

December 21, 2016



Mr. Greg Michael
Wisconsin Department of Natural Resources
141 NW Barstow Street, Room 180
Waukesha, WI 53188

REC'D DEC 27 2016

RE: Supplemental Information for the Soil Placement Approval Request for the Proposed VA Parking Structure Located at 5000 West National Avenue in Milwaukee, Wisconsin — DNR BRRTs # 02-41-563846; FEC Project No. 160806

Dear Mr. Michael:

As requested, **Friess Environmental Consulting, Inc. (FEC)** submits this letter to state that we believe the sampling has met the requirement of NR 718.12 (e) Wisconsin Administrative Code (WAC) for the 7,000 cubic yards (CY) of soil scheduled for excavation from the above-referenced property.

As discussed in our submittal, six (6) soil samples were collected by Sigma in April 2015; eighteen (18) soil samples were collected by FEC in November 2016 and an additional twelve (12) soil samples were collected by FEC in December 2016. These soil samples represent soils to be excavated and removed during construction and were submitted for analytical testing of PVOCs, lead and/or PAHs. The sampling locations were shown on Figure 2.

As such, we believe that the soil sampling conducted for the geotechnical and environmental assessments has sufficiently characterized the soils to be removed for disposal. In addition, we believe that a soil sample was collected for analysis for each 100 cubic yards of contaminated soil for the first 600 yards and an additional sample was collected for analysis for each additional 300 cubic yards to be removed thus meeting the requirements of NR 718.12 (e), WAC.

We appreciate your assistance with this request. If you have any questions or comments regarding this submittal, please contact us at (414) 228-9815.

Respectfully,

Friess Environmental Consulting, Inc.

A handwritten signature in black ink, appearing to read 'Trenton J. Ott'.

Trenton J. Ott
Project Manager

A handwritten signature in black ink, appearing to read 'Richard W. Frieseke'.

Richard W. Frieseke, P.E.
President

160806c

December 19, 2016



Mr. Greg Michael
Wisconsin Department of Natural Resources
141 NW Barstow Street, Room 180
Waukesha, WI 53188

REC'D DEC 27 2016

RE: Supplemental Information for the Soil Placement Approval Request for the Proposed VA Parking Structure Located at 5000 West National Avenue in Milwaukee, Wisconsin — DNR BRRTs # 02-41-563846; FEC Project No. 160806

Dear Mr. Michael:

As you are aware, **Friess Environmental Consulting, Inc. (FEC)** submitted a request dated October 27, 2016, for the Wisconsin Department of Natural Resources (DNR) to grant a ch. NR 718.12 Wisconsin Administrative Code (WAC) approval for approximately 7,000 cubic yards (CY) of soil scheduled for excavation from the above-referenced property. The soils are proposed to be disposed of at the R&R excavating site ("the "Site") located near the intersection of Highway 60 and Highway I in the Town of Cedarburg. Based on the DNR review, you have requested additional analytical testing and information. This letter provides the results of the twelve additional soil samples and a cut/fill diagram to better illustrate the project in relation to the soil sampling.

Cut/Fill Plans

The proposed four story parking structure will be located on the existing surface parking lots (Lots 7, 8, & 9). The grade of the existing lots slopes downward from the south to the north. The entrance to the structure will be on the north side of the structure at the existing grade. The majority of the soils removed will come from the south and west portions of the existing lot and a storm water retention area to the north of the proposed structure. The cut fill diagram for the development is attached.

It is anticipated that approximately 7,000 CY of material will be generated during construction of the parking lot, foundations, utility construction, stormwater management, and site grading. The soils are proposed to be disposed of at the R&R Excavating site.

The earthmoving activities will be monitored for unanticipated environmental conditions (such as a buried tank or barrel, strong unidentifiable odors, discolored soil, or volatile vapors) and to manage the materials appropriately, if necessary.

Initial Soil Testing

As you are aware, eight soil borings (B-1 through B-8) were conducted by Terracon; six soil probes (GP-1 through GP-6) were conducted by Sigma, and five soil probes (P-1 through P-5) were conducted by FEC at the locations depicted on the attached Figures. The soil samples collected at each soil boring and probe location were classified and field screened for the presence of volatile organic vapors. No volatile vapors or indications of contaminants were present in any of the soil samples.

Six (6) soil samples collected by Sigma and eighteen (18) soil samples collected by FEC were submitted for analytical testing of PVOCs, lead and/or PAHs. Samples representing soils to be excavated and removed during construction were submitted for analytical testing.

No concentrations of PVOCs were identified in the soil samples above their respective residual contaminant levels (RCLs), with the exception of benzene within GP-3. Additional sampling and water leach testing were conducted in this area to confirm the impacts and/or demonstrate the benzene concentration is not a risk to groundwater. However, no benzene was detected in the soil samples collected in the area of GP-3 and no leachable benzene concentrations were present in the water leach sample. As such, the previous detection could not be confirmed.

One or more PAH constituents were identified in soil samples from soil probes with concentrations of benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, chrysene, dibenzo (a,h) anthracene, and indeno (1,2,3-cd) pyrene above applicable WDNR soil quality standards for direct contact risk (non-industrial land use setting) and/or protection of groundwater.

RCRA metals concentrations were reported below WDNR soil quality standards with the exception of arsenic and lead within soil borings GP-2, GP-3, and GP-5. However, the detected concentrations of arsenic are below 8 mg/kg, which was established as the statewide soil-arsenic background threshold value. The lead concentrations reported within soil borings GP-3 and GP-5 are above the WDNR soil quality standard for the protection of groundwater but below the standard for direct contact risk.

