

Douglas A. Olson, P.E. Principal Investigator

Mark H. Morrel Principal-in-Charge

## **DRAFT**

PHASE II ENVIRONMENTAL
ASSESSMENT
GATEWAY OFFICE COMPLEX
WHITE PLAINS, NEW YORK

Prepared for:
CB Richard Ellis Investors L.L.C.,
a Delaware Limited Liability
Company

Prepared by:
Dames & Moore, Inc.
7101 Wisconsin Avenue, Suite 700
Bethesda, Maryland 20814

December 28, 1999 D&M No. 40863-022-027



#### EXECUTIVE SUMMARY

7101 Wisconsin Avenue, Suite 700 Bethesda, Maryland 20814-4870 301 652 2215 Tel 301 656 8059 Fax

Pursuant to that certain contract dated as of December 3, 1999 by and between Dames & Moore and CB Richard Ellis Investors L.L.C., a Delaware limited liability company, Dames & Moore was retained by CB Richard Ellis to conduct a Phase II Environmental Assessment of the Gateway Office Complex, in White Plains, Westchester County, New York ("subject property"). The objective of the Phase II Environmental Assessment (EA) is to evaluate the current soil and groundwater conditions on the subject and also evaluate the potential for the offsite migration of contaminants.

The Phase I EA prepared by Dames & Moore which was conducted concurrently with this Phase II EA identified several items of concern which each had the potential to create a Recognized Environmental Condition. These items consisted of the following:

- It was unknown whether or not the active and closed in place USTs on the southwest corner of the office tower parcel have impacted soil and groundwater quality.
- It was unknown if former petroleum USTs and automotive repair operations conducted on the north side of the office tower parcel have impacted soil and groundwater quality.
- It was unknown if unknown if spills or releases associated with a former suspected dry cleaning establishment impacted soil and groundwater quality.
- Previous investigations have identified (Polynuclear Aromatic Hydrocarbon) PAH contaminated soil at the central parking lot and parking garage. However, groundwater in this area has never been analyzed to determine if it has also been impacted by PAHs.



7101 Wisconsin Avenue, Suite 700

Offsite concerns identified in Dames & Moore's Phase I EA consisted of the following; Maryland 20814-4870 301 652 2215 Tel

- 301 656 8059 Fax
- The previous gas station located immediately east of the subject at the corner of Lexington & Hamilton Avenues is a potential source of off-site contamination.
- An Exxon LUST site located approximately 0.20 mile to the east and upgradient from the subject property, as well as another open LUST facility located approximately 0.25 mile to the northeast are potential sources of groundwater contamination.

In order to address these concerns, Dames & Moore's Phase II EA initially consisted of a Ground Penetrating Radar (GPR) and magnetometer survey to identify underground utilities, and to attempt to identify USTs in certain areas. Four soil borings were then advanced and groundwater monitoring wells were installed. Two soil samples from various horizons and one groundwater sample from each well were obtained and analyzed in a laboratory for various constituents. Groundwater samples from the existing wells located at the central parking facility and the parking garage were also analyzed for PAH contamination. After the wells were installed, the wells were surveyed by a licensed surveyor so that a groundwater flow could be determined.

The GPR and Magnetometer surveys did not identify the presence of USTs in the areas surveyed. Soil contamination consisting of Polynuclear Aromatic Hydrocarbons (PAHs) was identified in one soil boring on the north side of the tower parcel at 12 to 14 feet below ground surface (bgs). This contamination was consistent with previous investigations findings at the central parking lot and the parking garage. In addition, subsequent testing of this sample using the TCLP method determined that none of the PAHs were above regulatory guideline cleanup levels.

Groundwater contamination was identified in the same well (on the northern portion of the office tower parcel) from which the PAH contamination was found. Low levels of chlorinated solvents below groundwater standards were identified. These concentrations of VOCs are not considered significant, and it is unlikely that regulatory agencies would require groundwater remedition. MTBE, a gasoline additive was also identified in the most upgradient well on the property slightly



above cleanup standards. The MTBE appears to be from an offsite source and itributable, Suite 700

Bethesda, Maryland 20814-4870

301 652 2215 Tel

301 656 8059 Fax

On behalf of the subject property's owner, Environmental Risk Limited (ERL), the property owner's consultant, is pursuing a "No Further Action Letter" (NFAL) from the New York State Department of Environmental Conservation (NYSDEC). At the time this report was prepared, ERL had reportedly not received a response from NYSDEC. It is currently unclear under which regulatory program ERL is pursuing the NFAL, the Underground Storage Tank Program or the Voluntary Cleanup Program. Both programs have specific reporting, technical and administrative requirements. It is recommended that the buyer obtain all appropriate indemnification's and warranties that the owner will comply with all the regulatory requirements, assume all liabilities and absorb all future expenses associated with compliance.

