

Memorandum

December 14, 2021

To	Peter Ramanauskas/U.S. EPA	Tel	248 893-3400
Copy to	Tom Kinney, GHD Dave Favero, RACER	Email	sam.belisle@ghd.com
From	Sam Belisle/mg/5	Ref. No.	11223416
Subject	Well Reinstallation – Scope of Work Summary		

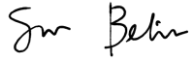
GHD is providing this memorandum on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust for the former PCC-Validation property in Pontiac, Michigan (Site). This memorandum summarizes the USEPA approved scope of work for the final phase well reinstallation at the Site. The scope of work was developed through several calls and email correspondence between USEPA, RACER, and GHD. Attachment A includes a package of figures related to the well reinstallation that was provided to USEPA via email on September 22, 2021. Attachment B includes the current monitoring plan for the Site.

Within Attachment A, Figure 1 includes the approximate locations of the 6 wells to be reinstalled. The final well placement may be modified to avoid Site structures and utilities. Additional details regarding the well placements and installation is summarized below:

- Replacement wells MW-88-12R, MW-74-08R, MW-90-12R, MW-94-15R, and MW-48-07R will be installed via Geoprobe with Direct Push Technology and/or hollow-stem auger equipment and will be screened within the shallow groundwater unit at the Site.
- Replacement well MW-74D-15R will be installed via sonic drilling technology and will be screened within a deeper groundwater unit (approximately 45' below ground surface).
- Proposed well MW-48-07R has replaced previously proposed well MW-91-12R.
- All reasonable efforts will be made to screen replacement well MW-94-15R within the same sand layer as MW-74-08R.
- The approximate 60-foot deep investigative boring at MW-48-07R will be completed, plugged, and then a separate borehole will be completed within ~3 feet for installation of the shallow well at MW-48-07R.
- Continuous soil samples will be collected from all well locations/borings and the samples will be field screened with a photoionization detector (PID) during completion.
- Drilling equipment will be decontaminated between drilling locations.
- Soil and groundwater waste will be containerized, characterized, and disposed of off-Site.

Please let us know if there are any concerns with the summary outlined above.

Regards,

A handwritten signature in black ink, appearing to read "Sam Belisle". The signature is written in a cursive, flowing style.

