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AECOM Project No.:
60610307

To:
Mr. Riley Newmann
Hydrogeologist, WDNR
1027 W. St. Paul Ave.
Milwaukee, WI 53233

CC:
Benjamin Timm – RACM
Tory Kress – RACM

From:
Dave Henderson, P.E., AECOM
Courtney Kulinski, AECOM

Date:
June 07, 2023

Technical Memo

Subject: Supplemental Site Investigation Addendum
3940 North 35th Street Site, Milwaukee, Wisconsin
BRRTS No.: 02-41-591218

AECOM prepared this addendum to the *Supplemental Site Investigation Report*[1] (SSIR) on behalf of the Redevelopment Authority of the City of Milwaukee (RACM) in response to review comments provided by the Wisconsin Department of Natural Resources (WDNR or Department).

On June 2, 2023, AECOM received preliminary site investigation review comments from the Department requesting updates to the three soil analytical results figures (i.e., Figures 10, 11, and 12) submitted with the SSIR. The figures as originally submitted did not consistently provide NR 720 Residual Contaminant Limit (RCL) isoconcentration lines for the contaminants of concern (COC).

As noted in the SSIR, the location of the COCs within the fill material and the diversity of COCs detected suggests that the impacts are associated with localized historical industrial activities and/or were imported with the fill material. Due to the heterogenous nature of the fill materials, RACM and AECOM concur with the Department that there may be COC impacts present on the property in areas not previously identified during the site investigation. Therefore, Figures 10, 11, and 12 have been revised to show an RCL isoconcentration line around the entire property indicating the potential for site wide COC industrial direct contact, non-industrial direct contact, and/or groundwater protection RCL exceedances to be present. Revised Figures 10, 11, and 12 are attached.

With the submittal of this addendum, RACM requests that the Department finalize the site investigation review.

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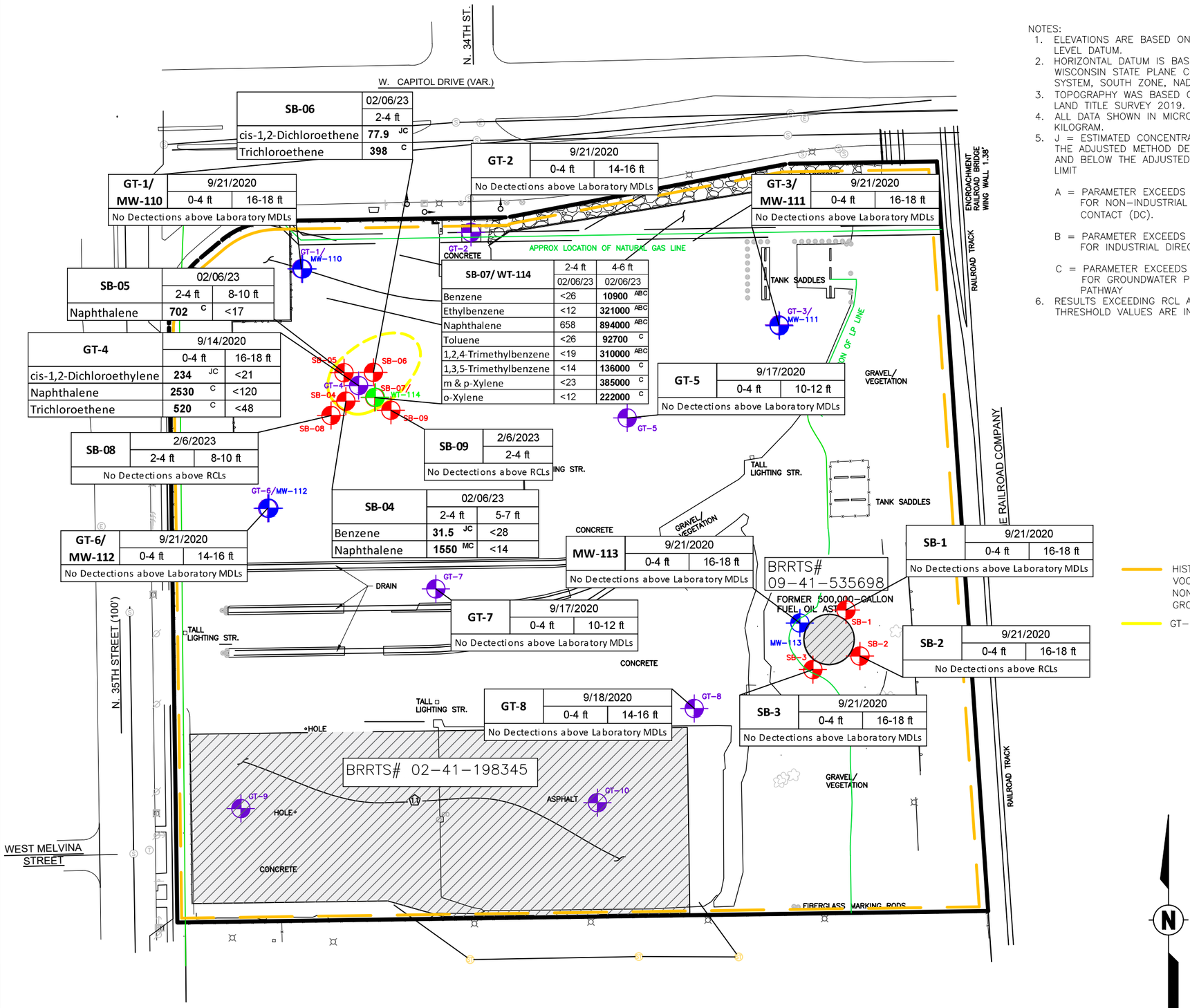
dsh/cak