It is Dames & Moore's opinion that the available data on the environmental conditions on the subject property should not preclude obtaining a NFAL from the NYSDEC as the contaminants found are at low levels in an urban setting where the risk of human exposure is low. It should be noted, however that the NYSDEC may require additional investigation or monitoring during and after development. Actual NYSDEC requirements can not be predicted at this time as it appears that the regulators have not been provided or have not reviewed all the studies and investigations related to the subject property.



7101 Wisconsin Avenue, Suite 700 Bethesda, Maryland 20814-4870 301 652 2215 Tel 301 656 8059 Fax

# TABLE OF CONTENTS

		<u>Page</u>
1.0	INTROD	UCTION1
	1.1	OBJECTIVE1
	1.2	SCOPE OF WORK1
	1.3	LIMITATIONS OF THE ASSESSMENT2
2.0	BACKG	ROUND3
	2.1	PREVIOUS REPORT REVIEW3
3.0	SITE INV	/ESTIGATION5
0.0	3.1	UTILITY MARKOUT & GPR/MAGNETOMETER SURVEY5
	3.2	SOIL BORINGS5
	3.3	GROUNDWATER MONITORING WELLS7
	3.4	WELL SURVEYING & GROUNDWATER FLOW8
4.0	ANALYT	CICAL RESULTS9
	4.1	SOIL SAMPLES9
	4.2	GROUNDWATER SAMPLES
5.0	CONCLU	USIONS & RECOMMENDATIONS12
6.0	REFERE	NCES13
FI	GURES	
	_	e 1 - Site Location Map e 2 - Site Plan

Figure 3 - Groundwater Contour Map

# **TABLES**

Table 1 - Soil & Groundwater Testing Results

#### **DRAFT**



**APPENDICES** 

7101 Wisconsin Avenue, Suite 700 Bethesda, Maryland 20814-4870

301 652 2215 Tel 301 656 8059 Fax

Appendix A - Scope of Work

Appendix B - Curricula Vitae of Dames & Moore Personnel

Appendix C - Analytical Testing results

Appendix D - Enviroscan GPR / Magnetometer Report

Appendix E - Soil Boring Logs

Appendix F - Previous Environmental Assessments



#### 1.0 INTRODUCTION

7101 Wisconsin Avenue, Suite 700 Bethesda, Maryland 20814-4870

Pursuant to that certain contract dated as of December 3, 1999 by and between Dames & Moore was retained by CB Richard Ellis to conduct a Phase II Environmental Assessment of the Gateway Plaza Office Complex, in White Plains, Westchester County, New York ("subject property"). There are three distinct parcels of the subject property which will be referred to in the report as the "office tower" located on the south side of the subject property; the "parking garage", located on the north side of subject property, and the "central parking area" located in between the office tower and parking garage. The environmental assessment was performed, and this report prepared, in accordance with the contract and generally accepted practices employed by reputable nationally recognized environmental consulting firms. The Phase II Environmental Assessment objectives, scope and limitations are presented in the following sections.

## 1.1 **OBJECTIVE**

The objective of the Phase II Environmental Site Assessment is to evaluate the current soil and groundwater conditions in three areas of concern. The first area is located on the southwest corner of the parcel where one closed-in-place, and one active fuel oil UST exist. A former dry cleaning establishment is also suspected to have existed on the southwest side of the office tower parcel. The second area of concern is along the south side of Hamilton Avenue where several gas stations used to exist. The third area of concern is the central asphalt paved parking lot in the central portion of the property. Another objective of the investigation is to evaluate the potential for the off-site migration of contaminants.

## 1.2 SCOPE OF WORK

The scope of work of this investigation is presented in Appendix A and is summarized below:

- Review of previously prepared environmental assessments;
- Preparation of a Health & Safety plan for Dames & Moore personnel and sub-contractors;
- GPR and Magnetometer survey to clear underground utilities and to assess for the presence of USTs in certain areas of the subject property;



• Installation of soil borings and monitoring wells;

7101 Wisconsin Avenue, Suite 700 Bethesda, Maryland 20814-4870

- Sampling and analysis of soil and groundwater for Volatile Organic Compounds (VOCs),

  MTBE, Semi-Volatile Organic Compounds (SVOCs) and Lead; and,
- Surveying the wells in order to obtain an accurate groundwater hydraulic gradient.

## 1.3 LIMITATIONS OF THE ASSESSMENT

The Phase II Environmental Assessment was prepared in accordance with the Scope of Work described in Section 2.0 of this report. The work conducted by Dames & Moore is limited to the services agreed to with CB Richard Ellis Investors, and no other services beyond those explicitly stated should be inferred or are implied.

