Hazardous Waste / Contaminated Materials Detailed Site Investigation Report

Dewey and Driving Park Realignment Project

P.I.N. 4755.55 Intersection of Dewey Avenue and Driving Park City of Rochester Monroe County, New York

Prepared For:

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Project No. 40-14-035

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EXECUTIVE SUMMARY

Ravi Engineering & Land Surveying, P.C. (RE&LS), as a sub-consultant to Bergmann Associates, has been retained by the City of Rochester to perform a Hazardous Waste / Contaminated Materials, Detailed Site Investigation (DSI) for the Dewey and Driving Park Realignment Project in the City of Rochester, Monroe County, New York. This DSI included subsurface sampling and groundwater well installation at locations of concern identified by the Hazardous Waste / Contaminated Materials Screening, completed in June 2014.

Based on the findings of this DSI the following is recommended:

- 1. The results of this DSI should be given to the NYSDEC for their review and consideration.
- 2. A specification should be added to the construction documents for the removal and disposal of underground storage tanks (USTs) at Site 8 &12 (320 Driving Park Avenue and 854 Dewey Avenue). Payment for the UST removal should be a line item per tank fee based on an assumed size, to be utilized only if UST(s) are encountered.
- 3. A specification should be added to the construction documents for screening, segregating, sampling, and disposal of petroleum contaminated soil at Site 4 & 5. A special note should be added to the plans identifying the area where the petroleum contamination may be encountered (Figure 3). A soil management plan should be developed that includes onsite monitoring during construction in accordance with NYSDOT Standard Specification Section 205, Contaminated Soil.
- 4. If the store at Site 4 & 5 will be removed, the soil beneath the structure should be either assumed to be petroleum contaminated and handled in accordance with recommendation 3, or sampled to determine if contamination is present.

1.0 INTRODUCTION:

Ravi Engineering & Land Surveying, P.C. (RE&LS), as a sub-consultant to Bergmann Associates, has been retained by the City of Rochester to perform a Hazardous Waste / Contaminated Materials, Detailed Site Investigation (DSI) for the Dewey Driving Park Realignment Project in the City of Rochester, Monroe County, New York (Attachment A, Figure 1). This DSI included subsurface sampling and groundwater well installation at locations of concern identified by the Hazardous Waste / Contaminated Materials Screening, completed in June 2014.

2.0 PROJECT OVERVIEW:

The proposed project includes full depth reconstruction of the intersection of Dewey Avenue and Driving Park. The portion of Dewey Avenue to the north of the intersection will be horizontally realigned to the west in an attempt to improve traffic flow patterns and reduce vehicle accidents at the intersection. The property at the North West corner of the intersection will be acquired to facilitate the realignment of Dewey Avenue.

A Hazardous Waste / Contaminated Materials Screening completed in June 2014 identified several properties and locations of concern. It was determined that some of the sites identified by this screening were not of concern to the porposed project based on project limits, or a more definitive understanding of project components. Eight of the sites of concern identified could pose a potential negative impact on the proposed project; therefore this DSI was recommended. The locations of the eight sites are presented in Figure 2: Boring Locations & Location of Sites Map included in Attachment A.

The following provides a summary of the sites from the June 2014 Hazardous Waste / Contaminated Materials Screening that pose a concern to the proposed project:

Site 2:

Price Rite Grocery Store 375 Driving Park Avenue and 835 Dewey Avenue

The NYSDEC Spill Report Database included an incident at this site in October 2001 when a gas tank fell off a vehicle in the parking lot. This spill was cleaned up by a responsible party and closed in October 2001. The site is also reported as being a historic drycleaner on the US Historic Cleaners List. Based on the potential for contaminated soils due to the past use as a drycleaner and a reported spill, a subsurface investigation along the right of way (ROW) adjacent to this property was recommended.

Site 3:

Historic Auto Service Facility 374 Driving Park Avenue

This site is listed on the US Historic Auto Station list as an automobile repair and service facility in 2000. Automotive shops house hazardous materials and potentially generate hazardous waste. Based on the historic use as an automotive shop, a subsurface investigation along the ROW adjacent to this property was recommended.

Site 4 & 5:

Family Dollar Parking Lot 340 and 342 Driving Park Avenue

This site is currently occupied by the parking lot for the Family Dollar. Both sites are listed as historic dry cleaners on the US Historic Cleaners list. Site 4 is listed as being a cleaner in the years 1940, 1945, and 1950. Site 5 is listed as being a cleaner in the years 1960, 1965, 1970, 1975, 1982, and 1985. In addition, it is understood that the previous structures were demolished on site when the Family Dollar parking lot was constructed. It was recommended that a subsurface investigation along the ROW adjacent to this property and within the property boundaries be conducted to determine if contaminated soils are present. A subsurface investigation was recommended within the property boundaries due to additional contamination concerns and the understanding that the City will be acquiring these sites.

Site 7:

329 Driving Park Avenue

This site is listed on the US Historic Cleaners list as a wash and dry self-service laundry in the years 1945, 1970, 1975, 1982, and 1985. Based on the potential for contaminated soils due to the past use as a cleaner, a subsurface investigation along the ROW adjacent to this property was recommended.

Site 8 &12:

Clinton & Ralston Auto Repair 320 Driving Park Avenue and 854 Dewey Avenue

These sites are currently Clinton and Ralston Auto Repair and the associated parking lot. Site 8 is reported on the US Historic Auto Station list as a gasoline station and automobile repair and service station from 1926 to present. Site 12 is reported on the US Historic Auto Station list as a filling station (Gulf Service Station) in 1965 and 1970. Additionally, Sanborn® maps from 1971 and 1950 indicate that the site was a historic filling station. Based on the potential for soil contamination due to historical and current use of the property as an automotive

repair shop and filling station, a subsurface investigation along the ROW adjacent to this property was recommended. Additionally, USTs associated with the past filling station and current automotive shop may be present, therefore it is recommended that a specification be added to the construction documents for the removal and disposal of USTs. Payment for the UST removal should be a line item per tank fee based on an assumed size, to be utilized only if UST(s) are encountered.

Site 9:

Ronnie's Barber Shop 308 Driving Park Avenue

This site is reported on the US Historic Auto Station list as an automobile garage in 1930, 1935, 1940, 1945, 1950, 1955, 1960, 1965, 1970 and 1975. Due to the past use as an automobile garage, a subsurface investigation along the ROW adjacent to this property was recommended.

3.0 METHODOLOGY:

3.1 SUBSURFACE SOIL INVESTIGATION

TREC Environmental, Inc. (TREC) was subcontracted to perform the soil borings for the subsurface soil investigation. This portion of the investigation included the installation of soil borings at Sites 2 through 5, Sites 7 through 9, and Site 12. A total of 18 soil borings were installed. The location of the test borings is shown on Figure 2 included in Attachment A. Soils from five of the test borings were retained for laboratory analysis.

All proposed soil borings were installed, however, due to the presence of underground utilities some borings were moved a minimal distance (less than 10 feet) from the original proposed location.

3.1.1 Soil Boring Installation Procedures

The soil borings were installed utilizing a Geoprobe® Direct-Push Technology sampling system. The Geoprobe® equipment utilizes a 4-foot long macro-core sampler, with disposable polyethylene sleeves. Soil cores are retrieved in four-foot sections. The polyethylene sleeves were cut for observation and sampling.

Generally it is expected that activities associated with the realignment will result in excavations up to approximately 4 feet in depth. Therefore, soil borings were installed to 4 feet. Borings at site 4 and 5 were advanced to a depth of 12 feet below ground surface (bgs) or equipment refusal due to additional contamination concerns, the potential for increased soil disturbance depth, and the understanding that the City will be acquiring this property. Soil characteristic were described in the field and recorded on boring logs (Attachment B).

Soil borings were backfilled with bentonite, native material, and sand to approximately 12 inches bgs, and finished with concrete or soil to the ground surface.

3.1.2 Soil Screening

Soil screening was conducted in conjunction with the installation of the soil borings. The entire soil column obtained from each 4-foot macro-core sleeve was screened for visual, olfactory, and soil vapor indications of contamination.

A photoionization detector (PID) equipped with a 10.6 eV lamp was utilized to screen the soil for volatile organics. The results of the soil screening were recorded in the field and are provided on the soil boring logs included in Attachment B and summarized in Table 2.

3.1.3 Soil Sampling and Analysis

Based on the results of the soil screening five soil samples (from five seperate borings) were retained for laboratory analysis as summarized in Table 1. The samples were placed in jars and transferred under chain of custody protocols to Paradigm Environmental Services (Paradigm) for the following analysis:

- Volatile Organic Compounds (VOCs), USEPA Method 8260, for either CP-51 / Spill Technology and Remediation Series #1 (STARS) List; or Target Compound List (TCL)
- Semi-Volatile Organic Compounds (SVOCs), USEPA Method 8270, CP-51 STARS List; and

A copy of the analytical results is provided as Attachment C.

Site	Boring No.	Sample No.	Depth of Sample (feet)	Analysis
Site 2 – 375 Driving Park Avenue and 835 Dewey Avenue	BN-1	BN-1-5	2.5	TCL VOCs
Site 3 –		BN-2-2	1.5	STARS/CP-51 Volatiles
374 Driving Park Avenue	BN-2	DIN-Z-Z	1.5	STARS/CP-51 Semivolatiles

Table 1: Soil Sample Summary

Site	Boring No.	Sample No.	Depth of Sample (feet)	Analysis
	BN-13	BN-13-1	10	TCL VOCs
Site 4 & 5 – 304 & 342 Driving Park	BN-16	BN-16-3	2.5	STARS/CP-51 Volatiles STARS/CP-51 Semivolatiles
Avenue	BN-17	BN-17-4	2.5	STARS/CP-51 Volatiles STARS/CP-51 Semi- volatiles

Table 1: Soil Sample Summary

3.2 SUBSURFACE GROUNDWATER INVESTIGATION

3.2.1 Installation of Groundwater Monitoring Wells

Groundwater was encountered during the boring installation process at Site 4 & 5 therefore, a 1-inch groundwater monitoring well was installed in order to investigate potential groundwater contamination.

The well within Site 4 & 5 was installed using a Geoprobe® Direct Push rig. The well installed by this unit consisted of 1-inch Schedule 40 PVC pipe with 10-foot screen sections (0.020 inch slot) and sand packing. A 4-inch flush mount roadway box set in concrete was installed over the well head.

3.2.2 Well Development and Sampling

After installation of the monitoring well, the well was left to stabilize. The well was then developed and sampled in accordance with NYSDEC protocol. The Groundwater sample was analyzed for the following parameters:

- Volatile Organic Compounds (VOCs), USEPA Method 8260, TCL; and
- Semi-Volatile Organic Compounds (SVOCs), USEPA Method 8270, CP-51 STARS List.

4.0 FINDINGS:

The following provides a summary of the findings of this Detailed Site Investigation.

4.1 Subsurface Soil Investigation

4.1.1 Soil Boring Installation and Screening:

As shown on the boring logs, soil encountered during this investigation consisted primarily of silts and clays with varying amounts of sand and clay. Fill material was present in some of the borings. The fill often included an ash like material. Groundwater was encountered in soil borings BN-14, BN-16, and BN-18.

Volatile organic vapors were detected in borings BN-1, BN-13, BN-16, and BN-17 at levels ranging from 0.5 to 19 part per million (ppm). In addition to the elevated PID readings, the soils from boring BN-16, and BN-17 had a petroleum-like odor. Odors from BN-13 and BN-15 were faint and did not exhibit characteristics such as "petroleum", "gasoline" or "#2 fuel oil". No volatile organic vapors above 0.2 ppm were detected in the other soil borings. Black and gray soil staining was observed in borings BN-1, BN-13, BN-14, BN-15, BN-16 and BN-17. As noted on the boring logs, the staining appeared to be at a depth of greater than 2 feet.

Based on the organic vapors detected in borings BN-13, BN-16, and BN-17 soil samples were retained for laboratory analysis. Based on the presence of soil staining, organic vapors detected, and ashy fill material, a sample from boring BN-1 was also retained for laboratory analysis. An additional soil sample was obtained from BN-2 in an attempt to characterize the ash like fill material.

Table 2 provides a summary of the data collected during the installation of the soil borings.

Soil Boring No.	Site number	Total Depth (feet)	Sample Depth ¹ (feet)	Range of PID Readings (ppm)
BN-1	2	4	2	0 – 0.5
BN-2	3	4	1.5	0
BN-3		4	Not Sampled	0
BN-4	2	4	Not Sampled	0
BN-5		4	Not Sampled	0
BN-6	7	4	Not Sampled	0
BN-7	/	4	Not Sampled	0
BN-8	9	4	Not Sampled	0
BN-9	8 & 12	4	Not Sampled	0
BN-10	οαΙΖ	4	Not Sampled	0

Table 2: Soil Boring Summary

Soil Boring No.	Site number	Total Depth (feet)	Sample Depth ¹ (feet)	Range of PID Readings (ppm)
BN-11		4	Not Sampled	0
BN-12		11.9	Not Sampled	0
BN-13		10.8	10	0 – 1.0
BN-14	4 & 5	9.7	Not Sampled	0
BN-15		10	Not Sampled	0
BN-16		11	2.5	0 – 0.5
BN-17		11	2.5	$0 - 19.0^{2}$
BN-18		10.8	Not Sampled	0

¹ Sample depth refers to the depth at which a sample was retained for laboratory analysis.

² Denotes a maximum PID reading.

4.1.2 Analytical Results

The laboratory results of the analysis conducted on the soils is provided in Attachment C. A summary is provided below.

