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July 17, 2017

Ms. Jennifer Borski  
Remediation and Redevelopment Program  
Wisconsin Department of Natural Resources  
625 East County Road Y, Suite 700  
Oshkosh, WI 54901-9731

**Subject: Work Plan Addendum for Additional Site Investigation  
FV Steel and Wire Company Site  
111 North Douglas Street, Hortonville, Wisconsin  
BRRTS No. 02-45-560221  
AECOM Project No. 60428891**

Dear Ms. Borski:

This letter and attachments have been prepared as an addendum to the 2017 Site Investigation Work Plan for further volatile organic compound (VOC) assessment at the FV Steel and Wire Company site in Hortonville, Wisconsin. This addendum is provided for review in conjunction with the Wisconsin Department of Natural Resources' (WDNR) ongoing review of the August 2016 Initial Site Investigation Report and the 2017 Site Investigation Work Plan previously submitted by AECOM Technical Services, Inc. (AECOM).

On June 22, 2017, AECOM and the WDNR discussed the Work Plan including, the proposed installation of four additional piezometers at the bedrock contact to further assess VOC groundwater impacts, ditch sampling along Douglas Street, and follow-up laboratory analysis. The Department concurred with the overall placement of the proposed bedrock contact piezometers but expressed a need for additional vertical profiling near the possible source area. Specifically, you acknowledged that case closure will likely not be achievable unless vertical VOC aquifer profiling is completed near the possible source area in the vicinity of sample locations MW-1, MW-2, GP-9, GP-10 and GP-11. You suggested perhaps using a single borehole multi-level sampling device to vertically assess groundwater VOC impacts in the unconsolidated soils above the sandstone bedrock. As a result of your request to consider aquifer profiling, AECOM indicated that we would discuss vertical profiling internally and get back to you with comments and/or a revised plan. You then offered to "pause" the Department's review of the work plan until we provided additional information.

AECOM internally discussed options for vertical aquifer profiling and while a single borehole multi-level aquifer sampling device may work well in competent bedrock, we have reservations about its use in the glacial soils at the site. We are concerned that it may be difficult to maintain borehole integrity in unconsolidated soils to allow effective placement of filter pack and sealant at the targeted depths. Therefore, we are proposing to assess the vertical groundwater quality by the use of traditional, individual borehole piezometers nested at multiple depths in the targeted area. We marked up the attached cross-section with targeted depths in the glacial soils to provide vertical quantification in the GP-9/GP-10/GP-11 area. We propose three individual piezometers be installed

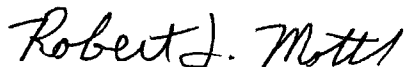
in the area at the stratigraphic depths depicted on the cross-section. These wells would be installed along with the other piezometers specified in the work plan.

Following installation and development in accordance with NR 141, these piezometers will also be sampled for VOCs. The analytical results will be included in a future site assessment report addendum along with recommendations, as appropriate, based on the results. If the proposed additional piezometers yield groundwater results less than Wisconsin regulatory limits, recommendations will include evaluation of case closure options. If groundwater VOC impacts in the proposed piezometers exceed regulatory limits, then AECOM will provide other recommendations.

Because this addendum discusses the installation of piezometers beyond what was included in the original work plan, we have included a certification page. Please contact me if you have any questions, comments, or require additional information.

Sincerely,

AECOM Technical Services, Inc.



Robert J. Mottl  
Project Geologist  
[robert.mottl@aecom.com](mailto:robert.mottl@aecom.com)



Jeffrey D. Maletzke, P.G.  
Project Manager  
[jeff.maletzke@aecom.com](mailto:jeff.maletzke@aecom.com)

Attachments:

Cross-section  
Certification page

c: Ms. Courtney Riley  
FV Steel and Wire Company  
5430 LBJ Freeway, Suite 1700  
Dallas, TX 75240

Mr. Kevin Lombardozzi  
FV Steel and Wire Company  
5430 LBJ Freeway, Suite 1700  
Dallas, TX 75240