The conclusions presented in this report are professional opinions based upon Dames & Moore's visual observations and measurements; Findings of Enviroscan's Ground Penetrating Radar (GPR) and magnetometer survey of various locations; Surveying of the site and monitoring wells by Gabriel E. Senor, P.C., and analytical testing of the soil and groundwater samples by York Analytical Laboratories, Inc. These conclusions are intended exclusively for the purpose stated herein, at the site indicated, and for the project indicated.

This report is intended for the sole use of CB Richard Ellis Investors. The scope of services performed during this investigation may not be appropriate for other users, and any use or re-use of this document, or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

This report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings of this assessment. Opinions and recommendations presented in this report apply to site conditions and features as they existed at the time of Dames & Moore's site visit, and those reasonably foreseeable. They cannot necessarily apply to conditions and features of which Dames & Moore is unaware and has not had the opportunity to evaluate.



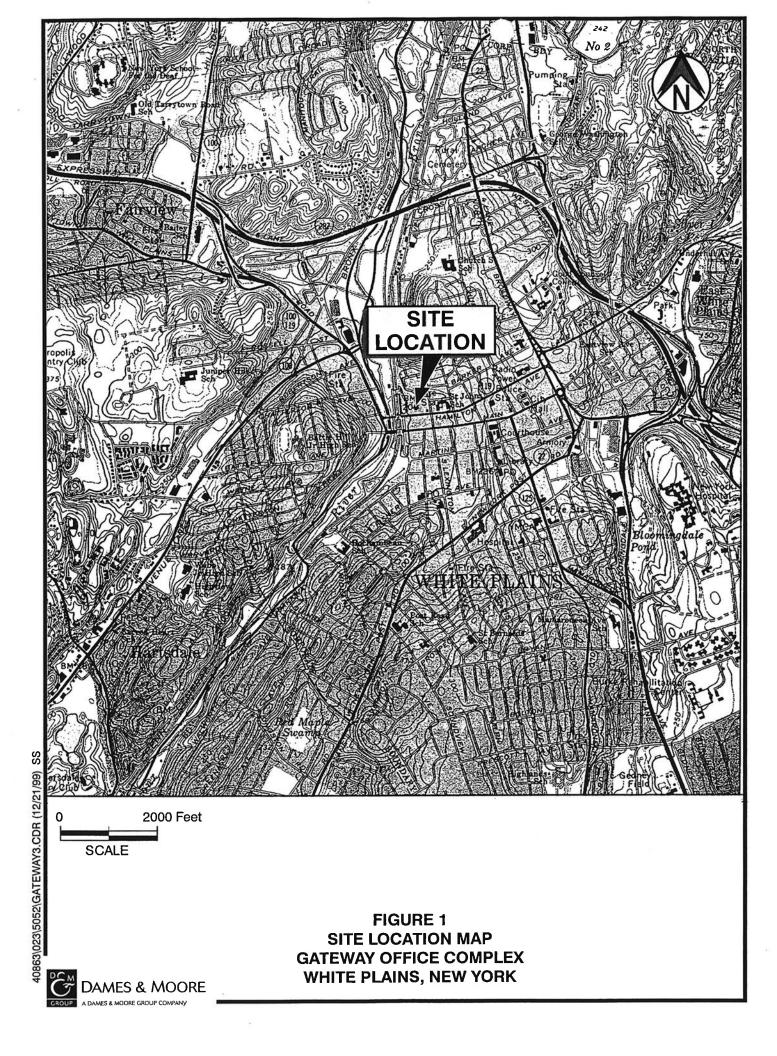
## 2.0 BACKGROUND

The Gateway office complex comprises 3 city blocks and is approximately 5 acres in size. The property is improved with a 20-story office tower, a six level parking garage and an asphalt paved parking area. The garage and office building were completed in 1986 while the asphalt paved parking lot was constructed between 1995 and 1996. From the 1880s until the 1960s the northern block of the subject (garage and parking lot) were occupied by a rail yard, a coal yard and oil storage facility, and an asphalt company. A gasoline station also used to exist on the southern portion of the central parking lot, and a fire station used to exist on southeast corner of the central parking lot. The southern portion of the property which is now developed with the existing office tower was improved with various residences and storefront retail facilities, of which, one may have been a dry cleaner. Two gasoline stations also used to exist on the south side of Hamilton Avenue along the northern border of the office building.

In the mid to late 1960s, the subject property became part of the White Plains urban renewal authority and the former train yard and coal storage facility on the northern portion of the property was razed. The residential and commercial development (to include the gas stations) were razed in the mid to late 1970s. A Site Location Map is presented as Figure 1 and a Site Plan is presented as Figure 2.