Attachments:
- Figure 10 – Soil VOC RCL Exceedances, Revised
- Figure 11 – Soil Metals RCL Exceedances, Revised
- Figure 12 – Soil PAH RCL Exceedances, Revised

[1] *Supplemental Site Investigation Report*, 3940 North 35tth Street, Milwaukee, WI, WDNR BRRTS No. 02-41-591218, WDNR Facility ID No. 341204600, AECOM, May 11, 2023

Figures

Figure 10 – Soil VOC RCL Exceedances, Revised
Figure 11 – Soil Metals RCL Exceedances, Revised
Figure 12 – Soil PAH RCL Exceedances, Revised



NOTES:
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- GT-4 VOC RCL EXCEEDANCES
- GT-8 — 2020 GESTRA GEOTECHNICAL BORINGS
- MW-113 — 2020 AECOM NR 141 PIEZOMETER WELLS
- WT-111 — 2023 AECOM NR 141 WATER TABLE WELLS
- SB-1 — 2020/2023 AECOM ENVIRONMENTAL BORINGS
- ADDITIONAL BRRTS SITES ASSOCIATED WITH FID# 341204600

PROPERTY AND EASEMENT DESCRIPTION

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597,637 S.F. 13.720 ACRES

11 Soil and engineered cap deed restriction, Doc. No. 7935390

12 Former Mud/Lincoln Creek, 60 ft drainage easement CSM No. 7524

15 Natural gas main, 10 ft easement, Doc. No. 3909211

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Soil VOC RCL Exceedances, Revised

