS/SVE) system and SSDS, coordinating the installation of an SSDS, removal of contaminated soils from two areas and removal of impacted sediments from twelve leaching structures. Prepared a Final Engineering Report documenting remedial activities. Site monitoring included AS/SVE O & M, and periodic reporting. The AS/SVE has completed remediation and SVI testing has been performed to ensure remediation is complete. Prepared work plan to evaluate potential emerging contaminates including PFAS compounds. Sampling and subsequent analysis and reporting was performed.
- **Program Manager, NYC Redevelopment Site, Queens NY.** Program Manager for environmental activities at a NYC Voluntary Cleanup Program Site. Environmental activities included preparation of a Phase I report, completion of a remedial investigation, preparation of associated work plans, implementation of a community air monitoring program for site activities, excavation and disposal of impacted soils, management and disposal of clean soils, and regulatory reporting.
- **Project Manager Remedial Investigation NYSDEC BCP Site, Queens, NY** Coordinated and performed an investigation at a vacant commercial property Far Rockaway, NY, including soil, groundwater and soil vapor sampling to assess onsite chlorinated solvent impacts from an adjoining offsite source. Prepared Remedial Work Plan and Report and provided monthly updates.
- **Project Manager, Site Investigation, Former Aerospace Facilities, Long Island, NY** Coordinated and performed soil and groundwater sampling and soil vapor studies at several aerospace manufacturing facilities on Long Island, NY. Assessments included an evaluation of past manufacturing and facility operations, storage and use of solvents, petroleum and manufacturing-derived wastes, and impacts to soils, soil vapor, and groundwater. Areas of concern were identified for further evaluation and/or corrective action.
- **Project Manager, Municipal Landfill Monitoring, Town of East Hampton, NY** Coordinated and performed long term groundwater monitoring at two closed Town of East Hampton, NY municipal landfills, including the sampling a multi-depth monitoring well network, analysis and interpretation of analytical and hydrogeologic data, and regulatory reporting in accordance with NYSDEC Part 363 (formerly Part 360) requirements.
- **Project Manager, Site Investigation, Former agricultural facilities, Long Island, NY** Coordinated and performed soil and groundwater investigations at various agricultural and horticultural properties to evaluate impacts of past herbicide and pesticide usage on the underlying soil and groundwater.
- **Program Manager, Municipal Landfill Gas Monitoring, Town of East Hampton, NY** Managed and performed routine methane monitoring at two Town of East Hampton landfills for compliance with NYSDEC requirements and to evaluate potential offsite migration to the surrounding community. Monitored indoor air with a flame ionization detector (FID) to evaluate impacts to buildings.
- **Hydrogeologist, Groundwater Modeling, Town of East Hampton, NY** Assisted with groundwater flow modeling for the Springs-Fireplace Road Landfill to evaluate the nature and extent of the landfill plume, its likely downgradient extent, and its fate.
- **Program Manager, Petroleum Release Sites, Various NYC, Long Island and Westchester County** Coordinated and performed onsite and offsite monitoring at petroleum release sites on Long Island, the New York metropolitan area, and in Westchester County in accordance with NYSDEC Spill program requirements. The monitoring programs generally included sampling multi-depth monitoring well networks utilizing low-flow sampling techniques, analysis/interpretation of analytical and hydrogeologic data, and regulatory reporting.
- **Project Manager, Site Investigation, Logan International Airport, Boston, MA.** Coordinated a soil and groundwater sampling program to evaluate environmental conditions at Terminal A, Logan International Airport, East Boston, Massachusetts. The program included an assessment of the current fuel hydrant system and other locations of potential environmental concern using non-destructive air vacuum

extraction-clearing techniques combined with direct-push sampling.

- **Project Manager, Site Investigation, Pyrotechnics Facility, Suffolk County, NY.** Managed and performed a soil and groundwater investigation, a remedial soil excavation, and groundwater monitoring at a pyrotechnics manufacturing facility in Suffolk County, NY. The work was performed under the direction of the Suffolk County Department of Health Services (SCDHS) to investigate and remediate contamination from historic use of perchlorate-containing materials at the facility.
- **Project Manager, Site Investigation, Automobile Franchise, Westchester County, NY.** Coordinated and performed soil, groundwater and soil vapor investigations at several automobile dealerships in Westchester County, NY to evaluate potential impacts from petroleum and chemical solvent storage and usage and onsite waste water disposal systems.
- **Project Manager, Site, Investigation, Former Mercury Thermometer Manufacturing Facility, Queens, NY.** Coordinated and performed soil and soil vapor intrusion study at a former mercury thermometer manufacturing facility situated in a mixed industrial and residential area. Assessments included an evaluation of past manufacturing and facility operations, storage and use of mercury, manufacturing-derived wastes, and impacts to soils and soil vapor Areas of concern were identified for further evaluation and remedial action.

Phase I Environmental Site Assessments

- **Project Manager, Various Northeastern and Mid-Atlantic States.** Performed numerous Phase I Environmental Site Assessments (ESAs) for commercial and industrial properties throughout the Northeastern and Mid-Atlantic States for various clients including trucking companies, major airlines, telecommunication companies, chemical/ petroleum storage facilities, aerospace manufacturing facilities, machine shops, retail shopping centers, auto dealerships and service stations.

Remediation

- **Project Manager, Remediation, Former Landfill, Suffolk County, NY.** Managed remedial activities at a NY State Environmental Restoration Program (ERP) Site situated at a former hospital landfill in Northport, NY. Responsibilities contractor management and oversight, soil disposal management, confirmatory testing, data review, and preparation of remedial work plan and final engineering report for remedial activities.
- **Project Manager, Remediation - AS/SVE, Various Sites, NYC and Long Island.** Performed pilot testing, design, installation and procurement of numerous multi-depth soil vapor extraction (SVE) and air sparge (AS) remediation systems on Long Island and in the NYC metropolitan area to remediate chlorinated solvents and petroleum. Conducted remediation system operation and maintenance, and evaluations of system performance.
- **Project Manager, Remediation – UIC Structures, Nassau and Suffolk County, NY.** Performed numerous storm water and sanitary leaching structure (UIC) cleanouts utilizing excavation and/or vacuum assisted equipment to remove contaminated sediments and liquids. Conducted waste characterization and profiling, pipe camera surveys, and structure locating utilizing water-soluble dyes and electronic locating equipment.
- **Project Manager, Remediation Sub-Slab Depressurization Systems, NYC, Nassau and Suffolk Counties, NY.** Conceptually designed and oversaw the installation of a sub- slab depressurization system (SSDS) at several commercial properties in the NYC and Long Island to mitigate chlorinated solvent impacts. SSDS monitoring was conducted to ensure proper operation and emissions compliance of with NYSDEC air discharge guidelines.
- **Project Manager, Remediation System O & M, NYC and Long Island.** Operated and maintained remediation systems, including SVE, groundwater pump and treat, AS, dual-phase extraction, SSDS and free-phase petroleum recovery systems.
- **Project Manager, Remediation. White Plains, NY.** Managed and coordinated a petroleum spill investigation to evaluate the nature and extent of a fuel oil release at an office building in White Plains, NY. The investigation included excavation and removal of a 5,000-gallon UST situated over 20 feet below grade, tightness testing of the UST and associated piping, a soil and groundwater investigation, free product recovery utilizing vacuum-enhanced fluid recovery techniques, and coordination and reporting to the NYSDEC and Westchester County Department of Health.

FPM group

An Olgoonik Company

Ben T. Cancemi, PG, CPG

Engineering and Environmental Science

Health and Safety

- **HASP and CAMP Plan Preparation, Various Sites.** Prepared community air monitoring and health and safety plans for several NYSDEC inactive hazardous waste, brownfield cleanup program, volunteer cleanup program, petroleum spill, and NYC e-designation program sites
- **HASP Monitoring, Various Sites.** Performed health and safety monitoring at investigation and remediation sites during intrusive activities. Calibrated and operated photoionization detectors (PID) and flame-ionization detectors (FID) for organic vapors and combustible gas indicators (CGI) for methane. Compared results to applicable action levels and took preventative/protective measures as necessary.
- **CAMP Monitoring, Various Sites.** Performed community monitoring, including monitoring for noise, particulates (dust), and organic vapors. Recorded observations and compared to applicable action levels. Calibrated and operated noise meters, particulate monitors, and PID/FID.
- **Radiation Screening, Various Sites.** Performed screening for radiation at select sites. Operated Geiger counter in different radiation modes and obtained and evaluated background readings.
- **Mercury Screening.** Performed screening of mercury vapor for several projects. Operated and experienced with Jerome and Lumex Mercury Vapor Analyzers.