## 2.1 Previous Report Review

The central parking facility and the parking garage have been the subject of numerous subsurface investigations. These investigations are referenced in Section 6.0 and consisted primarily of the sampling and analysis of the soil and groundwater. Soil contamination at various depths has been identified in both these areas. Contaminants consist primarily of PAHs which are above regulatory cleanup guidelines in some areas. Some PCB contamination has been detected at concentrations slightly above, or at regulatory guidelines. Metals were also identified n the soils at concentrations consistent with background levels for urban areas. Groundwater from these two parcels was also sampled and analyzed for Total Petroleum Hydrocarbons (TPH), Volatile Organic Compounds





(VOCs,) Methyl t-butyl ether (MTBE), some Semi- Volatile Organic Compounds (SWOEs) and ue, Suite 700 Bethesda, Maryland 20814-4870 metals. Laboratory analysis of the groundwater did not identify any contaminants above NYSIDEC 301 656 8059 Fax cleanup guidelines. These previous studies have concluded that contamination was consistent with the subject property's former industrial usage.

The two previous reports which included groundwater sampling and analysis had contradictory information on groundwater flow direction. One report conducted by BCM Engineers in 1993 stated that groundwater flows in a southwesterly direction, while a 1999 investigation conducted by ERL indicated that groundwater flow was in a northwesterly direction.

During the closing of the 2,000 gallon UST on the office tower parcel in 1991, a soil sample from the top of the UST had a TPH concentration of 15,900 mg/kg or ppm, which was attributed to spillage during the excavation to uncover the tank. Additional sampling and laboratory analysis of the excavated soils indicated TPH concentrations ranging from 50 to 100 ppm (below action levels). In 1999, four soil borings were advanced to a depth of approximately 10 feet below grade at the active and closed-in-place USTs at the office tower parcel. Analytical testing of the soil samples indicated low levels of petroleum contamination (under 100 ppm TPH). ERL (the consultant) concluded that the petroleum levels were typical to urban areas and that no petroleum was released from the USTs.



## 3.0 SITE INVESTIGATION

7101 Wisconsin Avenue, Suite 700 Bethesda, Maryland 20814-4870 301 652 2215 Tel 301 656 8059 Fax

# 3.1 Utility Markout & Ground Penetrating Radar / Magnetometer Survey

Dames & Moore contacted a local Miss-Utility Service to have public utilities such electric, gas, sewer, telephone and fiber optic cables marked out. Ticket numbers for these mark outs were 258-16-18, 258-16-31 and 258-16-39. The majority of these mark-outs were completed by Tuesday, December 7th, prior to drilling activities. In addition, due to the urban area and the substantial quantity of underground utility lines, Dames & Moore subcontracted Environscan of Lancaster, Pennsylvania to mark-out underground utilities. Enviroscan was on-site, Monday, December 6th, and utilized Ground Penetrating Radar (GPR) and magnetometers to mark-out utilities as well as search for USTs which may have been associated with the former gas stations that used to exist along the south side of Hamilton Avenue. Enviroscan's GPR survey of the south side of Hamilton Avenue along the sidewalk did not identify any anomalies that would be consistent with USTs in the area.

One anomaly that Enviroscan detected was in the vicinity of MW-4. A 3 foot x 3 foot oval shaped metallic object was located approximately 3 feet below ground surface (bgs). Based upon the depth and size of the structure, and the fact that it was in fill material, likely placed after the garage was constructed, Dames & Moore did not suspect the object to be a UST. An abandoned fire alarm call box was located in the immediate area, and it's former conduit ran into the anomaly. As such, this metallic anomaly was likely associated with the abandoned fire alarm system associated with the parking garage. Enviroscan's written report is presented as Appendix D.

# 3.2 Soil Borings

On Wednesday, December 8<sup>th</sup>, Dames & Moore and Aquifer Drilling & Testing met onsite and discussed the sample locations and protocol which was consistent with the scope of work referenced above. Field work was conducted on Wednesday December 8<sup>th</sup>, and Thursday December 9<sup>th</sup>. Sample locations which are referenced on Figure 1 as MW-1 through MW-4 were selected based



on topography, suspected groundwater flow, and their proximity to former and Existing monitoring wells installed by others (MW-5, MW-6 and MW-7) are 301 656 8059 Fax

Figure 1.

Location MW-1 was selected for its proximity to the existing 10,000 gallon fuel oil UST and the 2,000 gallon closed in place fuel oil UST. Location MW-2 was selected for its use as an upgradient reference point for groundwater flow direction. Location MW-3 was chosen for it proximity to former USTs associated with two gasoline stations that used to exist along Hamilton Avenue up until the 1960s. Location MW-4 was selected as an upgradient datum to determine the direction of groundwater flow.