The results did indicate concentrations of polynuclear aromatic hydrocarbons (PAHs) and select metals that would require soils management during construction. The result of the water leach tests did confirm that soil impacts are not a significant risk to groundwater.

Additional Testing and Information

In early December the DNR did review the request dated October 27, 2016, for a ch. NR 718.12 Wisconsin Administrative Code (WAC) approval for approximately 7,000 cubic yards (CY) of soil scheduled for excavation from the above-referenced property. Based on their review, the DNR has requested additional soil testing and clarification of where the soils are going to be removed from the site.

On December 14, 2016, FEC collected twelve additional soils samples (S-1 to S-12) for further characterization. The area of the proposed building has been stripped of asphalt and base course. In addition, trenches for sheetpile installation have been excavated along the south and west portion of the proposed structure. The samples were collected from test pits in the north, west and south portions of the proposed structure and from the soil berm created from the trench excavation.

The soil proposed for placement is excess soil to be generated during excavation for building construction as part of redevelopment. The development will involve the construction of a parking structure. Reworked fill is present on the site. Information regarding the development plans is included with this request.

Based on the remedial actions already completed on the site and the results of the recent subsurface explorations, there are no suspected or significant sources of impact to the soil. Although the intent is to minimize any off-site transport, approximately 7,000 CY of soil are anticipated to require off-site management. The fill soils can be managed with a ch. NR 718.12 approval for disposal at the R&R Excavating site. Based on a review of the analytical data from the generator site, the concentrations are less, as compared to those soils placed at the R&R Excavating Site under previous disposal approvals.

Conclusions

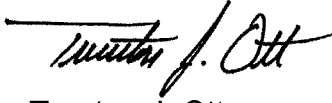
Approximately 7,000 CY of soils would originate from the generator site. The soils contain impacts that are likely attributable to the fill soils and historic use as a parking lot. The soils to be removed are associated with footing, foundation, and utility excavation related to the construction of the parking structure. The soils cannot be transported off-site as clean fill.

We again request that the DNR grant the ch. NR 718.12 exemption approval, as well as an exemption to ch. NR 718.12(1) (c) 6, for the disposal of soil from the proposed development at the R&R Excavating Site.

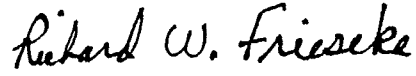
We appreciate your assistance with this request. If you have any questions or comments regarding this submittal, please contact us at (414) 228-9815.

Respectfully,

Friess Environmental Consulting, Inc.



