

**City of New York
Department of Environmental Protection**

**Emily Lloyd
Commissioner**



**PHASE I ENVIRONMENTAL SITE ASSESSMENT
FOR SHAFT 33B
E. 54th STREET/SECOND AVENUE SHAFT SITE**

**OCTOBER 2004
Revised DECEMBER 2005**

Prepared By: Malcolm Pirnie, Inc.

CONTRACT: 561 (No. 2000030105)

New York City Department of Environmental Protection

ENVIRONMENTAL SITE ASSESSMENT REPORT
Shaft 33B - E. 54th Street and Second Avenue Site
New York, New York

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FIGURES

Figure 1 – Site Location Map

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LIMITATIONS

This Environmental Site Assessment Report [Report] has been prepared for the sole use of Malcolm Pirnie, Inc.'s Client, the New York City Department of Environmental Protection (NYCDEP). The purpose of this Report is to provide information to the Client on the environmental conditions of the subject property, located at E. 54th Street and Second Avenue in New York, New York.¹

The use of and reliance on this Report by any person or entity other than the Client is not authorized without an agreement between the user and Malcolm Pirnie, Inc. Without an agreement with Malcolm Pirnie, Inc., the use of this report by an unauthorized user is for their information only and *shall be solely at the unauthorized user's risk.*

Malcolm Pirnie's work presented in this Report was performed pursuant to the Professional Services Contract between Malcolm Pirnie, Inc. and the NYCDEP, dated July 11, 2000, and pursuant to a request made by the Client on January 12, 2004. Any modifications, deviations or exceptions to the services proposed or limitations in the scope of the Environmental Site Assessment (ESA) arising out of site access issues and the actual availability of data and information related to the Site are as described in Section 1.2 of this Report.

An ESA can reduce but not wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with the Site. The conclusions in this Report have been based, in part, on information obtained from third parties including environmental agency records, and other public records regarding the Site obtained from various sources. Unless noted, Malcolm Pirnie, Inc. has not independently evaluated or verified the accuracy or completeness of such third party information. Visual observations of the Site only represent conditions at the time of the site

¹ This ESA was previously submitted in October 2004 and was later revised for consistency in presentation and to clarify the results. Database results are based on the original FirstSearch database search conducted in March 2004.

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visit. Malcolm Pirnie, Inc. makes no warranties that the on-site observations made during the ESA are representative of historical or future conditions at the Site. Malcolm Pirnie, Inc. performed its services and prepared this Report at the level customary for other prudent and competent professional engineers performing such services at the time and place where the services are provided. The Report shall be construed neither as a legal opinion nor as compliance with any environmental law. *Malcolm Pirnie, Inc. makes no other warranty, expressed or implied.*

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1. INTRODUCTION

1.1. Scope of Services

An ESA is a due diligence process to identify *recognized environmental conditions* on a property.² This ESA Report provides factual information about the Site in support of the Client's "all appropriate inquiry" into the previous ownership and uses of property consistent with good commercial or customary practices. The Report may not address all requirements to qualify for an innocent landowner defense commonly associated with the Comprehensive Environmental Response Compensation and Liability Act (see 42 USC § 9601(35)(B), the "Superfund" law). The Client's knowledge and experience may also be factors in determining the extent of an "all appropriate inquiry," and only legal counsel is competent to determine the legal implications of the information or conclusions in this Report.

1.2. Relationship to ASTM Standard Practice E 1527

The current American Society for Testing and Materials (ASTM) Standard E 1527 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, provides guidelines for conducting an ESA. However, in the performance of this Assessment, as with any professional service, modifications or exceptions to, or deviations from such guidelines may occur because of factors including but not limited to instructions from the client, site conditions, the availability of records, or scheduling and timing issues. The scope of services Malcolm Pirnie developed for this ESA and accepted by Client is controlling. It is standard procedure to review certain items when developing Phase I ESA reports.

² The definition of "recognized environmental conditions" is provided in the conclusion section of this Report.

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However, the NYCDEP Bureau of Environmental Planning and Assessment (BEPA) has instructed Malcolm Pirnie not to include the following items in this ESA:

- Interviews with site occupants, and past/present owners of the site and adjacent sites.
- City directories and title boundaries

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2. SITE DESCRIPTION

This Report presents the findings of the ESA at the property located at E. 54th Street and Second Avenue, New York, New York (Site). The ESA was commissioned by NYCDEP and was conducted by Malcolm Pirnie, Inc. pursuant to a request made on January 12, 2004 by the NYCDEP and fulfilled under Contract 561 (No. 20000030105) dated July 11, 2000.