Expert Witness/Technical Services

- **Expert Witness Services, Glen Cove Waterfront Redevelopment.** Provided expert witness services regarding environmental conditions and remedial procedures for redevelopment of a former industrial and commercial area in Glen Cove, NY.
- **Technical Services, multiple sites, Town of Brookhaven.** Provided technical services regarding environmental conditions at various commercial and residential sites within the municipality to evaluate potential compliance issues with Town code. Services included coordinating subsurface investigations, sampling of various media, methane surveys, tidal surveys, technical oversight of investigation activities.
- **Technical Services, multiple sites, Town of Huntington.** Provide technical review of environmental investigations and soil management plans prepared for proposed development for the Planning Division to asses if the proposed development has been properly evaluated in accordance with Town requirements.

PFAS Experience

- **Project Manager, Multiple NYSDEC and NYC VCP Sites**. Provides oversight and management of several Site Management and Investigations regulatory sampling programs for which PFAS sampling has been required. Responsible for, data acquisition and interpretation, reporting, and negotiations with NYSDEC.
- **Project Manager, Legal Support Services.** Provide support to counsel for providing consulting services regarding PFAS contamination at a municipal airport. Services include review and assessment of analytical data, technical support and preparation of anticipated future investigative and remedial costs.

MGP Site Experience

- **Field Team Leader, Property Transfer of MGP sites**. Conducted soil and groundwater sampling at several Nicor MGP sites in Illinois prior to property transfer to Con Edison. Coordinated sampling crews, oversaw sampling and sample management, and implemented HASP monitoring.
- **Project Manager, Geophysical Investigation at Brooklyn Union Greenpoint MGP site.** Developed and implemented a geophysical investigation at an MGP site that was subject to differential settlement. Coordinated with client and subcontractors, oversaw survey activities, implemented HASP, interpreted results, and prepared a report to document the completed work.

Other

- **Proposal Development.** Prepare and provide detailed work scopes and cost estimates for Phase II investigations, remedial investigations, SVI Investigations, remedial system and SSDS installations, contaminated soil removal, and continued site monitoring for project planning and legal support.
- **Project Manager, RCRA Closure, Nassau County, NY** Coordinated RCRA closure activities and performed confirmatory sampling at a former package manufacturing and printing facility in Nassau County, NY. Project duties included preparation of a closure work plan, contractor procurement, a subsurface site investigation, rinseate sampling, and regulatory agency reporting and coordination, and preparation of a closure report.

- **Project Manager, Former Landfill, Suffolk County, NY.** Prepared a remedial design (RD) work plan for a former hospital landfill on Long Island. The RD work plan included a summary of past investigations, a materials management plan for the excavation and disposal of contaminated soils and debris, a post-excavation sampling plan, a site restoration plan, community air monitoring plan (CAMP), health and safety plan (HASP) and a quality assurance and quality control (QA/QC) plan.
- **Project Manager, Air Monitoring, Nassau County, NY.** Managed and performed monthly soil gas sampling and quarterly indoor air quality sampling at an elementary school in southwestern Nassau County, NY. The monitoring and associated NYSDEC reporting were performed to ensure that a gasoline groundwater plume migrating through the school property was not impacting indoor air at the school.
- **Project Manager, Environmental Compliance, Multiple Sites.** Performed compliance inspections to assess issues of potential environmental concern at manufacturing, aviation, trucking, retail, and not-for-profit facilities.

FPM group

An Olgoonik Company

Stephanie O. Davis, PG, RG, CPG

Engineering and Environmental Science

Ms. Davis has diversified experience in geology and hydrogeology. Her professional technical experience includes groundwater, soil, and soil vapor investigations, design and management of soil and groundwater remediation projects, design and installation of groundwater containment systems, design and evaluation of soil vapor intrusion mitigation systems, groundwater flow modeling, aquifer testing and interpretation, evaluation of site compliance with environmental regulations, and personnel training. Ms. Davis presently manages several large-scale investigation and remedial programs, including program scopes, budgets, staffing, and schedules.

Functional Role	Title	Years of Experience
Senior Project Manager	Corporate Vice President	30+

Personal Data

Education

M.S./1984/Geology/University of Southern California
B.S./1981/Geology/Bucknell University

Registration and Certifications

New York Professional Geologist #000247, 2017
Certified Professional Geologist #9487, (AIPG) 1995
California Registered Geologist #5192, 1991
Pennsylvania Professional Geologist #PG-000529-G,1994
OSHA-approved 40-hour Health and Safety Training Course (1990)
OSHA-approved 8-hour Health and Safety Training Refresher Courses (1991-Present)
OSHA-approved 8-hour Site Safety Supervisor Training Course (2008)
National Ground Water Association
Long Island Association of Professional Geologists
USEPA Triad Training for Practitioners
NYC OER Gold Certified Professional

Employment History

1993-Present	FPM Group
1992-1993	Chevron Research and Technology Co.
1990-1992	Chevron Manufacturing Co.
1984-1990	Chevron Exploration, Land, and Production Company

Continuing Education

- Treatment of Contaminated Soil and Rock
- Groundwater Pollution and Hydrology
- Environmental Law and Regulation
- Remedial Engineering
- Soil and Foundation Engineering
- Environmental Geochemistry
- Project Management Professional (PMP) training

Detailed Experience

Site Investigations

- **Program Manager** for ongoing investigation and remedial projects at several New York State Inactive Hazardous Waste Disposal sites, Voluntary Cleanup Program (VCP) sites, and Brownfield Cleanup Program (BCP) sites, and NYCOER e-designated sites. Investigations have included site characterization, Remedial Investigation/Feasibility Studies (RI/FS), and Resource Conservation and Recovery Act (RCRA) facility investigations and closures. Remedial services have included contaminated soil removal, in-situ chemical treatment, design, installation, and operation of air sparge/soil vapor extraction (AS/SVE) systems and sub-slab depressurization systems (SSDSs), capping, and other remedial measures.
- **Program Manager, NYS Inactive Hazardous Waste Disposal Site, Greenpoint, NY.** Responsible for project scoping, cost estimation, subcontracting, field services, report preparation, and agency negotiations for a former manufacturing facility. Services included an RI, an FS, implementation of an Interim Remedial Measure (IRM), and an underground utility survey. A Remedial Action Work Plan (RAWP) was also prepared for an associated petroleum spill.
- **Program Manager, NYS BCP Site, Far Rockaway, NY.** Managed all aspects of pre-application investigation, BCP application, RI Work Plan development and implementation, and Citizen Participation Plan (CPP) for a chlorinated solvent site. Responsible for scope development, NYSDEC and NYSDOH coordination, budget, schedule, staffing, and report management.
- **Program Manager, Site Characterization (SC) for NYS Inactive Hazardous Waste Disposal Site, Flushing, NY.** Responsible for SC scope development, budget, schedule, SC Work Plan and report review, staffing, and agency negotiations for a chlorinated solvent site undergoing residential redevelopment.
- **Program Manager, Investigation and Remedial Services, NYS BCP Site, Far Rockaway, NY.** Managed scope, budget, schedule, staffing and quality assurance for pre-application investigations for a BCP site at a former hospital facility. Prepared the BCP application and supporting documentation for the environmental issues, including chlorinated

solvents, a petroleum spill, petroleum tanks, and historic fill. Prepared the Remedial Investigation (RI) Work Plan, managed the RI field services and data evaluation, and prepared the RI Report; the RI received NYSDEC approval. Developed the Remedial Action Work Plan (RAWP), including identifying contamination for remediation, evaluating remedial alternatives and selecting the remedy for NYSDEC approval. Completed Citizen Participation (CP) and Community Air Monitoring Plan (CAMP) requirements.