Trenton J. Ott
Project Manager



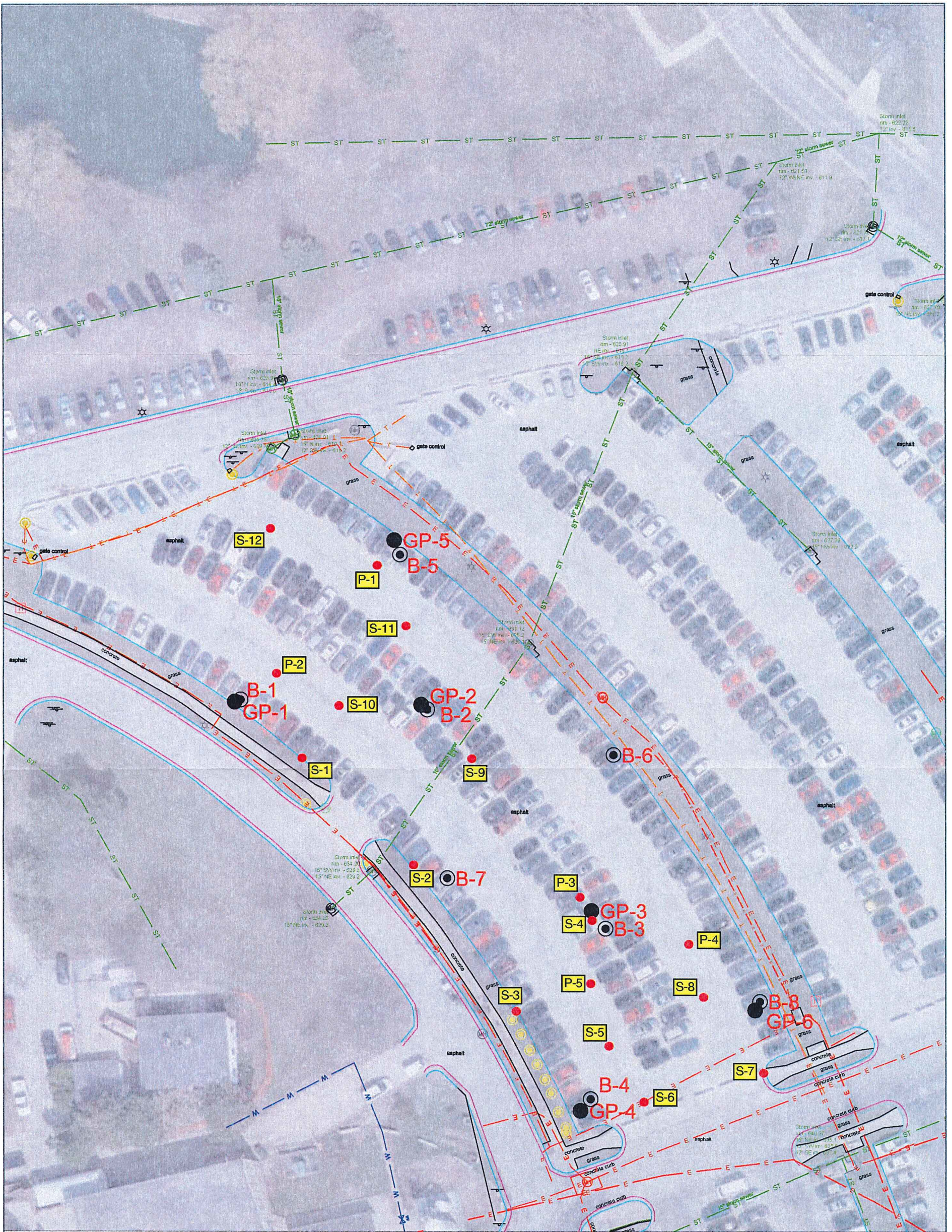
Richard W. Frieseke, P.E.
President

160806b

Additional Site Information

1. Cut/Fill Site Diagram
2. Sampling Location Diagram
3. Cross Section Diagram
4. FEC Sampling Data December 2016





Date: 06/02/2015

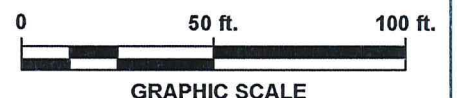
Created By: SLO

Filename: F2_15233_SBLM

Directory: FIGURES

Project: 15233

LEGEND	
	Environmental Geoprobe Soil Boring Location (April 2015)
	Geotechnical Soil Boring Location (April-May 2015)



GRAPHIC SCALE



**BOREHOLE LOCATION MAP
PARKING LOT 7 AT VAMC**

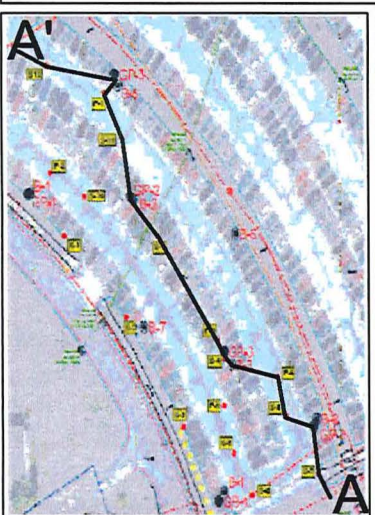
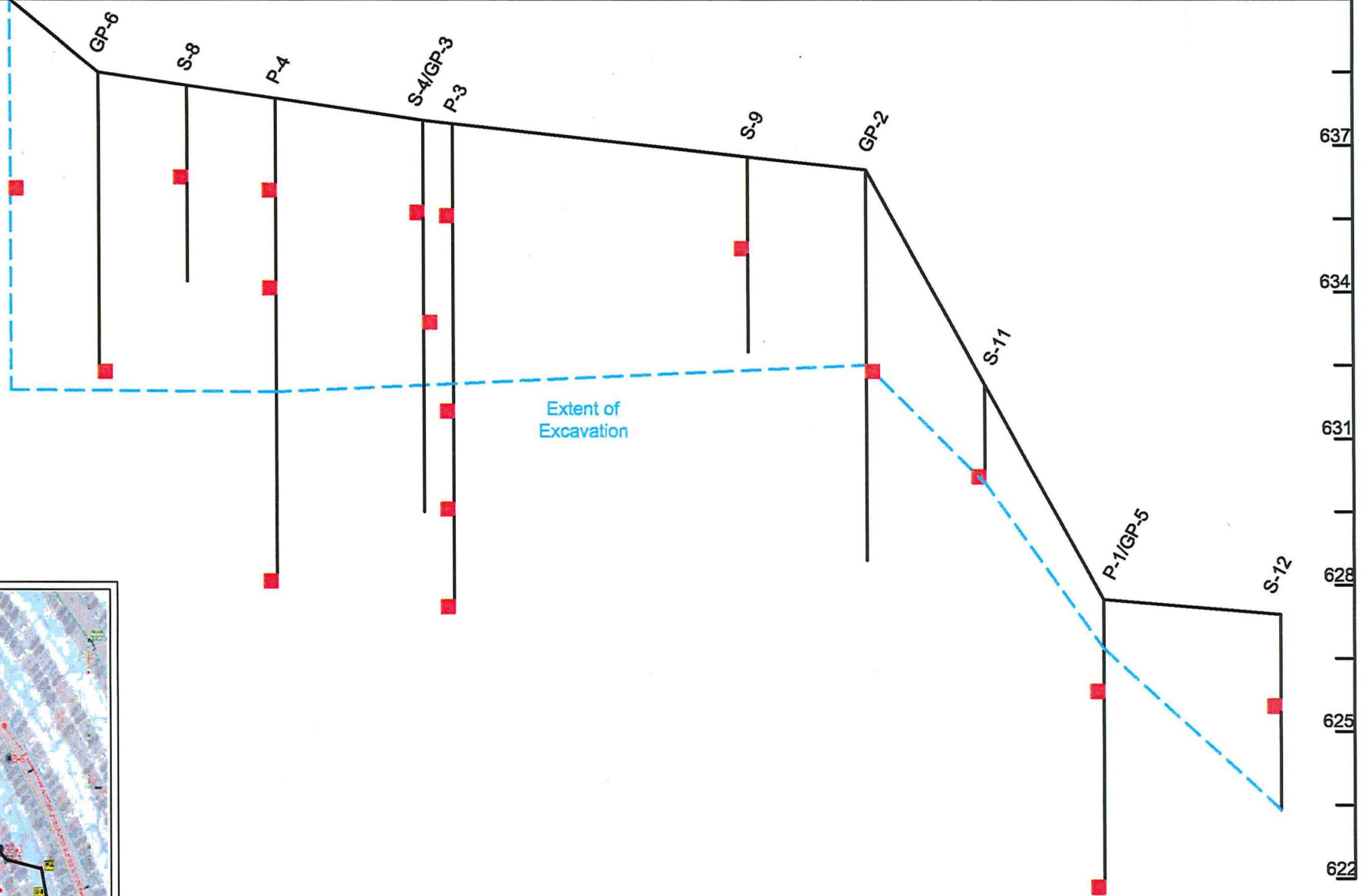
5000 W. NATIONAL AVENUE
MILWAUKEE, WISCONSIN

FIGURE

2

A SOUTH \hat{s}

NORTH A'



File No.: 160806 B.3.a
 DWG Date: 12-19-16
 Rev Date: 12-19-16
 Drawn By: TJO
 Checked By (PM): TJO

B.3.a. Geologic Cross-Section Diagram (A-A')
 5000 West National Avenue Property
 Milwaukee, Wisconsin

Figure
B.3.a.