Semi-Volatile Organic Compounds (SVOCs)

As presented in Table 3, the SVOCs anthracene, benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, benzo (g,h,i) perylene, benzo (k) fluoranthene, chyrsene, fluoranthene, indeno (1,2,3-cd) pyrene, phenanthrene, and pyrene were detected in the soil sample obtained from boring BN-16. These SVOCs were also detected in the soil sample obtained from boring BN-17, in addition to acenapthene and fluorene. SVOCs were not detected in the soil sample obtained from boring BN-17, in sample obtained from soil boring BN-2. As shown in Table 3, many of the SVOCs detected in BN-16 and BN-17 did exceed the soil cleanup objectives. These SVOCs are common constituents of many petroleum products including gasoline.

Sample Location	BN-16 (site 4 & 5)	BN-17 (site 4 & 5)	Unrestricted Use Soil Cleanup	Restricted Use Commercial Soil Cleanup
Compound	Results ¹	Results ¹	Objectives from 6 NYCRR part 675 - Table 375-6.8(a):	Objectives from 6 NYCRR part 675 - Table 375-6.8(b):
Acenaphthene	ND ³	0.463	20	500
Anthracene	0.695	0.625	100	500
Benzo (a) anthracene	<u>1.770²</u>	<u>1.130</u>	1	5.6
Benzo (a) pyrene	<u>1.440</u>	0.892	1	1

Table 3: Summary of SVOC Sampling Results

Sample Location	BN-16 (site 4 & 5)	BN-17 (site 4 & 5)	Unrestricted Use Soil Cleanup	Restricted Use Commercial Soil Cleanup
Compound	Results ¹	Results ¹	Objectives from 6 NYCRR part 675 - Table 375-6.8(a):	Objectives from 6 NYCRR part 675 - Table 375-6.8(b):
Benzo (b) fluoranthene	<u>1.270</u>	0.838	1	5.6
Benzo (g,h,i) perylene	0.752	0.530	100	500
Benzo (k) fluoranthene	<u>0.870</u>	0.610	0.8	56
Chrysene	<u>1.890</u>	<u>1.200</u>	1	56
Fluoranthene	3.160	2.420	100	500
Fluorene	ND	0.678	30	500
Indeno (1,2,3-cd) pyrene	<u>1.180</u>	<u>0.876</u>	0.5	5.6
Phenanthrene	1.410	3.140	100	500
Pyrene	3.440	2.370	100	500

Table 3: Summary of SVOC Sampling Results

¹All laboratory data are presented in parts per million (mg/kg)

²Bold and underlined results exceed the soil cleanup objectives.

³ND denotes a non-detect based on laboratory analysis.

Volatile Organic Compounds (VOCs)

As presented in Table 4, VOCs were detected in the soil sample obtained from boring BN-17. VOCs were not detected in soils samples obtained from borings BN-2 and BN-16. As shown below, the 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, isopropylbenzene, naphthalene, nbutylbenzene, n-propylbenzene, p-isopropyltoluene, and sec-butylbenzene in the soil sample taken from BN-17 do not exceeded the unrestricted soil cleanup objectives.

Sample Location	BN-17 (site 4 & 5)	Unrestricted Use Soil Cleanup Objectives ³ from 6 NYCRR part 675 -	Restricted Use Commercial Soil Cleanup Objectives ³ from 6 NYCRR part 675 -
Compound	Results ¹	Table 375-6.8(a):	Table 375-6.8(b):
1,2,4 - Trimethylbenzene	0.037	3.6	190
1,3,5 - Trimethylbenzene	0.022	8.4	190
Ethylbenzene	0.009	1	390
Isopropylbenzene	0.016	2.3 ²	N/A ³
Naphthalene	0.081	12	500
n-Butylbenzene	0.060	12	500
n - Propylbenzene	0.039	3.9	500

 Table 4: Summary of VOC Sampling Results

Sample Location	BN-17 (site 4 & 5)	Unrestricted Use Soil Cleanup Objectives ³ from 6 NYCRR part 675 -	Restricted Use Commercial Soil Cleanup Objectives ³ from 6 NYCRR part 675 -
Compound	Results ¹	Table 375-6.8(a):	Table 375-6.8(b):
p-Isopropyltoluene	0.012	10 ²	N/A
sec-Butylbenzene	0.081	11	500

Table 4: Summary of VOC Sampling Results

¹All laboratory data are presented in parts per million (mg/kg)

² Includes NYSDEC CP-51 soil cleanup levels for gasoline contaminated soils.

³ N/A denotes not applicable/guidance level not provided by NYSDEC.

Total (Halogenated) VOCs

As presented in Table 5, Halogenated VOCs were detected in the soil samples obtained from borings BN-13 and BN-1. Acetone and tetrachloroethene levels in the samples from BN-13 and BN-1 do not exceed soil cleanup objectives.

Table 5: Summary of TCL VOCs Sampling Results

Sample Location	BN-13 (site 4&5)	BN-1 (site 2)	Unrestricted Use Soil Cleanup Objectives from 6 NYCRR part 675 -	Restricted Use Commercial Soil Cleanup Objectives from 6 NYCRR part 675 -
Analyte	Results ¹		Table 375-6.8(b):	Table 375-6.8(b):
Acetone	0.070	0.064	100	500
Tetrachloroethene	0.012	ND	5.5	150

¹All laboratory data are presented in parts per million (mg/kg)

4.2 Groundwater Monitoring Well

4.2.1 Groundwater Monitoring Results:

One groundwater monitoring well (MW-1) was installed at BN-16 within Site 4 & 5. One sample was collected from MW-1 and submitted to Paradigm for Semi Volatile Organics analysis (EPA method 8270) and Volatile Organics Analysis (EPA method 8260) and Target Compound List Volatile Organic Compounds (EPA method 8260). Results from Paradigm indicate that no VOCs or SVOCs were detected in the groundwater sampled from MW-1.

5.0 Summary and Conclusions:

5.1 Subsurface Soil Investigation

<u>VOCs</u>

The subsurface soil investigation identified petroleum contamination within Site 4 & 5, the parking lot for the *Family Dollar*. However, volatile organic compounds detected in the soils from BN-17 do not exceeded the NYSDEC Unrestricted Use Soil Cleanup Objectives. Although the recommended cleanup values for residential properties are not exceeded, soil excavated from the site would require disposal because of "nuisance conditions" due to the presence of petroleum like odors as outlined in NYSDEC guidance's.

<u>SVOCs</u>

SVOCs were detected in soil samples submitted for laboratory analysis taken from BN-16 and BN-17 within Site 4&5, the parking lot for the *Family Dollar*. Indeno (1,2,3-cd) pyrene, benzo (k) fluoranthene, chrysene, benzo (a) anthracene, benzo (a) pyrene, and benzo (b) fluoranthene exceeded the NYSDEC Unrestricted Use Soil Cleanup Objectives. The source of contamination could not be determined from this investigation. However, the SVOC contamination is likely associated with the previous structures located at site 4&5. Soil staining and odors similar to the soils sampled from BN-16 and BN-17 were exhibited in soil borings BN-13, BN-14 and BN-15 at similar depths. Thse odors were faint in nature, and did not exhibit characteristics similar to "gasoline" or #2 fuel oil. Therefore, the assumed extent of SVOC contamination is shown on Figure 3.

Total (Halogenated) VOCs

The subsurface investigation identified Halogenated VOC contamination in BN-13 and BN-1 within Site 4 & 5 and within the right of way of site 2. However, none of the halogenated VOC results exceeded the NYSDEC Unrestricted Use Soil Cleanup Objectives.

5.2 Groundwater Investigation

<u>VOCs</u>

The groundwater sampled from MW-1 did not contain any VOCs per laboratory results.

<u>SVOCs</u>

The groundwater sampled from MW-1 did not contain any SVOCs per laboratory results.

6.0 Recommendations:

Based on the findings of this DSI the following is recommended:

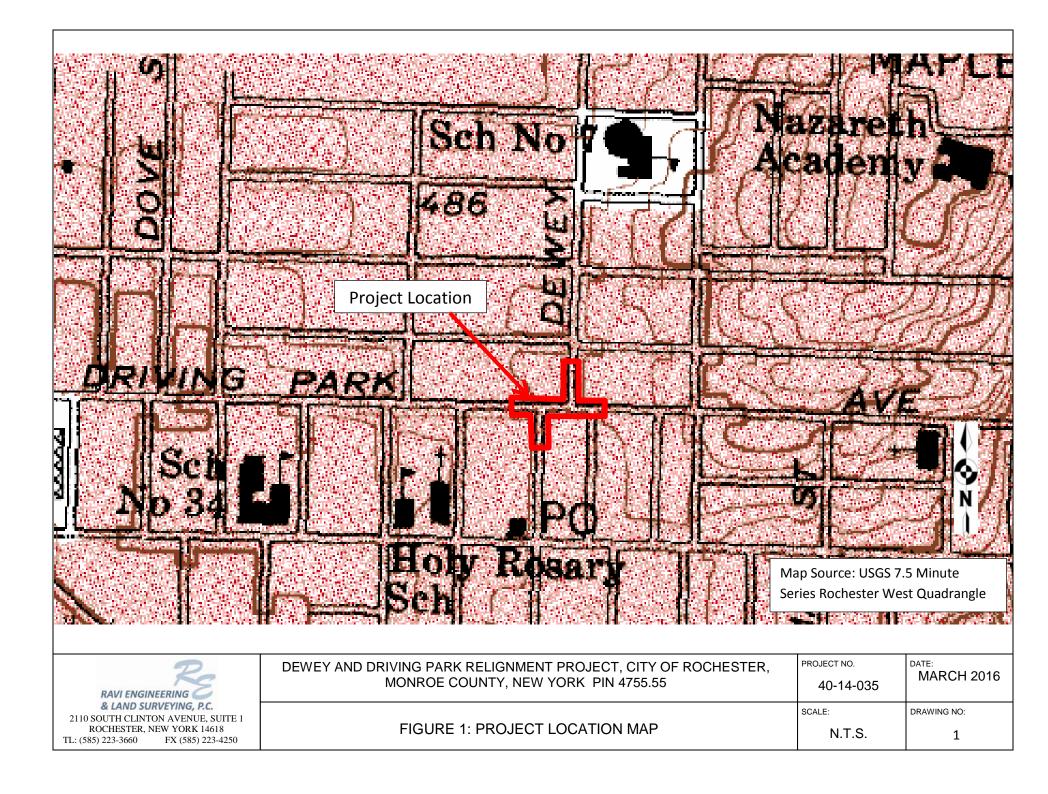
- 1. The results of this DSI should be given to the NYSDEC for their review and consideration.
- 2. A specification should be added to the construction documents for the removal and disposal of underground storage tanks (USTs) at Site 8 &12 (320 Driving Park Avenue and 854 Dewey Avenue). Payment for the UST removal should be a line item per tank fee based on an assumed size, to be utilized only if UST(s) are encountered.
- 3. A specification should be added to the construction documents for screening, segregating, sampling, and disposal of petroleum contaminated soil. A special note should be added to the plans identifying the area where the petroleum contamination may be encountered (see Figure 3). A soil management plan should be developed that includes onsite monitoring during construction in accordance with NYSDOT Standard Specification Section 205, Contaminated Soil.
- 4. If the store at Site 4 & 5 will be removed, the soil beneath the structure should be either assumed to be petroleum contaminated and handled in accordance with recommendation 3, or sampled to determine if contamination is present.