- **Program Manager, Environmental Services for Senior Living Developer, Long Island, NY.** Performs environmental analyses and directs investigation and remedial activities for property acquisition and redevelopment for senior residential facilities. Services included Phase I ESAs, investigation and remediation cost estimation, Phase II investigations, Site Management Plans (SMP), and transaction and regulatory agency negotiations. Modifications for SMP and Periodic Review Reports (PRRs) were also prepared, and were approved by NYSDEC.
- **Project Director, Investigation and Remediation for Manufacturing Plant, Lindenhurst, NY.** Managed comprehensive investigation of a multi-parcel, multi-building manufacturing facility with over a century of operations. Completed Phase I ESA, asbestos and hazardous materials investigation, and Phase II investigation. Prepared a remedial and materials management plan as required by the NYSDEC and oversaw contaminated materials management during construction. Conducted removals of previously-abandoned tanks and obtained regulatory approvals. The facility was successfully redeveloped for mixed commercial and residential use.
- **Program Manager, Environmental Services for Major Transportation Business, Long Island, NY.** Responsible for managing all aspects of investigation and remediation for properties owned by or considered for acquisition by this client. Services typically include Phase I ESAs, Phase II investigations, developing and implementing remediation, and obtaining regulatory agency approvals. Investigations of soil, groundwater, soil vapor, indoor air, Class V injection wells, and tanks have been completed. Remediation has included contaminated soil removal, Class V injection well remediation, and sub-slab depressurization. The completed work has allowed the client to negotiate and complete transactions and maintain business operations.
- **Program Manager, Environmental Services for Commercial Real Estate Developer, Long Island, NY.** Managed all Phase I ESA, Phase II investigations, and remediation projects for a major commercial real estate developer. Projects included environmental services associated with purchase and redevelopment of office buildings, aerospace facilities, former research and development facilities, and large manufacturing plants. Remedial services have included RCRA closures, UIC closures, tank removals, and large excavations.
- **Program Manager, RI/FS, RAWP, and Remedial Services, Levittown, NY.** Managed all aspects of RI/FS for a Class 2 Inactive Hazardous Waste Disposal (Superfund) site involving chlorinated solvents. Responsibilities included RI/FS scope, budget and schedule development, RI/FS work plan, HASP, CAMP, and QAPP, coordination with client, tenants, and regulatory agencies, report review, remedial approach development, conceptual design, and cost estimation. Developed RAWP and negotiated the remedial scope with the NYSDEC. Remedial services included implementation of AS/SVE, SSDS, and site management.
- **Project Director, Investigation Services for Multi-Parcel Urban Redevelopment Project, Long Beach, NY.** Provided comprehensive oversight and management of investigations of a large beach-front parcel including Phase I ESA, Phase II investigation, remedial plan development, tank investigation, and negotiations, with regulators. Issue of concern included urban fill, soil vapor intrusion, historic tanks, and flooding.
- **Program Manager, Environmental Investigation and Remediation, Communication Facility, Long Island, NY.** Responsible for all aspects of investigation and remediation of a former communications facility during property acquisition and redevelopment for a medical facility use. Services included Phase I ESA, facility investigation scope, budget, staffing, and reporting, and remediation cost estimation. Environmental issues included obsolete communications and facility equipment, USTs, underground injection control systems, asbestos and other hazardous materials, and transaction and regulatory agency negotiations.
- **Project Manager, RCRA Facilities Investigation (RFI), Barksdale AFB, LA**. Responsible for all aspects of field program planning, solicitation and selection of subcontractors, mobilization and establishment of a field office, supervising multiple field crews, installation and sampling of monitoring wells, collection and soil samples, data tracking and management and preparation of an RFI report. The scope of work included characterization of the nature and extent of groundwater and soil contamination at thirteen Solid Waste Management Units (SWMUs),

performing a Base-wide evaluation of background contaminant concentrations, and developing a long-term monitoring (LTM) program for the Base.

- **Field Services Manager, UST Investigation, Plattsburgh AFB, NY, AFCEE**. Responsible for field crew training, coordination of sampling crews at multiple sites, sample labeling, handling, tracking, and shipping, field data management and remote field office management. The scope of work included collection of over 450 groundwater samples to characterize groundwater conditions in the vicinity of 150 USTs using a Geoprobe sampling rig, well points, and rapid turnaround-time analysis.
- **Program Manager, Environmental Investigations for Supermarket Developer, Long Island, NY**. Conducted site investigations, including soil vapor sampling, soil sampling and analysis, groundwater sampling and analysis, and geotechnical evaluation for numerous sites in Suffolk County, New York. The resulting data were utilized by a major supermarket company in the negotiations for the purchase of the properties and in the property remediation prior to development.
- **Project Manager, Site Investigation, Bronx, NY.** Managed field sampling and data analysis activities, including soil vapor analysis, soil sample analysis, and groundwater sampling and analysis at an active commercial bus terminal. Made recommendations for site remediation, including UST removal, soil excavation and disposal, and free-phase product extraction.
- **Project Manager, RCRA Facilities Investigation, City of Richmond, CA**. Prepared RFI work plan, incorporating existing geologic, chemical, and historical data, evaluating newly-acquired site data, and developing recommendations for further investigation and remedial action at a former municipal landfill.
- **Project Manager, Site Investigation, Bay Shore, NY**, **Manufacturing facility.** Managed onsite and offsite soil and groundwater sampling program. Compiled and evaluated data and prepared a comprehensive report of the investigation results for approval by the SCDHS and NYSDEC. Proposed remediation technologies for onsite soil contamination and onsite and offsite groundwater contamination.
- **Project Manager, Site Investigation for FAA, Newark Airport, NJ.** Managed and conducted a soil and groundwater sampling program adjacent to Runway 29. Analyzed chemical analytical data and developed recommendations.
- **Project Manager, Remedial Investigation, Richmond Refinery, CA.** Supervised and conducted drilling, soil sampling, cone penetrometer testing, and well installation at a refinery process water effluent treatment system and former municipal landfill.
- **Program Manager, Major New York Metro Automobile Dealer.** Managed all investigation and remedial activities for a major automobile retailer with multiple facilities. Sites included tanks, petroleum spills, underground injection control (UIC) systems, soil vapor intrusion issues, and hazardous waste management. Responsible for work scope and budget preparation, staffing and oversight, client and regulatory agency interactions, addressing insurance issues, reporting and certification, and project closeouts.
- **Program Manager, SWTP groundwater monitoring program, Town of East Hampton.** Managed groundwater monitoring and reporting for the Scavenger Waste Treatment Plant (SWTP). Responsibilities included oversight of well installation, purging and sampling the SWTP groundwater monitoring wells, and providing data to the Town for reporting purposes.
- **Program Manager, Site Assessments and Remediation for Transportation Hub Development, Suffolk County, NY.** Manages Phase I ESAs, Phase II investigations, and remediation required for client acquisition of multiple parcels for redevelopment. Coordinates and oversees each project, interfaces with counsel and regulatory agency representatives, and develops comprehensive cost estimates. Remediations has included contaminated soil removal, Class V injection well closures, and tank removals.
- **Expert Environmental Review Services, Nationwide Sites for Real Estate Developers.** Reviews environmental investigation and remediation reports for several major real estate developers, advises clients regarding environmental concerns for property acquisition and redevelopment, develops comprehensive cost estimates, coordinates with construction contractors, architects, regulators and attorneys regarding environmental concerns.
- **Expert Environmental Consulting Services, Multiple Sites, Town of Brookhaven, NY.** Performed site inspections, investigations, and remedial cost estimation in response to Town Attorney requests. Assisted with Town Code revision and litigation. Coordinated with Town personnel, outside counsel, regulatory agency representatives, and law enforcement officers regarding environmental concerns.
- **Program Manager, Large Agricultural Property, Jamesport, NY.** Responsible for investigation scoping, budget and schedule, remedial cost

estimates, staffing, and client interactions for evaluation of a large agricultural property for a property transaction.