Soil borings were advanced utilizing a 4.25 inch diameter hollow stem auger. Soil sampling was conducted at 5 foot intervals utilizing a 2 foot long split spoon sampling apparatus which was advanced using a 140 pound drop hammer. Split spoon samples were visually inspected for evidence of contamination, and screened with a photoionization detector (PID) for the presence of Volatile Organic Compounds (VOCs). Soil samples were collected in laboratory supplied, precleaned sample containers and placed in a cooler on ice. In accordance with the Scope of Work, two samples from each bore hole were sent to the laboratory for analysis. Which sample intervals, that were selected for analysis was based on the sample depth's proximity to the bottom of a former or existing UST, elevated PID readings, or visual or olfactory evidence of contamination. In the absence of elevated PID readings or other evidence of contamination, a shallow sample interval and the sample interval located immediately above the saturated zone were analyzed.

Generally, soils encountered at each location consisted of fine to medium textured sands with trace amounts of silts. With increasing depth, the sands became courser in texture, to become gravelly sands at the lower sections of the soil borings. Fill material, particularly top soil in boring MW-4 and various debris to include bricks and a tire inner tube were detected in boring MW-2. Soil boring logs are presented in Appendix E.



Only one sample exhibited evidence of contamination. Boring MW-2 from 15'-17' had a faint petroleum odor and also registered 80 ppm of VOCs on a PID reading. This reading may have been influenced by the presence of an inner tube that came up though the boring from the 12'-17' horizon which gave significantly higher VOC levels.

# 3.3 Groundwater Monitoring Wells

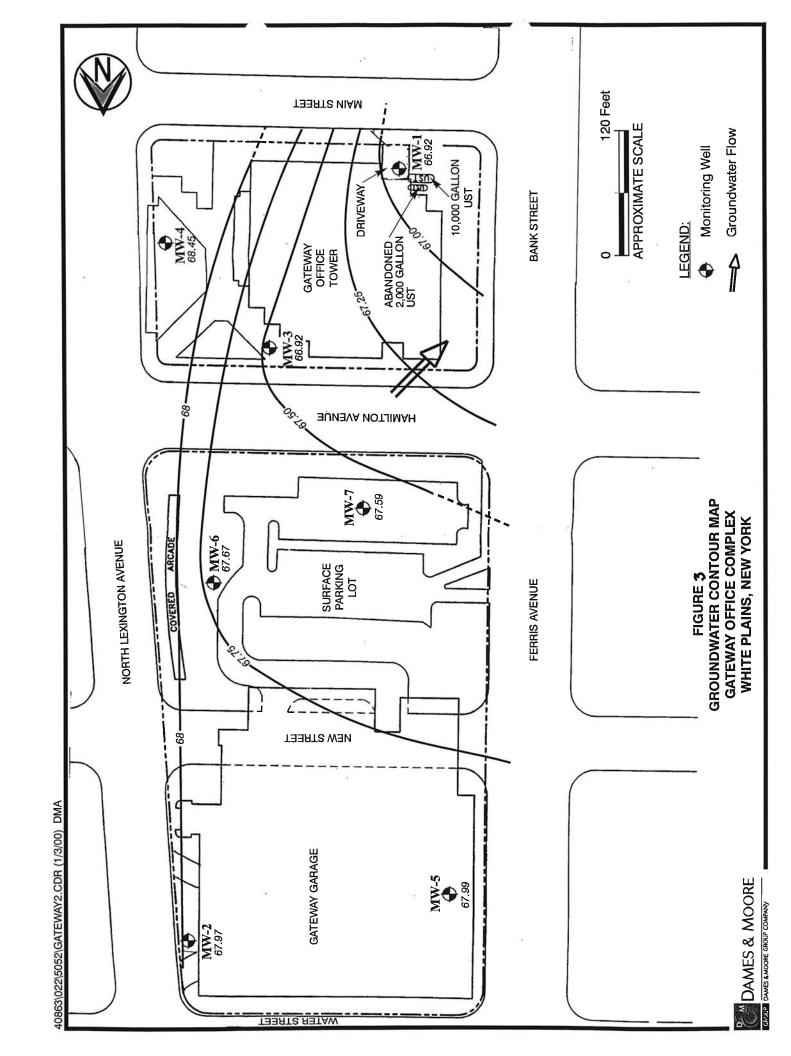
Each soil boring was advanced approximately 7-8 feet below the water table so that monitoring wells could be installed. The wells were constructed of 2 inch diameter PVC casings. The screens were also constructed of PVC with 0.01 inch slots and typically extended 3 feet above the water table. Filter sand was installed around the screening and extended ±2 feet above the screen. From this point, 2 feet of bentonite clay was installed as a sealant for the wells. Concrete grout was then installed from the bentonite seal to the top of the casing. All wells were capped with a pressurized cover and had flush mounted road boxes, secured with bolts.