Friess Environmental Consulting, Inc.
Guide to Abbreviations
in Laboratory Data Tables

< = Less than the specified detection limit.

DO = Dissolved Oxygen

ES = Enforcement Standard

DRO = Diesel range organics

GRO = Gasoline range organics

iu = instrument units

MTBE = Methyl-tert butyl ether

mV = Millivolts

NA = Not analyzed for indicated parameter

NM = Not measured for indicated parameter

NR = No recovery at this interval.

NR 140 ES = Wisconsin Administrative Code NR 140 Groundwater Quality
Enforcement Standard

NR 140 PAL = Wisconsin Administrative Code NR 140 Groundwater Quality
Preventive Action Limit

NR 720 Groundwater RCL = Wisconsin Administrative Code NR 720 Residual Contaminant Level for the protection of groundwater
via the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890

NR 720 Non-Industrial DC RCL = Wisconsin Administrative Code NR 720 Non-Industrial Residual Contaminant Level for direct contact
via the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890

Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890.

NS = No NR 140 ES/PAL or NR 720 RCL standard has been established.

ORP = Oxidation-reduction potential

PAL = Preventive Action Limit

PID = Photoionization detector

ppb = parts per billion

ppm = parts per million

RCL = Residual contaminant level as established in WAC Chapter NR 720

TMBs = Trimethylbenzenes (combined 1,2,4- and 1,3,5-trimethylbenzene)

umhos = Micromhos

**Table 1
Analytical Results - Soil Samples
VA Parking Structure (5000 W. National)
Milwaukee, Wisconsin**

Sample Location	Sampling Date	Lead (ppm)	Acenaphthene (ppb)	Acenaphthylene (ppb)	Anthracene (ppb)	Benzo (a) anthracene (ppb)	Benzo (a) pyrene (ppb)	Benzo (b) fluoranthene (ppb)	Benzo (g,h,i) perylene (ppb)	Benzo (k) fluoranthene (ppb)	Chrysene (ppb)	Dibenzo (a,h) anthracene (ppb)	Fluoranthene (ppb)	Fluorene (ppb)	Indeno (1,2,3-cd) pyrene (ppb)	1-Methyl Naphthalene (ppb)	2-Methyl Naphthalene (ppb)	Naphthalene (ppb)	Phenanthrene (ppb)	Pyrene (ppb)
P-1 (0-2)	10/10/2016	<0.52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-1 (4-6)	10/10/2016	NA	65.0	42.0	300	1,010	<i>1,000</i>	<i>1,280</i>	550	460	<i>940</i>	139	2,160	49.0	53	<14	<11	<12	500	1,820
P-1 (6-8)	10/10/2016	NA	<13	288.0	360	1,400	<i>1,140</i>	<i>1,450</i>	430	520	<i>1,090</i>	154	2,340	86.0	490	<14	19.3J	41	600	1,960
P-1 (8-10)	10/10/2016	23.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-2 (0-2)	10/10/2016	5.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-2 (4-6)	10/10/2016	NA	410	<12	430	490	<i>490</i>	<i>690</i>	298	234	<i>490</i>	71.0	1,360	410	2856	19.7J	13.7J	12.2	1,170	1,030
P-2 (8-10)	10/10/2016	NA	118	177	440.0	1,530	<i>1800.0</i>	<i>2,400</i>	1,150	840.0	<i>1680.0</i>	289	3,050	172	1,060	54	51	66	1,480	2,630
P-3 (0-2)	10/10/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-3 (4-6)	10/10/2016	8.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-3 (6-8)	10/10/2016	NA	14.8J	13J	14.7J	48	51	76	39	24.7J	48	<14.2	101	<13.5	32J	65	21.4J	137	45	86
P-3 (8-10)	10/10/2016	NA	<13.5	<12	<12.4	13.3J	<11.3	<13	<11.4	<11.7	<13.8	<14.2	14.2J	<13.5	<15	<14.3	<11.9	<12.2	18.7J	13.6J
P-4 (0-2)	10/10/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-4 (2-4)	10/10/2016	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-4 (8-10)	10/10/2016	NA	249	570	640	1,140	<i>1,700</i>	<i>1,710</i>	1,010	560	<i>1,090</i>	229	1,660	212.0	880	126	96	249	1,120	2,160
P-5 (0-2)	10/10/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-5 (4-6)	10/10/2016	8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-5 (6-8)	10/10/2016	NA	106	28.4J	57	86	101	135	71	45	91	14.6J	197	59	59	59	18.7J	19.8J	148	193
P-5 (8-10)	10/10/2016	NA	<13.5	<12	<12.4	<11.6	<11.3	<13	<11.4	<11.7	<13.8	<14.2	<13.1	<13.5	<15	<14.3	<11.9	<12.2	<10.9	<12.6
NR 720 Groundwater RCL		27	*38,000	*700	196,744	*17,000	470	480	*6,800,000	*870,000	145	*38,000	88,818	14,815	*68,000	*23,000	*20,000	659	*1,800	54,473
NR 720 Non-industrial DC RCL		400	3,440,000	487,000	17,200,000	148	15	148	*1,800	1,480	14,800	15	2,290,000	2,290,000	148	15,600	229,000	5,150	115,000	1,720,000
NR 720 Industrial DC RCL		800	33,000,000	487,000	100,000,000	2,110	211	2,110	*39,000	21,100	211,000	211	22,000,000	22,000,000	2,110	53,100	368,000	26,000	115,000	16,500,000

* indicates a suggested value.

Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics*.

Note: Concentrations that exceed their respective non-industrial RCLs for direct contact within the top 4 feet are in **red bold**.

Note: "J" indicates estimated value above the level of detection but less than the level of quantification.

**Table 1
Additional Analytical Results - Soil Samples
VA Parking Structure (5000 W. National)
Milwaukee, Wisconsin**

Sample Location	Sampling Date	Acenaphthene (ppb)	Acenaphthylene (ppb)	Anthracene (ppb)	Benzo (a) anthracene (ppb)	Benzo (a) pyrene (ppb)	Benzo (b) fluoranthene (ppb)	Benzo (g,h,i) perylene (ppb)	Benzo (k) fluoranthene (ppb)	Chrysene (ppb)	Dibenzo (a,h) anthracene (ppb)	Fluoranthene (ppb)	Fluorene (ppb)	Indeno (1,2,3-cd) pyrene (ppb)	1-Methyl Naphthalene (ppb)	2-Methyl Naphthalene (ppb)	Naphthalene (ppb)	Phenanthrene (ppb)	Pyrene (ppb)
S-1 (4 ft)	12/14/2016	<13.5	<12	<12.4	12.1J	<11.3	<13	<11.4	<11.7	<13.8	<14.2	13.6J	<13.5	<15	<14.3	<11.9	<12.2	<10.1	13.6J
S-2 (4 ft)	12/14/2016	<13.5	<12	14.2J	19.1J	<11.3	17.1J	<11.4	<11.7	18.4J	<14.2	39J	<13.5	<15	<14.3	<11.9	<12.2	43	29.3J
S-3 (4 ft)	12/14/2016	<13.5	<12	<12.4	<11.6	<11.3	<13	<11.4	<11.7	<13.8	<14.2	13.4J	<13.5	<15	<14.3	<11.9	<12.2	<10.1	<12.6
S-4 (2 ft)	12/14/2016	<13.5	<12	<12.4	<11.6	<11.3	<13	<11.4	<11.7	<13.8	<14.2	13.4J	<13.5	<15	<14.3	<11.9	<12.2	<10.1	<12.6
S-5 (2 ft)	12/14/2016	<13.5	<12	<12.4	22.2J	21J	33J	19.6J	<11.7	25.1J	<14.2	25.8J	<13.5	15.2J	<14.3	<11.9	<12.2	12.2J	27.7J
S-6 (4 ft)	12/14/2016	<13.5	<12	<12.4	18.5J	14J	26.2J	14.2J	<11.7	<13.8	<14.2	34J	<13.5	<15	<14.3	<11.9	<12.2	14.6J	30.1J
S-7 (4 ft)	12/14/2016	<13.5	<12	29.1J	71	65	103	54	22.5J	81	<14.2	177	<13.5	40J	<14.3	<11.9	<12.2	81	138
S-8 (2 ft)	12/14/2016	21.7J	13J	58	119	109	164	96	56	129	15.7J	270	<13.5	73	<14.3	<11.9	<12.2	122	239
S-9 (2 ft)	12/14/2016	60	49	93	228	219	320	169	102	249	34J	440	29.6J	135	20.2J	17.9J	43	221	400
S-10 (2 ft)	12/14/2016	57	82	123	273	294	410	225	119	311	43J	510	25.9J	172	27.9	29.5J	43	190	520
S-11 (2 ft)	12/14/2016	70	33J	88	203	203	290	148	95	217	31.2J	390	19J	117	<14.3	<11.9	28.9J	170	350
S-12 (2 ft)	12/14/2016	86	31.1J	590	690	640	840	480	274	690	88	1,560	84	38	<14.3	<11.9	16.9J	1,290	1,330
NR 720 Groundwater RCL		*38,000	*700	196,744	*17,000	470	480	*6,800,000	*870,000	145	*38,000	88,818	14,815	*68,000	*23,000	*20,000	659	*1,800	54,473
NR 720 Non-industrial DC RCL		3,440,000	487,000	17,200,000	148	15	148	*1,800	1,480	14,800	15	2,290,000	2,290,000	148	15,600	229,000	5,150	115,000	1,720,000
NR 720 Industrial DC RCL		33,000,000	487,000	100,000,000	2,110	211	2,110	*39,000	21,100	211,000	211	22,000,000	22,000,000	2,110	53,100	368,000	26,000	115,000	16,500,000

* indicates a suggested value.

Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics*.

Note: Concentrations that exceed their respective non-industrial RCLs for direct contact within the top 4 feet are in **red bold**.

Note: "J" indicates estimated value above the level of detection but less than the level of quantification.

