

Alyssa Sellwood
Complex Sites Project Manager – Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
101 South Webster Street
Madison, Wisconsin 53703

Arcadis U.S., Inc.
126 North Jefferson
Street
Suite 400
Milwaukee
Wisconsin 53202
Phone: 414 276 7742
Fax: 414 276 7603
www.arcadis.com

Date: April 14, 2021
Our Ref: 30015296
Subject: Revised Foam Monitoring Work Plan
Tyco Fire Technology Center
BRRTS #: 02-38-580694

Dear Ms. Sellwood,

Arcadis U.S., Inc. (Arcadis) has prepared this Revised Foam Monitoring Work Plan on behalf of Tyco Fire Products LP (Tyco) describing the monitoring and foam collection plan for 2021 on waterways (Ditches A, B, C, D, and E) in the City of Marinette, Wisconsin, and the Town of Peshtigo, Wisconsin. This Revised Foam Monitoring Work Plan incorporates comments received from the Wisconsin Department of Natural Resources (WDNR) in the conditional approval (letter dated March 17, 2021) of the Foam Monitoring Work Plan (submitted February 15, 2021). These ditches have been selected because: 1) they are located within the Fire Technology Center study area; and 2) prior reported citizen notifications of the presence of foam in ditches within the study area to the WDNR. As with past foam collection activities associated with the ditches, the activities will commence in the spring (after ice out in the area) and continue until the onset of freezing conditions, at which time the collection booms will be removed, and inspection monitoring will cease. These procedures will continue in subsequent calendar years, as necessary. Surface water locations within the extent of impacts from the Site and found to have foam accumulations containing per- and polyfluoroalkyl substances (PFAS) will be added to the foam monitoring program as needed.

Site Location and Contact Information

The Tyco Fire Technology Center is located at 2700 Industrial Parkway South in Marinette, Wisconsin (Site), as shown on **Figure 1**. The Site location is also described as:

- **Public Land Survey System Description:** NE ¼ of the NE ¼ of Section 13, Township 30N, Range 23E.
- **County:** Marinette.
- **Coordinates:** Coordinates describing the approximate locations of the Site boundaries are shown in **Figure 1**.
- Contact information for the responsible party (Tyco) is listed below:
 - **Name:** Jeffrey Danko
 - **Address:** 5757 N. Green Bay Avenue, Milwaukee, Wisconsin 53209
 - **Telephone Number:** 262-349-2528

Permitting and Access

Arcadis will notify the WDNR prior to implementing the work plan. Arcadis will access the ditches from public road rights-of-way and a public park. Tyco will notify the City of Marinette, the Town of Peshtigo, and Marinette County regarding ditch access from these rights-of-way.

Boom Deployment and Monitoring

Floating foam capture booms will be deployed and monitored as follows:

1. Provide notification to the WDNR, City of Marinette, Town of Peshtigo, and Marinette County prior to boom deployment.
2. Booms will be deployed on the surface water to contain and prevent downstream migration of foam. **Figure 2** presents the boom deployment locations in Ditches A through E. Surface water locations within the extent of impacts from the Site and found to have foam accumulations PFAS will be added to the foam monitoring program as needed.
3. Conduct daily inspections to monitor, collect, and remove observable foam build-up via manual skimming with a pool skimmer from these ditch locations. The booms will be inspected and replaced during the inspections, as necessary.
4. Foam and spent booms will be temporarily containerized, transported to the Tyco Fire Technology Center (FTC), and placed in 55-gallon drums pending characterization and disposal.
5. Daily records of observations, summary of volumes collected, total volume collected, and photo documentation will be recorded for each inspection.

Waste Characterization and Disposal

Containerized foam meets the definition of a solid waste under the Wisconsin Administrative Code (Wis. Admin. Code) § NR 500.03(215) and will be stored in sealed, leak proof 55-gallon drums and stored at the FTC. Foam collected from all ditches will be consolidated and stored in labeled drums. The performance requirements per Wis. Admin. Code § NR 502.04(1), 502.04(3)(a), 502.04(3)(b), and the operation requirements under Wis. Admin. Code § NR 502.05(5) will be met such that a license is not required, per the exemption in Wis. Admin. Code § NR 502.05(3)(a).

The containerized foam will be stored pending waste characterization analysis (including 36 PFAS compounds). The foam will be allowed to collapse into a liquid form prior to sampling. Waste characterization analysis will be coordinated with the disposal facility and characterization data will be provided to the WDNR. One sample of the composite bulk material from each container will be collected for disposal purposes. Per Wis. Admin. Code § NR 502.05(5)(c), the containerized foam will be removed for disposal within 90 days of the date of the first foam collection. The 90-day disposal period will recommence after each disposal event.