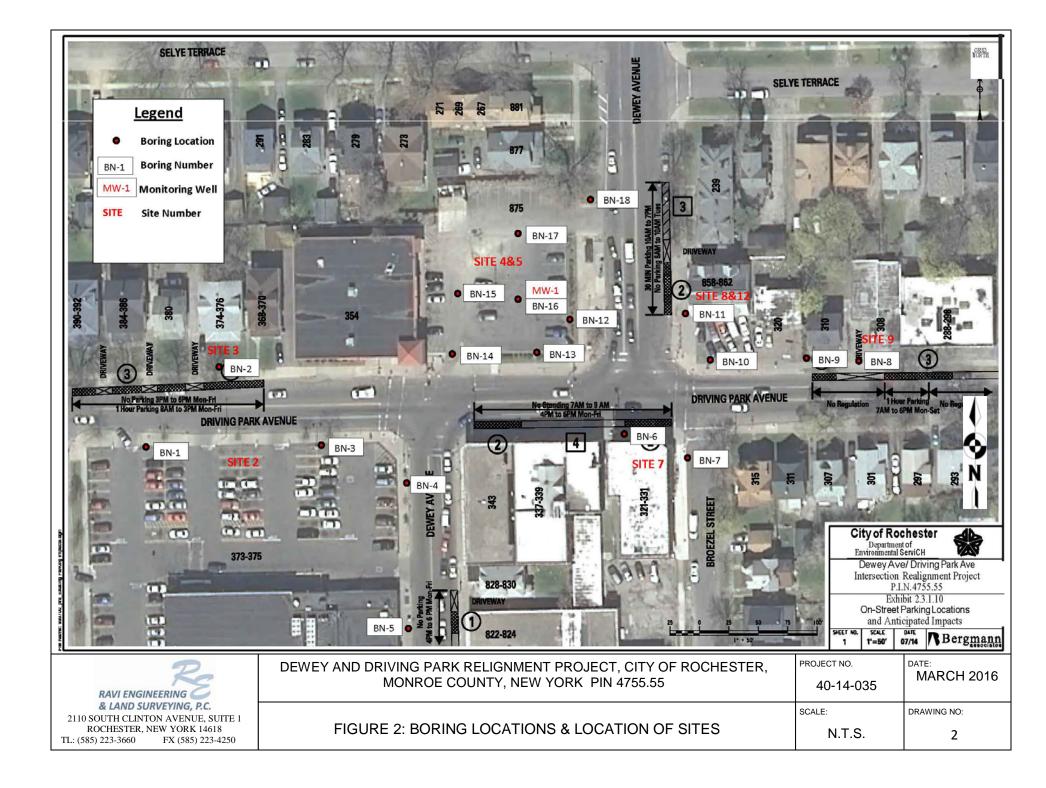
Attachments

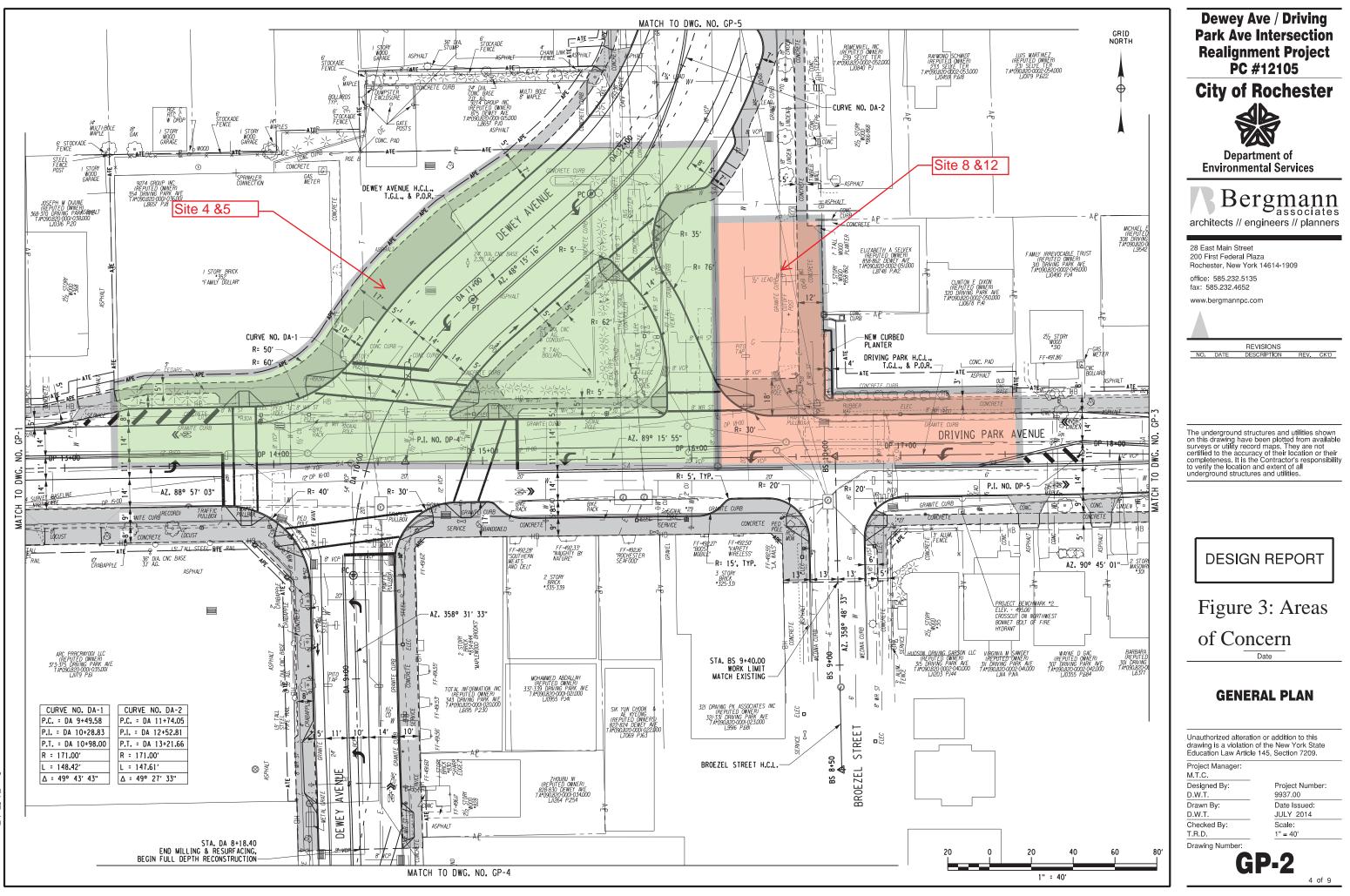
Attachment A

Figures

- Figure 1: Figure 2:
- Project Location Map Boring Locations & Location of Sites
- Figure 3: Areas of Concern







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Attachment B

Boring Logs

	/I ENGINI AND SUR					PROJECT Dewey and Driving Pa		ment	BORING SHEET 1 OF JOB #: 40-14			
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1						Dark Sandy Fill Ma	aterial				_1'	0.
2					50%	Dark Stained Clay	Sample #	BN-1-	5		_2'	0.
3					_	Light Brown Silty C	lay mottle	d with (Gray		_3'	0.
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	_)	bgs =	below grou parts per r	ind surface	,			,		BORING #		

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/ERBURDE DCK DRILLI D E E F BLOW	EN SAMP			Geoprobe Trac Macrocore 4'	Mounted	DATE	TIME	WATER	CASING	REMARKS	
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BLOW		HOD:		N/A							
	/ NO.		E DATA	RECOVERY	-	SA	MPLE	DESCRIP	TION		PID (ppm
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RA	VI ENGINI	ERING	S			Dewey and Driving Pa	ark Realigr	ment	SHEET 3 OF JOB #: 40-14			
8	LAND SUR	VEYING	S, P.C.			PIN - 4755.55			CHKD. BY:	+-033		
	TRACTOR	Ravi E	ingineering	& Land Surve	eying P.C.	BORING LOCATION	SEE PLAI	N				
DRIL	LER: PERSON	Trec E	Environmen	ital Inc		GROUND SURFACE START DATE: Febru			00 ft DATU END DATE:	JM: N/A February 8 3	2016	
TILL LC	LICOL		David De	roung			ary 0, 201	0		EVEL DATA		
	OF DRIL		05		Geoprobe Trac	c Mounted	DATE	TIME	WATER	CASING	REMARKS	
	NG SIZE A RBURDEN		ING MET	HOD:	Macrocore 4' N/A							
ROCI	K DRILLIN				N/A							
D												
E P			SAMPL	E DATA			SA		DESCRIP	TION		PID
Т	BLOW	NO.	DEPTH	N-VALUE	RECOVERY	-	0,		DECON			(ppm)
Н	/6"		(FT.)	/RQD(%)	(%)							
1					-	Asphalt/Concrete					1'	
'					-	Yellowish Light Co	ored Fill				-'	
2					70%	_					2'	0.0
					1078	Dark Brown Sandy	Fill					0.0
3					-	Light Clolored Clay					_3'	
4		1	0-4		-	Rock	еугш				_3.5' 4'	
			.			Boring terminated	4' BGS				<u>-</u> '	
5												
						_						
6						-						
7						-						
						1						
8												
0						_						
9						-						
10						-						
11						_						
12						-						
12						-						
13						1						
14					-	4						
15						-						
						-						
16												
					-	4						
17						-						
18						-						
]						
19						4						
20						4						
20						1						
21]						
						4						
22						_						
23						-						
20						-						
24]						
						4						
25						-						
26						1						
		LEGEN		1	1	1						1
			SPOON SO	IL SAMPLE DIL SAMPLE								
			CORE SAM									
	GENERAL	NOTES	:			+						
						dary between soil type: bil in disposable sleeve				om boring		
	2)	bgs =	below grou	ind surface	.,				-			
		ppm =	parts per i	million						BORING #	BN-3	

		2	2			PROJECT			BORING	BN-4		
RA	VI ENGINI	FRING	S			Dewey and Driving Pa	ark Realigr	nment	SHEET 4 OF JOB #: 40-14			
81	AND SUR	VEYING	5, P.C.			PIN - 4755.55			CHKD. BY:	+-033		
	FRACTOR	Ravi E	ingineering	& Land Surve	eying P.C.	BORING LOCATION	SEE PLA	N				
DRILL			invironmen			GROUND SURFACE START DATE: Febru				JM: N/A	2016	
RELO	PERSON	NEL.	David Det	roung		START DATE. FEDI	Jary 5, 201	0	END DATE: WATER LI	EVEL DATA	2018	
	OF DRIL				Geoprobe Trac	Mounted	DATE	TIME	WATER	CASING	REMARKS	
	NG SIZE A				Macrocore 4'							
	KBURDEN K DRILLIN		LING MET	HOD:	N/A N/A							
D	UNILLIN		HOD.		14/7							
Е			SAMPL	E DATA								
P	DI 011		DEDTU		05001/501/		SA	MPLE	DESCRIP	TION		PID
T H	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)							(ppm)
	70		(1.1.)	//\QD(76)	(78)	Concrete and Subl	oase					
1					-							
											1.5'	
2					70%	Dark Brown Sandy	Clay					0.0
											_2.5'	
3					-	Light Brown Clay N	lottled wi	th Gray				
4		1	0-4		-						4'	
-		•	0 4			Boring Terminated	at 4' BGS	5				
5												
6												
						_						
7						_						
8												
Ŭ						-						
9												
10												
					-	_						
11						_						
12						_						
13												
14					-	_						
15						-						
10						-						
16						-						
17												
						4						
18						4						
19						1						
]						
20												
						4						
21						4						
22						-						
22						_						
23												
]						
24						1						
						4						
25						-						
26						-						
20		LEGEN	I <u>ID</u>	1	1	1						1
		SPLIT S	SPOON SO									
				DIL SAMPLE								
-	C- GENERAL		CORE SAM	PLE		l						
				s represent a	pproximate boun	dary between soil type:	s; transitior	ns may b	e gradual.			
		PID re	adings wer	e taken direct		oil in disposable sleeve				om boring.		
			below grou parts per i	ind surface						BORING #	BN-4	
L		hhii) =	parts per l							BORING #	DIN-4	

	IN ENGINEERING LAND SURVEYING, P.C. TRACTOR Ravi Engineering & Land Surveying P.C.					PROJECT Dewey and Driving P		ment	BORING SHEET 5 OF JOB #: 40-14			
CON ⁻ DRILI	TRACTOR LER:	Ravi E Trec E		ntal Inc	eying P.C.	PIN - 4755.55 BORING LOCATION GROUND SURFACE START DATE: Febr	ELEVATIO	Aprx: 5	END DATE:		2016	
CASI	E OF DRILI NG SIZE A	ND TY		.HOD.	Geoprobe Trac Macrocore 4' N/A	Mounted	DATE	TIME	WATER LI WATER	EVEL DATA CASING	REMARKS	
	K DRILLIN				N/A	1						
E P T	BLOW	NO.		E DATA	RECOVERY	-	SA	MPLE	DESCRIP	TION		PI (pp
Н	/6"		(FT.)	/RQD(%)	(%)	Concrete and Sub	base					
1					-						_1'	
2					00%	Gray/Brown Fill ma	aterial and	crushe	er run		2'	
					60%	Light Brown Clay	Nottled wit	h Gray			-	0.
3					_							
4		1	0-4		-						_4'	
5						Boring Terminated	I 4' BGS					
Ŭ						-						
6						-						
7						1						
8						-						
0						-						
9						-						
10						-						
11						-						
12												
13						-						
14						-						
15						-						
16						-						
17						_						
18												
19						-						
20						4						
21						-						
22						-						
			<u> </u>			1						
23						4						
24					1							
25						4						
26		LEGEN	ND									
	U-	SPLIT UNDIS	SPOON SO	OIL SAMPLE								
	GENERAL	NOTES	:		oprovimete	dony botwoon	o: trons ¹⁴¹	o mo:: '	o gradual			
	2)	PID re bgs =	adings wer below grou	re taken direct und surface		dary between soil type bil in disposable sleeve			ving retrieval fr			
		ppm =	parts per i	million						BORING #	BN-5	

		7	2			PROJECT Dewey and Driving P		ment	BORING SHEET 6 OF	BN-6		
							antitoungi	interne	JOB #: 40-14			
	LAND SUR			& Land Surve	ying P.C.	PIN - 4755.55 BORING LOCATION	SEE PLA	N	CHKD. BY:			
DRILI	LER:	Trec E	nvironmen	ital Inc	, , ,	GROUND SURFACE	ELEVATI	Aprx: 5		JM: N/A	2010	
RELS	PERSON	NEL:	David De	roung		START DATE: Febr	uary 5, 201	0	END DATE: WATER LE	EVEL DATA		
	OF DRILI		יסר.		Geoprobe Trac Macrocore 4'	Mounted	DATE	TIME	WATER	CASING	REMARKS	
OVEF	RBURDEN	SAMP	LING MET	HOD:	N/A							
ROCI D	K DRILLIN	G MET	HOD:		N/A	I						
E			SAMPL	E DATA								
P T	BLOW	NO.	DEPTH	N-VALUE	RECOVERY		SA	MPLE	DESCRIP	TION		PID (ppm)
н	/6"	NO.	(FT.)	/RQD(%)	(%)							(ppm)
1					_	Concrete					1'	
						Sandy Fill/Asphalt					-	
2					50%	Dark Brown Fill					_2' 1.5'	0.0
3						Red Sandy Fill					3'	
		1	0.4			Light Brown Clay N	Nottled wi	th Gray			4	
4		1	0-4			Boring Termintated	4' BGS				_4'	
5						· · · · g · - · · · · · · · · ·						
0						-						
6												
7						-						
8						-						
Ŭ												
9												
10						-						
11						-						
12												
13												
14												
15						-						
16						-						
17												
18												
19						1						
						1						
20						4						
21						1						
~~						4						
22						1						
23						-						
24						4						
						1						
25						-						
26												
	U-	UNDIS	SPOON SO TURBED SO	OIL SAMPLE								
<u> </u>	C- GENERAL		CORE SAM	PLE		1						
1	1)	Stratifi	cation Line			dary between soil type iil in disposable sleeve				om boring		
	2)	bgs =	below grou	ind surface	iy on exposed SC	in a aposable sieeve	, mmeuidu	Siy IOllOW	-			
		ppm =	parts per i	million						BORING #	BN-6	