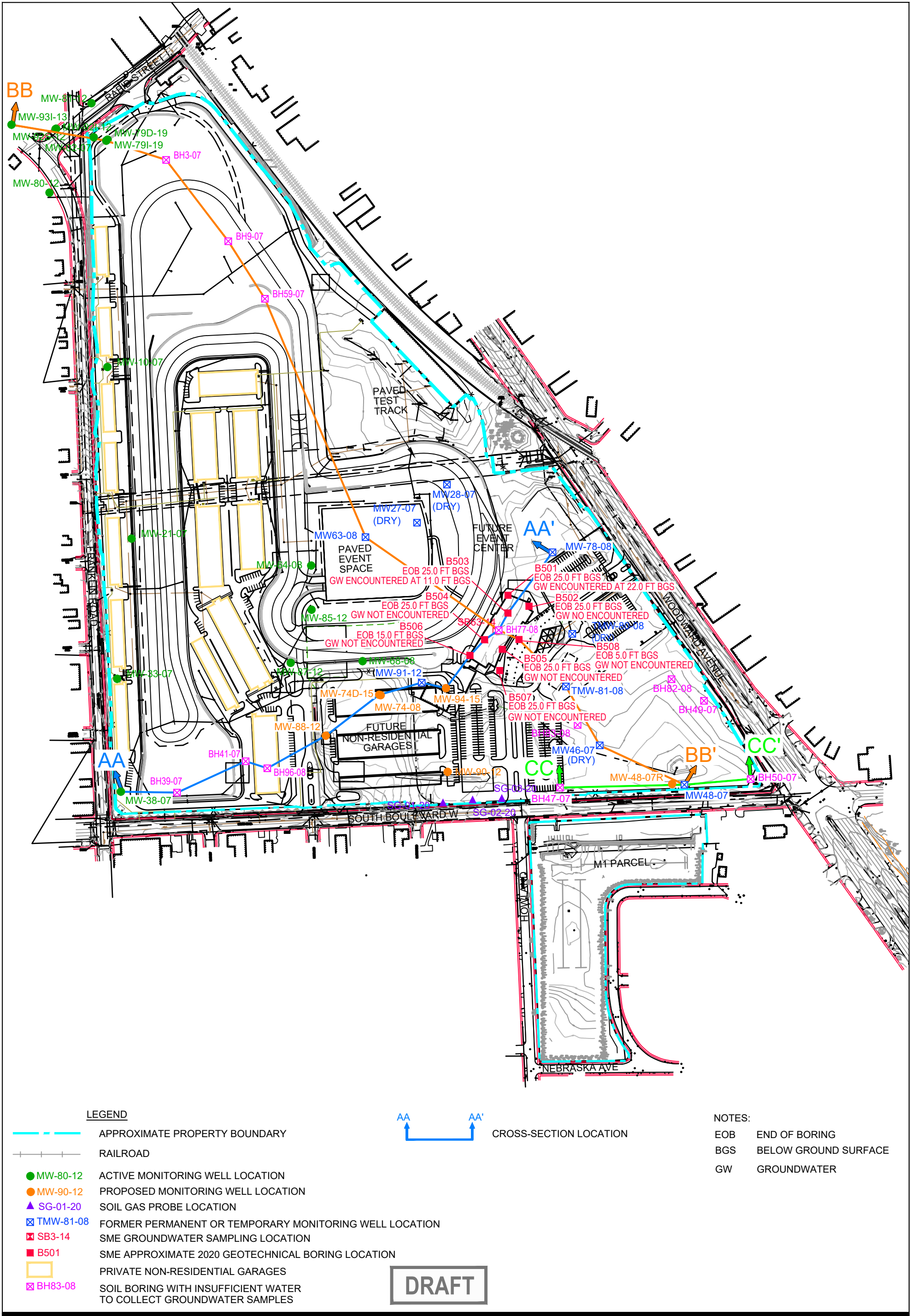
Sam Belisle
Project Coordinator

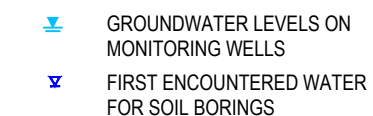
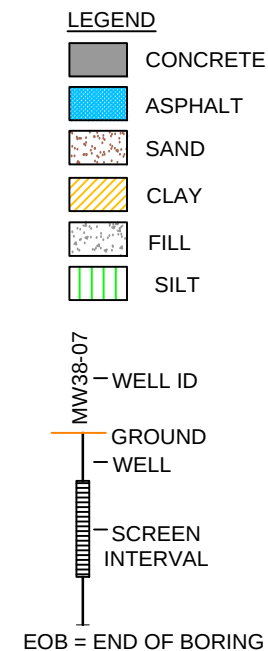
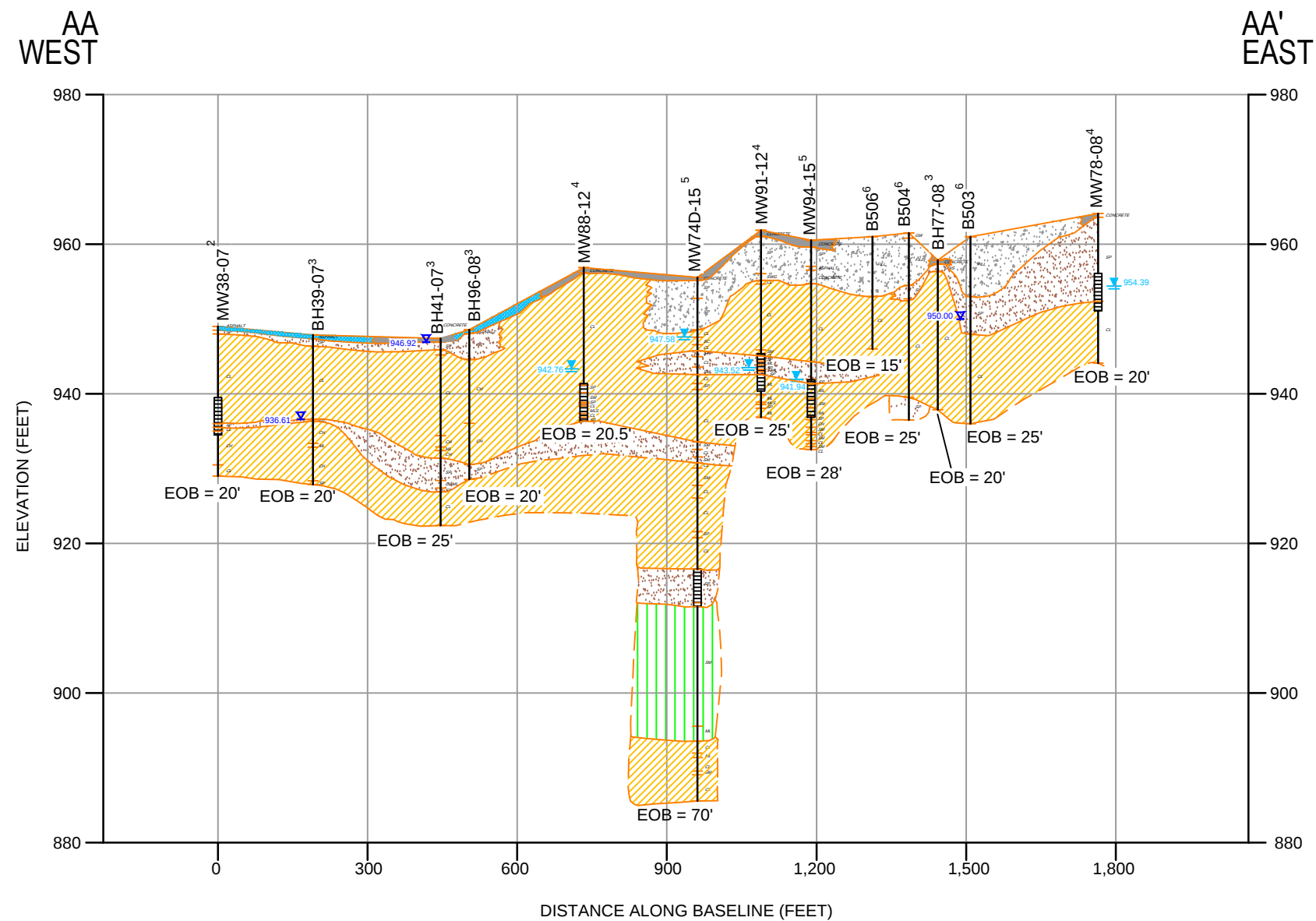
Encl.

Attachments

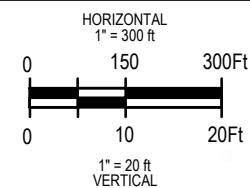
Attachment A

Well Reinstall Figure Package





- NOTES:**
- IF NO WATER LEVEL IS INDICATED ON SOIL BORING, GROUNDWATER WAS NOT ENCOUNTERED DURING COMPLETION.
 - WELL WAS DRY DURING JUNE 2021 MONITORING EVENT.
 - SOIL BORING COMPLETED IN 2007 OR 2008.
 - WATER LEVEL RECORDED DURING MAY 2015 MONITORING EVENT.
 - WATER LEVEL RECORDED DURING MARCH 2015 MONITORING EVENT.
 - SOIL BORING COMPLETED IN 2020.