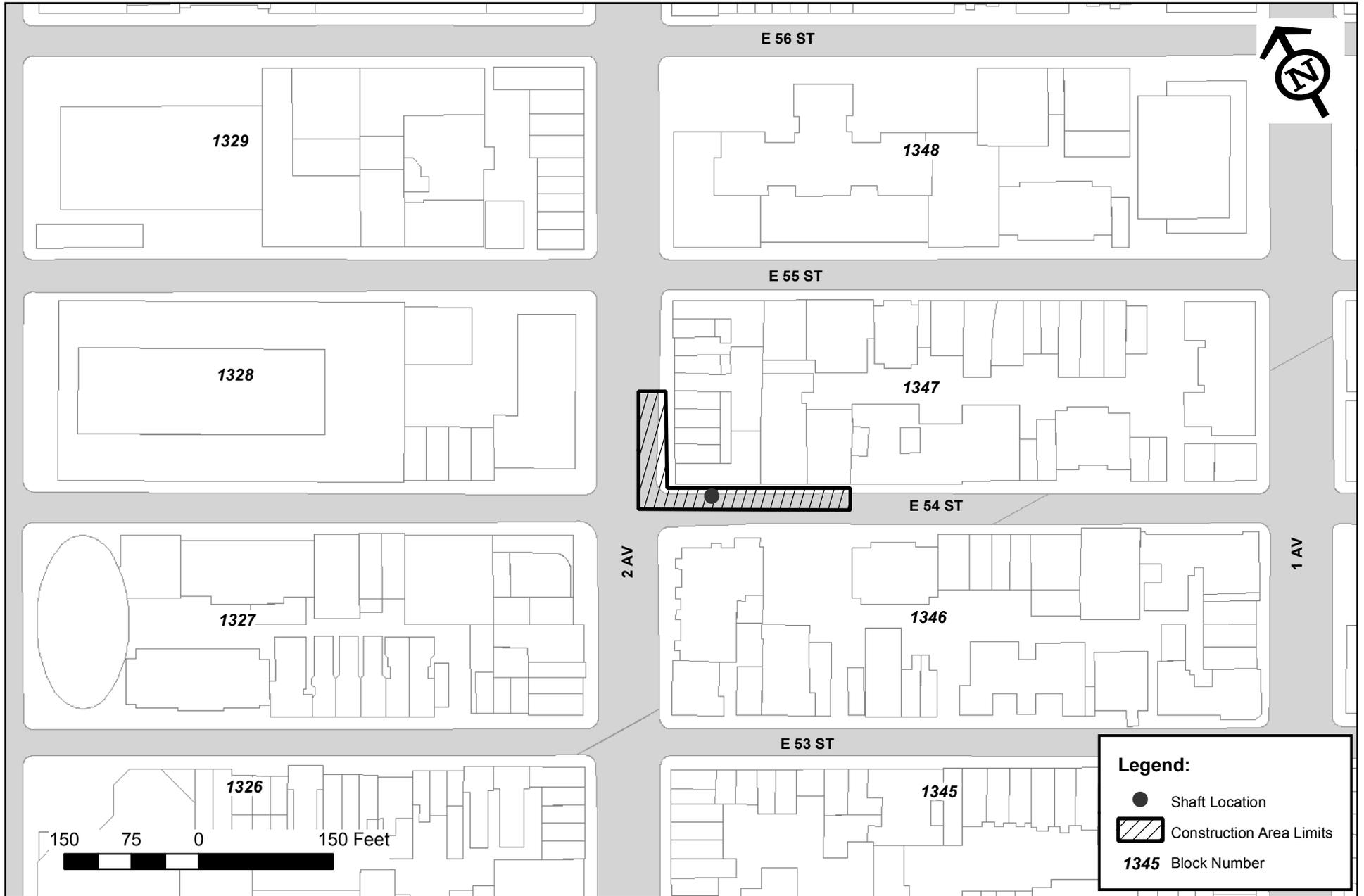
2.1. Site Reconnaissance

Warren Riznychok (Malcolm Pirnie) performed a site reconnaissance on February 10th, 2004. This reconnaissance included a general observation of the site and the surrounding buildings, properties, and neighborhoods.

2.2. General Site Information

The Site, as shown in Figure 1, consists of approximately 8,500 square feet of a developed, city, street corner located in New York, New York. The area around the site is zoned for both residential and commercial use. Occupied retail space consists predominantly of small, independently-owned businesses at ground level with residential use above.