Foam Characterization

At this time, Tyco will not collect analytical samples from each foam collection event. However, Tyco understands that information related to PFAS content in foam collected within each ditch may be requested in the future to advance the understanding of site conditions, if necessary.

Reporting

An Annual Foam Monitoring Interim Action Report will be prepared in accordance with Wis. Admin. Code § NR 708 to summarize boom deployment, monitoring observations, and results. The applicable report contents per Wis. Admin. Code § NR 708.15(3) that will be included in future reports are:

- (a) Name, address, and telephone number of the responsible party.
- (b) Location of the site or facility, or discharge incident, including street address; quarter-quarter section, township, range, and county; the location information specified in s. NR 716.15(5)(d); latitude and longitude, and legal description of lot, if located in platted area.
- (c) The department issued site or facility identification number.
- (d) The name of the consultant or person who has implemented the measures.
- (e) A description of the interim action implemented.
- (f) The estimated quantity and type of contamination.
- (i) The type, total volume and final disposition of any recovered hazardous substance discharged, and contaminated environmental media generated, treated, stored or disposed of, including legible copies of manifests, receipts and other relevant documents
- (k) An operation and maintenance plan for any engineered control or barrier employed.

The following additional reporting requirements will also be met:

- Weather conditions (precipitation, wind speed, and wind direction) will be recorded for days when foam is observed per Wis. Admin. Code § NR 706.05(1)(c)(10). An existing weather monitoring station located at the Tyco FTC will be used for measurement of wind speed and direction.
- Tyco will provide an email to the WDNR Project Manager within 2 days of a foam accumulation event that includes a photo of the foam and a summary of the date, location, weather conditions, and volume of foam recovered.
- Tyco will submit the Annual Foam Monitoring Interim Action Report by February 15th each year for the prior calendar year. The report will include recommendations based on the findings and conclusions (e.g., continue, modify, or end the Work Plan).

Alyssa Sellwood
WDNR
April 14, 2021

Closing

Please do not hesitate to contact me if there are any questions.

Sincerely,
Arcadis U.S., Inc.



Ben Verburg, PE
Principal Engineer

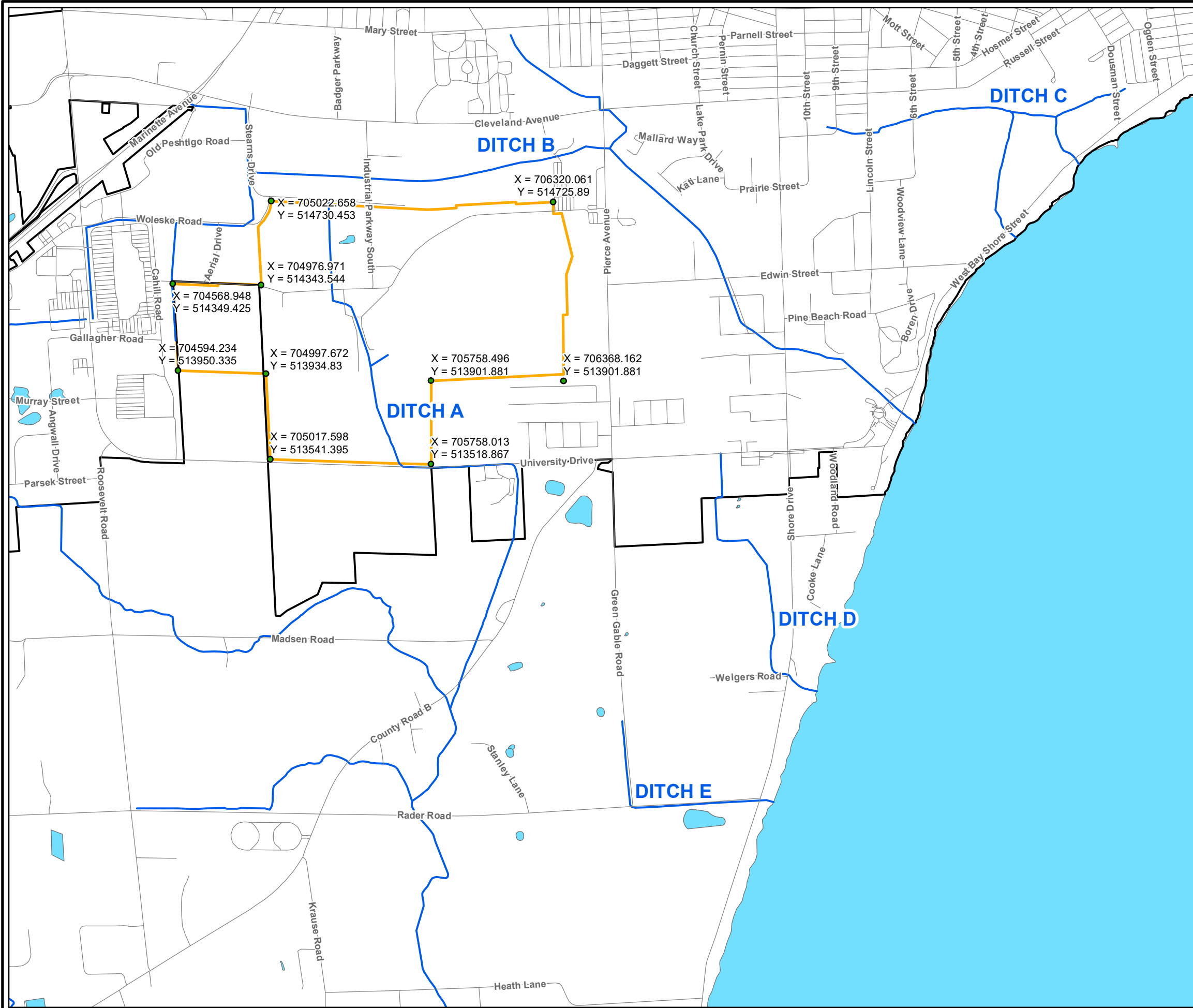
Email: Ben.Verburg@arcadis.com
Direct Line: 414-277-6231

