

TOWN OF ANIWA ARSENIC DISPOSAL SITE GROUNDWATER

MONITORING PLAN FOR THE YEAR 2019

Groundwater and soil monitoring done by the Town of Aniwa in the years 1989-2013 indicated groundwater dissolved arsenic levels were increasing especially during high water events in the monitoring wells found at the disposal site. Levels of dissolved arsenic were extremely high in monitoring wells next to the pit and down gradient to the southeast. The Town of Aniwa did not have the resources to clean up the site and applied to the Wisconsin DNR for remediation and closure assistance. Closure was denied by the WDNR. WDNR and the Town of Aniwa requested assistance from the Environmental Protection Agency (EPA) Emergency Response Branch in September 2014. From June 1-19, 2015 the EPA supervised/assisted the removal of 1,019 tons of pretreated arsenic contaminated soil to an EPA non-hazardous approved landfill in central Wisconsin.

A condition of the removal was the Town of Aniwa develop a groundwater monitoring plan for the years 2016-2018 for the 7 monitoring wells currently found at the site (B-10, B-11, B-12, B-13R, B-19R, B-20 and B-21) and the TIMM private drinking water well 300 ft. northwest of the burial pit. Monitoring done in 2016-2018 indicated the wells of most concern were B-12, B-13R and B-21 because of arsenic levels above 10 ug/L As. The TIMM private well was supplied with a arsenic treatment unit and is also monitored to make sure it is working properly.

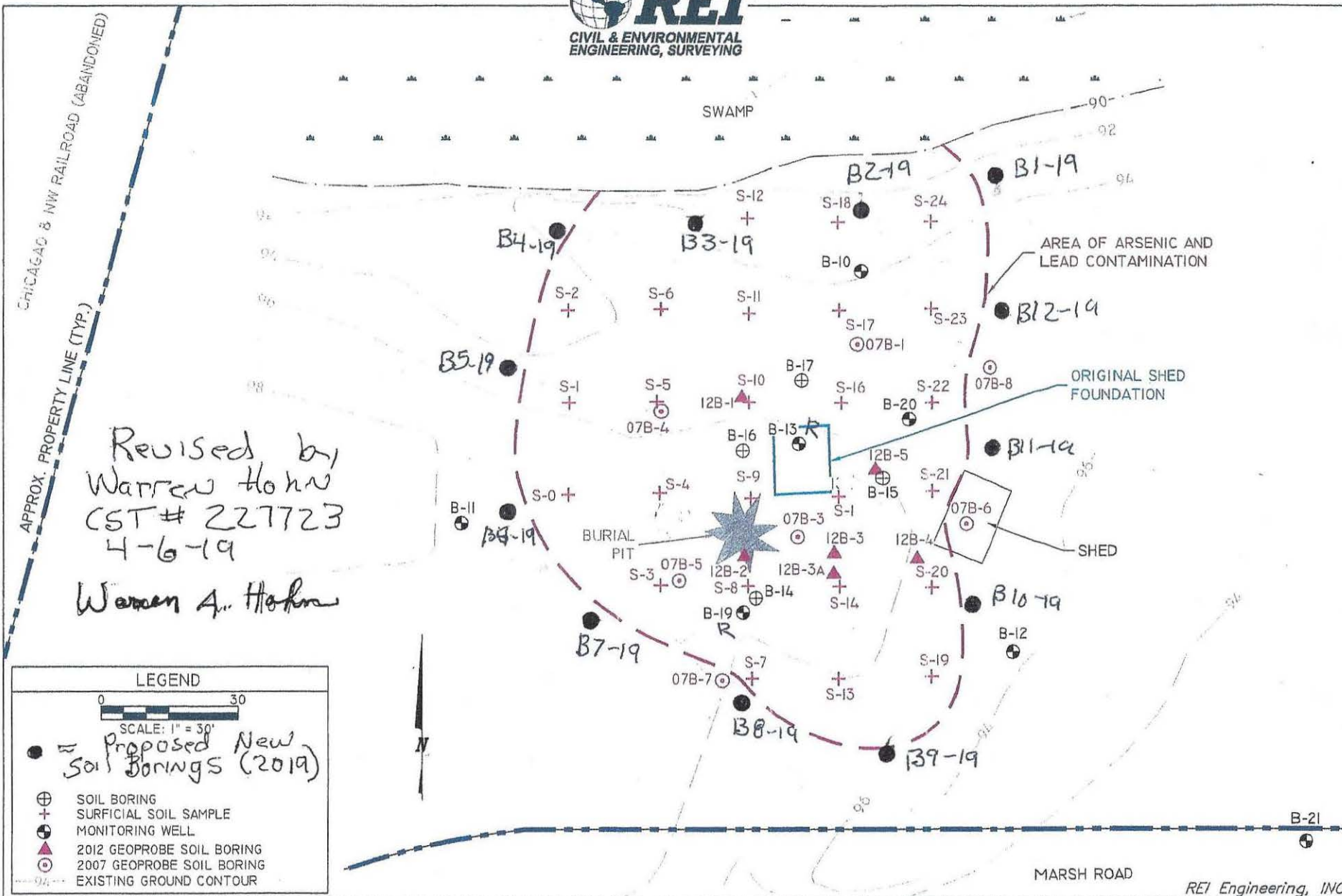
All of the monitoring wells will be sampled for the year 2019 including the TIMM private well in June 2019. Wells will be sampled for dissolved arsenic, field filtered and acidified the HNO_3 . Additionally all will be monitored for depth to water, field pH, specific conductance, field temperature and the amount of water bailed from the wells. Further Wells B-10, B-11 and B-19R will be sampled for dissolved lead. The bailings are put in a barrel in a secured small shed on site and will be disposed of properly. The samples will be analyzed by Pace Labs, Inc., Green Bay, WI., a WDNR and EPA certified water and wastewater lab.