The Site is bordered by a restaurant to the north (Lenny's Diner), an apartment building to the south on E. 54th Street, and Second Avenue to the west. The properties adjacent to the Site consist of commercial storefronts and residential apartment buildings. The majority of these buildings are currently occupied.



Legend:

- Shaft Location
- ▨ Construction Area Limits
- 1345 Block Number

Map Document: (S:\Projects\2175158\GIS_Figures\Shaft_33B\EIS_Field_Work\DEP_Site_Original.mxd)
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**NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PROPOSED SHAFT 33B TO CITY TUNNEL NO. 3
STAGE 2 - MANHATTAN LEG
E. 54TH STREET/SECOND AVENUE SHAFT SITE
SITE LOCATION MAP**

FIGURE 1

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2.3. Observations of Current Site Conditions

Malcolm Pirnie personnel observed the following conditions:

- The Shaft Site is covered by pavement, asphalt, curbing, streetbed, and sidewalks and a sidewalk café area of Lenny's Diner.
- There are underground electrical utilities serving the area.
- The Site is located partially in a streetbed of midtown Manhattan and is heavily trafficked.

2.4. Description of Adjacent Lands and Vicinity Land Uses

The Site is located in a mixed business, commercial, and residential area. The following are descriptions of current lands and land uses immediately adjacent to the Site as observed during site reconnaissance:

- North: A restaurant (Lenny's Diner) occupies the northeast corner of the intersection, and a multi-unit apartment building occupies the northwest corner of the intersection. Storefronts make up the ground floor of this apartment building.
- South: Multi-unit apartment buildings occupy the southeast and southwest corners of the intersection.

2.5. Physical Environmental Setting

Land in the vicinity of the Site is relatively flat. The Site is not located in a floodplain, and there are no water bodies at the Site itself. The nearest water bodies include:

- East River – approximately 0.25 miles to the east.

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- Hudson River – approximately 2.0 miles to the west.

2.6. Site and Vicinity Photographs

Photographs taken during site reconnaissance are provided in Appendix B. The photographs show the following features:

- The Site is in a general state of good repair.
- The Site is predominantly covered by asphalt and pavement.

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3. RECORDS REVIEW

Malcolm Pirnie reviewed records from reasonably ascertainable sources, which were publicly available and obtained within the time and budget constraints of this ESA, but did not require an extraordinary review of irrelevant data in the process. This record review was conducted to obtain information regarding the Site's recognized environmental conditions.

3.1 Government Environmental Databases

Malcolm Pirnie obtained a listing of federal and state environmental enforcement sites from a private database management firm, FirstSearch Technology Corporation, for the area in which the Site is located. This firm organizes government agency list sources in a consolidated format. Malcolm Pirnie makes no representation about the reliability and accuracy of the information contained within the lists. The complete database report is available at Malcolm Pirnie, Inc.'s New York City office located at: 75-20 Astoria Blvd. Suite 350, Jackson Heights, NY 11370.

The lists and the geographic area included in the search are presented below. **Please note, the list names for which the search returned positive findings are noted in bold letters and highlighted.**

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Government Database List	Distance From Site (miles)
<i>Federal</i>	
NPL	National Priority List 1.00
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System CERCLIS – No Further Remedial Action 0.50
CERCLIS-NFRAP	Planned 0.25
RCRIS-TSD	Resource Conservation and Recovery Information System –Treatment, Storage, Disposal 0.50
RCRIS-COR	RCRIS – Corrective Action Sites 0.25
RCRIS-GEN	RCRIS – Hazardous Waste Generator 0.25
RCRIS-NLR	RCRIS – No Longer Regulated 0.25
ERNS	Emergency Response Notification System 0.25
NPDES	National Pollution Discharge Elimination System 0.25
FINDS	Facility Index System 0.25
TRIS	Toxic Release Inventory System 0.25
HMIRS	Hazardous Material Incident Reporting System 0.25
NCDB	National Compliance Database 0.25
PADS	PCB Administrative Database System 0.25
<i>State</i>	
State Sites	State Sites List 1.00
Spills – 1990	State Spills List 0.25
Spills – 1980	0.25
SWL	Solid Waste Landfills 0.50
Permits	Permitted Facilities 0.25
Other	0.25

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Government Database List	Distance From Site (miles)
<i>State cont.</i>	
REG UST/ AST	Registered Underground Storage Tanks/ Aboveground Storage Tanks 0.25
LUST	Leaking Underground Storage Tanks 0.50
Nuclear Permits	0.50
Releases (Air/Water)	0.25
Receptors	1990 Census Bureau Listing 0.50

