August 30, 2023
File No. 25220211.01

Mr. Jeff Ackerman
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711-5367

Subject: Evaluation of Off-Site Groundwater Contamination
Highway Cleaners (Former)
1509 Elm Street, Boscobel, Wisconsin
BRRTS #02-22-543001

Dear Mr. Ackerman:

On behalf of Mound City Bank, SCS Engineers (SCS) is providing this letter, which summarizes our evaluation for the potential of an off-site source of groundwater contamination to the north of the former Highway Cleaners property. Findings indicate that there is evidence of an off-site source which has resulted in groundwater contamination inconsistent with a release from the former dry cleaner. Based on these findings we propose that no further groundwater sampling be performed, and that Mound City Bank submit for regulatory case closure of the Highway Cleaners case.

BACKGROUND

The Highway Cleaners site is located at 1509 Elm Street on the southwest side of Boscobel (**Figure 1**). The Bureau for Remediation and Redevelopment Tracking System (BRRTS) case for this site began after tetrachloroethylene (PCE) was discovered in groundwater at the Citgo Quick Stop (Citgo), which was located at 1406 Elm Street, approximately 300 feet north of the drycleaner site (**Figure 2**).

Dry cleaning operations ceased approximately 30 years ago. Subsequent environmental work related to the dry cleaner case has included installation and sampling of numerous groundwater monitoring wells and soil borings, a soil gas survey, vapor intrusion assessment, mitigation of the source property building, operation of a soil vapor extraction system, and assessing buried utilities as potential pathways for contaminant migration.

PCE was detected in Citgo monitoring wells in February 1998, but only one round of sampling was performed for PCE prior to closure of the Citgo case. In 2005, Highway Cleaners monitoring well MW-4 was installed adjacent to the Citgo property as a part of the dry cleaner investigation. MW-4 and 15 other Highway Cleaners monitoring wells have been sampled up to 12 times between 2005 and 2023. The most recent groundwater flow and isococentration maps are provided as **Figures 3** through **4**.

OFF-SITE GROUNDWATER CONTAMINATION

As more fully summarized in our November 7, 2022, Remedial Action Documentation Report, there appears to be a second source of groundwater contamination to the north of the dry cleaner site based on the following information:

- The maximum PCE concentration in groundwater adjacent to the former Citgo (well MW-4) is an order of magnitude greater than the maximum PCE concentration for other wells, including those installed at the dry cleaner property (MW-1 and MW-2), and the timing of the peak PCE concentration for MW-4 does not appear to be consistent with a release from the dry cleaner. Based on the estimated rate of contaminant migration and date when dry cleaning operations ceased, a peak concentration likely would have occurred several years sooner if the contamination had migrated to MW-4 from the dry cleaner.

- The distribution of PCE in groundwater is not consistent with a release from the drycleaner. Groundwater flows to the northwest. However, the location of historic high PCE concentrations (MW-4) and the shape of the plume suggests there is a separate source north and cross gradient of the dry cleaner.

- The anomalous north and side gradient extent of the plume does not appear related to preferential pathway migration through buried utilities, such as sewers. The sanitary lateral at the former dry cleaning property does not connect to the City's sanitary sewer line that flows north along Elm Street. It connects to a line that flows west. It also seems unlikely that the sewers would be a preferential pathway based on the sewer depths relative to groundwater.

SUMMARY AND CONCLUSION

Site investigation, interim actions, and remedial actions have been performed to address contamination related to a release of dry cleaning solvent at the former Highway Cleaners property. Investigation has identified what appears to be a second source of PCE, unrelated to the dry cleaner. While Mound City Bank did not cause the contamination from the dry cleaner, or cause, possess, or control the second source of contamination discussed in this letter, they have complied with regulatory requirements and have investigated and cleaned up the contamination to the extent practicable.

We request that the Department agree that no additional groundwater investigation is necessary related to the former Highway Cleaners property given the likelihood of an off-site source of PCE. As a result, Mound City Bank would submit for regulatory case closure.