Project Number:	Drawn By:	Date:	Figure No.
60610307	EMS/CAK	Rev 6/7/2023	10

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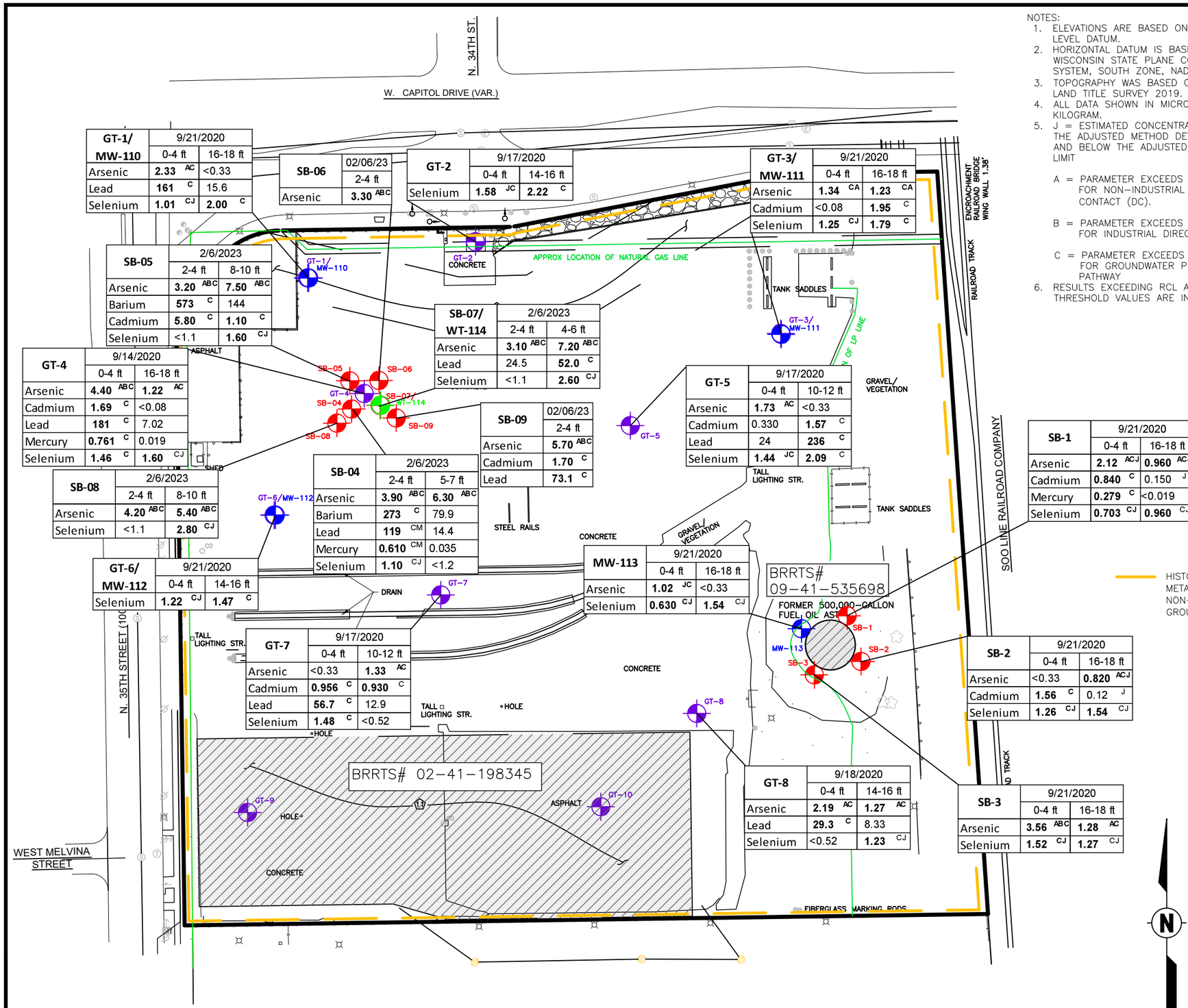

GT-1/ MW-110	9/21/2020	
	0-4 ft	16-18 ft
Arsenic	**2.33** AC	<0.33
Lead	**161** C	15.6
Selenium	**1.01** CJ	**2.00** C

SB-06	02/06/23
	2-4 ft
Arsenic	**3.30** ABC

GT-2	9/17/2020	
	0-4 ft	14-16 ft
Selenium	**1.58** JC	**2.22** C

GT-3/ MW-111	9/21/2020	
	0-4 ft	16-18 ft
Arsenic	**1.34** CA	**1.23** CA
Cadmium	<0.08	**1.95** C
Selenium	**1.25** CJ	**1.79** C

SB-05	2/6/2023	
	2-4 ft	8-10 ft
Arsenic	**3.20** ABC	**7.50** ABC
Barium	**573** C	144
Cadmium	**5.80** C	**1.10** C
Selenium	<1.1	**1.60** CJ

SB-07/ WT-114	2/6/2023	
	2-4 ft	4-6 ft
Arsenic	**3.10** ABC	**7.20** ABC
Lead	24.5	**52.0** C
Selenium	<1.1	**2.60** CJ

GT-4	9/14/2020	
	0-4 ft	16-18 ft
Arsenic	**4.40** ABC	**1.22** AC
Cadmium	**1.69** C	<0.08
Lead	**181** C	7.02
Mercury	**0.761** C	0.019
Selenium	**1.46** C	**1.60** CJ

GT-5	9/17/2020	
	0-4 ft	10-12 ft
Arsenic	**1.73** AC	<0.33
Cadmium	0.330	**1.57** C
Lead	24	**236** C
Selenium	**1.44** JC	**2.09** C

SB-09	02/06/23
	2-4 ft
Arsenic	**5.70** ABC
Cadmium	**1.70** C
Lead	**73.1** C

SB-08	2/6/2023	
	2-4 ft	8-10 ft
Arsenic	**4.20** ABC	**5.40** ABC
Selenium	<1.1	**2.80** CJ

SB-04	2/6/2023	
	2-4 ft	5-7 ft
Arsenic	**3.90** ABC	**6.30** ABC
Barium	**273** C	79.9
Lead	**119** CM	14.4
Mercury	**0.610** CM	0.035
Selenium	**1.10** CJ	<1.2

MW-113	9/21/2020	
	0-4 ft	16-18 ft
Arsenic	**1.02** JC	<0.33
Selenium	**0.630** CJ	**1.54** CJ