RACER
 1 CONCOURSE DRIVE
 PONTIAC, MICHIGAN
 PHASE III INVESTIGATION

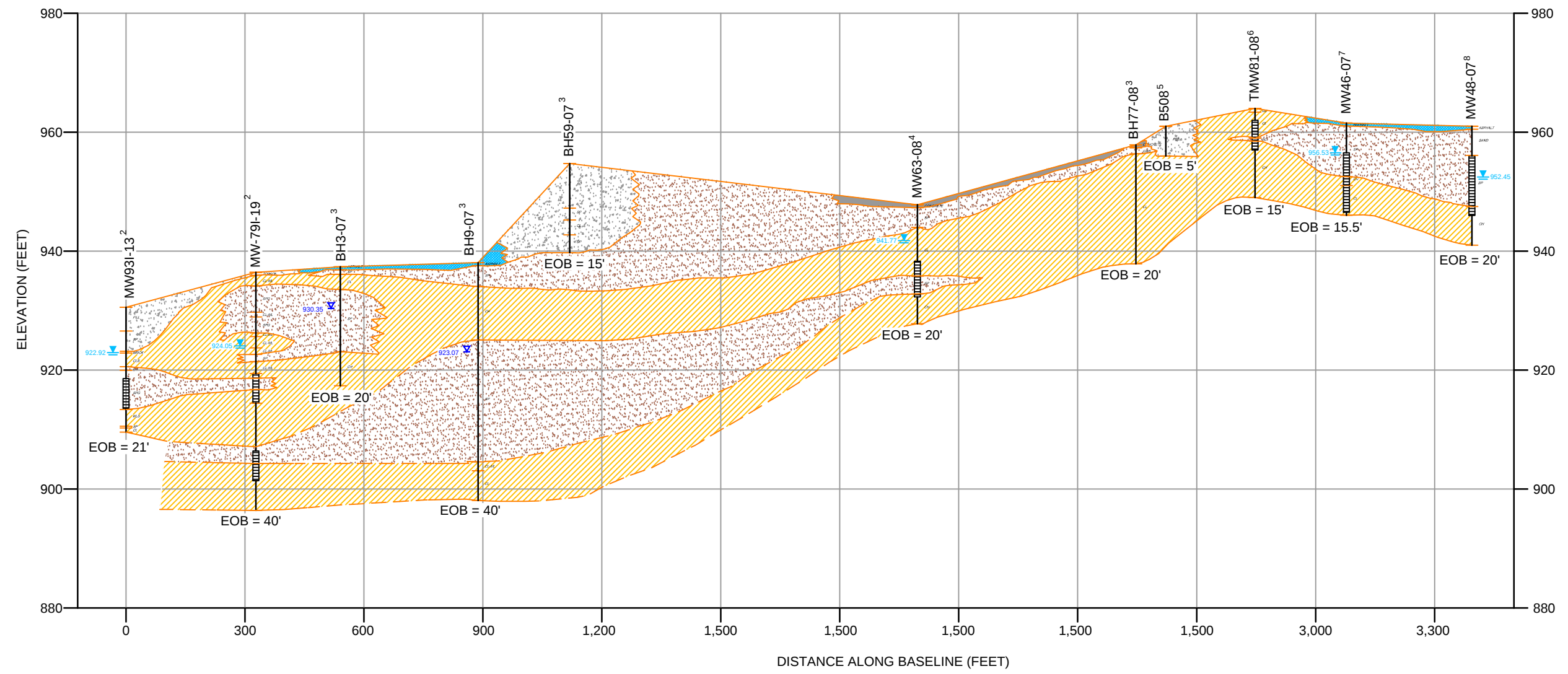
Project No. 11223416
 Date September 2021

CROSS-SECTION AA-AA'

FIGURE 3

BB
NORTH

BB'
SOUTH



LEGEND

- CONCRETE
- ASPHALT
- SAND
- CLAY
- FILL
- SILT

WELL ID

GROUND

WELL

SCREEN INTERVAL

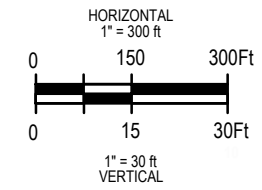
EOB = END OF BORING

GROUNDWATER LEVELS ON MONITORING WELLS

FIRST ENCOUNTERED WATER FOR SOIL BORINGS

- NOTES:**
- IF NO WATER LEVEL IS INDICATED ON SOIL BORING, GROUNDWATER WAS NOT ENCOUNTERED DURING COMPLETION.
 - WELL WAS DRY DURING JUNE 2021 MONITORING EVENT.
 - SOIL BORING COMPLETED IN 2007 OR 2008.
 - WATER LEVEL RECORDED DURING MAY 2015 MONITORING EVENT.
 - SOIL BORING COMPLETED IN 2020.
 - TEMPORARY WELL INSTALLED IN 2008, REPORTED AS DRY DURING SAMPLING EVENT.
 - WATER LEVEL RECORDED DURING OCTOBER 2007 INSTALLATION.
 - WATER LEVEL RECORDED DURING MARCH 2013 MONITORING EVENT.