Of the positive database findings, the following items may represent an environmental condition as related to the Site. Detailed information regarding these items can be found within the FirstSearch data provided as Appendix C and is available at Malcolm Pirnie, Inc.'s New York City office located at:

Malcolm Pirnie, Inc.
 75-20 Astoria Boulevard Suite 350
 Jackson Heights, New York 11370

Within 0.25 miles of the E. 54th Street and Second Avenue Site, there are:

- 2 RCRIS Large Quantity Generators
- 14 RCRIS Small Quantity Generators
- 10 RCRIS Conditionally Exempt Small Quantity Generators.
- 3 RCRIS Transporters

There was one spill reported within ¼ mile of the site as identified in the 1980 database. There were 43 spills reported within ¼ mile of the site as identified in the 1990 database; 29 of these sites were within 0.15 mile of the site. These spills included:

- dielectric fluid

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- #2, #4, and #6 fuel oils
- antifreeze
- unknown solid material
- unknown petroleum
- hydraulic oil
- waste oil
- asbestos
- transformer oil
- diesel fuel
- gasoline

Groundwater hydrogeology at the preferred Shaft 33B Site flows from west to east towards the East River. Area topography based on USGS mapping of the area around the preferred Shaft 33B site also suggest that spills which are west of the site would flow in an eastwardly direction and therefore represent incidents most likely to impact Site groundwater or soils. Additional details regarding all spills can be found in the environmental database search report provided as part of Appendix C which is located in Malcolm Pirnie Inc.'s New York City office at:

Malcolm Pirnie Inc.
75-20 Astoria Boulevard, Suite 350
Jackson Heights, New York 11370

The following table lists the spills located immediately to the west or within one block north or south of the site and are the spills most likely to have had any impact on the site:

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Search ID No.	Location	Material Spilled	Media Affected	Quantity	Status/ Closure Date
144	E. 54 th Street & 2 nd Avenue	Unknown Material	Land	5 Gallons	Active
154	E. 54 th Street & 2 nd Avenue	Unknown Petroleum	Land	1 Gallon	Active
153	E. 54 th Street & 2 nd Avenue	Unknown Petroleum	Land	1 Gallon	Active
145	E. 54 th Street & 2 nd Avenue	Unknown Petroleum	Land	1 Gallon	07/11/01

There is one Emergency Response Notification System (ERNS) site within 0.15 miles of the E. 54th Street and Second Avenue Site and two additional ERNS sites within 0.25 miles of the Shaft Site.

The following materials were reported:

- hydraulic oil
- unknown oils

There are seven Hazardous Material Incident Reporting System (HMIRS) sites within 0.25 miles of the E. 54th Street and Second Avenue Site; five are within 0.15 miles of the site. The following materials were reported:

- #1, #2, #4, #5, and #6 fuel oils

There are 41 Regulated Underground Storage Tanks (UST)/Aboveground Storage Tanks (AST) sites within 0.15 miles of the E. 54th Street and Second Avenue Site and another 19 within 0.25 miles of the site.

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There are three Leaking Underground Storage Tanks (LUST) within 0.15 miles of the E. 54th Street and Second Avenue Site, and another seven within 0.25 miles. The following materials were reported:

- #2, #4, and #6 fuel oils
- diesel fuel
- gasoline

There are five reported release sites within 0.25 miles of the E. 54th Street and Second Avenue Site one of these was within 0.15 miles of the site. The following materials were reported:

- hydraulic oil
- transformer oil
- asbestos
- heavy smoke

There are five receptor sites within 0.50 miles of the E. 54th Street and Second Avenue Site. These sites include:

- 4 public schools (PS 18, 59, 73, and 167)
- 1 trades high school (Aviation Trades High School)

Based on the number of spills, permitted RCRIS generators, regulated USTs and ASTs, LUST sites and environmental releases in the vicinity of the site, there exists the potential for soil and groundwater contamination from off-site sources that may have migrated onto the site.

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3.2 Historical Uses of Site and Adjacent Properties

Malcolm Pirnie reviewed the following reasonably ascertainable historical sources to obtain information on Site's history. This information provides historical information from 1951 to the present and were obtained from:

- EDR Sanborn Maps/ Fire Insurance Maps

3.2.1 EDR Sanborn/ Fire Insurance Maps

Malcolm Pirnie obtained Sanborn Maps from Environmental Data Resources, Inc. Copies of these maps have not been included in this ESA, but have been kept on file at Malcolm Pirnie. These maps are available for review by the Client at their request.