GT-6/ MW-112	9/21/2020	
	0-4 ft	14-16 ft
Selenium	**1.22** CJ	**1.47** C

GT-7	9/17/2020	
	0-4 ft	10-12 ft
Arsenic	<0.33	**1.33** AC
Cadmium	**0.956** C	**0.930** C
Lead	**56.7** C	12.9
Selenium	**1.48** C	<0.52

GT-8	9/18/2020	
	0-4 ft	14-16 ft
Arsenic	**2.19** AC	**1.27** AC
Lead	**29.3** C	8.33
Selenium	<0.52	**1.23** CJ

SB-1	9/21/2020	
	0-4 ft	16-18 ft
Arsenic	**2.12** ACJ	**0.960** ACJ
Cadmium	**0.840** C	0.150 J
Mercury	**0.279** C	<0.019
Selenium	**0.703** CJ	**0.960** CJ

SB-2	9/21/2020	
	0-4 ft	16-18 ft
Arsenic	<0.33	**0.820** ACJ
Cadmium	**1.56** C	0.12 J
Selenium	**1.26** CJ	**1.54** CJ

SB-3	9/21/2020	
	0-4 ft	16-18 ft
Arsenic	**3.56** ABC	**1.28** AC
Selenium	**1.52** CJ	**1.27** CJ

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Soil Metals RCL Exceedances, Revised

Project Number: 60610307 | Drawn By: CAK | Date: Rev 6/7/2023

Figure No. 11

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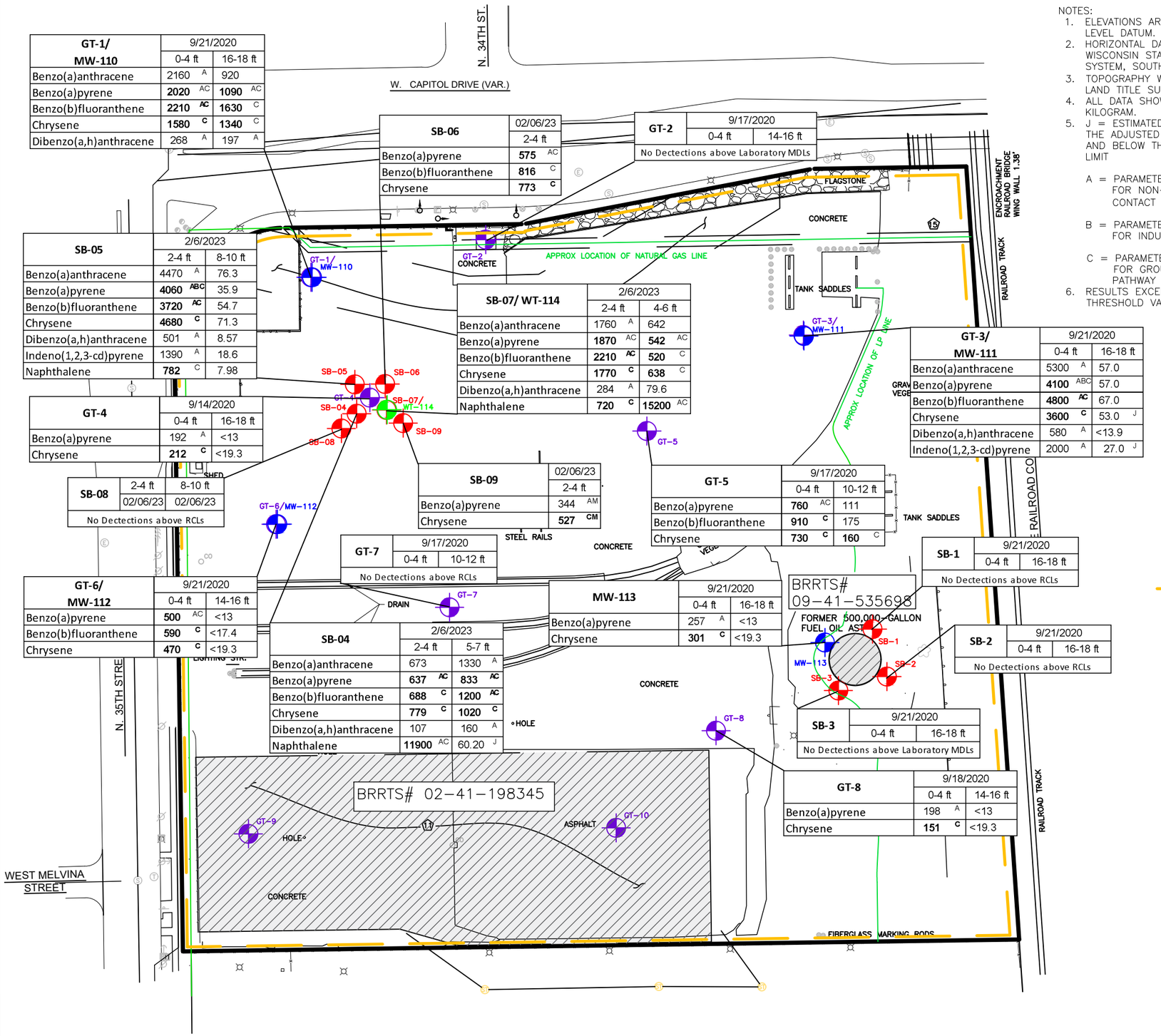