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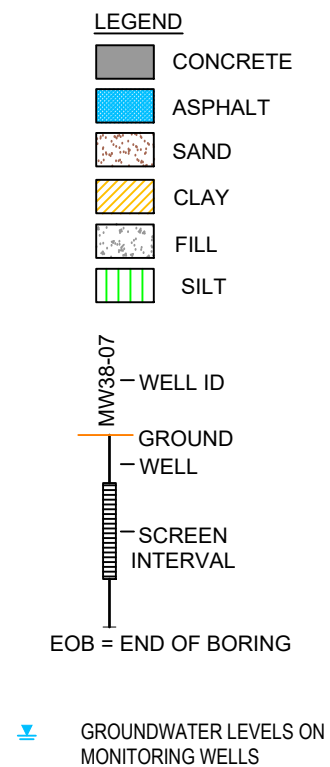
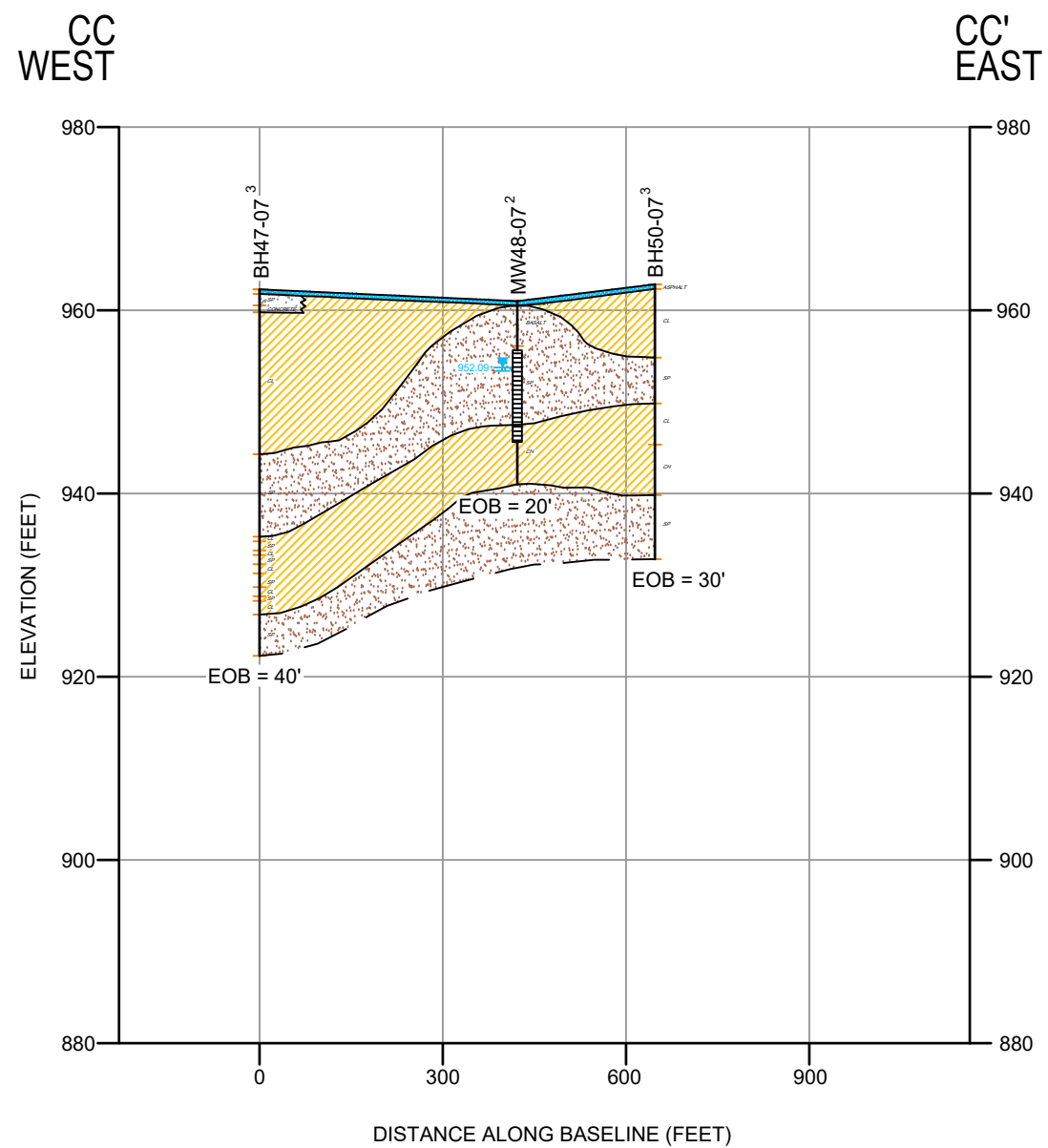