Remediation

- **Program Manager, NYSDEC BCP site, NY.** In responsible charge of all investigation and remedial activities at a NYSDEC BCP site in New York City. Prepared the RI and Remedial Work Plan; coordinated with the owner, contractors, and NYSDEC; prepared for and conducted citizen participation activities; supervised all waste characterization, profile preparation, and waste management; developed the Final Engineering Report (FER) and Site Management Plan (SMP) for NYSDEC approval; and ensured that all remedial requirements were met such that the Certificate of Completion (COC) was issued. Continuing activities include coordination of the ongoing site management, communications with the NYSDEC and NYSDOH, and preparation of the Periodic Review Reports (PRRs).
- **Program Manager, Major Oil Storage Facility (MOSF) Closure, Glen Harbor, NY.** Responsibilities included coordination of the work scope with the NYSDEC and NCDOH, development of work plans for tanks, UIC, and petroleum spill closure, budget and schedule development, staffing and oversight, reporting and certification, and closeout of all environmental issues such that residential redevelopment could proceed.
- **Program Manager, Delineation and Remedial Services, NYS Spill Site, Amityville, NY.** Successfully managed all aspects of investigation remediation, and closure of a #6 fuel oil spill at a hospital site. Work included spill delineation, waste characterization, removal and proper disposal of about 4,000 tons of impacted soil and 6,000 gallons of petroleum, oversight, reporting, and regulatory agency negotiations.
- **Program Manager, Delineation and Remedial Services, NYS Spill Site, St. James, NY.** Responsible for client and agency coordination, budget, schedule, staffing, remedial design and reporting for a petroleum release at a service station property with offsite impacts.
- **Program Manager, RCRA Closure Site, Freeport, NY.** Successfully managed all aspects of RCRA Closure of a former printing facility, including scope, budget and schedule development, Closure Plan, NYSDEC interactions, QAPP, specifications for contractor services, remediation, and Closure Report.
- **Program Manager, Sub-slab Depressurization System (SSDS), Brooklyn, NY.** Managed all aspects of SSDS implementation, including delineation sampling, remedial design, budget and schedule, construction services testing, reporting, and O&M manual development for a former dry cleaner site in an active shopping center.
- **Program Manager, SSDS, Bronx, NY.** Responsible for all aspects of SSDS implementation for a former dry cleaner site in a mixed-use building, including delineation sampling, SSDS design, construction contractor services, testing, reporting, and O&M manual development.
- **Program Manager, Investigation and Remediation for Nassau County, NY Subdivision Approval.** Coordinated investigation and remediation of a former school facility for redevelopment with multi-family housing. Services included Phase I ESA, Phase II investigation, NCDOH Remedial Work Plan development and implementation, and Remedial Action Reports. Issues addressed included soil, USTs, UICs, transformer areas, and water supply well closure.
- **Project Manager, Soil Remediation of Metal Plating Facility, Hauppauge, NY.** Planned remedial project and managed contractor support for soil remediation. Project was completed and approved by SCDHS.
- **Program Manager, Investigation and Remediation of Former Agricultural Properties.** Responsible for all aspects of investigation and remedial plans required for redevelopment of former agricultural properties in Suffolk County, NY. Prepared Soil Management Plans (SMPs) and received regulatory agency approvals.
- **Remedial Design, AS/SVE projects**. Developed pilot test plans, evaluated test results, and prepared conceptual designs for several air sparge/soil vapor extraction (AS/SVE) systems to treat petroleum and/or chlorinated solvent VOCs. These systems were subsequently installed and operated. Provides ongoing review of system operations and remedial monitoring results.
- **Program Manager, Waste Soil Management, Brooklyn, NY.** In responsible charge of several task orders for waste characterization of a 90,000-cy construction soil stockpile at a municipal sewer facility. Responsibilities included development and implementation of Sampling and Analysis Plan (SAP), coordination of staffing, review of lab data, preparation of Field Sampling Summary Reports, coordination with disposal facilities, and preparation of waste profiles.
- **Program Manager, NYS Inactive Hazardous Waste Disposal (Superfund) site, Hicksville, NY.** Responsibilities included developing and implementing pre-demolition investigations,

developing and implementing remedial actions (source removal) in conjunction with retail redevelopment, conceptual design and installation of sub-slab depressurization systems (SSDSs), and maintaining the ongoing OM&M program.

- **Project Manager, Manufacturer Remediation, Patchogue, NY.** Designed and performed indoor underground storage tank abandonment program and leaching pool remediation plan, and managed contractor support for closure activities at a metal tape manufacturing facility. SCDHS provided oversight and approval.
- **Senior Hydrogeologist, Groundwater Containment System, Richmond, CA.** Contributed to the design of a groundwater containment and remediation system for a former municipal landfill, including subsurface groundwater barrier walls and extraction wells. Coordinated technical aspects of groundwater barrier wall construction, including routing, permitting, material selection, and field activities.
- **Project Manager, Soil Remediation, Carle Place, NY.** Designed remedial plan and supervised soil remediation activities at an active construction site involving excavation and disposal of 5,000 tons of PCB-, metal-, and petroleum-contaminated soil. NYSDEC oversaw and approved the completed remediation.
- **Project Manager, Multiple UIC Investigations and Closures, Suffolk and Nassau Counties, NY.** Responsible for investigation and remediation of contaminated cesspool and stormwater drain pool systems. Fully conversant with SCDHS SOP 9-95 and USEPA UIC regulations for investigation and cleanup of leaching pool systems, including Action Levels and Cleanup Standards, groundwater monitoring criteria, and remedial requirements.
- **Project Coordinator, UIC Closure, Hempstead, NY.** Coordinated and supervised all aspects of waste management for a UIC closure, including disposal facility review, waste sampling and classification, manifesting, project closeout, and taxation issues.

Hydrogeologic Evaluations

- **Project Manager, Well Permitting, East Hampton, NY.** Prepared Engineer's Report for Long Island Well Permit for a 230-gpm irrigation supply well. Responsible for evaluation of well interference, salt water upconing, impacts from contaminants, and other factors affecting the proposed well. Performed well design (gravel pack size, screen size, etc.). Familiar with sieve analyses, well construction and development methods.
- **Senior Hydrogeologist, Groundwater Modeling, East Hampton,** NY. Utilized Visual Modflow to evaluate impact from a contaminant plume on a proposed SCWA wellfield. Model development included evaluation of recharge, aquifer properties, subsurface stratigraphy, boundary conditions, plume source and concentration, and wellfield locations and pumping rates.
- **Hydrogeologist, NYCT Aquifer Testing, Manhattan, NY.** Participated in a multi-day, multi-well aquifer pumping test for NYCT subway extension. Responsible for operating and maintaining data logging equipment, coordinating manual water level measurements, and analyzing resulting drawdown data.
- **Hydrogeologist, NYCT Aquifer Evaluation, Brooklyn, NY.** Evaluated subsurface geologic conditions for subway site utilizing existing boring logs, topographic, and historic map data.
- **Hydrogeologist, NYCT Aquifer Testing, Queens, NY.** Performed slug tests on monitoring wells at an East Side Access site, and evaluated hydrologic properties using the HYDROLOGIC ISOAQX computer program.
- **Hydrogeologist, Remedial Well Installation, USEPA Superfund site, Deer Park, NY**. Supervised drilling, installation and development of groundwater extraction, injection, and monitoring wells at a USEPA Superfund site. Interpreted aquifer and well performance from development data and recommended modification of drilling and development procedures.
- **Hydrogeologist, Aquifer Testing, Manhattan, NY**. Performed aquifer pumping and slug tests and evaluated hydrologic properties using the AQTESOLV computer program. Results were used to address dewatering and construction concerns for subway tunnels.
- **Hydrogeologist, Aquifer Evaluation, Mattituck Airport, Mattituck, NY**. Performed water level and water quality monitoring at a NYSDEC Superfund site. Constructed groundwater elevation contour maps and utilized chemical analytical data to predict contaminant plume migration.
- **Senior Hydrogeologist, DEIS Services, Lazy Point, NY.** Prepared detailed evaluations of groundwater conditions and potential impacts for a water main extension to Lazy Point for a draft Environmental Impact Statement (DEIS). Evaluated current and historic groundwater data and analytical models to determine potential impacts for both Lazy Point and the drinking water source area and prepared associated portions of the DEIS.

Landfills

- **Program Manager, Greenhouse Gas Monitoring Program, Town of Islip, NY**. Responsibilities include scope and budget management, staffing, client and USEPA coordination, reporting review, and troubleshooting.
- **Project Manager, Landfill Closure Investigations, Town of East Hampton, NY**. Prepared Closure Investigation work plans, including Hydrogeologic investigations, methane investigations, surface leachate investigations, and vector investigations. Prepared final Closure Investigation Reports, approved by the NYSDEC.
- **Project Manager, Landfill Monitoring Networks, Town of East Hampton, NY.** Supervised installation of groundwater and methane monitoring wells at the landfills, including hollow-stem auger and mud-rotary well installations, split-spoon soil sampling and boring log preparation, oversight and interpretation of wireline electric logging, and completion of initial baseline monitoring events.
- **Hydrogeologist, Landfill Groundwater Monitoring, NJ.** Performed groundwater sampling at a radio tower facility constructed on a landfill. Analyzed results and made recommendations.
- **Program Manager, Landfill MonitoringPprograms, Town of East Hampton, NY.** Supervises ongoing groundwater and methane monitoring programs, including field team coordination, communications with the Town, report scheduling, data review, and report review prior to distribution to the client and NYSDEC. Negotiated with NYSDEC for reduced monitoring frequencies based on historic monitoring results.
- **Senior Hydrogeologist, Landfill Plume Modeling, Town of East Hampton, NY.** Conducted groundwater flow modeling to evaluate the nature and extent of a landfill plume and its fate. Findings were presented at public meetings and were used to determine the configuration of the landfill's groundwater monitoring network.
- **Hydrogeologist, Septage Lagoon Superfund Site, Town of East Hampton, NY.** Conducted sampling of former septage lagoons at a landfill. Evaluated the resulting data and prepared a delisting petition for this NYSDEC Superfund site.
- **Hydrogeologist, Containment System Modeling, Richmond, CA.** Used FLOWPATH modeling program to predict groundwater flow directions and evaluate extraction well locations and pumping rates for a groundwater containment and remediation system at a former municipal landfill.
- **Program Manager, Landfill Gas Monitoring Program, Town of Islip, NY**. Manages monthly methane monitoring for all landfills, including onsite and offsite monitoring wells, methane collection systems, and flare systems. Data is recorded electronically and downloaded to computer for formatting prior to expedited delivery to Town.
- **Program Manager, Landfill Monitoring Reporting Program, Town of Smithtown, NY**. Supervised and reviewed quarterly and annual monitoring reports for all monitoring programs at the landfills for Town compliance with NYSDEC requirements, including tabulation and reporting of groundwater and methane monitoring data, solid waste and recycling collection data, yard waste composting operations, and landfill leachate collection and disposal data.
- **Program Manager, Landfill Remediation, Town of Huntington, NY.** An historic landfill was removed from parkland under the NYSDEC's ERP. Responsibilities included work scope development, schedule and budget management, staffing, client and regulatory agency coordination and reporting, and report review and certification.
- **Program Manager, Landfill Financial Assurance Reporting, Town of Smithtown, NY.** Prepares annual Financial Assurance Reports as per Town landfill closure requirements. Services include summarizing landfill closure and monitoring costs, calculating total costs over a 30-year period, evaluating available Town funds using Comptroller's financial reports, assessing available funds using NYSDEC-required procedures, and preparing annual reports.