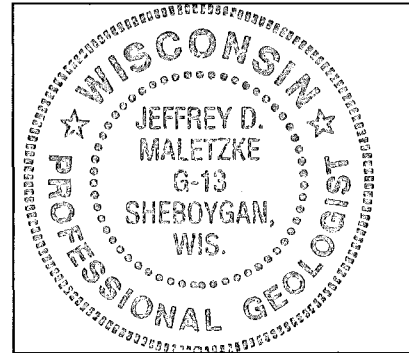


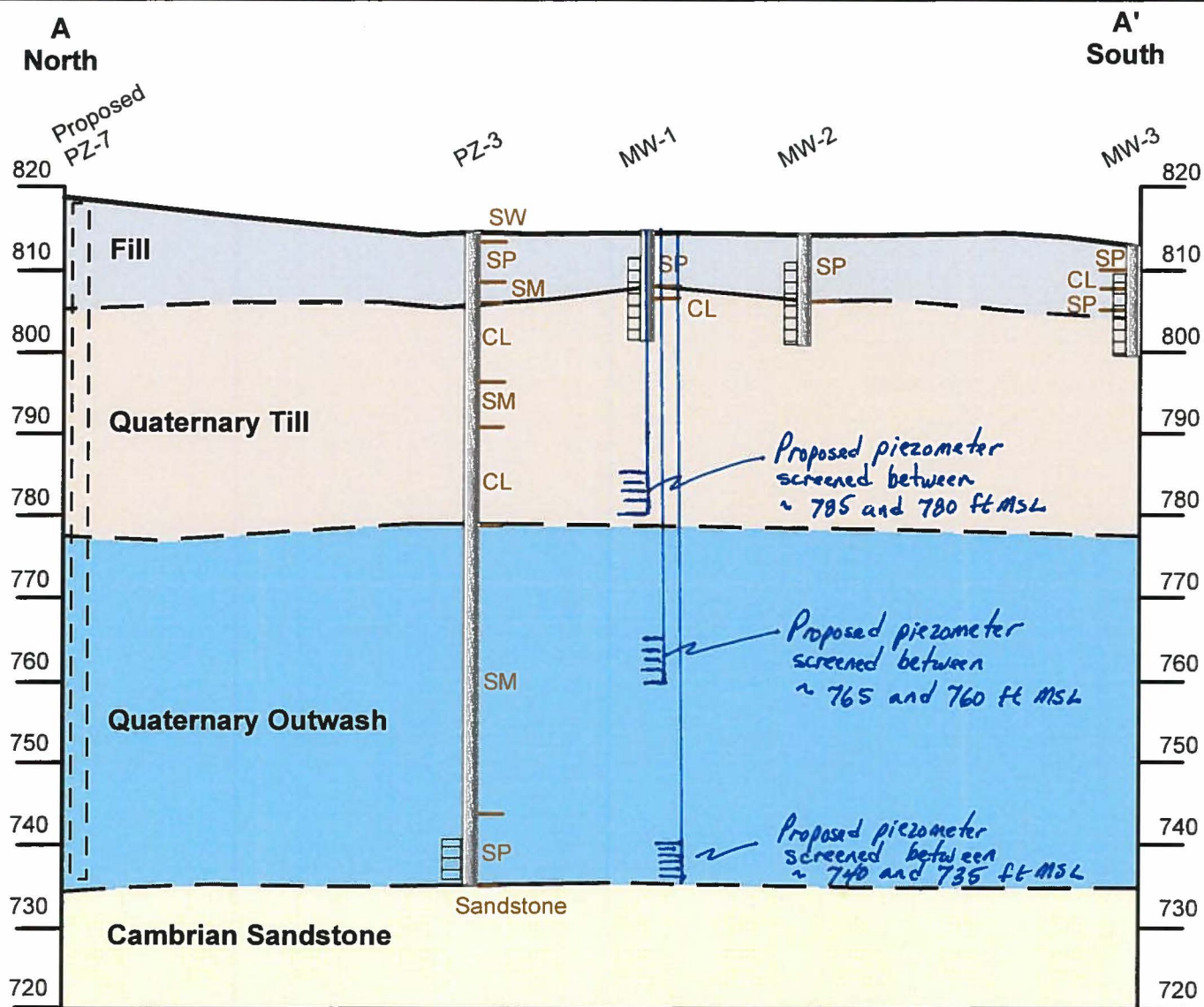
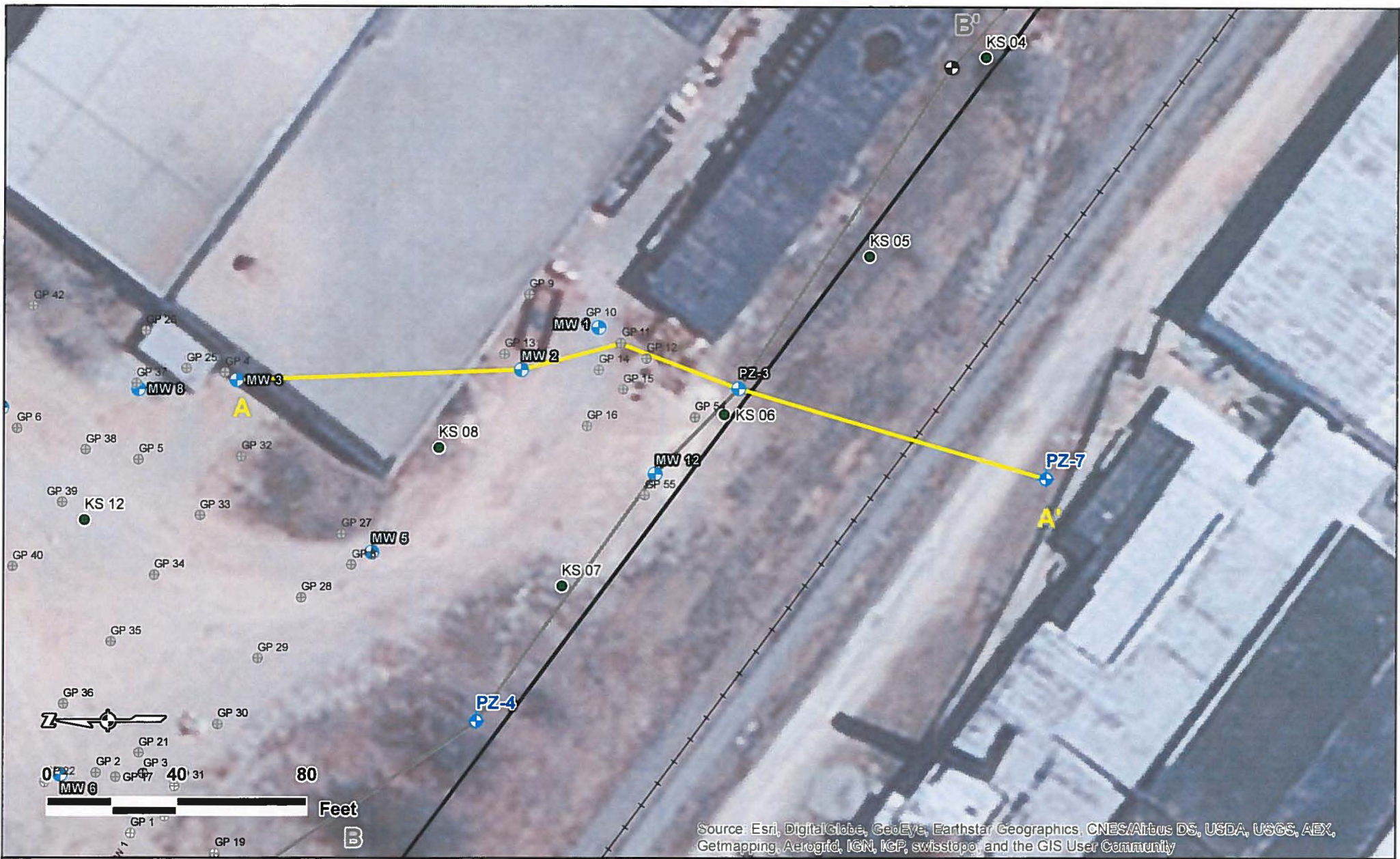
Addendum to the Work Plan for Additional Site Investigation  
FV Steel and Wire Company Site, 111 N. Douglas St., Hortonville, Wisconsin