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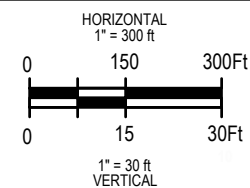
CROSS-SECTION BB-BB'

FIGURE 4



- NOTES:
1. IF NO WATER LEVEL IS INDICATED ON SOIL BORING, GROUNDWATER WAS NOT ENCOUNTERED DURING COMPLETION.
 2. WATER LEVEL RECORDED DURING MARCH 2013 MONITORING EVENT.
 3. SOIL BORING COMPLETED IN 2007.

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1 CONCOURSE DRIVE
PONTIAC, MICHIGAN
PHASE III INVESTIGATION

Project No. 11223416
Date August 2021

CROSS-SECTION CC-CC'

FIGURE 5

Attachment B

Groundwater Monitoring Plan Summary

Attachment B

**Groundwater Monitoring Plan Summary
RACER PCC - Validation
Pontiac, Michigan**

Well ID	Most Recent Install Date	Sampling Parameters	Current Monitoring Frequency
MW-02-07	6/4/2018	TCL VOCs	Annually (1)
MW-10-07	6/1/2018	Al, Pb, V (Total+Dissolved)	Annually (1)
MW-21-07	5/22/2019	Al, Pb, V (Total+Dissolved)	Annually (1)
MW-33-07	5/31/2018	Al, Pb, V (Total+Dissolved)	Annually (1)
MW-38-07	5/30/2018	Al, Pb, V (Total+Dissolved)	Annually (1)
MW-64-08	5/29/2018	TCL VOCs	Annually (1)
MW-68-08	5/24/2019	TCL VOCs	Annually (1)
MW-79D-19	5/21/2019	TCL VOCs	Annually (1)
MW-79I-19	5/21/2019	TCL VOCs	Annually (1)
MW-80-12	8/28/2012	TCL VOCs	Annually (1)
MW-81-12	8/28/2012	TCL VOCs	Annually (1)
MW-85-12	5/28/2018	TCL VOCs	Annually (1)
MW-87-12	5/22/2019	TCL VOCs	Annually (1)
MW-92I-13	1/23/2013	TCL VOCs	Annually (1)
MW-92S-13	1/24/2013	TCL VOCs	Annually (1)
MW-93I-13	7/26/2013	TCL VOCs	Annually (1)
MW-74-08R	Second Quarter of 2022	TCL VOCs & 1,4-Dioxane (initial event only unless detected)	To be sampled quarterly for four events following install
MW-74D-15R	Second Quarter of 2022	TCL VOCs	To be sampled quarterly for four events following install
MW-88-12R	Second Quarter of 2022	TCL VOCs	To be sampled quarterly for four events following install
MW-90-12R	Second Quarter of 2022	TCL VOCs	To be sampled quarterly for four events following install
MW-48-07R (2)	Second Quarter of 2022	TCL VOCs	To be sampled quarterly for four events following install
MW-94-15R	Second Quarter of 2022	TCL VOCs	To be sampled quarterly for four events following install

Notes:

(1) Annual sampling event will occur in June, the quarter with the most recent exceedance of Michigan EGLE Generic Groundwater Cleanup Criteria (Part 201).

(2) Proposed well MW-48-07R has replaced previously proposed MW-91-12.