CC. Jeff Danko (Tyco)
Scott Wahl (Tyco)
Scott Potter (Arcadis)

Enclosures:
Figure 1. Site Location Map
Figure 2. Boom Deployment and Foam Removal Locations

Figures

City: Minneapolis/Citrix Div/Group: IMDVC Created By: Last Saved By: msmiller
 TYCO Marinette, WI
 T:_ENV\TYCO_Marinette_Temp\TYCO_Marinette\MXD\2020-06\Figure 1 Site Location Map.mxd 7/16/2020 4:14:59 PM

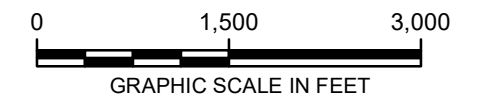


LEGEND:

- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- ROAD
- DITCH/STREAM
- WATERBODY

NOTES:

1. CITY BOUNDARY DATA SOURCE: WISCONSIN LEGISLATIVE TECHNOLOGY SERVICES BUREAU, WISCONSIN COUNTY CLERKS AND LAND INFORMATION OFFICES, ACCESSED FALL 2017.
2. DITCH/STREAM AND WATERBODY DATA SOURCE: U.S. GEOLOGICAL SURVEY NATIONAL HYDROGRAPHY DATASET, ACCESSED FALL 2017.
3. ROAD DATA SOURCE: OPEN STREET MAP, ACCESSED FALL 2017.
4. APPROXIMATE SITE PROPERTY BOUNDARY COORDINATES ARE IN WISCONSIN TRANSVERSE MERCATOR 91 METERS.