Environmental Data Analysis

Ms. Davis has participated in multiple sessions of environmental geochemistry training provided by environmental geochemists, including physical chemistry, thermodynamics, ionic interactions, complexation, biologic effects, and other basic principles. Training also included field sampling procedures and effects on chemical data, chemical analytical methods and equipment, and QA/QC procedures and interpretation. Attended periodic environmental chemistry training sessions hosted by environmental laboratories and participated in hands-on training in data and QA/QC evaluation.

- **Data Evaluation, multiple projects**. Reviewed and evaluated numerous soil, groundwater, product, indoor/ambient air, and soil vapor chemical analytical datasets, including evaluation of batch and site-specific QA/QC samples, laboratory narratives, comparison to regulatory agency criteria, historic data, and background data.

- **Quality Assurance Project Plans (QAPPs), multiple projects**. Developed and implemented numerous QAPPs, including QAPP design, sample delivery group (SDG) evaluations, sampling procedures and sequences, and QA/QC sample preparation/collection.
- **Data Usability Summary Reports (DUSRs), multiple projects**. Prepared DUSRs for numerous chemical analytical datasets for projects overseen by USEPA, NYSDEC and other regulatory agencies, including soil, groundwater, soil vapor, indoor air, and ambient air datasets.
- **DUSR Preparation for Major RCRA Closure, Great Neck, NY.** Prepared DUSRs for over 90 sites during RCRA closure of a major manufacturing facility. Coordinated with sampling personnel, laboratories and regulatory agency chemists to resolve QA/QC issues. Completed work under tight schedules to meet client deadlines.
- **Electronic Data Deliverables (EDDs), multiple projects**. Implemented protocols and procedures for all FPM sites for which NYSDEC EDDs are required. Responsibilities included staff training, data package QA/QC, client interactions, budget and schedule impact assessments, and dissemination of EDD training information.
- **Data Evaluation, multiple sites**. Performed forensic assessments of historic environmental chemical analytical data to resolve apparent discrepancies with modern data and other inconsistencies.
- **Leachate Test Assessments**. Assessed leachate test protocols and results to determine the most applicable methods to evaluate and develop soil cleanup objectives for non-regulated compounds.
- **Organic Parameter Breakdown Assessments.** Interpreted numerous organic parameter datasets to evaluate breakdown sequences, likely original parameters, and rates of degradation.
- **Insitu Remediation Assessments, multiple sites**. Formulated chemical treatment plans for insitu remediation, including assessment of contaminant concentrations and distribution, chemical processes and indicators, natural attenuation indicators, additional stociometric demands, and hydrogeologic factors.

Community Impacts

- **Community Monitoring Plans, multiple hazardous waste sites**. Developed Community Air Monitoring Plans (CAMPs) for investigation and remediation projects, including monitoring procedures, action levels, and mitigation measures for odors, traffic, noise, dust, and/or vapors with the potential to affect surrounding communities. Each CAMP was approved by the NYSDEC and NYSDOH and was implemented under agency oversight. Presented CAMP findings at numerous community meetings. Addressed community and agency questions and issues.
- **Odor Abatement, NYSDEC BCP Site, NYC, NY.** Developed and implemented an odor abatement plan for highly-odorous soil discovered during a remedial project. The site was surrounded by three public schools; complaints following discovery of odorous soil resulted in a job shutdown until the nuisance was abated. The odor abatement plan was prepared and implemented within 24 hours and involved immediate covering of the odorous soil followed by spot excavation and removal during non-school hours (night work) and the use of odor-controlling foam. The removal was completed within one week without further incident. The NYSDEC and NYSDOH approved the completed work, allowing the job to recommence.
- **Vector Assessment, Town of East Hampton, NY**. Conducted inspections of intense fly infestations at a Town transfer station building to identify the locations and migration pathways of flies inside the building and to develop an abatement plan. This plan was successfully implemented and abated the nuisance flies.
- **Soil Vapor Intrusion Assessments, multiple sites**. Developed and implemented air and soil vapor investigations of residential and commercial properties, as approved by the NYSDEC/NYSDOH, to evaluate potential air quality impacts and determine if mitigation or monitoring was necessary. Monitoring/mitigation designs were developed for NYSDEC/NYSDOH approval.
- **CAMP Monitoring, multiple sites**. Conducted odor, dust, noise, and organic vapor monitoring in communities surrounding environmental sites. Data were collected and interpreted in accordance with NYSDEC and/or NYSDOH guidance and the results were submitted to these agencies together with recommendations for mitigation, if appropriate.
- **Project Manager, Environmental data assessment, Windmill Village, Town of East Hampton, NY.** Evaluated environmental data obtained during due diligence testing for a proposed housing development. Recommended additional sampling and confirmed the absence of impacts.

Expert Witness/Technical Services

- **Expert Witness/Technical Services, residential project, Glen Harbor, NY.** Provided expert witness and technical services regarding environmental conditions and remedial procedures for residential redevelopment of a former oil terminal, including

preparing and obtaining NYSDEC and NCDOH approval of remedial work plans, preparing remedial cost estimates and schedules, and providing testimony at a public hearing before the Town Board from which a change of zone was requested. The proposed change of zone, although subject to considerable public opposition, was approved, allowing redevelopment and associated remediation of the property to move forward.

- **Expert Witness/Technical Services, petroleum spill site, Westbury, NY.** Provided expert witness and technical services to a petroleum company defending NYSDEC cost recovery claims for a petroleum spill. The spill site involved two very large petroleum releases at gasoline stations adjoining the defendant's property. Services provided included evaluating tank tests, groundwater, soil and soil vapor chemical analytical data, petroleum fingerprint data, remediation activities and costs. Prepared numerous detailed timelines of activities, large displays of site information and subsurface conditions, and cost allocation calculations. Conducted a detailed subsurface investigation to evaluate stratigraphic conditions.
- **Expert Witness/Technical Services, petroleum spill site, Brooklyn, NY.** Provided expert witness and technical services to a petroleum company for investigation and remediation cost allocation for a petroleum spill. The spill site included two releases: an historic release related to the client's operations and a recent release related to a contractor's faulty spill bucket installation. Services provided included evaluating groundwater and soil chemical analytical data, assessment of free-phase product migration and removal, and a review of remediation activities. Prepared detailed timelines of plume growth and migration, displays of site information and subsurface conditions, and assessments of future remedial scopes and costs. Provided technical support and presentations during mediation.
- **Expert Technical Services, chlorinated solvent site, Far Rockaway, NY.** Provided expert witness services for federal court litigation, including Expert Reports, Affidavits, depositions, and counsel support. Oversaw supporting technical services, including conducting an RI and additional investigations and developing remedial approaches and cost estimates.
- **Expert Technical Services, solvent plume site, Nassau County, NY.** Provided technical support to a property owner subject to a USEPA investigation as the potential source of a large chlorinated solvent plume, including evaluation of a plume-wide RI/FS, detailed review of property historic information, multiple meetings with the USEPA, client and counsel, and identification of additional potential source areas.
- **Expert Technical Services, solvent plume site, Nassau County, NY.** Provided technical support to a property owner subject to litigation as a potential source of chlorinated solvent impacts to a public supply well, including evaluation of a plume-wide RI/FS and related investigation reports, detailed review of property historic information, meetings with the plaintiff, client and counsel, and identification of more likely chlorinated solvent sources.
- **Expert Technical Services, contaminated fill sites, Town of Brookhaven, NY.** Provided expert technical and witness services for several Town sites where illegal disposal of contaminated fill was suspected. Services provided included site inspections, preparation of investigation scopes and budgets, preparation of technical reports, Expert Reports, and Affidavits, participating in depositions and negotiations, and counsel support. Oversaw supporting technical services, including conducting investigations and developing remedial approaches and cost estimates.
- **Expert Technical Services, development site, Village of Larchmont, NY.** Assisted the Village in successfully opposing the construction of a very large superstore in the adjoining community, including evaluating previous environmental investigations, developing cost estimates and scopes of work for a full environmental site assessment, preparing scoping cost estimates for likely remediation scenarios, preparing technical documents in support of the Village's position, and making a presentation at a public hearing. The proposed project was subsequently withdrawn.
- **Expert Hydrogeologist Services, development site, Town of Carmel, NY.** Provided technical evaluation of a proposed water district. The proposed water district would impact existing residents due to limited available water supplies and likely impact on existing wells. The work included evaluation of aquifer pumping tests, determining impacts on nearby wells, assessment of likely increased water demand, preparation of supporting documents, and presentations at project hearings. The proposed project was subsequently conditionally approved by the NYSDEC with significant modifications to protect the water rights of existing residents.
- **Expert Technical Services, development site, Village of Laurel Hollow, NY.** Provided technical evaluations of potential impacts from a proposed development site, including soil and drainage conditions, loss of protected vegetation, and slope issues.