Please contact Robert Langdon at 608-212-3995 if you have any questions concerning this letter.

Sincerely,

Robert Langdon
Senior Project Manager
SCS Engineers

Ray Tierney, PG
Vice President
SCS Engineers

REL/AJR/RT

cc: Jeff Miesen, Mound City Bank

Attachments: Figure 1 – Site Location Map
Figure 2 – Site Plan
Figure 3 – Water Table Map, July 2023
Figure 4 – Potentiometric Surface Map, July 2023
Figure 5 – PCE Isoconcentration Map, July 2023

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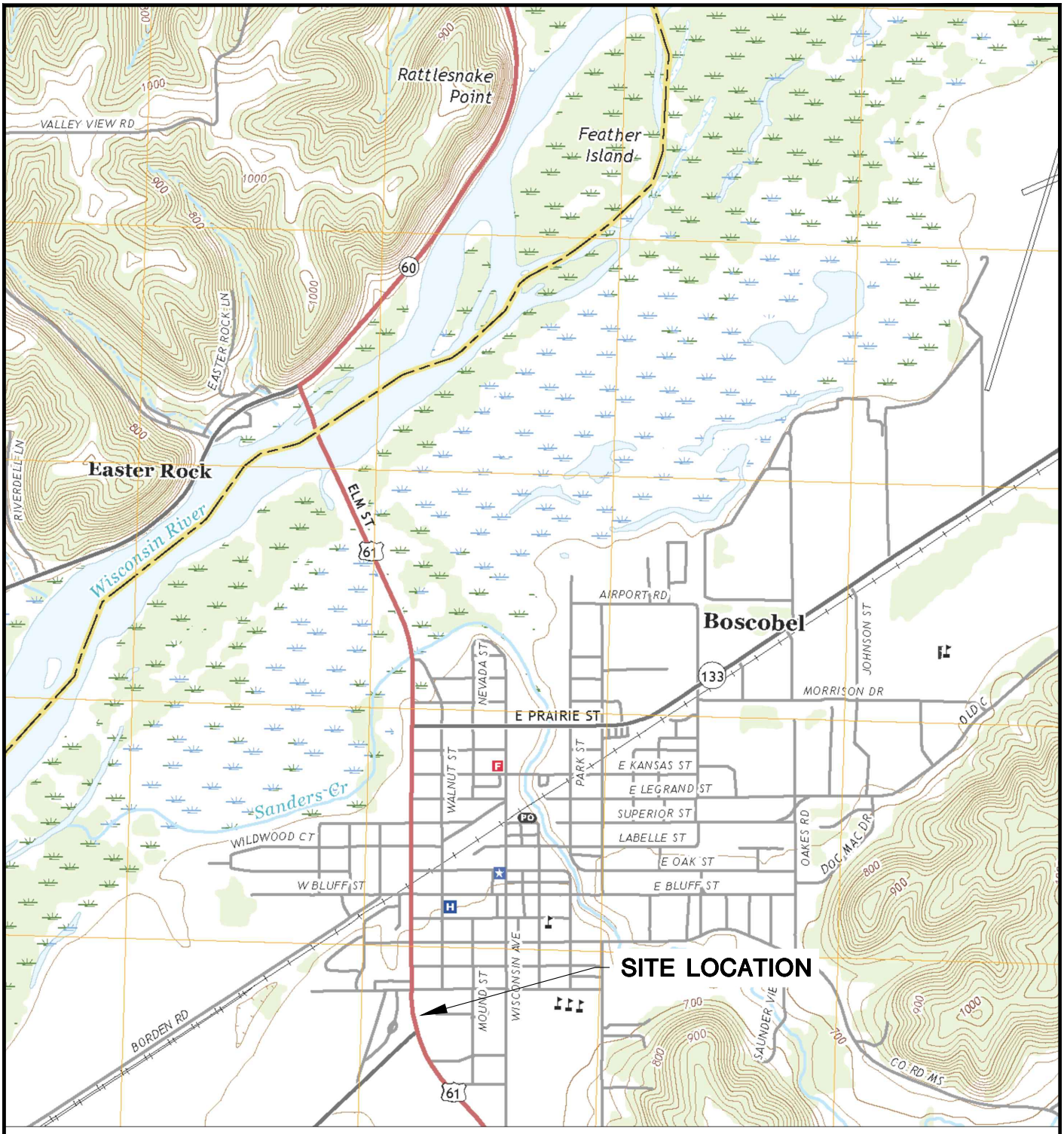
Figures