A total of 11 maps were obtained. The earliest of these maps dates from 1951 and the most recent map dates from 1996. After reviewing these maps, it appears that only minor structural changes to adjacent properties have occurred within the past 50 years. The only significant construction that has occurred on an adjacent property to the E. 54th Street and Second Avenue Site within this time frame, occurred on city block #1348. In 1951, block #1348 consisted primarily of small, residential buildings, a hotel (Hotel Sutton), and a church (St. John's Evangelist Church). By 1976, the church had expanded to include a high school, and the small, residential buildings were eliminated and replaced with a large, multi-unit apartment building (The Bristol), and a parking garage.

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3.2.2 NYC Building Department Records

An attempt was made to acquire Site information through the NYC Building Department Building Information System (BIS). However, since no specific address exists for the Site, no information was available.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions - Environmental Site Assessment

Malcolm Pirnie performed an ESA for this Site and its findings are provided in Sections 2 and 3 of this Report. As a result of the findings in Chapters 2 and 3, the following conclusions are offered:

Recognized Environmental Conditions

A recognized environmental condition means "...the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property." Recognized environmental conditions do not "...include de minimis conditions that generally do not present a material risk of harm to public health or the environment, and that generally would not be subject of an enforcement action if brought to the attention of appropriate government agencies. Conditions determined to be de minimis are not recognized environmental conditions." (ASTM E1527 ¶3.3.31)

This ESA has revealed no evidence of recognized environmental conditions in connection with the Site.

Historical Recognized Environmental Condition

A historical recognized environmental condition means an "... environmental condition which in the

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past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently.” (ASTM E 1527 ¶ 3.3.16) The use of this term largely depends on the current impact of the condition on the Site. For example, if a site remediation had occurred and the overseeing government agency accepted the remediation, the condition may be considered a ‘historical recognized condition’.

This ESA has revealed no evidence of historical recognized environmental conditions in connection with the E. 54th Street and Second Avenue Site.

Other Environmental Conditions

In certain situations, a Site condition, observed by Malcolm Pirnie or noted in the available records, may not meet the definition of a ‘recognized environmental condition’. However, presence of these environmental conditions may impact the Client’s due diligence decisions regarding the Site.

In the course of this ESA, other environmental conditions in connection with the E. 54th Street and Second Avenue Site were observed or discovered in the previously-described documents, as follows:

- Environmental Database records indicate the potential for soil and groundwater contamination, based on sources in the vicinity (e.g., dry cleaners, and the history of spill records).

4.2 Recommendations - Environmental Site Assessment

Malcolm Pirnie performed an ESA for this Site and its findings are provided in Sections 2 and 3 of this Report. As a result of the findings in Sections 2 and 3, the following recommendations are offered:

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Phase II Environmental Site Assessment

Based upon the information obtained, it is recommended that a Phase II ESA be performed for the E. 54th Street and Second Avenue Site, to include soil borings and associated chemical testing within and adjacent to the Site boundaries. The constituents listed in Section 3.1, Government Environmental Databases, would be reviewed to determine the appropriate chemical analyses to be conducted. These soil borings and chemical analyses are recommended to determine the potential for off-site migration of contaminants to the proposed Shaft site, and to identify disposal needs and costs of site soils during construction. Water testing may also be necessary, depending upon whether excavation activities occur at or below the water table.

APPENDIX A

Site Map

APPENDIX B

Site and Vicinity Photographs



E. 54TH STREET AND SECOND AVENUE INTERSECTION LOOKING EAST



E. 54TH STREET LOOKING NORTHWEST



**NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
CITY WATER TUNNEL NO. 3, STAGE 2
SHAFT 33B
E. 54TH STREET AND SECOND AVENUE SHAFT SITE**

APPENDIX B



E. 54TH STREET LOOKING NORTHWEST



CONSTRUCTION ON E. 54TH STREET NEXT TO LENNY'S RESTAURANT



**NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
CITY WATER TUNNEL NO. 3, STAGE 2
SHAFT 33B
E. 54TH STREET AND SECOND AVENUE SHAFT SITE**

APPENDIX B



E. 54TH STREET LOOKING EAST TOWARD CONSTRUCTION



E. 54TH STREET LOOKING EAST TOWARD CONSTRUCTION



**NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
CITY WATER TUNNEL NO. 3, STAGE 2
SHAFT 33B
E. 54TH STREET AND SECOND AVENUE SHAFT SITE**

APPENDIX B

APPENDIX C

FirstSearch Electronic Database Report

The FirstSearch Electronic Database Report is on file and available at Malcolm Pirnie Inc.'s New York City office:

Malcolm Pirnie Inc.
75-20 Astoria Boulevard, Suite 350,
Jackson Heights, New York 11370