	AVI ENGINEERING LAND SURVEYING, P.C. ITRACTOR Ravi Engineering & Land Surveying P.C.					PROJECT Dewey and Driving P		ment	BORING SHEET 7 OF JOB #: 40-14			
CON DRIL	TRACTOR	Ravi E Trec E	ngineering nvironmen	tal Inc	eying P.C.	PIN - 4755.55 BORING LOCATION GROUND SURFACE START DATE: Febr	ELEVATIO	Aprx: 5	END DATE:		2016	_
CASI OVEI	E OF DRILI ING SIZE A RBURDEN	ND TY SAMP	LING MET	HOD:	Geoprobe Trac Macrocore 4' N/A	Mounted	DATE	TIME	WATER LE WATER	EVEL DATA CASING	REMARKS	
D E	K DRILLIN	GMEI		E DATA	N/A		<u> </u>					
P T H	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)		SA	MPLE	DESCRIP	TION		PID (ppm)
1					-	Asphalt Brick					-	
2					80%	Subbase/Concrete					-	0.0
3		1	0-4		-	Light Brown Clay N	Nottled wit	h Gray				
5		-	04			Boring Terminated	4' BGS				-	
6						-						
7						-						
8						-						
9 10						-						
11												
12						-						
13						-						
14						-						
16						-						
17						-						
18						-						
19 20						-						
20						-						
22						-						
23						-						
24						-						
25 26		-				-						
	S- U-	UNDIS	SPOON SO TURBED SO	DIL SAMPLE								•
	GENERAL 1)	NOTES Stratif	ication Line	s represent a		dary between soil type bil in disposable sleeve				om boring.		
		bgs =		ind surface		•			-	BORING #	BN-7	

81	VI ENGINE	VEYIN	G, P.C.			PROJECT Dewey and Driving P PIN - 4755.55	ark Realign		BORING SHEET 8 OF JOB #: 40-14 CHKD. BY:			
DRILI	LER:	Trec E	Engineering Environmen David De	l & Land Surve htal Inc Young	eying P.C.	BORING LOCATION GROUND SURFACE START DATE: Febr	ELEVATIO	Aprx: 5	00 ft DATU END DATE:		2016	
CASI	OF DRILI NG SIZE A	ND T			Geoprobe Trac Macrocore 4'	Mounted	DATE	TIME	WATER LE WATER	EVEL DATA CASING	REMARKS	
	RBURDEN K DRILLIN		'LING MET 'HOD:	HOD:	N/A N/A	1						
E P				E DATA		4	SA	MPLE	DESCRIP	ΓΙΟΝ		PID
T H	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)							(ppm)
1					-	Asphalt/Concrete						
2					- 50%	Dark Brown Moist	Sandy Cla	ay			_1.5'	0.0
3					50%							0.0
		1	0-4		-						4	
4		1	0-4			Boring Terminated	4' BGS				_4'	
5						-						
6												
7						-						
8												
9						-						
						-						
10						_						
11						-						
12						-						
13						-						
14												
15												
						-						
16						-						
17						_						
18						-						
19						-						
20						-						
21												
						-						
22						-						
23						-						
24			ļ			-						
25						-						
26						-						
-	S- U-	UNDIS	SPOON SO TURBED SO	OIL SAMPLE								
	GENERAL 1) 2)	NOTES Stratif PID re	ication Line adings wer	es represent a re taken direct		dary between soil type il in disposable sleeve				om boring.		
			below grou parts per i	und surface million						BORING #	BN-8	

I & ON	VI ENGINE LAND SUR TRACTOR	Ravi E	5, P.C. Engineering	& Land Surve	eying P.C.	PROJECT Dewey and Driving P PIN - 4755.55 BORING LOCATION	ark Realigr	N	BORING SHEET 9 OF JOB #: 40-14 CHKD. BY:	4-035		
	LER: SPERSON	NEL:	nvironmer David De	Young		GROUND SURFACE START DATE: Febr			END DATE:	JM: N/A February 8, 2 EVEL DATA	2016	
					Geoprobe Trac	Mounted	DATE	TIME	WATER	CASING	REMARKS	
	NG SIZE A RBURDEN		'PE: LING MET	HOD:	Macrocore 4' N/A							
	K DRILLIN	G MET	HOD:		N/A	1						-
E P				E DATA		_	SA	MPLE	DESCRIP	TION		PID
Т Н	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)							(ppm
						Dark Brown Organ	ic Loam					
1					-						1.5'	
2					500/	Reddish Brown Sil	ty Sand				1.0	
					- 50%							0.0
3					_	Linkt Drawn Cilture	I				_3'	
4		1	0-4		-	Light Brown Silty s	anu				4'	
			0.								_ '	
5												
6						-						
6						1						
7						1						
8												
9						-						
0						-						
11												
2						-						
3												
Ŭ												
4												
5						-						
5												
6												
-												
7						-						
18												
						-						
19												
20						-						
21						-						
22						-						
23						4						
24					1	1						
Ì						1						
25						4						
26						4						
20	S- U-	UNDIS	SPOON SO TURBED SO	OIL SAMPLE	1							
	C- GENERAL		CORE SAM	IPLE		<u> </u>						
	1) 2)	Stratifi PID re	cation Line adings we			dary between soil type il in disposable sleeve				om boring.		
										BORING #		

						PROJECT Dewey and Driving P		ment	BORING SHEET 10 C JOB #: 40-14			
CON [®] DRIL	LER:	Ravi E Trec E		l & Land Surve ntal Inc Young	eying P.C.	PIN - 4755.55 BORING LOCATION GROUND SURFACE START DATE: Febr	ELEVATIO	Aprx: 5	END DATE:		2016	
CASI OVEF		ND TY SAMP	LING MET	HOD:	Geoprobe Trac Macrocore 4' N/A	Mounted	DATE	TIME	WATER LI WATER	EVEL DATA CASING	REMARKS	
ROCI D E	K DRILLIN	G MET		E DATA	N/A							
P T H	BLOW /6"	NO.			RECOVERY (%)		SA	MPLE	DESCRIP	TION		PID (ppm)
1	70		(11.)			Dark Brown Orgar	nic Loam					
2					50%	Reddish Silty Sand	ł				_1.5'	0.0
3 4		1	0-4		-						_4'	
5						Boring terminated	4' BGS					
6						-						
7						-						
8						-						
9						-						
10												
11												
12												
13						-						
14												
15												
16						-						
17												
18						-						
19												
20												
21						1						
22 23					1	1						
23 24						4						
24 25												
25					<u> </u>							
_0	U-	UNDIS	SPOON SO	OIL SAMPLE	1							I
	GENERAL 1) 2)	NOTES Stratif PID re	: ication Line adings wei	es represent a re taken direct		dary between soil type bil in disposable sleeve				om boring.		
			below grou parts per i	and surface million						BORING #	BN-10	

		2	2			PROJECT			BORING	BN-11		
RA	VI ENGINE	FRING	S			Dewey and Driving Pa	ark Realigr	ment	SHEET 11 C JOB #: 40-14			
	AND SUR					PIN - 4755.55			CHKD. BY:	+-033		
	FRACTOR	Ravi E	ingineering	& Land Surve	eying P.C.	BORING LOCATION						
DRILL						GROUND SURFACE START DATE: Febru				JM: N/A	2016	
RELS	PERSON	NEL:	David De	roung		START DATE: Febru	ary 5, 201	6	END DATE:	EVEL DATA	2016	
TYPE	OF DRILL	RIG:			Geoprobe Trac	c Mounted	DATE	TIME	WATER	CASING	REMARKS	
	NG SIZE A				Macrocore 4'							
	KBURDEN K DRILLIN		LING MET	HOD:	N/A N/A							
D	(DIVILLIN		HOD.		14/7							
Е			SAMPL	E DATA								
P	B I O 14		0.50711		05001/501/	_	SA	MPLE	DESCRIP	TION		PID
T H	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)							(ppm)
	70		(1.1.)	//(QD(70)	(78)	Concrete and Subl	base					
1												
											1.5'	
2					50%	Dark Brown Silty S	and					0.0
3					-	Light Reddish Brow	un Silty S	and			_3'	
4		1	0-4		-	Light Reduish Brow	VIT SIILY S	anu			4'	
			<u> </u>			Boring Terminated	4' BGS					
5												
6												
						_						
7						_						
8												
Ŭ						-						
9												
10												
						_						
11						_						
12						_						
13												
14						_						
15						-						
10						-						
16						-						
17						4						
						4						
18						-						
19					1	1						
					1]						
20												
						1						
21						4						
22						-						
22						_						
23						1						
24						4						
						4						
25						4						
26						-						
20		LEGEN	I <u>D</u>	1	1	+						1
	S-	SPLIT S	SPOON SO									
				DIL SAMPLE								
	C- GENERAL		CORE SAM	IPLE		ļ						
1	1)	Stratifi	cation Line			dary between soil types						
	2)	PID re	adings wei	re taken direct		bil in disposable sleeve				om boring.		
			below grou parts per i	Ind surface						BORING #	BN-11	
L		Phill =	paris per l							DOMING #	DIN-11	

		7	2						BORING BN-12 SHEET 12 OF 18					
	LAND SUR					JOB				OB #: 40-14-035				
CON	TRACTOR	Ravi E	ingineering	& Land Surve	eying P.C.	PIN - 4755.55 CHKD. BY: BORING LOCATION: SEE PLAN								
DRIL RELS			nvironmen David De			GROUND SURFACE ELEVATICAprx: 500 ft DATUM: N/A START DATE: February 5, 2016 END DATE: February 8, 2016								
	E OF DRILI				Geoprobe Trac		DATE		WATER L	EVEL DATA CASING	REMARKS			
CASI	NG SIZE A	AND TY			Macrocore 4'	Mounted	DATE		WATER	CAUNC				
	RBURDEN K DRILLIN		LING MET HOD:	HOD:	N/A N/A									
D E			SAMPI	E DATA										
Р	DI OLI					-	SA	MPLE	DESCRIP	TION		PID		
Т Н	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)							(ppm)		
1					_	Organic Loamy Gra	avel							
					-		1.5'							
2					50%	Reddish Sandy Cla	ay Fill				2.5'	0.0		
3						Dark Brown Clay w	/ith Oxidiz	zed Cap	sules		_2.5			
4		1	0-4		_						4'			
-			•••		_	Reddish Sticky Cla	ıy				_ ·			
5					-						5.5'			
6					100%	Light Brown Clay N	Nottled W	ith Gray	/			0.0		
7														
		_	1.0											
8		2	4-8											
9														
10					100%							0.0		
					- 100%							0.0		
11					-									
12		3	8-11.9			Refusal at 11.9' BC	20				_11.9			
13						Relusar at 11.9 BC	50							
14														
14						-								
15						-								
16						-								
17														
18						-								
19														
20						1								
21						4								
21														
22						-								
23						-								
24						-								
25														
26						ļ								
	U-	UNDIS	SPOON SO TURBED SO	DIL SAMPLE										
	GENERAL	NOTES				ļ								
		PID re	adings wer	e taken direct		dary between soil types il in disposable sleeve				om boring.				
		bgs =		ind surface					-	BORING #	BN-12			
L		PP/11 -	Purio por l							201110 #	U.1 12			

Re									BORING BN-13 SHEET 13 OF 18				
	VI ENGINE					JOB #: 40-14-035 PIN - 4755.55 CHKD. BY:							
				& Land Surve	eying P.C.	PIN - 4755.55 CHKD. BY: BORING LOCATION: SEE PLAN							
DRIL			nvironmen David DeY			GROUND SURFACE ELEVATI(Aprx: 500 ft DATUM: N/A START DATE: February 5, 2016 END DATE: February 8, 2016							
RELO	PERSON	INEL.	David Det	oung		START DATE. FEDI	Jary 5, 201	0		EVEL DATA	2016		
	OF DRIL				Geoprobe Trac	Mounted	DATE	TIME	WATER	CASING	REMARKS		
	NG SIZE A		'PE: LING MET	HOD	Macrocore 4' N/A								
	K DRILLIN			NOD.	N/A								
D													
E P			SAMPL	E DATA			SA		DESCRIP	TION			PID
Т Н	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)	-	0,		DECON			(ppm)	
	70		(11.)	//(QD(78)	(78)	Organic Loam					0.5'		
1						Fill Material - Mixed	d Sand				_		
2					_	Light Brown Clay N	Acttled with	th Crow			_1.5'		
2					60%	LIGHT BIOWH Clay IN	nottieu wi	ui Giay			2.5'		0.0
3						Gray Stained Clay	- Slight P	etroleur	m Odor		_		
		4	0.4		_	Chunk of Brick					4		
4		1	0-4			Gray Stained Clay	- No Odo	r			_4' _4.5'	F	
5						Light Brown Clay N	Aottled wi	th Gray			5'		
						Gray Stained Clay					5.5'		
6					-	Light Brown Clay N	Nottled wi	th Gray			6 E'		0.0
7					-	Dark Brown Moist	Sand				_6.5'		
											7.5'		
8		2	4-8			Light Brown Hard F	Packed C	lay				Ļ	
9					-								0.0
Ŭ					-						9.5		
10					_	Stained Light Gray		cked Cla	ау				1.0
11		3	8-10.8			Sample # BN-13-1 Refusal at 10.8' BC					10.8	-	-
11						Refusar at 10.0 BC	30						
12													
13													
14													
15						-							
16													
17						-							
18						-							
]							
19						4							
20						1							
]							
21						4							
22						4							
~~						1							
23]							
						4							
24						1							
25]							
~						4							
26		LEGEN		l		+							
1		SPLIT	SPOON SOI										
1			TURBED SO CORE SAM	DIL SAMPLE PLE									
	GENERAL	NOTES	:			•							
	1) 2)	Stratifi PID re	cation Line	s represent a	pproximate bound	dary between soil type: bil in disposable sleeve	s; transitior	ns may b elv follow	e gradual. /ing retrieval fr	om boring			
	2)	bgs =	below grou	nd surface	, 5 5		,		-				
		ppm =	parts per r	million						BORING #	BN-13		