Monitoring wells MW-1 and MW-2 were installed on December 8<sup>th</sup>, while wells MW-3 and MW-4 were installed on December 9<sup>th</sup>. In addition to the wells installed by Dames & Moore, an additional three wells exist onsite. These wells (MW-5, MW-6 & MW-7) were installed by Environmental Risk Limited (ERL) and BCM Engineers during previous environmental assessments and were included in Dames & Moore's sampling program. Monitoring well MW-5 was developed and sampled on Thursday, December 9<sup>th</sup> while the remaining wells were developed and sampled on Friday, December 10<sup>th</sup>. Gauging of the depth to groundwater was conducted prior to well development and consisted of using an electronic groundwater indicator and tape measure. Depth to groundwater was measured from the top of each well's flush mounted road box. Between three and four well volumes were extracted from each well during development. Samples were collected in laboratory supplied, pre-cleaned sample containers and placed in a cooler on ice.



# 3.4 Surveying & Groundwater Flow

On Friday, December 10<sup>th</sup>, Dames & Moore met with a representative of Gabriel E. Senor, P.C., a licensed Professional Surveying firm in the State of New York. The purpose of surveying the wells was to obtain precise elevations and distances between the wells for determining groundwater gradient and flow directions. Based upon this surveying, groundwater flows in a southwest direction towards the Bronx River. At the office tower parcel, the groundwater gradient is approximately ±0.0025 feet/feet towards the southwest. Figure 3 presents the groundwater contour map.





## 4.0 ANALYTICAL TESTING RESULTS & INTERPRETATION

All samples were placed in a cooling chest on ice and submitted under a chain-of-custody protocol to York Analytical Laboratories, Inc. of Stamford, Connecticut for laboratory analysis. Soil and groundwater samples from borings and wells MW-1 through MW-4 were analyzed for Volatile Organic Compounds (VOCs), Polynuclear Aromatic Hydrocarbons (PAHs), and Total and Filtered Lead. VOCs including MTBE were analyzed using USEPA method 8260, PAHs were analyzed using EPA Method 8270, and lead was analyzed using Method 8010. Groundwater from the preexisting monitoring wells, MW-5, MW-6 and MW-7 was only analyzed for PAHs via Method 8270. Laboratory reports and Chain of Custody documents are presented in Appendix "C".

## 4.1 Soil Samples

Laboratory Testing Results are summarized in Table 1. As shown, the only VOCs detected in any of the soil samples was MTBE in MW-1, just above the water table at a concentration well below cleanup guidelines. Because MTBE was not introduced until the late 1970's or early 1980's it is unlikely that its presence is related to the former gasoline stations which were removed from the property in 1967/1968. Lead concentrations from all the samples were within background levels typical to urban areas. Soil sample B3A collected from MW-3 had PAHs at concentrations slightly above regulatory guidelines at a depth of 12-14 feet below grade. It should be noted that subsequent analysis of this soil sample using the TCLP method determined that none of the samples were above regulatory guidelines. The soil PAH concentrations detected on the office tower parcel are consistent with the low levels detected in soils in previous investigations by others. Dames & Moore does not believe that concentrations of PAHs detected are significant, and it is unlikely that regulatory agencies would require soil remediation. This contamination is likely a result of some residual contamination associated with the former gas stations/auto repair facilities and asphalt manufacturing and oil storage facilities that used to exist in the immediate area. PAHs were not detected in the soil sample aliquot taken from 27'-29' bgs which was immediately above the water table.

#### Table 1

# Oummary of Groundwater and Soil Analyses Gateway Office Complex White Plains, NY

#### **GROUNDWATER RESULTS**

Sample ID:	MVV-1	MW-2	MW-3	MW-4	MW-5*	MW-6*	MW-7*	Applicable Standards
Sample Depth (Ft. bgs):		16.51	30.05	25.63	12.16	22.45	25.62	and Guidelines
Volatile Organic Compounds (ug/L)								
Chloroform	17	ND	ND	ND	(ND*)	(ND*)	(ND*)	7 <sup>a</sup>
Tetrachloroethylene	ND	ND	4	ND	(ND*)	(ND*)	(ND*)	5ª
Trichloroethylene	ND	ND	2	ND	(ND*)	(ND*)	(ND*)	5ª
МТВЕ	ND	86/87	ND	ND	(ND*)	(ND*)	(ND*)	50 b
"STARS" PAH's (ug/L)	ND	NA						
Lead (mg/L)								
Total Lead	0.133	0.629	0.319	0.127	-	-	-	.025 <sup>a</sup>
Dissolved Lead	ND	ND	ND	ND	-	-	-	.025 <sup>a</sup>