- **Expert Technical Services, development site, Village of North Haven, NY**. Provided technical evaluations of a proposed development site, including soil and drainage conditions, geomorphic features, and slope issues.
- **Expert Technical Services, road construction projects, Westchester County, NY.** Provided technical services to assess impacts from proposed road construction projects on the Kensico Reservoir and other New York City water supply system facilities. This work included evaluating stormwater pollutant loading calculations, assessing impacts to wetlands, promoting application of more accurate stormwater runoff calculation methods, assessing proposed stormwater management techniques, presenting at public meetings, preparing technical statements for submittal to regulatory agencies, and participating in the NYSDOT SWPPP Guidance committee.
- **Expert Witness Affidavits, multiple projects**. Prepared affidavits regarding environmental conditions at client properties in support of pending legal actions, including landfill issues, wetlands and navigable waterway issues, and petroleum spills.

PFAS Experience

- **Project Director, RI/FS, NYSDEC BCP Site, Far Rockaway, NY.** Prepared RI Work Plan, directed RI implementation, and prepared RI Report that included PFAS sampling, analysis, and evaluation for soil and groundwater.
- **PFAS Sampling, Analysis and Data Interpretation Training.** Developed and implemented an in-house training seminar for FPM field personnel. Continues to provide in-house consulting for PFAS sampling, analysis, and data interpretation. Prepared training seminar update for January 2019 updated NYSDEC PFAS guidance.
- **Technical Assistance, PFAS Remediation, Stewart ANG Base, NY.** Provided technical assistance for development and operation of a wastewater pre-treatment system for aircraft parking and maintenance area runoff. This system successfully treats the wastewater to meet POTW pre-treatment requirements.
- **Project Director, Site Management Sampling Programs, Multiple NYSDEC Sites.** Provides oversight and management of several Site Management sampling programs for which PFAS sampling has been required. Responsible for amending Site Management Plans, data acquisition and interpretation, reporting, and negotiations with NYSDEC.
- **Project Director, RI/FS NYSDEC Superfund Site, East Hampton, NY.** Prepared RI Scope of Work, developed likely remedial scenarios, and prepared cost estimates for area-wide PFAS investigation of a regional airport with multiple Areas of Concern (AOCs), known groundwater contamination, and onsite and offsite water supply wells. Provided litigation support.

Health and Safety

- **Health and safety monitoring, multiple sites**. Implemented HASP monitoring at investigation and remediation sites during intrusive activities, including calibration and operation of photoionization detector (PID) and flame ionization detector (FID) for organic vapors, combustible gas indicator (CGI) for methane, dust meter for particulates, and noise monitor. Compared results to applicable action levels and implemented protective measures as necessary.
- **CAMP monitoring, multiple sites**. Performed community monitoring, including monitoring for noise, particulates (dust), and organic vapors. Recorded observations and compared to applicable action levels. Calibrated and operated noise meters, particulate monitors, and PID/FID. Prepared CAMP monitoring reports and presented results to regulatory agencies and the public.
- **Radiation screening, multiple sites**. Performed screening for radiation at select sites, including operating Geiger counter in different radiation modes and obtaining background readings.

Miscellaneous Projects

- **Phase I Environmental Site Assessments (ESAs)**. Performed numerous Phase I ESAs for industrial, commercial, and residential sites in the metropolitan New York area. Presently supervises the Phase I ESA program, including budgets, staffing, quality control and report preparation.
- **Environmental Trainer.** Conducted aquifer pumping and soil vapor extraction test training. Instructed classes for site investigation methods, aquifer pumping test analysis, soil classifications, and risk assessment.
- **Project Management**. Performs a wide range of project management functions, including development and management of project budgets and schedules, coordination of field and office staffing, document preparation, review, editing, and interaction with clients, regulatory, legal, real estate, consultant, and compliance personnel.

- **Field Mapping Studies**. Organized, supervised, and conducted field mapping studies in Alaska.
- **Downhole Logging**. Directed petroleum well site geophysical logging operations and interpreted geophysical well logs.
- **Geophysical Data Interpretation**. Processed and interpreted seismic reflection data and constructed seismic velocity models.
- **Regulatory Evaluations**. Assisted and reviewed regulator's revision of proposed risk assessment-based UST cleanup guidelines. Reviewed proposed USEPA NPDES permits for remediation effluent.
- **Geologic Mapping**. Constructed and interpreted structural and stratigraphic cross sections, and structure contour, fault surface, isochore, and isopach maps.

Regulatory Compliance

- **RCRA compliance audits.** Conducted inspections and reporting regarding underground and aboveground storage tanks (USTs and ASTs), hazardous waste storage facilities, waste management and reporting requirements, and hazardous waste storage area closures in compliance with RCRA.
- **CERCLA Compliance**. Oversees and coordinates Phase I ESAs for compliance with CERCLA requirements for operating and historic industrial sites, manufacturing plants, abandoned facilities, and multi-property Brownfield sites.
- **Superfund Sites**. Managed multiple investigation and remedial projects at state and federal Superfund sites. Is very familiar with all phases of CERCLA projects, including PA/SI, RI, FS, RD and RA. Has supervised and directed activities at many Superfund sites from investigation through closure.
- **Clean Water Act Projects.** Conducted investigation and remediation of Class V underground injection control (UIC) systems, investigation and acquisition of UIC discharge permits, and discharges into surface water bodies.
- **Clean Air Act Compliance Projects**. Conducted facility investigations for emissions sources, including paint booths, fume hoods, process discharges and other point sources. Sampled and evaluated remediation system discharges for CAA compliance, and recommended emissions treatment when required.

Representative DOD Projects

- **Barksdale RFI, Barksdale AFB, LA, $520K-**Lead Geologist for RFI for multiple Base-wide sites at Barksdale AFB, including landfills, petroleum spills, fire training areas, sewage treatment plans, and chemical spills. Managed field crews and sampling of soil, groundwater, and waste, performed sample and waste management, and coordinated with Base representatives. Prepared RFI Report, including analytical data reports, CS, and recommendations.
- **Barksdale LTM Program, Barksdale AFB, LA, $1.7M-**Lead Geologist for Base-wide Barksdale LTM Program for groundwater, including landfills, petroleum and chemical spills, fire training areas, and sewage treatment plants. Supervised field crews, managed samples and waste, prepared LTM Reports and made optimization recommendations.
- **Field Team Leader, Site Characterization, Plattsburgh AFB, NY.** SC investigation of fuel oil USTs and petroleum spills at Base housing, officers' quarters, and support building prior to redevelopment. Working for AFCEE, developed and conducted an SC for over 200 USTs, including soil and groundwater sampling to identify petroleum contamination. Supervised several field crews in an accelerated sampling program to complete the SC prior to winter conditions. Prepared SC Report submitted to and approved by the NYSDEC.

MGP Site Experience

- **Field Sampling Services. Soil Investigation, Brooklyn Union Greenpoint MGP site.** Conducted soil sampling and screening activities during tank removal activities at this former MGP facility. Tasks included visual observations, screening with a calibrated PID, soil sampling, interfacing with the client, subcontractors and NYSDEC personnel, and report preparation.
- **Program Manager. Soil Vapor Intrusion Investigation and Mitigation, Brooklyn MGP site.** Developed and implemented a soil vapor intrusion (SVI) investigation following the discovery of chlorinated solvents in soil vapor beneath a shopping center constructed on an MGP site. Managed all scheduling, budget and contract issues. Reviewed results and developed an SVI mitigation plan to address the chlorinated solvent vapors. Oversaw design and installation of an SSDS to address SVI. Work was completed on time and within budget.