Table 3
Analytical Results - Soil Leach Test
VA Parking Structure (5000 W. National)
Milwaukee, Wisconsin

Sample Location	Sampling Date	Lead (ppb)	Acenaphthene (ppb)	Acenaphthylene (ppb)	Anthracene (ppb)	Benzo (a) anthracene (ppb)	Benzo (a) pyrene (ppb)	Benzo (b) fluoranthene (ppb)	Benzo (g,h,i) perylene (ppb)	Benzo (k) fluoranthene (ppb)	Chrysene (ppb)	Dibenzo (a,h) anthracene (ppb)	Fluoranthene (ppb)	Fluorene (ppb)	Indeno (1,2,3-cd) pyrene (ppb)	Naphthalene (ppb)	Phenanthrene (ppb)	Pyrene (ppb)
P-1 (4-6)	10/10/2016	NA	<0.033	<0.0233	<0.0267	<0.0277	<0.0527	<0.0071	<0.0066	<0.085	<0.048	<0.0151	<0.055	0.030	<0.0246	0.042	<0.067	<0.0517
P-1 (8-10)	10/10/2016	<3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-3 (4-6)	10/10/2016	<3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-3 (6-8)	10/10/2016	NA	<0.033	<0.0233	<0.0267	<0.0277	<0.0527	<0.019	<0.0205	<0.085	<0.048	0.019J	<0.055	0.030	<0.0246	0.042	<0.067	<0.0517
NR 140 ES		15	NS	NS	3,000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	100	NS	250
NR 140 PAL		1.5	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50

Notes:

1. Only the detected compounds are presented.
2. Concentrations in *blue italics* exceed their respective NR 140 preventive action limits (PALs).
3. Concentrations in *red bold* exceed their respective NR 140 enforcement standards (ESs).

**Table 4
Analytical Results - Soil Samples
VA Parking Structure (5000 W. National)
Milwaukee, Wisconsin**

Sample Location	Sampling Date	Lead (ppm)	Acenaphthene (ppb)	Acenaphthylene (ppb)	Anthracene (ppb)	Benzo (a) anthracene (ppb)	Benzo (a) pyrene (ppb)	Benzo (b) fluoranthene (ppb)	Benzo (g,h,i) perylene (ppb)	Benzo (k) fluoranthene (ppb)	Chrysene (ppb)	Dibenzo (a,h) anthracene (ppb)	Fluoranthene (ppb)	Fluorene (ppb)	Indeno (1,2,3-cd) pyrene (ppb)	1-Methyl Naphthalene (ppb)	2-Methyl Naphthalene (ppb)	Naphthalene (ppb)	Phenanthrene (ppb)	Pyrene (ppb)
GP-5 (4-6)	4/27/2015	78.0	<180	206J	500J	1,690	1,430	2,140	910	810	1,450	229J	3,800	<180	870	<180	<180	<180	1,900	2,550
P-1 (4-6)	10/10/2016	NA	65.0	42.0	300	1,010	1,000	1,280	550	460	940	139	2,160	49.0	53	<14	<11	<12	500	1,820
P-1 (4-6) Leach	10/10/2016	<0.0038	<0.033	<0.0233	<0.0267	<0.0277	<0.0527	<0.0071	<0.0066	<0.085	<0.048	<0.0151	<0.055	0.030	<0.0246	N	N	0.042	<0.067	<0.0517
GP-3 (2-8)	4/27/2015	32.0	<36	141.0	237	490	500	640	278	252	410	70J	1,190	70J	251	38J	44J	80J	670	910
P-3 (4-6)	10/10/2016	8.39	65.0	42.0	300	1,010	1,000	1,280	550	460	940	139	2,160	49.0	53	<14	<11	<12	500	1,820
P-3 (4-6) Leach	10/10/2016	<0.0038	<0.033	<0.0233	<0.0267	<0.0277	<0.0527	<0.019	<0.0205	<0.085	<0.048	0.019J	<0.055	0.030	<0.0246	NA	NA	<0.067	<0.067	<0.0517
NR 720 Groundwater RCL		27	*38,000	*700	196,744	*17,000	470	480	*6,800,000	*870,000	145	*38,000	88,818	14,815	*68,000	*23,000	*20,000	659	*1,800	54,473
NR 720 Non-industrial DC RCL		400	3,440,000	487,000	17,200,000	148	15	148	*1,800	1,480	14,800	15	2,290,000	2,290,000	148	15,600	229,000	5,150	115,000	1,720,000
NR 720 Industrial DC RCL		800	33,000,000	487,000	100,000,000	2,110	211	2,110	*39,000	21,100	211,000	211	22,000,000	22,000,000	2,110	53,100	368,000	26,000	115,000	16,500,000
NR 140 ES		0.015	NS	NS	3,000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
NR 140 PAL		0.0015	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	NS	NS	10	NS	50

* indicates a suggested value.

Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics*.

Note: Concentrations that exceed their respective non-industrial RCLs for direct contact within the top 4 feet are in **red bold**.

Note: "J" indicates estimated value above the level of detection but less than the level of quantification.

Note: Concentrations in *green italics* exceed their respective NR 140 preventive action limits (PALs).

Note: Concentrations in **orange bold** exceed their respective NR 140 enforcement standards (ESs).

Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890.

Table 2
Analytical Results - Soil Samples
VA Parking Structure (5000 W. National)
Milwaukee, Wisconsin

Sample Location	Sampling Date	Benzene (ppb)	Ethyl-benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Combined TMBs (ppb)	Total Xylenes (ppb)
GP-5 (4-6)	4/27/2015	<25	<25	<25	<25	25.4J	<50	<50
GP-3 (2-8)	4/27/2015	<i>48.00</i>	33J	<25	80J	26.8J	41	42J
P-3 (0-2)	10/10/2016	<25	<25	<25	<25	<25	<50	<75
P-4 (0-2)	10/10/2016	<25	<25	<25	<25	<25	<50	<75
P-5 (0-2)	10/10/2016	<25	<25	<25	<25	<25	<50	<75
P-3 (0-2) Leach	10/10/2016	0.25	<0.4	<0.84	<0.737	0.32	2.50	1.30
S-4 (2 ft)	12/14/2016	<25	<25	<25	<25	<25	<50	<75
<i>NR 720 Groundwater RCL</i>		<i>5.1</i>	<i>1,570</i>	<i>27</i>	<i>659</i>	<i>1,107</i>	<i>1,382</i>	<i>3,940</i>
<i>NR 720 Non-industrial DC RCL</i>		<i>1,490</i>	<i>7,470</i>	<i>59,400</i>	<i>5,150</i>	<i>818,000</i>	<i>90K/182K</i>	<i>258,000</i>
<i>NR 720 Industrial DC RCL</i>		<i>7,410</i>	<i>37,000</i>	<i>293,000</i>	<i>26,000</i>	<i>818,000</i>	<i>219K/182K</i>	<i>258,000</i>
<i>NR 140 ES</i>		<i>5</i>	<i>700</i>	<i>60</i>	<i>100</i>	<i>1,000</i>	<i>480</i>	<i>10,000</i>
<i>NR 140 PAL</i>		<i>0.5</i>	<i>140</i>	<i>12</i>	<i>10</i>	<i>200</i>	<i>96</i>	<i>1,000</i>