Additional soil sampling will be required in the area surrounding the EPA cleanup in 2015. Twelve composite soil borings will be spaced 30 feet (9.1 meters) apart surrounding the perimeter originating @ Marsh Rd. and just south of the swamp to the north and on the eastern and western edges of the cleanup. Soil samples will be taken with a 4 inch stainless steel bucket auger at 6 inch (15 centimeter) intervals to a depth of 2 feet (60 centimeters), similar to sampling done in 1990. Samples will be digested and analyzed for arsenic by Pace Labs, Inc., Green Bay, WI. (See Attached Map).

Sampling will be done as soon as the weather permits in spring of 2019. The goal of this sampling is to see if the existing site meets the WDNR Soil-Arsenic Background Threshold Value (BTV) statewide of **8ppm** for surface soils in Wisconsin. If not additional removal or capping will be required. Results will be sent to Tauren Beggs, WDNR Northeast region hydrogeologist, Remediation and Redevelopment Division.

WARREN A. HOHN CST# 227723 4/15/2019

SIGNED: Warren A. Hohn



Revised by
Warren Hohn
CST # 227723
4-6-19
Warren A. Hohn

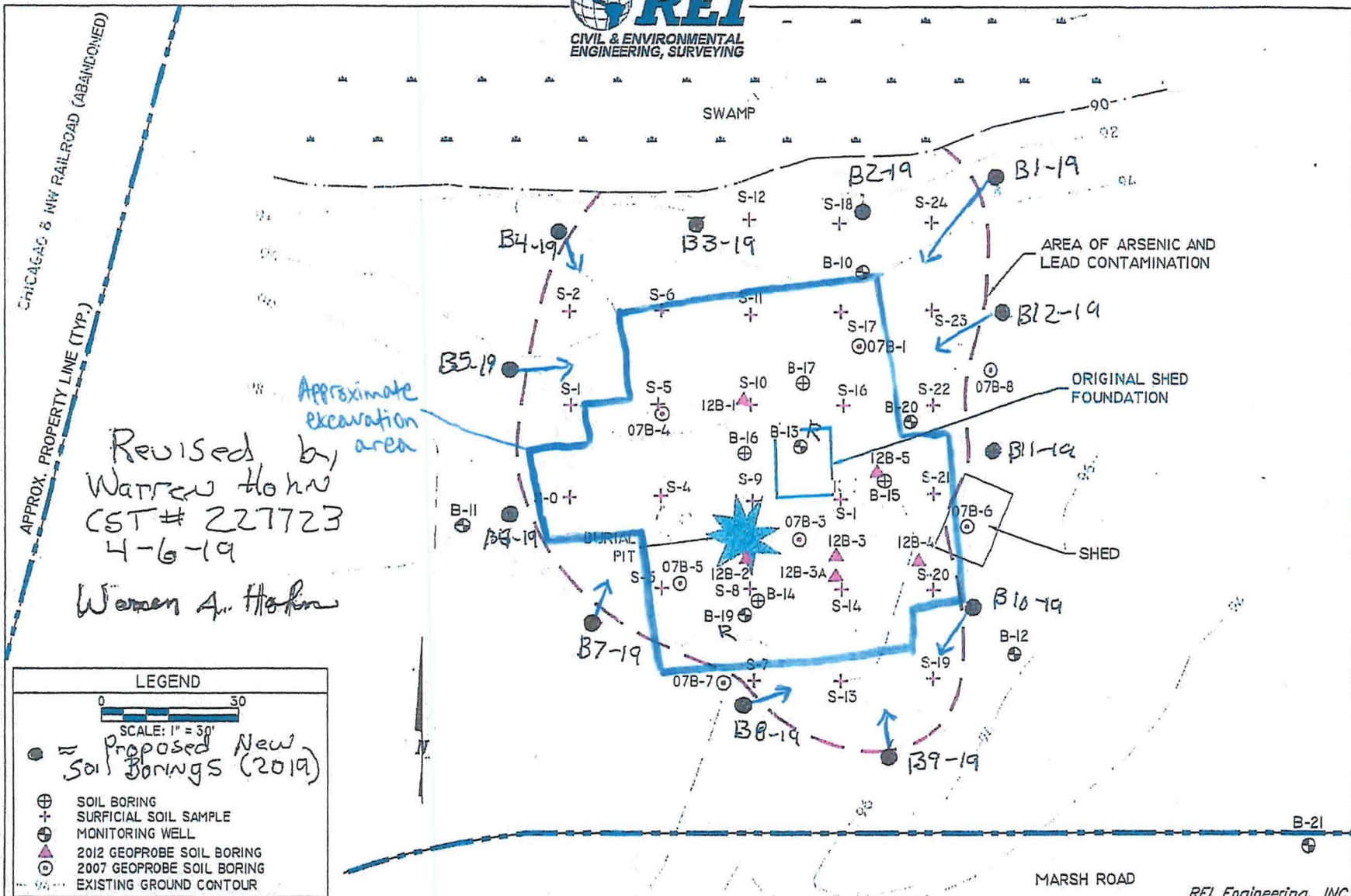
LEGEND

0 30
SCALE: 1" = 30'

- Proposed New Soil Borings (2019)
- ⊕ SOIL BORING
- + SURFICIAL SOIL SAMPLE
- ⊖ MONITORING WELL
- ▲ 2012 GEOPROBE SOIL BORING
- ⊙ 2007 GEOPROBE SOIL BORING
- 94--- EXISTING GROUND CONTOUR

TOWN OF ANIWA DISPOSAL SITE
MARSH ROAD NEAR CHICAGO & NW RAILROAD
TOWN OF ANIWA, SHAWANO COUNTY, WI

FIGURE B.2.c :PRE/POST-REMEDIAL SOIL CONTAMINATION		
PROJECT NO.	DRAWN BY:	DATE:
6663	TAW	6/17/2014



Revised by
Warren Hohn
CST# 227723
4-6-19
Warren A. Hohn

Approximate
excavation
area

LEGEND

0 30
SCALE: 1" = 30'

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- ⊕ SOIL BORING
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TOWN OF ANIWA DISPOSAL SITE