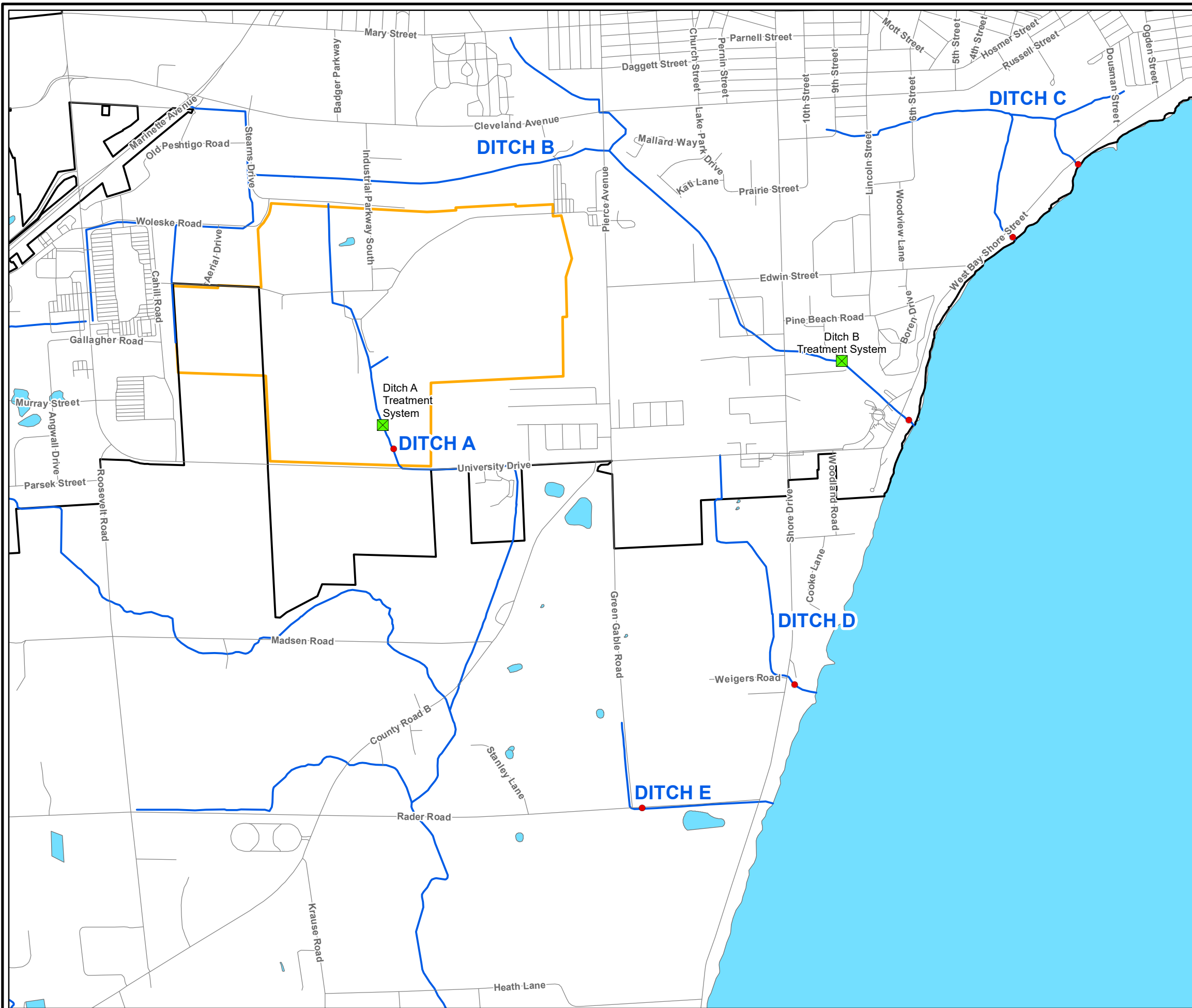
TYCO FIRE PRODUCTS, LP
 MARINETTE, WISCONSIN

SITE LOCATION MAP



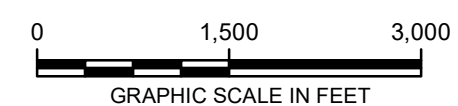
FIGURE
 1

City: Minneapolis/Citrix Div/Group: IMDVC Created By: Last Saved By: MSMiller
 TYCO Marinette, WI
 Tyco\TYCO_Marinette_KeepFromExternalDrive\Tyco_Marinette\MXD\2021-03\Figure 2 Boom Deployment Locations.mxd 3/23/2021 2:55:53 PM



- LEGEND:**
- APPROXIMATE BOOM DEPLOYMENT LOCATIONS
 - APPROXIMATE SITE PROPERTY BOUNDARY
 - APPROXIMATE MARINETTE CITY BOUNDARY
 - ROAD
 - DITCH/STREAM
 - WATERBODY
 - SURFACE WATER TREATMENT SYSTEM

- NOTES:**
1. CITY BOUNDARY DATA SOURCE: WISCONSIN LEGISLATIVE TECHNOLOGY SERVICES BUREAU, WISCONSIN COUNTY CLERKS AND LAND INFORMATION OFFICES, ACCESSED FALL 2017.
 2. DITCH/STREAM AND WATERBODY DATA SOURCE: U.S. GEOLOGICAL SURVEY NATIONAL HYDROGRAPHY DATASET, ACCESSED FALL 2017.
 3. ROAD DATA SOURCE: OPEN STREET MAP, ACCESSED FALL 2017.



TYCO FIRE PRODUCTS, LP
 MARINETTE, WISCONSIN

BOOM DEPLOYMENT LOCATIONS