#### **SOIL RESULTS**

Boring Location:		MVV-1		MW-2		MW-3		N-4	Applicable
Sample ID:		B1B	B2A	B2B	ВЗА	ВЗА	B4A	B4B	Standards
Sample Depth (Ft. bgs):		24-25	12-14	15-17	12-14	27-29	5-7	24-25	and Guidelines
Volatile Organic Compounds (ug/Kg)									
мтве		86	ND	ND	ND	ND	ND	ND	1,000 °
"STARS" PAH's (ug/Kg)									
Benzo(a)anthracene	ND	ND	ND	ND	460**	ND	ND	ND	330 <sup>d</sup> /330 <sup>f</sup>
Benzo(a)pyrene	ND	ND	ND	ND	450**	ND	ND	ND	330 <sup>d</sup> /330 <sup>f</sup>
Benzo(b)fluoranthene	ND	ND	ND	ND	430**	ND	ND	ND	330 <sup>d</sup> /1,100 <sup>f</sup>
Benzo(k)fluoranthene	ND	ND	ND	ND	400**	ND	ND	ND	330 <sup>d</sup> /1,100 <sup>f</sup>
Chrysene	ND	ND	ND	ND	500**	ND	ND	ND	330 <sup>d</sup> /400 <sup>f</sup>
Fluoranthene	ND	ND	ND	ND	1100**	ND	ND	ND	1,000 ° / 50,000 <sup>f</sup>
Phenanthrene	ND	ND	ND	ND	650**	ND	ND	ND	1,000 ° / 50,000 <sup>f</sup>
Pyrene	ND	ND	ND	ND	900**	ND	ND	ND	1,000 ° / 50,000 <sup>f</sup>
Lead (mg/Kg)	40.20	2.26	4.80	11.70	67.30	4.07	1.73	1.44	200-600 <sup>g</sup>

#### Notes:

See Figure 1 for sample locations. Monitoring wells MW-1 through MW-4 installed and sampled by Dames & Moore on December 8-10, 1999.

ND = Analyte(s) not detected above method limits. " - " = Compound(s) not analyzed for.

Results in BOLD exceed applicable Standards or Guidelines. \*\* TCLP Analysis of sample for PAHs was ND, soil sample does NOT exceed TCLP Guideline.

- \* Monitoring wells MW-5 through MW-7 installed and sampled for VOCs by ERL in November 1999. PAHs sampled by Dames & Moore
- <sup>a</sup> New York State Ambient Water Quality Standards (6NYCRR 703.5), June 1998
- New York State Department of Environmental Conservation (NYSDEC), STARS Memo #1, Petroleum -Contaminated Soil Guidance Policy, August 1992; Table 1, TCLP Extraction Guidance Value.
- NYSDEC STARS Memo #1, Petroleum -Contaminated Soil Guidance Policy, August 1992; Table 1, TCLP Alternative Guidance Value.
- MYSDEC STARS Memo #1, Petroleum -Contaminated Soil Guidance Policy, August 1992; Table 2, TCLP Alternative Guidance Value.
- NYSDEC STARS Memo #1, Petroleum -Contaminated Soil Guidance Policy, August 1992; Table 2, TCLP Alternative Guidance Value is 0.04 ug/l which is below Method Dection Limits. Applicable guidance value defaults to Method Detection Limit persuant to Note (2).
- f NYSDEC Technical Assistance Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), January 24, 1994. Appendix A, Table 2, Recommended Soil Cleanup Objectives.
- <sup>9</sup> NYSDEC, TAGM, HWR-94-4046, January 24, 1994. Appendix A, Table 4. Recommended soil cleanup objectives are to background, which for urban areas range from concentrations indicated.



## 4.2 Groundwater Samples

Analytical results from the office tower parcel indicate low levels of the chlorinated solvents Tetrachloroethylene (PCE) and Trichloroethylene (TCE) in groundwater from MW-3 at concentrations below groundwater standards. The origin of these compounds may be associated historic property-wide activities or with the historic auto repair operations on the parcel. In addition, the VOC chloroform was detected in the groundwater from MW-1 at a concentration slightly above standards. The chloroform could be a degradation product of PCE/TCE which was detected at an upgradient location (MW-3), or it could be a laboratory contaminant. Regardless of the source, the concentrations of VOCs detected are not considered significant and it is unlikely that regulatory agencies would require groundwater remediation.