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BOSCOBEL QUADRANGLE
WISCONSIN
7.5 MINUTE SERIES (TOPOGRAPHIC)
2018
SCALE: 1" = 2,000'

CLIENT		SITE	FORMER HIGHWAY CLEANERS, BOSCOBEL 1509 ELM STREET BOSCOBEL, WISCONSIN

SITE LOCATION MAP

PROJECT NO.	25220211.00	DRAWN BY:	KP
DRAWN:	07/26/2021	CHECKED BY:	AW
REVISED:	07/26/2021	APPROVED BY:	REL 8/30/2023

ENGINEER

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

FIGURE 1

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LEGEND

- PROPERTY LINE
- SANITARY SEWER
- STORM SEWER
- SANITARY MANHOLE
- STORM MANHOLE
- STORM INLET
- MONITORING WELL
- PIEZOMETER
- SOIL VAPOR EXTRACTION WELL

NOTES:

1. APRIL 2015 AERIAL PHOTOGRAPH SOURCES: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA FSA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY.
2. PROPERTY LINES FROM WISCONSIN STATEWIDE PARCEL MAP INITIATIVE, LOCATIONS ARE APPROXIMATE.
3. WELL LOCATIONS BASED ON SEYMOUR ENVIRONMENTAL SERVICES, INC. GROUNDWATER MONITORING DATA MAP DATED JUNE 12, 2018.
4. STORM SEWER LOCATIONS BASED ON NOT TO SCALE SKETCHES PROVIDED BY THE CITY OF BOSCOBEL. LOCATIONS ARE APPROXIMATE.
5. SANITARY SEWER LOCATIONS ARE BASED ON CITY OF BOSCOBEL SANITARY SEWER MAP, PREPARED BY DELTA 3 ENGINEERING, APRIL 12, 2019. PDF PROVIDED BY THE CITY OF BOSCOBEL. LOCATIONS ARE APPROXIMATE.

100 0 100

SCALE: 1" = 100'

SITE PLAN

FIGURE 2

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
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SITE
FORMER HIGHWAY CLEANERS, BOSCOBEL
1509 ELM STREET
BOSCOBEL, WISCONSIN