P									BORING BN-14					
RA	VI ENGINI	FRING	S			Dewey and Driving Park Realignment			SHEET 14 OF 18 JOB #: 40-14-035					
8	LAND SUR	VEYING	S, P.C.			PIN - 4755.55		CHKD. BY:						
				& Land Surve	eying P.C.	BORING LOCATION SEE PLAN								
DRIL			nvironmen David De			GROUND SURFACE ELEVATIC Aprx: 500 ft DATUM: N/A START DATE: February 5, 2016 END DATE: February 8, 2016								
RELO	PERSON	NEL.	David De	roung		START DATE. FEDIL	ary 5, 201	0		EVEL DATA	2018			
TYPE	OF DRIL	L RIG:			Geoprobe Trac	Mounted	DATE	TIME	WATER	CASING	REMARKS			
	NG SIZE A				Macrocore 4'									
	RBURDEN K DRILLIN		LING MET	HOD:	N/A N/A									
D			HOD.		11/7									
Е			SAMPL	E DATA										
Р							SA	MPLE	DESCRIP	TION		PID		
Т	BLOW	NO.	DEPTH		RECOVERY									
Н	/6"		(FT.)	/RQD(%)	(%)	Asphalt/Concrete F	30							
1														
2					50%						2'	0.0		
					30%	Light Brown Clay M	lottled wit	h Clay			_			
3					_						_3'			
			0.4		-	Stained Clay - Slig					3.5'			
4		1	0-4			Light Brown Clay M Blown In Asphault	lottled wi	h Gray			_4'			
5					-	biown in Asphault					5'			
5					-	Light Brown Clay M	lottled wit	h Grav						
6					4000/	Light Brown oldy it	lottiou mi	in Oldy						
				İ	100%							0.0		
7														
8		2	4-8								_8'			
					-	Wet Sand mixed with Water								
9					100%	9'								
10		3	8-9.7		-	Light Brown Clay Mottled with Gray 9.7'								
10		5	0 5.7			Refusal at 9.7' BGS	3							
11							-							
12														
13														
					-									
14						_								
15														
13						-								
16														
17						1								
						1								
18						4								
40						4								
19						4								
20						4								
20						1								
21			1	1	1	1								
]								
22						1								
						_								
23						_								
~						-								
24						4								
25						-								
20						1								
26			1			1								
		LEGEN			•									
			SPOON SO											
1			TURBED SO											
-	GENERAL					ļ								
	1)	Stratifi	cation Line			dary between soil types								
1	2)				ly on exposed so	oil in disposable sleeve,	immediate	ely follow	ing retrieval fr	om boring.				
			parts per i	Ind surface						BORING #	BN-14			
L		rr	Parto por I							201110 #	F1 11			

		7	N.			Dewey and Driving Park Realignment			BORING BN-15 SHEET 15 OF 18 JOB #: 40-14-035				
8	LAND SUR	VEYING	S, P.C.			JOB #: 40-14-035 PIN - 4755.55 CHKD. BY:							
DRIL	LER:	Trec E	nvironmen		eying P.C.	BORING LOCATION: SEE PLAN GROUND SURFACE ELEVATIC Aprx: 500 ft DATUM: N/A							
RELS	S PERSON	INEL:	David De	loung		START DATE: Febru	ary 5, 201	6	END DATE:	February 8, 2 EVEL DATA	2016		
	OF DRIL				Geoprobe Trac	Mounted	DATE	TIME	WATER	CASING	REMARKS		
	NG SIZE A		'PE: LING MET		Macrocore 4' N/A								
	K DRILLIN			HUD.	N/A N/A								
D											•		
E			SAMPL	E DATA			6					DID	
P T	BLOW	NO.	DEPTH	N-VALUE	RECOVERY	-	54	IVIPLE	DESCRIP	HON		PID (ppm)	
Н	/6"	_	(FT.)	/RQD(%)	(%)							,	
					_	Asphalt/Concrete/E	Brick				4		
1					-	Light Brown Silty C	'lav				_1'		
2					000/	Light Brown Only C	nay				2'		
					80%	Dark Stained Clay	- Light Oo	dor			-	0.0	
3					_	Linkt Drawn Cilty C					_3'		
4		1	0-4		-	Light Brown Silty C	lay				4'		
			<u> </u>			Gray Stained clay					_ '		
5											_5'		
						Light Brown Clay N	lottled wi	th Gray					
6					100%							0.0	
7													
8		2	4-8			_							
9											9'		
Ũ					100%	Wet Sandy Clay					-	0.0	
10		3	8-10								_10'		
						Refusal at 10' BGS	5						
11						-							
12													
13													
14						-							
						_							
15						_							
16						-							
17						_							
18	<u> </u>					1							
		L				4							
19						4							
20					1	1							
]							
21						4							
22						4							
						-							
23													
24	<u> </u>					4							
24	<u> </u>					1							
25]							
~						4							
26		LEGEN	ID		1	+						1	
1		SPLIT	SPOON SO										
1			TURBED SO CORE SAM	DIL SAMPLE									
	GENERAL	NOTES	:			. .							
						dary between soil types bil in disposable sleeve				om borina			
1	2)	bgs =	below grou	ind surface	., 5 5				-				
		ppm =	parts per r	million						BORING #	BN-15		

		Re			PROJECT Dewey and Driving Park Re	BORING BN-16 SHEET 16 OF 18					
	VI ENGINI					PIN - 4755.55		JOB #: 40-1 CHKD. BY:	4-035		
CON	TRACTOR	Ravi E	ingineering	& Land Surve	ying P.C.	BORING LOCATION: SEE I					
DRIL RELS			nvironmen David DeY			GROUND SURFACE ELEV START DATE: February 5,		END DATE:			
TYPE	OF DRIL	RIG			Geoprobe Trac	Mounted DA			EVEL DATA CASING		
CASI	NG SIZE A	ND TY			Macrocore 4'			WATER	CASING		
	RBURDEN K DRILLIN		LING MET HOD:	HOD:	N/A N/A						
D		-				ł		•	4	4	
E P			SAMPL	E DATA			SAMPLE	E DESCRIP	TION		PID
т Н	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)						(ppm)
	70		(1.1.)	//(QD(70)	(70)	Asphalt/Concrete					
1						Brick				1' 1.5'	0.0
2					40%	Very Black Stained Mate	rial/Wood	Slight Odor		1.5	
					40%	Sample # BN-16-3		-		_2.5'	0.5
3						Light Brown Stained Cla	У			3.5'	0.0
4		1	0-4			Brick/Wood				4'	
					_	Black Stained Material	Slight Odd	or		5'	0.2
5					-	Light Brown Hard Clay N	lottled with	n Grav		_5	
6					100%	g		,			
7					10070						0.0
					-						
8		2	4-8							_8'	
9						Water/Sandy Gravel				9'	
0					100%	Light Brown Clay Mottled	d with Gray	/			0.0
10					10070						0.0
11		3	8-11		-					11'	
						Refusal at 11' BGS				_	
12											
13											
14						1" (Groundw	ater Sam	nlina We	ell and Curb Box Installe	l d
15									p		Ĩ
10											
16											
17											
18											
19											
20					+						
21											
22											
23											
23											
24											
25											
2.5											
26		LEGEN									
	U-	SPLIT : UNDIS	SPOON SOI TURBED SC	DIL SAMPLE							
	C- GENERAL		CORE SAM	PLE							
						ary between soil types; trans in disposable sleeve, imme			rom boring		
	2)	bgs =	below grou	nd surface	y on exposed S0	in alapusable siceve, initite	Giatery 10110	mig ieuieval l			
		ppm =	parts per r	million					BORING #	BN-16	

		7	20			PROJECT Dewey and Driving Pa	ark Realigr	ment	BORING SHEET 17 C	BN-17 DF 18		
	VI ENGINE					PIN - 4755.55	, in the second s		JOB #: 40-14 CHKD. BY:	4-035		
CON	NTRACTOR Ravi Engineering & Land Surveying P.C. LLER: Trec Environmental Inc .S PERSONNEL: David DeYoung				ying P.C.	BORING LOCATION						
						GROUND SURFACE START DATE: Febru			END DATE:	UM: N/A February 8, 2	2016	
	OF DRILL	PIC:			Geoprobe Trac	Mounted	DATE	TIME		EVEL DATA CASING		
CASI	NG SIZE A	ND TY			Macrocore 4'	Mounted	DATE		WATER	CASING	REMARKS	
	RBURDEN K DRILLIN		LING MET HOD:	HOD:	N/A N/A							
D		0							1			
E P			SAMPL	E DATA			SAMPLE DESCRIPTION					PID
Т Н	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)		0.		22001			(ppm)
1						Asphalt/Concrete					1'	0.0
2						Clay/Sandy fill					2'	0.0
_					70%	Black Staining - St		oline Oo	dor			
3						Sample # BN-17-4					3.5'	19.0
4		1	0-4			Light Brown Clay M			/		4'	0.0
-						Black Staining - Ga	asoline O	dor			4.5'	10.0
5						Light Brown Clay M	lottled wi	th Gray				
6					100%							
7					10070							0.0
7					-							
8		2	4-8			-						
9					-							
-					100%							0.0
10					10070							0.0
11		3	8-11		_						_11'	
12						Refusal at 11' BGS	;					
12						-						
13						-						
14												
15						-						
15												
16												
17												
18												
10						1						
19						4						
20												
21						-						
21												
22						4						
23												
24						4						
24						1						
25						4						
26						1						
	9-	LEGEN	_	IL SAMPLE			-					
1	U-	UNDIS	TURBED SO	OIL SAMPLE								
-	C- GENERAL		CORE SAM	IPLE		<u> </u>						
						dary between soil types il in disposable sleeve,				om boring		
		bgs =	below grou	ind surface	., on onposed 50		icuidu	219 101101		-		
		ppm =	parts per	million						BORING #	BN-17	

		2	2			PROJECT Dewey and Driving Pa	ark Realior	ment	BORING SHEET 18 C	BN-18)F 18		
	AVI ENGINEERING CARACTERING CARACTERING CARACTERING P.C.					PIN - 4755.55			JOB #: 40-14 CHKD. BY:			
CON	TRACTOR	Ravi E	ngineering	& Land Surve	ying P.C.	BORING LOCATION						
DRIL	LER: S PERSON		nvironmer			GROUND SURFACE START DATE: Febru			00 ft DATU END DATE:	UM: N/A Februarv 8. 2	2016	
					0 I T				WATER L	EVEL DATA		
	E OF DRILI NG SIZE A		'PE:		Geoprobe Trac Macrocore 4'	: Mounted	DATE	TIME	WATER	CASING	REMARKS	
	RBURDEN K DRILLIN			HOD:	N/A N/A							
D	DIGELIN				10/7							
E P			SAMPL	E DATA			SA		DESCRIP	TION		PID
Т Н	BLOW /6"	NO.	DEPTH (FT.)	N-VALUE /RQD(%)	RECOVERY (%)	-	0,		DECON			(ppm)
						Organic Loam					0.5'	
1					_	Dark Brown Loamy	Sand					
2					90%						2'	0.0
3					0070	Reddish Brown Loa	amy Sano	l/Rock				0.0
3					_							
4		1	0-4			-					4.5	
5						Light Brown Clay M	lottled wi	th Gray			4.5	
6					100%							0.0
7												
8					_							
9					-	Gravely Sand/Wate	er				_9'	
10					100%						_10'	0.0
11						Light Brown Clay M	lottled wi	th gray			10.8'	
''						Refusal at 10.8' BG	S				_10.8	
12												
13						-						
14						-						
15												
16						-						
						-						
17						1						
18]						
19						1						
						1						
20						4						
21	-					1						
22						4						
						1						
23						-						
24						1						
25						4						
20	-					1						
26		LEGEN	ID									
	U-	SPLIT : UNDIS	SPOON SO	OIL SAMPLE								
	GENERAL	NOTES	:			.						
		PID re	adings we	re taken direct		dary between soil types bil in disposable sleeve,				om boring.		
1			below grou parts per	ind surface million						BORING #	BN-18	
L		- III 4	ראיז ארייאל								517-10	

Attachment C

Paradigm Analytical Report



Analytical Report For

Ravi Engineering & Land Surveying, P.C.