* indicates a suggested value.

Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics*.

Note: Concentrations that exceed their respective non-industrial RCLs for direct contact within the top 4 feet are in **red bold**.

Note: "J" indicates estimated value above the level of detection but less than the level of quantification.

Note: Concentrations in *green italics* exceed their respective NR 140 preventive action limits (PALs).

Note: Concentrations in **orange bold** exceed their respective NR 140 enforcement standards (ESs).

Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-8

Synergy Environmental Lab, INC.

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MILWAUKEE, WI 53209

Report Date 16-Dec-16

Project Name VA PARKING STRUCTURE
Project # 160806

Invoice # E32241

Lab Code 5032241A
Sample ID S-1
Sample Matrix Soil
Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.7	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/15/2016	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/15/2016	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/15/2016	NJC	1
Benzo(a)anthracene	0.0121 "J"	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/15/2016	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/15/2016	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/15/2016	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/15/2016	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/15/2016	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/15/2016	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/15/2016	NJC	1
Fluoranthene	0.0136 "J"	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/15/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/15/2016	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/15/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/15/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/15/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/15/2016	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/15/2016	NJC	1
Pyrene	0.0134 "J"	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/15/2016	NJC	1

Project Name VA PARKING STRUCTURE
Project # 160806

Invoice# E32241

Lab Code 5032241B
Sample ID S-2
Sample Matrix Soil
Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	85.3	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	0.0142 "J"	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.0191 "J"	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.0171 "J"	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.0184 "J"	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.039 "J"	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.043	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.0293 "J"	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE
Project # 160806

Invoice # E32241

Lab Code 5032241C
Sample ID S-3
Sample Matrix Soil
Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.1	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.0134 "J"	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE
 Project # 160806

Invoice # E32241

Lab Code 5032241D
 Sample ID S-4
 Sample Matrix Soil
 Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	83.1	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1
PVOC										
Benzene	< 0.025	mg/kg	0.014	0.046	1	GRO95/8021		12/15/2016	TCC	1
Ethylbenzene	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/15/2016	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.013	0.041	1	GRO95/8021		12/15/2016	TCC	1
Toluene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/15/2016	TCC	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/15/2016	TCC	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.012	0.038	1	GRO95/8021		12/15/2016	TCC	1
m&p-Xylene	< 0.05	mg/kg	0.023	0.074	1	GRO95/8021		12/15/2016	TCC	1
o-Xylene	< 0.025	mg/kg	0.024	0.078	1	GRO95/8021		12/15/2016	TCC	1

Project Name VA PARKING STRUCTURE
 Project # 160806

Invoice# E32241

Lab Code 5032241E
 Sample ID S-5
 Sample Matrix Soil
 Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.8	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.0222 "J"	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.021 "J"	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.033 "J"	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.0196 "J"	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.0248 "J"	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.0258 "J"	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	0.0152 "J"	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.0122 "J"	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.0277 "J"	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE

Invoice # E32241

Project # 160806

Lab Code 5032241F

Sample ID S-6

Sample Matrix Soil

Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	84.3	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.0185 "J"	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.014 "J"	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.0262 "J"	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.0142 "J"	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.0251 "J"	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.034 "J"	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.0146 "J"	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.0301 "J"	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE
Project # 160806

Invoice # E32241

Lab Code 5032241G
Sample ID S-7
Sample Matrix Soil
Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	83.1	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	0.0291 "J"	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.071	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.065	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.103	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.054	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	0.0225 "J"	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.081	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.177	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	0.04 "J"	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.081	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.138	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE
Project # 160806

Invoice # E32241

Lab Code 5032241H
Sample ID S-8
Sample Matrix Soil
Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.0	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	0.0217 "J"	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	0.013 "J"	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	0.058	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.119	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.109	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.164	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.096	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	0.056	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.129	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	0.0157 "J"	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.27	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	0.073	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.122	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.239	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE

Invoice # E32241

Project # 160806

Lab Code 5032241I

Sample ID S-9

Sample Matrix Soil

Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.0	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	0.06	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	0.049	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	0.093	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.228	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.219	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.32	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.169	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	0.102	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.249	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	0.034 "J"	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.44	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	0.0296 "J"	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	0.135	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	0.0202 "J"	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	0.0179 "J"	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	0.043	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.221	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.40	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE
 Project # 160806

Invoice # E32241

Lab Code 5032241J
 Sample ID S-10
 Sample Matrix Soil
 Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.9	%			1	5021	12/15/2016	12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	0.057	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	0.082	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	0.123	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.273	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.294	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.41	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.225	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	0.119	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.311	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	0.043 "J"	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.51	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	0.0259 "J"	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	0.172	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	0.0279 "J"	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	0.0295 "J"	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	0.043	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.19	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.52	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE
 Project # 160806