CLIENT
MOUND CITY BANK
25 EAST PINE STREET
PLATTEVILLE, WISCONSIN

ENGINEER

PROJECT NO.	25220211.00	
DRAWN:	06/08/2021	DRAWN BY: KP
REVISED:	10/03/2022	CHECKED BY: AW
		APPROVED BY: REL 8/30/2023

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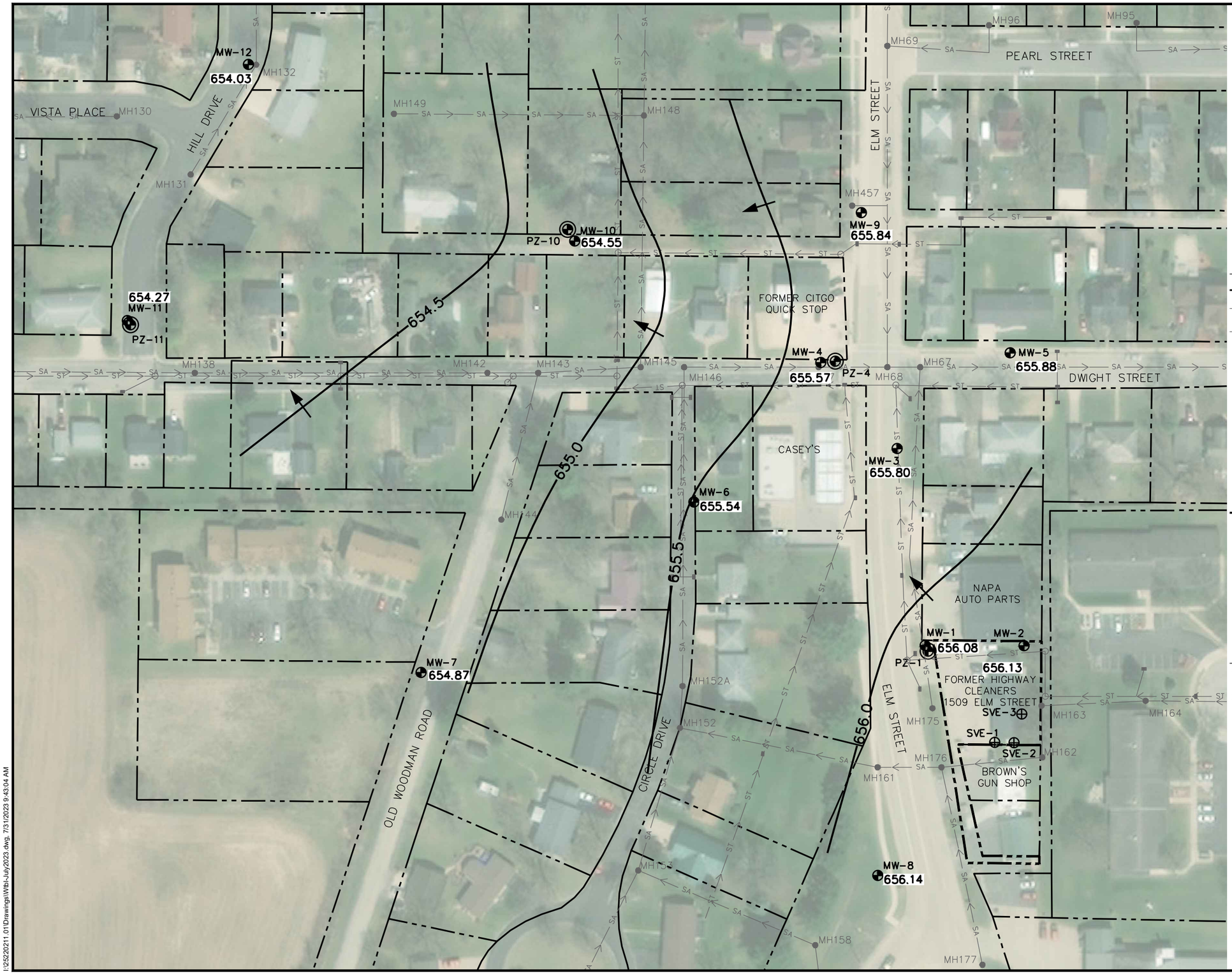

NOTES:

1. SEE FIGURE 2 FOR BASE MAP NOTES.
2. WATER LEVELS MEASURED BY SCS ENGINEERS ON JULY 24-25, 2023.

WATER TABLE MAP
JULY 2023

SITE
FORMER HIGHWAY CLEANERS, BOSCOBEL
1509 ELM STREET
BOSCOBEL, WISCONSIN

CLIENT
MOUND CITY BANK
25 EAST PINE STREET
PLATTEVILLE, WISCONSIN

FIGURE 3

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
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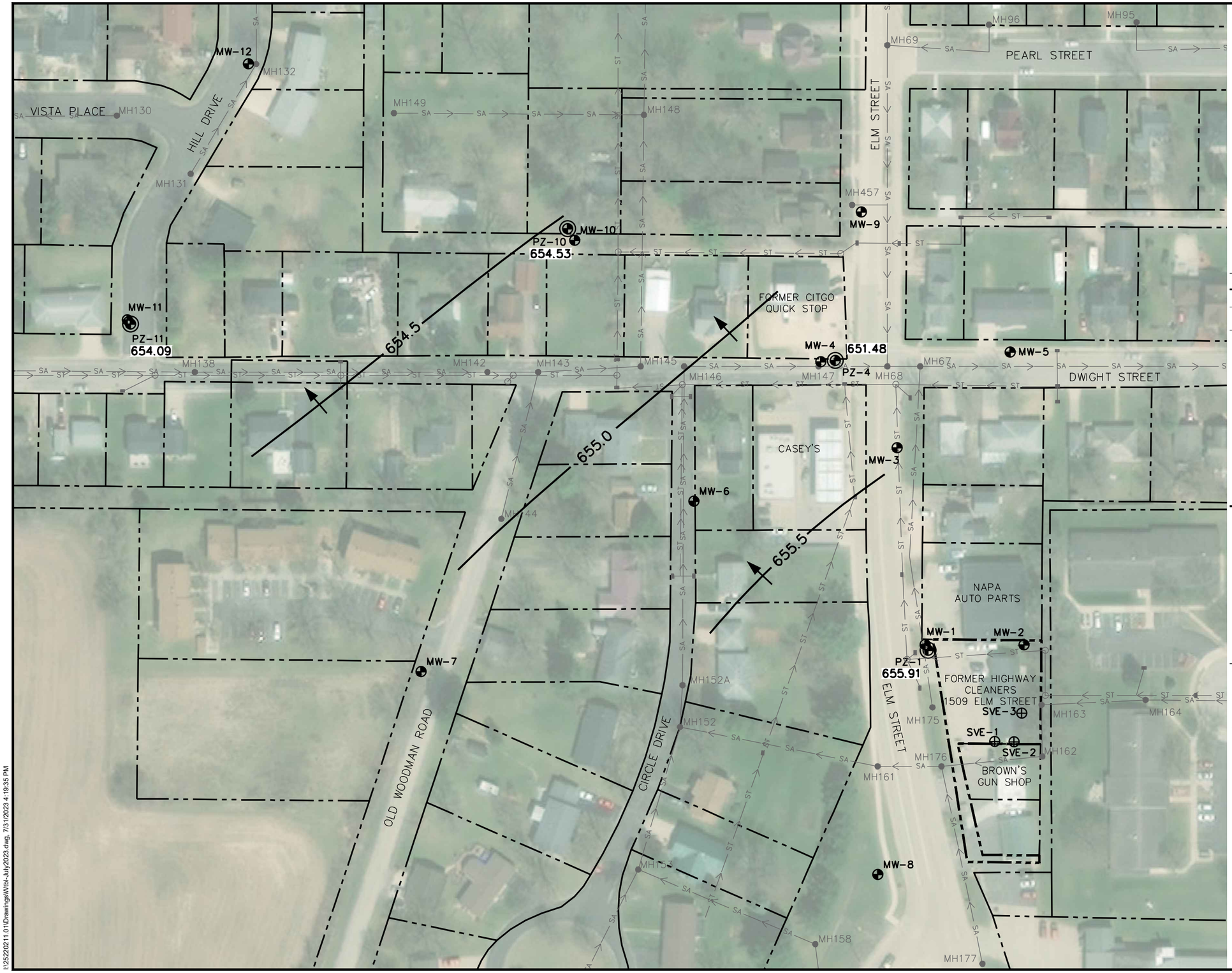

NOTES:

1. SEE FIGURE 2 FOR BASE MAP NOTES.
2. WATER LEVELS MEASURED BY SCS ENGINEERS ON JULY 24–25, 2023.
3. PZ–4 ELEVATION NOT USED FOR CONTOURING BECAUSE WELL APPEARED TO BE UNDER PRESSURE WHEN OPENED AND THE WATER LEVEL HAD LIKELY NOT STABILIZED PRIOR TO MEASUREMENT.