In conformance with NR 712.09 submittal certification requirements:

"I, Jeffrey D. Maletzke, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, the information contained in this document is correct and the document was prepared in compliance with applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Reviewed By: Jeffrey D. Maletzke, P.G.  
AECOM, Senior Hydrogeologist





*Add a well nest adjacent to MW-1*

- one 25-foot piezometer with 5-foot screen*
- one 45-foot piezometer with 5-foot screen*
- one 70-foot piezometer with 5-foot screen*

Legend	
	Proposed Well Locations
	Well Location
	Geoprobe Location (Previous Investigation)
	Cross Section AA'
	Cross Section BB'
	Railroad
	Soil Boring
	Project Area
	Production Well
	Well Screen

- Notes:
- MW wells are monitoring wells less than 15 feet below ground surface. PZ wells are piezometers set between 50 and 80 feet below ground surface.
  - Geoprobe locations from previous investigation are approximate.
  - The ground surface elevation is estimated from Outagamie county LiDAR.
  - Boring Log data presented adjacent to each well.

Drawn:	SED 5/5/2017
Approved:	JDM 5/5/2017
Scale:	AS SHOWN
PROJECT NUMBER	60428891
FIGURE NUMBER	1

### CROSS SECTION A A'

FV Steel and Wire Company  
111 N. Douglas Street, Hortonville, WI

# AECOM

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