Invoice # E32241

Lab Code 5032241K
 Sample ID S-11
 Sample Matrix Soil
 Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	90.9	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	0.07	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	0.033 "J"	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	0.088	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.203	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.203	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.29	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.148	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	0.095	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.217	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	0.0312 "J"	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	0.39	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	0.019 "J"	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	0.117	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	0.0289 "J"	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	0.17	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	0.35	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

Project Name VA PARKING STRUCTURE
 Project # 160806

Invoice# E32241

Lab Code 503224IL
 Sample ID S-12
 Sample Matrix Soil
 Sample Date 12/14/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	85.0	%			1	5021		12/15/2016	NJC	1
Organic										
PAH SIM										
Acenaphthene	0.086	mg/kg	0.0135	0.043	1	M8270C	12/15/2016	12/16/2016	NJC	1
Acenaphthylene	0.0311 "J"	mg/kg	0.012	0.0381	1	M8270C	12/15/2016	12/16/2016	NJC	1
Anthracene	0.59	mg/kg	0.0124	0.0395	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)anthracene	0.69	mg/kg	0.0116	0.037	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(a)pyrene	0.64	mg/kg	0.0113	0.0359	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(b)fluoranthene	0.84	mg/kg	0.013	0.0414	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(g,h,i)perylene	0.48	mg/kg	0.0114	0.0363	1	M8270C	12/15/2016	12/16/2016	NJC	1
Benzo(k)fluoranthene	0.274	mg/kg	0.0117	0.0371	1	M8270C	12/15/2016	12/16/2016	NJC	1
Chrysene	0.69	mg/kg	0.0138	0.0439	1	M8270C	12/15/2016	12/16/2016	NJC	1
Dibenzo(a,h)anthracene	0.088	mg/kg	0.0142	0.0453	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluoranthene	1.56	mg/kg	0.0131	0.0418	1	M8270C	12/15/2016	12/16/2016	NJC	1
Fluorene	0.084	mg/kg	0.0135	0.0431	1	M8270C	12/15/2016	12/16/2016	NJC	1
Indeno(1,2,3-cd)pyrene	0.38	mg/kg	0.015	0.0476	1	M8270C	12/15/2016	12/16/2016	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	12/15/2016	12/16/2016	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	12/15/2016	12/16/2016	NJC	1
Naphthalene	0.0169 "J"	mg/kg	0.0122	0.0387	1	M8270C	12/15/2016	12/16/2016	NJC	1
Phenanthrene	1.29	mg/kg	0.0109	0.0347	1	M8270C	12/15/2016	12/16/2016	NJC	1
Pyrene	1.33	mg/kg	0.0126	0.0401	1	M8270C	12/15/2016	12/16/2016	NJC	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code *Comment*

1 Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Sample Handling Request
Rush Analysis Date Required 12/16
(Rushes accepted only with prior authorization)
____ Normal Turn Around

Lab I.D. # _____
Account No. : _____ Quote No.: _____
Project #: 160806
Sampler: (signature) TJO

Project (Name / Location): VA Parking structure
Reports To: Rick F Invoice To: FEE
Company: FEE Company: _____
Address: _____ Address: _____
City State Zip: _____ City State Zip: _____
Phone: _____ Phone: _____
FAX: _____ FAX: _____

Analysis Requested										Other Analysis				
DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 5422)	VOC (EPA 8260)	#-PCRA METALS	PID/ FID

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
<u>5052241A</u>	<u>S-1</u>	<u>12/14/16</u>	<u>pm</u>		<u>X</u>			<u>Soil</u>	<u>NA</u>
<u>B</u>	<u>S-2</u>								
<u>C</u>	<u>S-3</u>								
<u>D</u>	<u>S-4</u>								
<u>E</u>	<u>S-5</u>								
<u>F</u>	<u>S-6</u>								
<u>G</u>	<u>S-7</u>								
<u>H</u>	<u>S-8</u>								
<u>I</u>	<u>S-9</u>								
<u>J</u>	<u>S-10</u>								

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment: clean
Temp. of Temp. Blank _____ °C On Ice:
Cooler seal intact upon receipt: Yes _____ No

Relinquished By: (Sign) [Signature] Time 8:35 Date 12/15/16
Received By: (sign) _____ Time _____ Date _____
Received in Laboratory By: [Signature] Time: 8:35 Date: 12/15/16

Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Sample Handling Request
 Rush Analysis Date Required 12/16
 (Rushes accepted only with prior authorization)
 Normal Turn Around

Lab I.D. # _____
 Account No.: _____ Quote No.: _____
 Project #: 160806
 Sampler: (signature) TD

Project (Name / Location): VA Parking structure
 Reports To: Rick Invoice To: FEE
 Company: FEE Company: _____
 Address: _____ Address: _____
 City State Zip: _____ City State Zip: _____
 Phone: _____ Phone: _____
 FAX: _____ FAX: _____

Analysis Requested										Other Analysis										
DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-PCRA METALS	PID/ FID						

Lab I.D.	Sample I.D.	Collection Date Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
<u>5032241K</u>	<u>S-11</u>	<u>12/14/16</u>		<u>1</u>	<u>N</u>		<u>Soil</u>	<u>NA</u>
<u>L</u>	<u>S-12</u>	<u>12/14/16</u>		<u>1</u>				<u>1</u>

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
 Method of Shipment: Overnight
 Temp. of Temp. Blank: _____ °C On Ice:
 Cooler seal intact upon receipt: Yes No

Relinquished By: (sign) Rick Mesick Time: 8:35 Date: 12/16/16
 Received By: (sign) _____ Time: _____ Date: _____
 Received in Laboratory By: [Signature] Time: 8:35 Date: 12/15/16