  Field Team Supervisor. Soil Remediation, Brooklyn Union Coney Island MGP site. Coordinated all field activities associated with segregation and removal of lead-paint impacted soil from MGP waste at this NYSDEC-listed MGP site. Conducted pre-excavation waste characterization, implemented HASP, oversaw subcontractor and FPM staff, coordinated with client and NYSDEC, managed waste manifesting, CAMP, and reporting.

Kevin F. Loyst, PE, PMP

FPM group — Engineering and Environmental Science

Mr. Loyst has over 30 years of experience in environmental and civil engineering involving areas such as regulation compliance/permitting, environmental impact analysis, solid waste management, site investigations, remediation, hydrology, design, and feasibility studies.

Functional Role	Title	Years of Experience
Project Manager	**Corporate Vice President Department Manager - Environmental Engineering**	**31**

Personal Data

Education
M.S./1997/Environmental Engineering - Brooklyn Polytechnic University
B.S./1989/Interdisciplinary Engineering & Management Clarkson University
B.S./1988/Civil and Environmental Engineering-Clarkson University

Registration and Certifications
Licensed Professional Engineer in State of New York
Project Management Professional
NYSDEC Stormwater Qualified Inspector Training
OSHA-approved 40-hr Health and Safety Training Course
OSHA-approved 8-hr Refresher Training Course
Asbestos Project Designer
OSHA 8-hr HAZWOPER Supervisor

Societies/Associations
Chi Epsilon - National Civil Engineering Honor Society
American Society of Civil Engineers

Employment History

1992 to Present	FPM Group
1989-1992	Westinghouse Electric Corp.

Technical Seminars
Hazardous Waste/RCRA, Emergency Planning & Community Right-To-Know (EPCRA), Environmental Impact Analysis/NEPA/EIS/EA, Air/CAA, Stormwater, Soil Erosion & Sediment Control, Soil Remediation

Detailed Experience

Expert Witness Testimony

- Beach erosion and accretion issues and evaluation of engineering/construction alternatives for case between Sea Gate Beach Club and USACE.
- Hazardous waste and disposal issues for case between defendant/Salinger & Sack and Ecolab, Inc.
- Engineering and Permitting issues for case between Town of Brookhaven and BRT for new rail line in Yaphank, NY.
- Landfill volume evaluation and closure alternatives for case between Town of Riverhead and Grimes Contracting.
- Hydrology and stormwater issues for case between Town of Greenburgh and Fortress Bible Church.
- Site contamination and site management plans, engineering and institution control issues for case between Town residents and City of Glen Cove/developers in Glen Cove, NY.

Hydrology

- Client List: Governmental-New York City Transit, Palisades Interstate Park Commission; NYS Office of General Services, NYC Department of Environmental Protection Municipalities-Town of Greenburgh, City of Rye; Private-numerous.
- Hydrologist consultant to New York City Transit (NYCT) involving numerous drainage studies and investigation of mitigation measures for stormwater and groundwater issues at bus depots, train yards, and subway stations.
- Hydrologist consultant to Town of Greenburgh involving the review of EIS documents, Stormwater Management Plans, Soil Erosion and Sediment Control Plans, drainage calculations, and modeling for proposed development projects on sites up to 300 acres.
- Hydrologist consultant to City of Rye involving site design review flooding analysis, and environmental impact assessment for a 10-acre Brownfield remediation/development project.
- Reviewed, prepared, and implemented numerous State Pollutant Discharge Elimination System (SPDES) General Permits for Stormwater Discharges from Construction Activities, Stormwater Pollution Prevention Plans (SWPPPs), and Soil Erosion and Sediment Control Plans for government, municipal, and private clients.
- Prepared SWPPP and performed bi-weekly stormwater inspections for a NYCDEP 11-acre 30 million gallon combined storage overflow facility in Brooklyn, NY.

- Performed dye-testing studies at several NYCT facilities in NYC, Grand Central Terminal, and La Salle Military Academy to identify discharges and remedies.
- Runoff calculations, drainage alternatives, and best management practices for site development projects in Long Island, NY City, and Westchester County.
- Evaluation of porous pavement installations at several NYCT bus terminals.
- Evaluation of existing surface and subsurface disposal systems at NYCT facilities and Long Island commercial residential properties.
- Water resources impact analysis for Ramapo Energy Limited Partnership DEIS.
- Evaluation and rehabilitation of groundwater well dewatering pumping systems via downhole camera videotaping, riser swab cleaning high velocity jetting, pump test analysis, specific capacity testing, and pump redesign.
- Performed leak investigation studies for MTA Grand Central Station and South Ferry Station in Manhattan, NY.

Design & Construction

- Client List: Governmental-FAA, NYCT, NYSOGS, USCG, NYS Parks, DASNY, USPS, USAF; Municipalities-Riverhead Central School District, East Hampton Airport, Town of Southold; Village of Lake Success, Private-Net Properties, TGI Fridays, Arkay Packaging, Kiss Nails, Orlandi, Grucci Fireworks.
- PE certification for numerous types of reports including periodic review, feasibility study, engineering, and work plan reports for inactive hazardous waste disposal (NYS Superfund) and environmental restoration program (ERP) sites.
- As a Village of Lake Success environmental consultant, involved in a groundwater pump and treat system design review as well as review of the quarterly OU-1 and OU-2 remedial system operation, maintenance and monitoring reports.
- Hazardous material storage area design for industrial and governmental facilities in accordance with Suffolk County and Nassau County regulations and containment provisions (e.g., containment buildings, bermed epoxy coated storage areas).
- Conventional subsurface sewage disposal system and reduced pressure zone device designs and construction management services for numerous governmental, municipal, and private facilities.
- Soil erosion and sediment control plans and certifications for FAA airport navigational aid projects.
- Porous pavement designs for NYCT bus depots.
- Plans and specifications for asbestos abatement projects for elementary schools in LI.
- Asbestos abatement specification reviews for FAA facility rehabilitations.
- New track and field athletic complex at USCG Academy, New London, CT involving NCAA regulation 8-lane track with synthetic type running service, separate event throwing areas, NCAA regulation soccer field inside the track and all necessary elements for typical collegiate facilities (lighting, grandstand, scoreboard, etc.) Critical design aspects included managing infiltration and surface water runoff for discharge into Thames River and environmental permitting (SWPPP and coastal zone consistency determination).
- Performed study and conceptual design of an equalization tank for storing roof runoff to be used at two NYCT bus depots in Manhattan and Staten Island.
- Soil Vapor Intrusion (SVI and sub slab depressurization systems (SSDS) design work for office buildings and aircraft hangar/warehouses at former Griffiss AFB and 1.3 million sf of mixed use building in Nassau County.
- Sub-slab depressurization system (SSDS) design including a horizontal well and blower system for a DASNY and NYS Office of Alcoholism and Substance Abuse Services (OASAS) 4,000 sf facility on a 1-acre parcel on a municipal landfill in the City of Peekskill.
- Designed an 80'x45'x30' deep recharge basin with infiltration wells for an 11-acre NYCT bus depot in Staten Island, NY.
- Provided water well treatment design services for a golf course irrigation system in Lake Success, NY.
- Designed a ground mounted 10kw Photovoltaic system for a Town of Islip Compost Facility.
- Performed condition assessments for the Latimer Reef and Little Gull Light Stations in Southold, NY.

Regulation Compliance/Permitting

- Client List: Governmental –US Postal Service, US Army Corps of Engineers, US Air Force, Veterans Administration, NYS Office of General Services (NYSOGS), NYS Parks, NYS Corrections, NYS Department of Transportation; Municipalities: Town of Islip, Private/Industrial-numerous.
- Environmental compliance audits covering the Clean Air Act (CAA), Resource Conservation and Recovery Act (RCRA), Clean Water Act (CWA), Emergency Planning and Community Right to Know Act (EPCRA), and local regulations involving areas such as hazardous material storage.
- Air permitting and associated reporting including Title V and 76-19-3 air permits; new source review; seasonal variance applications; BACT analysis;

emission statements; EPA NESHAP surveys annual and semi-annual compliance certifications; Air Guide 1 and Screen 2 modeling; Air Facility Registrations; air quality assessments; emission reduction credits, and stack testing.