For Lab Project ID

160536

Referencing

Dewey & Driving Park 40-14-035 Prepared

Friday, February 12, 2016

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

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Client:	<u>Ravi Enginee</u>	ring & Lan	<u>d Surveying, P.C.</u>	-	
Project Reference:	Dewey & Driv	ing Park 40	-14-035		
Sample Identifier:	BN-13-1				
Lab Sample ID:	160536-01			Date Sampled:	2/5/2016
Matrix:	Soil			Date Received:	2/5/2016
Volatile Organics					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 9.07	ug/Kg		2/8/2016 22:19
1,1,2,2-Tetrachloroeth	ane	< 9.07	ug/Kg		2/8/2016 22:19
1,1,2-Trichloroethane		< 9.07	ug/Kg		2/8/2016 22:19
1,1-Dichloroethane		< 9.07	ug/Kg		2/8/2016 22:19
1,1-Dichloroethene		< 9.07	ug/Kg		2/8/2016 22:19
1,2,3-Trichlorobenzen	e	< 22.7	ug/Kg		2/8/2016 22:19
1,2,4-Trichlorobenzen	9	< 22.7	ug/Kg		2/8/2016 22:19
1,2-Dibromo-3-Chloro	propane	< 45.3	ug/Kg		2/8/2016 22:19
1,2-Dibromoethane		< 9.07	ug/Kg		2/8/2016 22:19
1,2-Dichlorobenzene		< 9.07	ug/Kg		2/8/2016 22:19
1,2-Dichloroethane		< 9.07	ug/Kg		2/8/2016 22:19
1,2-Dichloropropane		< 9.07	ug/Kg		2/8/2016 22:19
1,3-Dichlorobenzene		< 9.07	ug/Kg		2/8/2016 22:19
1,4-Dichlorobenzene		< 9.07	ug/Kg		2/8/2016 22:19
1,4-dioxane		< 90.7	ug/Kg		2/8/2016 22:19
2-Butanone		< 45.3	ug/Kg		2/8/2016 22:19
2-Hexanone		< 22.7	ug/Kg		2/8/2016 22:19
4-Methyl-2-pentanone		< 22.7	ug/Kg		2/8/2016 22:19
Acetone		70.1	ug/Kg		2/8/2016 22:19
Benzene		< 9.07	ug/Kg		2/8/2016 22:19
Bromochloromethane		< 22.7	ug/Kg		2/8/2016 22:19
Bromodichloromethan	e	< 9.07	ug/Kg		2/8/2016 22:19
Bromoform		< 22.7	ug/Kg		2/8/2016 22:19
Bromomethane		< 9.07	ug/Kg		2/8/2016 22:19
Carbon disulfide		< 9.07	ug/Kg		2/8/2016 22:19
Carbon Tetrachloride		< 9.07	ug/Kg		2/8/2016 22:19
Chlorobenzene		< 9.07	ug/Kg		2/8/2016 22:19
Chloroethane		< 9.07	ug/Kg		2/8/2016 22:19
Chloroform		< 9.07	ug/Kg		2/8/2016 22:19

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				· · · · · · · · · · · · · · · · · · ·		
Client:	<u>Ravi Engin</u>	leering & Lar	<u>nd Surveying, P.C.</u>			
Project Reference:	Dewey & D	riving Park 40)-14-035			
Sample Identifier:	BN-13-1					
Lab Sample ID:	160536-0	1		Date Sampled:	2/5/2016	
Matrix:	Soil			Date Received:	2/5/2016	
Chloromethane		< 9.07	ug/Kg		2/8/2016	22:19
cis-1,2-Dichloroether	ne	< 9.07	ug/Kg		2/8/2016	22:19
cis-1,3-Dichloroprop	ene	< 9.07	ug/Kg		2/8/2016	22:19
Cyclohexane		< 45.3	ug/Kg		2/8/2016	22:19
Dibromochlorometha	ane	< 9.07	ug/Kg		2/8/2016	22:19
Dichlorodifluorometl	hane	< 9.07	ug/Kg		2/8/2016	22:19
Ethylbenzene		< 9.07	ug/Kg		2/8/2016	22:19
Freon 113		< 9.07	ug/Kg		2/8/2016	22:19
Isopropylbenzene		< 9.07	ug/Kg		2/8/2016	22:19
m,p-Xylene		< 9.07	ug/Kg		2/8/2016	22:19
Methyl acetate		< 9.07	ug/Kg		2/8/2016	22:19
Methyl tert-butyl Eth	er	< 9.07	ug/Kg		2/8/2016	22:19
Methylcyclohexane		< 9.07	ug/Kg		2/8/2016	22:19
Methylene chloride		< 22.7	ug/Kg		2/8/2016	22:19
o-Xylene		< 9.07	ug/Kg		2/8/2016	22:19
Styrene		< 22.7	ug/Kg		2/8/2016	22:19
Tetrachloroethene		12.5	ug/Kg		2/8/2016	22:19
Toluene		< 9.07	ug/Kg		2/8/2016	22:19
trans-1,2-Dichloroeth	hene	< 9.07	ug/Kg		2/8/2016	22:19
trans-1,3-Dichloropr	opene	< 9.07	ug/Kg		2/8/2016	22:19
Trichloroethene		< 9.07	ug/Kg		2/8/2016	22:19
Trichlorofluorometha	ane	< 9.07	ug/Kg		2/8/2016	22:19
Vinyl chloride		< 9.07	ug/Kg		2/8/2016	22:19

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Client:	<u>Ravi En</u>	<u>gineering</u>	& Land Surveying	<u>, P.C.</u>			
Project Reference:	Dewey &	& Driving P	ark 40-14-035				
Sample Identifier:	BN-13-	·1					
Lab Sample ID:	16053	6-01		Dat	e Sampled:	2/5/2016	
Matrix:	Soil			Dat	e Received:	2/5/2016	
Surrogate			Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4	ł		109	83 - 126		2/8/2016	22:19
4-Bromofluorobenzen	e		93.3	80.8 - 115		2/8/2016	22:19
Pentafluorobenzene			90.8	90.6 - 111		2/8/2016	22:19
Toluene-D8			102	89.2 - 109		2/8/2016	22:19
Method Referen Data File:		EPA 8260C EPA 5035A x29497.D					
			g SW846 5035A specific	ations. According	ly, any Volatiles	soil results that	are

less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 4 of 14



Client:	<u>Ravi Engineering & Land Surveying, P.C.</u>		
Project Reference:	Dewey & Driving Park 40-14-035		
Sample Identifier:	BN-2-2		
Lab Sample ID:	160536-02	Date Sampled:	2/5/2016
Matrix:	Soil	Date Received:	2/5/2016

Semi-Volatile Organics (PAHs)

Analyte	<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	zed
Acenaphthene	< 340	ug/Kg			2/11/2016	23:47
Acenaphthylene	< 340	ug/Kg			2/11/2016	23:47
Anthracene	< 340	ug/Kg			2/11/2016	23:47
Benzo (a) anthracene	< 340	ug/Kg			2/11/2016	23:47
Benzo (a) pyrene	< 340	ug/Kg			2/11/2016	23:47
Benzo (b) fluoranthene	< 340	ug/Kg			2/11/2016	23:47
Benzo (g,h,i) perylene	< 340	ug/Kg			2/11/2016	23:47
Benzo (k) fluoranthene	< 340	ug/Kg			2/11/2016	23:47
Chrysene	< 340	ug/Kg			2/11/2016	23:47
Dibenz (a,h) anthracene	< 340	ug/Kg			2/11/2016	23:47
Fluoranthene	< 340	ug/Kg			2/11/2016	23:47
Fluorene	< 340	ug/Kg			2/11/2016	23:47
Indeno (1,2,3-cd) pyrene	< 340	ug/Kg			2/11/2016	23:47
Naphthalene	< 340	ug/Kg			2/11/2016	23:47
Phenanthrene	< 340	ug/Kg			2/11/2016	23:47
Pyrene	< 340	ug/Kg			2/11/2016	23:47
Surrogate	Per	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analyz	ed
2-Fluorobiphenyl		67.3	22 - 96.1		2/11/2016	23:47
Nitrobenzene-d5		64.7	11.6 - 83.3		2/11/2016	23:47
Terphenyl-d14		83.4	60.4 - 114		2/11/2016	23:47
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 2/11/2016 B10145.D					

Volatile Organics (Petroleum)

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,2,4-Trimethylbenzene	< 8.66	ug/Kg		2/8/2016 22:43
1,3,5-Trimethylbenzene	< 8.66	ug/Kg		2/8/2016 22:43
Benzene	< 8.66	ug/Kg		2/8/2016 22:43

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Client:	<u>Ravi Engine</u>	ering & L	and Surveying	<u>g, P.C.</u>			
Project Reference:	Dewey & Driv	ving Park	40-14-035				
Sample Identifier:	BN-2-2						
Lab Sample ID:	160536-02			Dat	te Sampled:	2/5/2016	
Matrix:	Soil			Dat	te Received:	2/5/2016	
Ethylbenzene		< 8.66	ug/Kg			2/8/2016	22:43
Isopropylbenzene		< 8.66	ug/Kg			2/8/2016	22:43
m,p-Xylene		< 8.66	ug/Kg			2/8/2016	22:43
Methyl tert-butyl Ethe	r	< 8.66	ug/Kg			2/8/2016	22:43
Naphthalene		< 21.6	ug/Kg			2/8/2016	22:43
n-Butylbenzene		< 8.66	ug/Kg			2/8/2016	22:43
n-Propylbenzene		< 8.66	ug/Kg			2/8/2016	22:43
o-Xylene		< 8.66	ug/Kg			2/8/2016	22:43
p-Isopropyltoluene		< 8.66	ug/Kg			2/8/2016	22:43
sec-Butylbenzene		< 8.66	ug/Kg			2/8/2016	22:43
tert-Butylbenzene		< 8.66	ug/Kg			2/8/2016	22:43
Toluene		< 8.66	ug/Kg			2/8/2016	22:43
<u>Surrogate</u>		<u>Pe</u>	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Anal	<u>yzed</u>
1,2-Dichloroethane-d4			109	83 - 126		2/8/2016	22:43
4-Bromofluorobenzen	e		87.4	80.8 - 115		2/8/2016	22:43
Pentafluorobenzene			94.3	90.6 - 111		2/8/2016	22:43
Toluene-D8			97.1	89.2 - 109		2/8/2016	22:43
Method Referen Data File:	ce(s): EPA 82 EPA 50 x29498)35A					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 6 of 14



Client:	<u>Ravi Engineering & Land Surveying, P.C.</u>		
Project Reference:	Dewey & Driving Park 40-14-035		
Sample Identifier:	BN-16-3		
Lab Sample ID:	160536-03	Date Sampled:	2/5/2016
Matrix:	Soil	Date Received:	2/5/2016

Semi-Volatile Organics (PAHs)

Analyte	Result	<u>Units</u>		Qualifier	Date Anal	yzed
Acenaphthene	< 341	ug/Kg			2/12/2016	00:15
Acenaphthylene	< 341	ug/Kg			2/12/2016	00:15
Anthracene	695	ug/Kg			2/12/2016	00:15
Benzo (a) anthracene	1770	ug/Kg			2/12/2016	00:15
Benzo (a) pyrene	1440	ug/Kg			2/12/2016	00:15
Benzo (b) fluoranthene	1270	ug/Kg			2/12/2016	00:15
Benzo (g,h,i) perylene	752	ug/Kg			2/12/2016	00:15
Benzo (k) fluoranthene	870	ug/Kg			2/12/2016	00:15
Chrysene	1890	ug/Kg			2/12/2016	00:15
Dibenz (a,h) anthracene	< 341	ug/Kg			2/12/2016	00:15
Fluoranthene	3160	ug/Kg			2/12/2016	00:15
Fluorene	< 341	ug/Kg			2/12/2016	00:15
Indeno (1,2,3-cd) pyrene	1180	ug/Kg			2/12/2016	00:15
Naphthalene	< 341	ug/Kg			2/12/2016	00:15
Phenanthrene	1410	ug/Kg			2/12/2016	00:15
Pyrene	3440	ug/Kg			2/12/2016	00:15
Surrogate	Per	cent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
2-Fluorobiphenyl		65.6	22 - 96.1		2/12/2016	00:15
Nitrobenzene-d5		62.8	11.6 - 83.3		2/12/2016	00:15
Terphenyl-d14		65.6	60.4 - 114		2/12/2016	00:15
Method Reference(s):	EPA 8270D EPA 3550C					
Preparation Date: Data File:	2/11/2016 B10146.D					

Volatile Organics (Petroleum)

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,2,4-Trimethylbenzene	< 7.55	ug/Kg		2/8/2016 23:07
1,3,5-Trimethylbenzene	< 7.55	ug/Kg		2/8/2016 23:07
Benzene	< 7.55	ug/Kg		2/8/2016 23:07

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Client:	<u>Ravi Engine</u>	ering & l	Land Surveying	<u>g, P.C.</u>			
Project Reference:	Dewey & Dri	ving Parl	x 40-14-035				
Sample Identifier:	BN-16-3						
Lab Sample ID:	160536-03			Dat	e Sampled:	2/5/2016	
Matrix:	Soil			Dat	e Received:	2/5/2016	
Ethylbenzene		< 7.55	ug/Kg			2/8/2016	23:07
Isopropylbenzene		< 7.55	ug/Kg			2/8/2016	23:07
m,p-Xylene		< 7.55	ug/Kg			2/8/2016	23:07
Methyl tert-butyl Ether		< 7.55	ug/Kg			2/8/2016	23:07
Naphthalene		< 18.9	ug/Kg			2/8/2016	23:07
n-Butylbenzene		< 7.55	ug/Kg			2/8/2016	23:07
n-Propylbenzene		< 7.55	ug/Kg			2/8/2016	23:07
o-Xylene		< 7.55	ug/Kg			2/8/2016	23:07
p-Isopropyltoluene		< 7.55	ug/Kg			2/8/2016	23:07
sec-Butylbenzene		< 7.55	ug/Kg			2/8/2016	23:07
tert-Butylbenzene		< 7.55	ug/Kg			2/8/2016	23:07
Toluene		< 7.55	ug/Kg			2/8/2016	23:07
<u>Surrogate</u>		<u>P</u>	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>vzed</u>
1,2-Dichloroethane-d4			112	83 - 126		2/8/2016	23:07
4-Bromofluorobenzene)		97.0	80.8 - 115		2/8/2016	23:07
Pentafluorobenzene			93.1	90.6 - 111		2/8/2016	23:07
Toluene-D8			103	89.2 - 109		2/8/2016	23:07
Method Referenc Data File:	e (s): EPA 82 EPA 50 x2949	035A					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Client:	<u>Ravi Engineering & Land Surveying, P.C.</u>		
Project Reference:	Dewey & Driving Park 40-14-035		
Sample Identifier:	BN-17-4		
Lab Sample ID:	160536-04	Date Sampled:	2/5/2016
Matrix:	Soil	Date Received:	2/5/2016