POTENTIOMETRIC SURFACE MAP
JULY 2023

FIGURE 4

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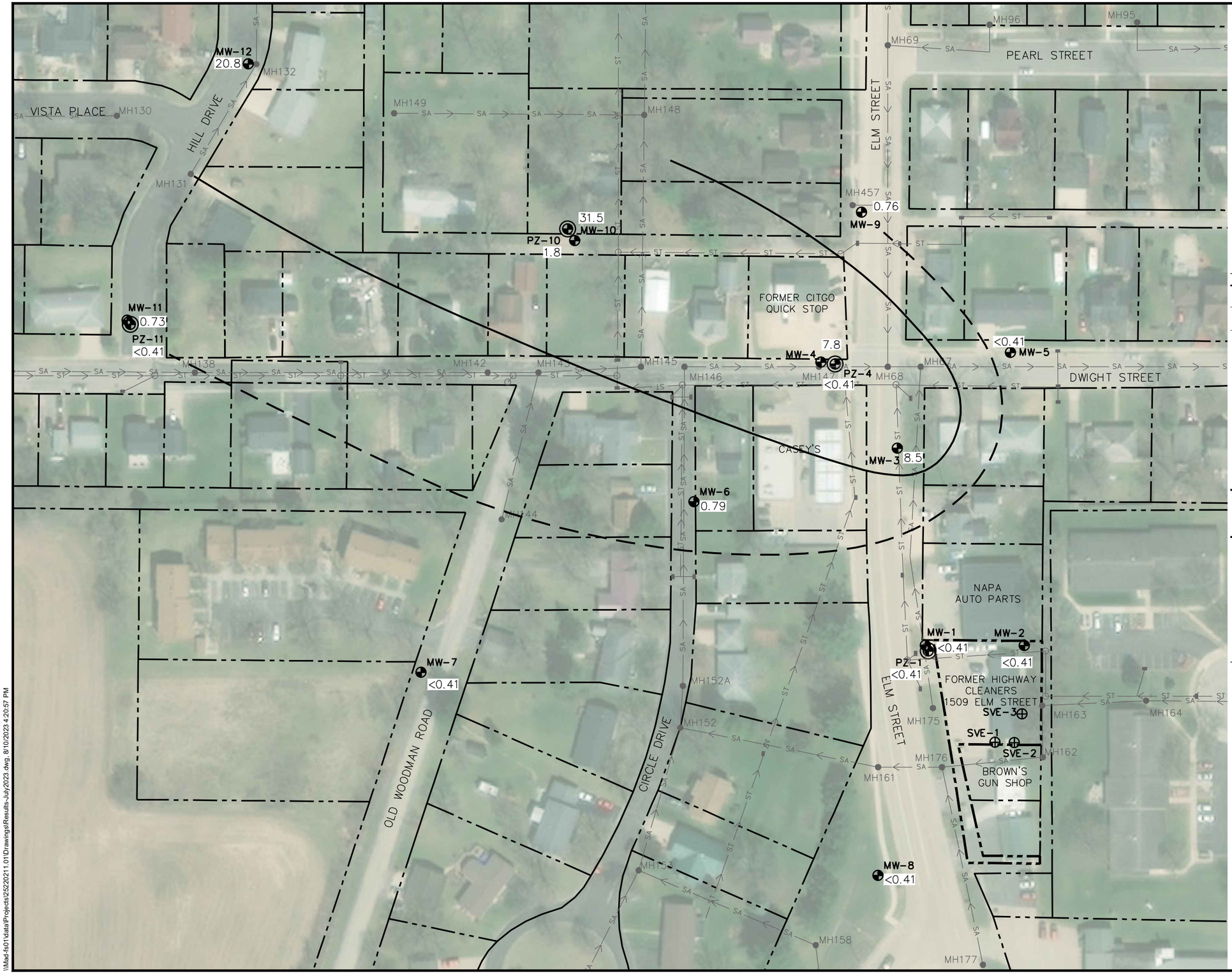

PCE ISOCONCENTRATION MAP
JULY 2023

FIGURE 5

SITE
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1509 ELM STREET
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