MARSH ROAD NEAR CHICAGO & NW RAILROAD
TOWN OF ANIWA, SHAWANO COUNTY, WI

FIGURE B.2.c :PRE/POST-REMEDIAL SOIL CONTAMINATION

PROJECT NO. 6663	DRAWN BY: TAW	DATE: 6/17/2014
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REI Engineering, INC.

From: Warren Hohn <whohntesting@gmail.com>
Sent: Tuesday, April 16, 2019 2:25 PM
To: Beggs, Tauren R - DNR
Subject: Fwd: Proposed 2019 Aniwa Sampling
Attachments: Sample Locations Revised.pdf

Yes, looks good. Warren

----- Forwarded message -----

From: **Beggs, Tauren R - DNR** <Tauren.Beggs@wisconsin.gov>
Date: Tue, Apr 16, 2019 at 1:09 PM
Subject: RE: Proposed 2019 Aniwa Sampling
To: Warren Hohn <whohntesting@gmail.com>

Hey Warren,

The intent of the soil sampling is to determine if soil is still above 8 mg/kg within the footprint of arsenic contaminated soil defined historically that is outside of the EPA's excavation and capping they completed at the site. These confirmation samples will determine whether historic S sample locations (S-1, S-2, etc.) are still above 8 mg/kg which would require further capping and/or removal. I put the approximated EPA excavation area on your figure and blue arrows to show approximate revised sample locations (see attached). Please let me know if you have any questions or would like to discuss further.

The groundwater sampling as you have it outlined is good.

Thanks,

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Tauren R. Beggs

Phone: (920) 662-5178

Tauren.Beggs@wisconsin.gov

From: Warren Hohn <whohntesting@gmail.com>
Sent: Tuesday, April 16, 2019 11:22 AM
To: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Subject: Proposed 2019 Aniwa Sampling

Tauren: This is the proposed monitoring @ the Arsenic Dump for 2019. Let me know what you, I am also sending a paper copy. Warren