Semi-Volatile Organics (PAHs)

Analyte	Result	<u>Units</u>		Qualifier	Date Anal	yzed
Acenaphthene	463	ug/Kg			2/12/2016	00:44
Acenaphthylene	< 341	ug/Kg			2/12/2016	00:44
Anthracene	625	ug/Kg			2/12/2016	00:44
Benzo (a) anthracene	1130	ug/Kg			2/12/2016	00:44
Benzo (a) pyrene	892	ug/Kg			2/12/2016	00:44
Benzo (b) fluoranthene	838	ug/Kg			2/12/2016	00:44
Benzo (g,h,i) perylene	530	ug/Kg			2/12/2016	00:44
Benzo (k) fluoranthene	610	ug/Kg			2/12/2016	00:44
Chrysene	1200	ug/Kg			2/12/2016	00:44
Dibenz (a,h) anthracene	< 341	ug/Kg			2/12/2016	00:44
Fluoranthene	2420	ug/Kg			2/12/2016	00:44
Fluorene	678	ug/Kg			2/12/2016	00:44
Indeno (1,2,3-cd) pyrene	876	ug/Kg			2/12/2016	00:44
Naphthalene	< 341	ug/Kg			2/12/2016	00:44
Phenanthrene	3140	ug/Kg			2/12/2016	00:44
Pyrene	2370	ug/Kg			2/12/2016	00:44
Surrogate	Per	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2-Fluorobiphenyl		71.4	22 - 96.1		2/12/2016	00:44
Nitrobenzene-d5		56.1	11.6 - 83.3		2/12/2016	00:44
Terphenyl-d14		75.9	60.4 - 114		2/12/2016	00:44
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 2/11/2016 B10147.D					

Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,2,4-Trimethylbenzene	37.1	ug/Kg		2/8/2016 23:31
1,3,5-Trimethylbenzene	22.3	ug/Kg		2/8/2016 23:31
Benzene	< 7.49	ug/Kg		2/8/2016 23:31

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Client:	<u>Ravi Enginee</u>	ering 8	Land Surveying	<u>g, P.C.</u>			
Project Reference:	Dewey & Driv	ving Pa	rk 40-14-035				
Sample Identifier:	BN-17-4						
Lab Sample ID:	160536-04			Dat	e Sampled:	2/5/2016	
Matrix:	Soil			Dat	e Received:	2/5/2016	
Ethylbenzene		9.11	ug/Kg			2/8/2016	23:31
Isopropylbenzene		16.6	ug/Kg			2/8/2016	23:31
m,p-Xylene		< 7.49	ug/Kg			2/8/2016	23:31
Methyl tert-butyl Ether		< 7.49	ug/Kg			2/8/2016	23:31
Naphthalene		81.8	ug/Kg			2/8/2016	23:31
n-Butylbenzene		60.2	ug/Kg			2/8/2016	23:31
n-Propylbenzene		39.3	ug/Kg			2/8/2016	23:31
o-Xylene		< 7.49	ug/Kg			2/8/2016	23:31
p-Isopropyltoluene		12.6	ug/Kg			2/8/2016	23:31
sec-Butylbenzene		81.1	ug/Kg			2/8/2016	23:31
tert-Butylbenzene		< 7.49	ug/Kg			2/8/2016	23:31
Toluene		< 7.49	ug/Kg			2/8/2016	23:31
<u>Surrogate</u>			Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			106	83 - 126		2/8/2016	23:31
4-Bromofluorobenzene			109	80.8 - 115		2/8/2016	23:31
Pentafluorobenzene			96.7	90.6 - 111		2/8/2016	23:31
Toluene-D8			103	89.2 - 109		2/8/2016	23:31
Method Referenc	e(s): EPA 826	50C					
Data File:	EPA 503 x29500.						

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"*J*" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and Compensation.	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order. Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report. Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples. LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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Fax (585) 647-3311
Office (585) 647-2530
179 Lake Avenue, Rochester, NY 14608

CHAIN OF CUSTODY

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		PHONE:			PHONE:		Email:			1
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Rush 2 day	Category B			Provinced Bu	AANDA	25/10	350			
Rush 1 day				Acceleration by	25	//6	14:04			
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CJo/



Chain of Custody Supplement

Client:	Mari Engineering	Completed by:	Glem Pezzulo
Lab Project ID:	Mari Engineering 160536	Date:	2/5/16
	Sample Condition Per NELAC/ELAP 210	n Requirements 0/241/242/243/244	
N Condition	ELAC compliance with the sample c Yes	ondition requirements upo No	n receipt N/A
Container Type		5035	
Comments		·	
Transferred to method- compliant container			
Headspace (<1 mL) Comments			
Preservation Comments			
Chlorine Absent (<0.10 ppm per test strip) Comments			
Holding Time Comments			
Temperature Comments	12°C		
Sufficient Sample Quantity Comments			



Analytical Report For

Ravi Engineering & Land Surveying, P.C.

For Lab Project ID

160551

Referencing

Dewey / Driving Park Prepared

Thursday, February 11, 2016

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

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				Lab I Toject ID.	100551
Client:	<u>Ravi Engine</u>	ering & Land	<u>l Surveying, P.C.</u>		
Project Reference:	Dewey / Driv	ring Park			
Sample Identifier:	BN-1-5				
Lab Sample ID:	160551-01			Date Sampled:	2/8/2016
Matrix:	Soil			Date Received:	2/8/2016
Volatile Organics					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 8.56	ug/Kg		2/10/2016 20:43
1,1,2,2-Tetrachloroetha	ane	< 8.56	ug/Kg		2/10/2016 20:43
1,1,2-Trichloroethane		< 8.56	ug/Kg		2/10/2016 20:43
1,1-Dichloroethane		< 8.56	ug/Kg		2/10/2016 20:43
1,1-Dichloroethene		< 8.56	ug/Kg		2/10/2016 20:43
1,2,3-Trichlorobenzene	9	< 21.4	ug/Kg		2/10/2016 20:43
1,2,4-Trichlorobenzene	2	< 21.4	ug/Kg		2/10/2016 20:43
1,2-Dibromo-3-Chlorop	oropane	< 42.8	ug/Kg		2/10/2016 20:43
1,2-Dibromoethane		< 8.56	ug/Kg		2/10/2016 20:43
1,2-Dichlorobenzene		< 8.56	ug/Kg		2/10/2016 20:43
1,2-Dichloroethane		< 8.56	ug/Kg		2/10/2016 20:43
1,2-Dichloropropane		< 8.56	ug/Kg		2/10/2016 20:43
1,3-Dichlorobenzene		< 8.56	ug/Kg		2/10/2016 20:43
1,4-Dichlorobenzene		< 8.56	ug/Kg		2/10/2016 20:43
1,4-dioxane		< 85.6	ug/Kg		2/10/2016 20:43
2-Butanone		< 42.8	ug/Kg		2/10/2016 20:43
2-Hexanone		< 21.4	ug/Kg		2/10/2016 20:43
4-Methyl-2-pentanone		< 21.4	ug/Kg		2/10/2016 20:43
Acetone		64.9	ug/Kg		2/10/2016 20:43
Benzene		< 8.56	ug/Kg		2/10/2016 20:43
Bromochloromethane		< 21.4	ug/Kg		2/10/2016 20:43
Bromodichloromethan	e	< 8.56	ug/Kg		2/10/2016 20:43
Bromoform		< 21.4	ug/Kg		2/10/2016 20:43
Bromomethane		< 8.56	ug/Kg		2/10/2016 20:43
Carbon disulfide		< 8.56	ug/Kg		2/10/2016 20:43
Carbon Tetrachloride		< 8.56	ug/Kg		2/10/2016 20:43
Chlorobenzene		< 8.56	ug/Kg		2/10/2016 20:43
Chloroethane		< 8.56	ug/Kg		2/10/2016 20:43
Chloroform		< 8.56	ug/Kg		2/10/2016 20:43

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Report Prepared Thursday, February 11, 2016



Client:	<u>Ravi Enginee</u>	ring & Land	<u>Surveying, P.C.</u>			
Project Reference:	Dewey / Drivi	ng Park				
Sample Identifier:	BN-1-5					
Lab Sample ID:	160551-01			Date Sampled:	2/8/2016	
Matrix:	Soil			Date Received:	2/8/2016	
Chloromethane		< 8.56	ug/Kg		2/10/2016	20:43
cis-1,2-Dichloroethene	2	< 8.56	ug/Kg		2/10/2016	20:43
cis-1,3-Dichloroproper	ne	< 8.56	ug/Kg		2/10/2016	20:43
Cyclohexane		< 42.8	ug/Kg		2/10/2016	20:43
Dibromochloromethan	ie	< 8.56	ug/Kg		2/10/2016	20:43
Dichlorodifluorometha	ane	< 8.56	ug/Kg		2/10/2016	20:43
Ethylbenzene		< 8.56	ug/Kg		2/10/2016	20:43
Freon 113		< 8.56	ug/Kg		2/10/2016	20:43
Isopropylbenzene		< 8.56	ug/Kg		2/10/2016	20:43
m,p-Xylene		< 8.56	ug/Kg		2/10/2016	20:43
Methyl acetate		< 8.56	ug/Kg		2/10/2016	20:43
Methyl tert-butyl Ether	r	< 8.56	ug/Kg		2/10/2016	20:43
Methylcyclohexane		< 8.56	ug/Kg		2/10/2016	20:43
Methylene chloride		< 21.4	ug/Kg		2/10/2016	20:43
o-Xylene		< 8.56	ug/Kg		2/10/2016	20:43
Styrene		< 21.4	ug/Kg		2/10/2016	20:43
Tetrachloroethene		< 8.56	ug/Kg		2/10/2016	20:43
Toluene		< 8.56	ug/Kg		2/10/2016	20:43
trans-1,2-Dichloroethe	ene	< 8.56	ug/Kg		2/10/2016	20:43
trans-1,3-Dichloroprop	pene	< 8.56	ug/Kg		2/10/2016	20:43
Trichloroethene		< 8.56	ug/Kg		2/10/2016	20:43
Trichlorofluoromethar	ne	< 8.56	ug/Kg		2/10/2016	20:43
Vinyl chloride		< 8.56	ug/Kg		2/10/2016	20:43

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11/15/2012.

Lab Project ID: 160551

Client:	<u>Ravi Eı</u>	<u>ngineering</u>	& Land Surveying	<u>, P.C.</u>			
Project Reference:	Dewey	/ Driving Pa	ark				
Sample Identifier:	BN-1-	5					
Lab Sample ID:	16055	51-01		Date	e Sampled:	2/8/2016	
Matrix:	Soil			Date	e Received:	2/8/2016	
Surrogate			Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	vzed
1,2-Dichloroethane-d	4		104	83 - 126		2/10/2016	20:43
4-Bromofluorobenzer	ne		99.0	80.8 - 115		2/10/2016	20:43
Pentafluorobenzene			102	90.6 · 111		2/10/2016	20:43
Toluene-D8			104	89.2 - 109		2/10/2016	20:43
Method Referen	nce(s):	EPA 8260C EPA 5035A					
Data File:		x29561.D					
•		, ,	g SW846 5035A specific ects, may be biased low	0			

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Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and Compensation.	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi
compensation	use LAB default method for all tests unless specified otherwise on the Work Order. Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report. Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples. LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311	CHAIN OF CUSTOD	REPORTION IN INVOICE TO: RAVE ENVERGE TUL OLIENT SAVES	ADDRESS: ADDRESS	STATE: ZIP: CITY: STATE: ZIP: Quot	PHONE: PHONE: Email:	ATTHE DAVED DEYOUNG PUDIA DITEYEUDIGE RAVENIG. (BAL	Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid	REQUESTED ANALYSIS	REMARKS SAMPLE IDENTIFIER SAMPLE SAMP	X 73N-1-5 50 1 X 100											DAVED EXCUME 2/8/16	Sampled By	PAUT EXPONSION 2016	Relinquished By Detertime Relinquished By Date/Time Detertime	Received By Date/Time Date	Reinquished By Date/Time Received By Date/Time Received By Date/Time Received By Date/Time Received By Date/Time Date/Time Date/Time	Received By Date/Time Date/Time By Date/Time Date/Time By Date/Time Date/Time By Date/Time Date/	AVTO EVONU Determe Sampled By DateTime Refinquished By DateTime Received By DateTime Received By DateTime Received By DateTime DateTime DateTime
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		PARADIG M				PROJECT REFERENCE	0000-214-2		DATE COLLECTED TIME COLLECTED	12/8/16 10:00		3	4	2	0	~	8	0	10	Turnaround Time	Turn	Turn.	Turn: ndard 5 (Turn ndard 5 (sh 3 day	Turn ndard 5 (sh 3 day sh 2 day sh 1 day	Turna ard 5 c ay 2 day 2 day 1 day dicate:	Turn ard 5 c ay 2 day 2 day 1 day 1 day	Turn, ndard 5 (sh 3 day sh 2 day sh 1 day er er





<u>Chain of Custody Supplement</u>

Client:	Ravi Engineering	Completed by:	6 lenn Pezzylo
Lab Project ID:	Ravi Engineering 160551	Date:	2/8/16
	Sample Condition Per NELAC/ELAP 210	n Requirements /241/242/243/244	
Condition	NELAC compliance with the sample co Yes	ondition requirements upo No	n receipt N/A
Container Type Comments		5035	
Transferred to method- compliant container			
Headspace (<1 mL) Comments			
Preservation Comments			
Chlorine Absent (<0.10 ppm per test strip) Comments			
Holding Time Comments			
Temperature Comments	16°C	Ţ.	
Sufficient Sample Quantity Comments			

:



Analytical Report For

Ravi Engineering & Land Surveying, P.C.

For Lab Project ID

160805

Referencing

Dewey Driving Park Prepared

Thursday, March 10, 2016

This project has been re-issued to expand the analyte list, per Chain of Custody and client correspondence.