Groundwater results from MW-1 the vicinity of the USTs did not indicate a release to groundwater from the 2,000 gallon or 10,000 gallon fuel oil USTs. In addition, No PAHs were detected in any of the groundwater samples analyzed by Dames & Moore.

Total lead was detected in all Dames & Moore monitoring wells at levels exceeding groundwater standards. Dissolved lead concentrations from the same wells were below detection limits, indicating that the elevated concentrations are associated with sediments in the samples. Soil lead concentrations were not found to be elevated. Dames & Moore does not believe that concentrations of total lead detected are significant and it is unlikely that regulatory agencies would require groundwater remediation.

Finally, the groundwater sample from the northeast corner of the parking garage, MW-2 contained MTBE at a concentration of 86 and 87 micrograms per liter (ug/L), slightly above the 50 ug/L guideline. MTBE was not found in any other groundwater sample. MW-2 is most hydrogologically upgradient well on the subject property. Given the location of the well, the date of site development, and the date of introduction of MTBE as a gasoline additive, it is Dames & Moore's opinion that the MTBE is from an offsite source and it is unlikely that regulatory agencies would require groundwater remediation.



## 5.0 CONCLUSIONS & RECOMMENDATIONS

The results of Dames & Moore's Phase II Environmental Assessment found low levels of soil and groundwater contamination that are consistent with the site history and previous investigations. The soil contamination under the surface parking lot may increase site development cost due to special handling and disposal requirements.

On behalf of the subject property's owner, ERL is pursuing a "No Further Action Letter" (NFAL) from the New York State Department of Environmental Conservation (NYSDEC). At the time this summary was prepared, ERL had reportedly not received a response from NYSDEC. It is currently unclear under which regulatory program ERL is pursuing the NFAL, the Underground Storage Tank Program or the Voluntary Cleanup Program. Both programs have specific reporting, technical and administrative requirements. It is recommended that the buyer obtain all appropriate indemnification's and warranties that the owner will comply with all the regulatory requirements, assume all liabilities and absorb all future expenses associated with compliance.

It is Dames & Moore's opinion that the available data on the environmental conditions on the subject property should not preclude obtaining a NFAL from the NYSDEC as the contaminants found are at low levels in an urban setting where the risk of human exposure is low. It should be noted, however that the NYSDEC may require additional investigation or monitoring during and after development. Actual NYSDEC requirements can not be predicted at this time as it appears that the regulators have not been provided or have not reviewed all the studies and investigations related to the subject property.



## 6.0 REFERENCES

Environmental Assessment for Hamilton Plaza and Gateway garage Bus Terminal (Asbestos Sampling excepts from a report), prepared by BCM Engineers for Prudential Mortgage Company, dated April 1991

Soil Quality Investigation, JMB Properties Company, White Plains, NY, prepared by Environmental Science & Engineering, dated October 14, 1991

Phase II Environmental Assessment, Gateway Garage/Vacant Lot, Hamilton and N. Lexington Avenues, White Plains, New York, prepared by BCM Engineers on behalf of Prudential Mortgage Capital, dated February 1993.

UST and Debris Removal Report, Gateway Garage, Vacant Lot, prepared by Camp Dresser & McKee, on behalf of the Prudential Realty Group, dated May 1995.

Additional Phase II Sampling, Gateway Garage/Vacant Lot, prepared by Malcolm Pirnie on behalf of Cigna Investment Management, dated May 1995.

Phase I Environmental Assessment, Gateway Office Building and Two Adjacent Parking Properties, North Lexington Avenue, White Plains, New York, prepared by Environmental Risk Limited on behalf of Cigna Investments, Inc., dated September 1999.

Document Review, Gateway Office Building and two adjacent parking lots, prepared by ERL, on behalf of Cigna Investments, dated November 30, 1999

Draft Phase I Environmental Assessment, Gateway Office Complex, White Plains, New York, prepared by Dames & Moore, on behalf of CB Richard Ellis Investors, dated December 29, 1999.

Survey of Gateway, prepared by J.W. Delano, PLS of White Plains, New York, dated October 17, 1986

Groundwater Monitoring Well Survey of Gateway Office Complex prepared by Elliot Senor, P.C. of Hartsdale, New York, dated December 10, 1999.

STARS MEMO # !, Petroleum-Contaminated Soil Guidance Policy, published by the New York State Department of Environmental Conservation (NYSDEC), dated August 1992

NYSDEC, Technical Assistance Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels, (HWR-94-4046), January 24, 1994, Appendix A, Table 2, Recommended Soil Cleanup Levels & Table 4, Recommended soil cleanup objectives are to background which for urban areas range from concentrations indicated.