GT-1/ MW-110	9/21/2020	
	0-4 ft	16-18 ft
Benzo(a)anthracene	2160 A	920
Benzo(a)pyrene	**2020** AC	**1090** AC
Benzo(b)fluoranthene	**2210** AC	**1630** C
Chrysene	**1580** C	**1340** C
Dibenzo(a,h)anthracene	268 A	197 A

SB-06	02/06/23
	2-4 ft
Benzo(a)pyrene	**575** AC
Benzo(b)fluoranthene	**816** C
Chrysene	**773** C

GT-2	9/17/2020	
	0-4 ft	14-16 ft
No Dectections above Laboratory MDLs		

SB-05	2/6/2023	
	2-4 ft	8-10 ft
Benzo(a)anthracene	4470 A	76.3
Benzo(a)pyrene	**4060** ABC	35.9
Benzo(b)fluoranthene	**3720** AC	54.7
Chrysene	**4680** C	71.3
Dibenzo(a,h)anthracene	501 A	8.57
Indeno(1,2,3-cd)pyrene	1390 A	18.6
Naphthalene	**782** C	7.98

SB-07/ WT-114	2/6/2023	
	2-4 ft	4-6 ft
Benzo(a)anthracene	1760 A	642
Benzo(a)pyrene	**1870** AC	**542** AC
Benzo(b)fluoranthene	**2210** AC	**520** C
Chrysene	**1770** C	**638** C
Dibenzo(a,h)anthracene	284 A	79.6
Naphthalene	**720** C	**15200** AC

GT-3/ MW-111	9/21/2020	
	0-4 ft	16-18 ft
Benzo(a)anthracene	5300 A	57.0
Benzo(a)pyrene	**4100** ABC	57.0
Benzo(b)fluoranthene	**4800** AC	67.0
Chrysene	**3600** C	53.0 J
Dibenzo(a,h)anthracene	580 A	<13.9
Indeno(1,2,3-cd)pyrene	2000 A	27.0 J

GT-4	9/14/2020	
	0-4 ft	16-18 ft
Benzo(a)pyrene	192 A	<13
Chrysene	**212** C	<19.3

SB-08	2-4 ft	8-10 ft
	02/06/23	02/06/23
No Dectections above RCLs		

SB-09	02/06/23
	2-4 ft
Benzo(a)pyrene	344 AM
Chrysene	**527** CM

GT-5	9/17/2020	
	0-4 ft	10-12 ft
Benzo(a)pyrene	**760** AC	111
Benzo(b)fluoranthene	**910** C	175
Chrysene	**730** C	**160** C

GT-7	9/17/2020	
	0-4 ft	10-12 ft
No Dectections above RCLs		

SB-1	9/21/2020	
	0-4 ft	16-18 ft
No Dectections above RCLs		

GT-6/ MW-112	9/21/2020	
	0-4 ft	14-16 ft
Benzo(a)pyrene	**500** AC	<13
Benzo(b)fluoranthene	**590** C	<17.4
Chrysene	**470** C	<19.3

MW-113	9/21/2020	
	0-4 ft	16-18 ft
Benzo(a)pyrene	257 A	<13
Chrysene	**301** C	<19.3

SB-04	2/6/2023	
	2-4 ft	5-7 ft
Benzo(a)anthracene	673	1330 A
Benzo(a)pyrene	**637** AC	**833** AC
Benzo(b)fluoranthene	**688** C	**1200** AC
Chrysene	**779** C	**1020** C
Dibenzo(a,h)anthracene	107	160 A
Naphthalene	**11900** AC	60.20 J

SB-2	9/21/2020	
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No Dectections above RCLs		

SB-3	9/21/2020	
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No Dectections above Laboratory MDLs		

GT-8	9/18/2020	
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Benzo(a)pyrene	198 A	<13
Chrysene	**151** C	<19.3

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