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

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Client:	<u>Ravi Engineering & Land Surveying, P.C.</u>		
Project Reference:	Dewey Driving Park		
Sample Identifier:	MW-1		
Lab Sample ID:	160805-01	Date Sampled:	2/26/2016
Matrix:	Water	Date Received:	2/26/2016

Semi-Volatile Organics (PAHs)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 10.0	ug/L		3/2/2016 16:50
1,2,4,5-Tetrachlorobenzene	< 10.0	ug/L		3/2/2016 16:50
1,2,4-Trichlorobenzene	< 10.0	ug/L		3/2/2016 16:50
1,2-Dichlorobenzene	< 10.0	ug/L		3/2/2016 16:50
1,3-Dichlorobenzene	< 10.0	ug/L		3/2/2016 16:50
1,4-Dichlorobenzene	< 10.0	ug/L		3/2/2016 16:50
2,4-Dinitrotoluene	< 10.0	ug/L		3/2/2016 16:50
2,6-Dinitrotoluene	< 10.0	ug/L		3/2/2016 16:50
2-Chloronaphthalene	< 10.0	ug/L		3/2/2016 16:50
2-Methylnapthalene	< 10.0	ug/L		3/2/2016 16:50
2-Nitroaniline	< 20.0	ug/L		3/2/2016 16:50
3,3'-Dichlorobenzidine	< 10.0	ug/L		3/2/2016 16:50
3-Nitroaniline	< 20.0	ug/L		3/2/2016 16:50
4-Bromophenyl phenyl ether	< 10.0	ug/L		3/2/2016 16:50
4-Chloroaniline	< 10.0	ug/L		3/2/2016 16:50
4-Chlorophenyl phenyl ether	< 10.0	ug/L		3/2/2016 16:50
4-Nitroaniline	< 20.0	ug/L		3/2/2016 16:50
Acenaphthene	< 10.0	ug/L		3/2/2016 16:50
Acenaphthylene	< 10.0	ug/L		3/2/2016 16:50
Acetophenone	< 10.0	ug/L		3/2/2016 16:50
Anthracene	< 10.0	ug/L		3/2/2016 16:50
Atrazine	< 10.0	ug/L		3/2/2016 16:50
Benzaldehyde	< 10.0	ug/L		3/2/2016 16:50
Benzo (a) anthracene	< 10.0	ug/L		3/2/2016 16:50
Benzo (a) pyrene	< 10.0	ug/L		3/2/2016 16:50
Benzo (b) fluoranthene	< 10.0	ug/L		3/2/2016 16:50
Benzo (g,h,i) perylene	< 10.0	ug/L		3/2/2016 16:50
Benzo (k) fluoranthene	< 10.0	ug/L		3/2/2016 16:50
Bis (2-chloroethoxy) methane	< 10.0	ug/L		3/2/2016 16:50

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Client:	<u>Ravi Enginee</u>	ering & Lan	<u>d Surveying, P.C.</u>			
Project Reference:	Dewey Drivin	g Park				
Sample Identifier:	MW-1					
Lab Sample ID:	160805-01			Date Sampled:	2/26/2016	
Matrix:	Water			Date Received:	2/26/2016	
Bis (2-chloroethyl) et	her	< 10.0	ug/L		3/2/2016	16:50
Bis (2-chloroisopropy	l) ether	< 10.0	ug/L		3/2/2016	16:50
Bis (2-ethylhexyl) pht	halate	< 10.0	ug/L		3/2/2016	16:50
Butylbenzylphthalate		< 10.0	ug/L		3/2/2016	16:50
Caprolactam		< 10.0	ug/L		3/2/2016	16:50
Carbazole		< 10.0	ug/L		3/2/2016	16:50
Chrysene		< 10.0	ug/L		3/2/2016	16:50
Dibenz (a,h) anthrace	ne	< 10.0	ug/L		3/2/2016	16:50
Dibenzofuran		< 10.0	ug/L		3/2/2016	16:50
Diethyl phthalate		< 10.0	ug/L		3/2/2016	16:50
Dimethyl phthalate		< 20.0	ug/L		3/2/2016	16:50
Di-n-butyl phthalate		< 10.0	ug/L		3/2/2016	16:50
Di-n-octylphthalate		< 10.0	ug/L		3/2/2016	16:50
Fluoranthene		< 10.0	ug/L		3/2/2016	16:50
Fluorene		< 10.0	ug/L		3/2/2016	16:50
Hexachlorobenzene		< 10.0	ug/L		3/2/2016	16:50
Hexachlorobutadiene		< 10.0	ug/L		3/2/2016	16:50
Hexachlorocyclopenta	diene	< 10.0	ug/L		3/2/2016	16:50
Hexachloroethane		< 10.0	ug/L		3/2/2016	16:50
Indeno (1,2,3-cd) pyre	ene	< 10.0	ug/L		3/2/2016	16:50
Isophorone		< 10.0	ug/L		3/2/2016	16:50
Naphthalene		< 10.0	ug/L		3/2/2016	16:50
Nitrobenzene		< 10.0	ug/L		3/2/2016	16:50
N-Nitroso-di-n-propyl	lamine	< 10.0	ug/L		3/2/2016	16:50
N-Nitrosodiphenylam	ine	< 10.0	ug/L		3/2/2016	16:50
Phenanthrene		< 10.0	ug/L		3/2/2016	16:50
Pyrene		< 10.0	ug/L		3/2/2016	16:50

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Ravi Engineering & Land Surveying, P.C. **Client:**

B10490.D

Project Reference:	Dewey Driving Park		
Sample Identifier:	MW-1		
Lab Sample ID:	160805-01	Date Sampled:	2/26/2016

-				-		
Matrix: W	/ater		Dat	e Received:	2/26/2016	
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	Outliers	Date Analyzed	
2-Fluorobiphenyl		25.9	20.3 - 108		3/2/2016	16:50
Nitrobenzene-d5		38.9	48 - 101	*	3/2/2016	16:50
Terphenyl-d14		51.4	52.7 - 113	*	3/2/2016	16:50
Method Reference(s):	EPA 8270D					
	EPA 3510C					
Preparation Date:	3/2/2016					

Volatile Organics (Petroleum)

Data File:

Analyte	<u>Result</u>	<u>Units</u>	Qualifier Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L	2/29/2016 15:40
1,1,2,2-Tetrachloroethane	< 2.00	ug/L	2/29/2016 15:40
1,1,2-Trichloroethane	< 2.00	ug/L	2/29/2016 15:40
1,1-Dichloroethane	< 2.00	ug/L	2/29/2016 15:40
1,1-Dichloroethene	< 2.00	ug/L	2/29/2016 15:40
1,2,3-Trichlorobenzene	< 5.00	ug/L	2/29/2016 15:40
1,2,4-Trichlorobenzene	< 5.00	ug/L	2/29/2016 15:40
1,2,4-Trimethylbenzene	< 2.00	ug/L	2/29/2016 15:40
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	2/29/2016 15:40
1,2-Dibromoethane	< 2.00	ug/L	2/29/2016 15:40
1,2-Dichlorobenzene	< 2.00	ug/L	2/29/2016 15:40
1,2-Dichloroethane	< 2.00	ug/L	2/29/2016 15:40
1,2-Dichloropropane	< 2.00	ug/L	2/29/2016 15:40
1,3,5-Trimethylbenzene	< 2.00	ug/L	2/29/2016 15:40
1,3-Dichlorobenzene	< 2.00	ug/L	2/29/2016 15:40
1,4-Dichlorobenzene	< 2.00	ug/L	2/29/2016 15:40
1,4-dioxane	< 20.0	ug/L	2/29/2016 15:40
2-Butanone	< 10.0	ug/L	2/29/2016 15:40
2-Hexanone	< 5.00	ug/L	2/29/2016 15:40
4-Methyl-2-pentanone	< 5.00	ug/L	2/29/2016 15:40
Acetone	< 10.0	ug/L	2/29/2016 15:40
Benzene	< 1.00	ug/L	2/29/2016 15:40

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Client:	<u>Ravi Engineer</u>	ring & L	and Surveying, P.C.			
Project Reference:	Dewey Driving	g Park				
Sample Identifier: Lab Sample ID: Matrix:	MW-1 160805-01 Water			Date Sampled: Date Received:	2/26/2016 2/26/2016	
Bromochloromethane		< 5.00	ug/L		2/29/2016	15:40
Bromodichlorometha		< 2.00	ug/L		2/29/2016	
Bromoform		< 5.00	ug/L		2/29/2016	
Bromomethane		< 2.00	ug/L		2/29/2016	
Carbon disulfide		< 2.00	ug/L		2/29/2016	15:40
Carbon Tetrachloride		< 2.00	ug/L		2/29/2016	15:40
Chlorobenzene		< 2.00	ug/L		2/29/2016	15:40
Chloroethane		< 2.00	ug/L		2/29/2016	15:40
Chloroform		< 2.00	ug/L		2/29/2016	15:40
Chloromethane		< 2.00	ug/L		2/29/2016	15:40
cis-1,2-Dichloroethen	e	< 2.00	ug/L		2/29/2016	15:40
cis-1,3-Dichloroprope	ne	< 2.00	ug/L		2/29/2016	15:40
Cyclohexane		< 10.0	ug/L		2/29/2016	15:40
Dibromochlorometha	ne	< 2.00	ug/L		2/29/2016	15:40
Dichlorodifluorometh	ane	< 2.00	ug/L		2/29/2016	15:40
Ethylbenzene		< 2.00	ug/L		2/29/2016	15:40
Freon 113		< 2.00	ug/L		2/29/2016	15:40
Isopropylbenzene		< 2.00	ug/L		2/29/2016	15:40
m,p-Xylene		< 2.00	ug/L		2/29/2016	15:40
Methyl acetate		< 2.00	ug/L		2/29/2016	15:40
Methyl tert-butyl Ethe	er	< 2.00	ug/L		2/29/2016	15:40
Methylcyclohexane		< 2.00	ug/L		2/29/2016	15:40
Methylene chloride		< 5.00	ug/L		2/29/2016	15:40
Naphthalene		< 5.00	ug/L		2/29/2016	15:40
n-Butylbenzene		< 2.00	ug/L		2/29/2016	15:40
n-Propylbenzene		< 2.00	ug/L		2/29/2016	15:40
o-Xylene		< 2.00	ug/L		2/29/2016	15:40
p-Isopropyltoluene		< 2.00	ug/L		2/29/2016	15:40
sec-Butylbenzene		< 2.00	ug/L		2/29/2016	15:40
Styrene		< 5.00	ug/L		2/29/2016	15:40
tert-Butylbenzene		< 2.00	ug/L		2/29/2016	15:40
Tetrachloroethene		< 2.00	ug/L		2/29/2016	15:40

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Client:	<u>Ravi Engine</u>	ering & L	and Surveying	<u>, P.C.</u>			
Project Reference:	Dewey Drivin	ng Park					
Sample Identifier:	MW-1						
Lab Sample ID:	160805-01			Dat	e Sampled:	2/26/2016	
Matrix:	Water			Dat	e Received:	2/26/2016	
Toluene		< 2.00	ug/L			2/29/2016	15:40
trans-1,2-Dichloroeth	ene	< 2.00	ug/L			2/29/2016	15:40
trans-1,3-Dichloropro	pene	< 2.00	ug/L			2/29/2016	15:40
Trichloroethene		< 2.00	ug/L			2/29/2016	15:40
Trichlorofluorometha	ne	< 2.00	ug/L			2/29/2016	15:40
Vinyl chloride		< 2.00	ug/L			2/29/2016	15:40
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>vzed</u>
1,2-Dichloroethane-d4	ł		103	81.6 - 118		2/29/2016	15:40
4-Bromofluorobenzen	e		85.9	79.5 - 115		2/29/2016	15:40
Pentafluorobenzene			88.9	91.4 - 111	*	2/29/2016	15:40
Toluene-D8			92.2	89.8 - 108		2/29/2016	15:40
Method Referen							
Data File:	EPA 50 x29869						

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Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"*J*" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and Compensation.	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order. Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report. Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples. LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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CHAIN OF CUSTODY

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							OL - Oil AR - Air		10	PARADIGM LAB SAMPLE NUMBER		10	1					3	-							5- - 41-		
		LAB PROJECT ID	505				WP - Wipe CK - Caulk	A State of the					10			24			, († 4	24			Total Cost:					se).
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	.o:			ZIP:			SO - Soil SL - Sludge	YSIS														2-26-16	Date/Time	Date/Time	210/1		Date/Time	digm Term
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		CLIENT: RAVE	ADDRESS:	CITY:	PHONE:	ATTN: DAVE	Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid	See 1 2 See				1- MW									Report Supplements	al; additional 1						Deeded:
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	P A P	ENVIRONME	/			PROJEC	NORMEN DISITIVE PARA			DATE COLLECTED		2-26-16									Turnaround Time	Availabi	Standard 5 day	10 day	Rush 3 day	Rush 2 day	Rush 1 day	Other olease indicate date needed:

See additional page for sample conditions.

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<u>Chain of Custody Supplement</u>

Client:	Ravi	Completed by:	TholeNai						
Lab Project ID:	160805	Date:	2/26/16						
	Sample Condition Requirements Per NELAC/ELAP 210/241/242/243/244								
Condition	NELAC compliance with the sample Yes	e condition requirements upo No	n receipt N/A						
Container Type Comments									
Transferred to method- compliant container									
Headspace (<1 mL) Comments									
Preservation Comments	-pvoA		Γ γ						
Chlorine Absent (<0.10 ppm per test strip) Comments		· ·	с¥—						
- Holding Time Comments	¥								
- Cemperature Comments	6°C 2/26/	16 1634							
ufficient Sample Quantity Comments	×								

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