- Performed RCRA compliance activities involving waste stream characterizations; waste minimization; pollution prevention; manifest tracking; preparation of quarterly, annual, and bi-annual reports; and training.
- Prepared hazardous waste closure plans in accordance with 6NYCRR 373-3 and implemented closure of hazardous waste management areas in accordance with 6NYCRR 373-3.7(c).
- Expert witness testimony for hazardous waste disposal matters.
- Performed EPCRA/Sara Title III audits, reporting and investigated administrative complaints.
- Suffolk County Department of Health Services (SCDHS) Article 12 and Nassau County Department of Health (NCDOH) Article 11 Toxic and Hazardous Material Storage Facility Permits.
- Prepared, reviewed, and certified numerous Spill Prevention Control and Countermeasure Plans (SPCCPs) in accordance with 40 CFR Part 112.
- UST compliance inspections in accordance with NYSDEC - Petroleum Bulk Storage (PBS) and Chemical Bulk Storage (CBS) regulations; SCDHS Article 12; NCDOH Article 11; and National Fire Protection Agency (NFPA) codes.
- UST Closure activities for private industrial clients in LI NY.
- SCDHS Article 7 compliance reviews for restricted chemical storage.
- SCDPW sewer connection and agreements for a flavor manufacturer in Melville, NY.
- Prepared and acquired NYCDEP construction dewatering permits for a corporate center building in Queens, NY.
- Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) permits for industrial and stormwater discharges.
- Baseline and semi-annual monitoring, BMR and SMR reporting, and sampling for wastewater discharges for compliance with NYCDEP and SCDPW requirements.
- Performed health and safety monitoring at investigation and remediation sites during intrusive activities. Monitoring included calibration and operation of photoionization detector (PID) and flame-ionization detector (FID) for organic vapors and combustible gas indicator (CGI) for methane. Compared results to applicable action levels and took preventative/protective measures as necessary.
- Site Specific Health and Safety Plans (HASPs).
- Sound level studies to determine compliance with local noise ordinances.
- Prepared engineering report for a LI Well permit for irrigation needs in Cold Spring, Harbor, NY.

Environmental Impact Analysis

- Client List: Governmental-Federal Aviation Administration, US Army, US Army Corps of Engineers, US Department of Agriculture (USDA).
- Coastal/Biological Monitoring Program components for the US Army Corps of Engineers (USACE), New York District Beach Erosion Control Projects including intertidal ichthyoplankton studies, intertidal offshore finfish studies, nearshore and offshore benthic sampling, water quality analysis, and creel census.
- Cultural resource projects for USACE and FAA in the northeast region including cultural resource surveys; cultural resource assessments; underwater archeology surveys; and recordations.
- Wetland Delineations and Biological Surveys (Grassland Birds) in support of FAA EAs at Teterboro Airport.
- Historic Preservation Plan for Plum Island NY and Historic Structure Report for Plum Island Light Station, Plum Island Animal Disease Center, NY.
- Environmental Scoping Document and presentation agenda for the District's Atlantic Coast of Long Island Fire Island Inlet to Montauk Point, NY Storm Damage Reduction Reformation Study.
- Preliminary Environmental Assessment (PEA) Reconnaissance Studies for USACE Flood Control and Shore Protection Projects in South River, Raritan River Basin, NJ and Cliffwood Beach, NJ.
- Environmental assessment and architectural and historical study for a USMA historical building/site at West Point, NY.
- Draft Supplemental Environmental Impact Statement (EIS) Limited Reevaluation Study for the Deepening of the Arthur Kill/Howland Hook Navigation Channel in NY/NJ.
- Long and Short Environmental Assessment Forms (EAFs) for construction and site development projects in LI, NY.
- Environmental Assessments for Federal Aviation Administration (FAA) navigational aid projects at numerous airports in the northeast region in accordance with the National Environmental Policy Act (NEPA) and FAA order 1050.1D Policies and Procedures for Considering Environmental Impacts. Airport projects included Instrument Landing Systems (ILS), Approach Lighting Systems, Remote Transmitters, Doppler Equipment, Air Traffic Control Towers and Air Route Traffic Control Centers. Airports and support areas included Teterboro, Richmond Intl, Baltimore Washington Intl, Syracuse-

Hancock Intl, Newark Intl, Stewart, Philadelphia Intl, LaGuardia, and Leesburgh.

- Environmental assessments for the Army and Air Force Exchange Service (AAFES) at bases in Oahu, HI in accordance with NEPA, AR-200 Environmental Effects of Army Actions and DOD Directive 6050.1 Environmental Effects in the US of DOD Actions. Projects included capital improvement projects at Schofield Barracks, Helemano Military Reservation, Aliamanu Military Reservation, and Bellows Air Force Base.

Site Investigations

- Client List: Governmental-US Army Corps of Engineers, NYS Office of General Services, NYS Dept. of Corrections, Internal Revenue Service; Municipalities-Town of East Hampton; Private-numerous.
- Groundwater, soil, and air sampling at numerous sites on LI and NYC for landfill closures, remedial investigations, and petroleum spills. Developed and Implemented SAPs for USCG Station dredging projects in LI in accordance with NYSDEC Region 1 Marine Habitat Division protocols.
- Quarterly and semi-annual sampling/monitoring and reporting in accordance with NYSDEC Part 360 regulations for several landfills in Long Island.
- ASTM Phase I Environmental Assessments for property transactions in Suffolk, Nassau, and the five boroughs of New York.
- Sampling and Analysis Plans for Phase II investigations in Long Island and NYC.
- Petroleum Spill Investigations (gasoline, diesel, No. 2 and 6 fuel oil) and associated closure work for tanks and other types of discharges in the metropolitan and upstate NY regions.
- Hazardous, Toxic, and Radioactive Waste (HTRW) Preliminary Assessments in NY and NJ.
- Polychlorinated Biphenyl (PCB) basewide (3500 acres) evaluation of electrical equipment at Griffiss Air Force Base.
- Anthrax sampling for several IRS mail sorting facilities.
- Performed Indoor Air Quality Study for an office building in Lake Success, NY.

Remediation

- Client List: Governmental-US Air Force, NYSOGS; Private/Industrial-Star Corrugated Box Co., Shorewood Packaging, Metex Corp.
- Remediation of lead contaminated soil at four water tower sites at Barksdale Air Force Base, LA via excavation/disposal. Feasibility studies, work plans, Health and Safety Plans, Closure Reports, and No Further Response Action Planned Memorandums were prepared in conjunction with the remediation.
- In-site soil remediation of VOCs through vapor extraction and soil aeration techniques at LI and NJ contaminated sites.
- Removal of contaminated soil associated with petroleum spills and tank issues at LI, NYC, and upstate facilities.
- Identification, characterization, and removal of hazardous material and hazardous waste at industrial facilities and psychiatric centers in LI and NYC.

Solid Waste Management

- Client List: Governmental- USDA, NYSOGS; Municipalities – Town of Riverhead.
- Estimated the remaining volume and footprint for the Youngs Avenue Landfill, Riverhead, NY which currently was in a full scale reclamation mode. Prepared and implemented a boring and excavation plan involving numerous deep borings and shallow test pits and used topographic surveys/landfill maps to estimate footprint boundaries and landfill volume. Based on the results, approximately 2m cy were estimated to be remaining or approximately four to five times the estimated amount. Riverhead Town then put the reclamation project on hold while it evaluated other options including capping.
- Assisted the Town with capping estimates, feasibility study for reclaiming and capping a reduced landfill and engineering reviews for a full Part 360 landfill cap design.
- Performed site reconnaissance, surveying, identification, and enumeration activities to develop plans, specifications, and environmental permitting for NYSOGS for processing waste tire materials into beneficial shred material to be used by the New York State Department of Transportation (NYSDOT) in road construction projects and landfill applications. Following the development of plans and specifications, FPM assisted NYSOGS with bidding phase services including contractor award and construction/ remediation/restoration/ oversight. In total approx. 12 million tires were recycled at four sites across New York State.
- Prepared Solid Waste Management Plan (SWMP) for Town of Riverhead.
- Removal, recycling, and disposal of over 10,000 cy of construction and demolition debris at various waste management areas on Plum Island, NY involving plans, specifications, cost estimating, and construction oversight for USDA.

Feasibility Studies

- Client List: Governmental-NYCT; Private-Chugai Boyecki, Net Properties.

- Study to prevent the potential migration of a PCB oil pool/contaminated aqueous plume and peat layer settlement due to dewatering activities at Sunnyside Yard, Queens.
- Investigated disposal alternatives for permanent subway dewatering activities in Brooklyn and Manhattan, NY.
- Site Planning studies for property consolidations and expansion of shopping centers in LI. Site development potential was evaluated in accordance with local ordinances/codes.

Quality Control

- As Department Manager and Project Manager, performs QC on environmental compliance tasks including review of data, designs, and report of Task Leaders.