Jacobs

# Soil Management Plan Introduction

| | |
|---|---|
| **Date:** | February 22, 2024 |
| **Project name:** | Tyco Fire Products LP, One Stanton Street, Marinette, Wisconsin |
| **Project no:** | D3838400 |
| **Attention:** | Andrew Kleinberg /U.S. Environmental Protection Agency (EPA) |
| **Company:** | Tyco Fire Products LP (Tyco) |
| **Prepared by:** | Jacobs |
| **Document no:** | D3838400.315 |
| **Copies to:** | Sara Krueger/Wisconsin Department of Natural Resources (WDNR)<br>Angela Carey, WDNR<br>Ryan Suennen, Tyco Fire Products<br>Denice Nelson, Johnson Controls<br>Scott Wahl, Tyco Fire Products |

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The enclosed soil management plan is intended to align all parties on the soil management process and document the procedures and associated regulations for soil management at the Tyco Fire Products, LP (Tyco) property at One Stanton Street in Marinette, Wisconsin (property).

The following is a summary of the main regulatory components driving soil management at the Tyco property:

- **Resource Conservation and Recovery Act (RCRA) Remedy Component Disturbed** – The Tyco property is in compliance with a 2009 Administrative Order on Consent (AOC; EPA 2009). Under the AOC, several RCRA remedy components were implemented and includes cover areas, phyto-plots, vertical barrier walls, groundwater monitoring wells, pump down program components, groundwater collection and treatment system (GWCTS) components and the other components relevant to the integrity of the remedy that are identified in the Legend on Figure 1 of Attachment 1 to the Soil Management Plan. The completed RCRA remedy components include operations and maintenance (O&M) requirements per the following agency-approved plans, which requires the U.S. Environmental Protection Agency's (EPA's) prior written approval for certain activities that would impact the remedy components, including subsurface activities.
  - O&M Plan, Revision 1 for Onsite Groundwater Management (CH2M 2010a)
  - Cover Maintenance Plan (CH2M 2010b)
  - Addendum to 2015 Barrier Wall Groundwater Monitoring Plan Update (Jacobs 2019)

  If subsurface activities disturb a RCRA remedy component, a written request will need to be provided for EPA approval, prior to the start of work.
- **Management of Non-hazardous Contaminated Soil** – If planned work will include non-hazardous (contaminated) soil that is not directly loaded or temporarily stockpiled (per the definition of temporary stockpile in Wisconsin Administrative Code (WAC) Chapter NR 718 Management of Contaminated Soil or Solid Wastes Excavated During Response Actions (NR 718) or are planned to be reused on the property, NR 718 requirements would apply and a Material Management Plan (MMP) submittal would need to be submitted and approved by Wisconsin Department of Natural Resources

(WDNR) prior to the start of work pursuant to NR 718. If RCRA remedy components are impacted as part of this work, the request to EPA and the MMP to WDNR should be submitted to both agencies concurrently. Note that soil management under NR 718 applies whether a RCRA remedy component is disturbed or not.

- **Management of Hazardous Soil** – If planned work will include soil that is considered hazardous, the soil will be managed as a RCRA hazardous waste in accordance with WAC Chapters NR 600 to 699 (Environmental Protection – Hazardous Waste Management) and Title 40 of the Code of Federal Regulations (40 CFR) Parts 262 (Standards Applicable to Generators of Hazardous Waste) and 268 (Land Disposal Restrictions). Note that hazardous waste soil must be directly loaded into a truck or container and does not require an NR 718 approved MMP.

The soil management plan details are included in the enclosed streamlined process flow chart. This document should be reviewed when subsurface activities are planned at the property to determine soil management requirments and if any RCRA remedy components are impacted by the work requiring a plan to restore the area.

In addition, to streamline future MMP submittals, Tyco has developed an MMP template for the property (Attachment 2 to the Soil Management Plan). Tyco's MMP template is based on the information in WDNR's Form 4400-315, Recommended Template for Request to Manage Materials under NR 718.12 or NR 718.15. The MMP template includes property specific details that will be completed with each application to support proposed MMPs for subsurface activities that require managing or reusing non-hazardous contaminated soil at the property. Because the property is situated within a floodplain and therefore cannot meet the NR 718 location standards, the MMP template also incorporates an exemption from the location standards. All details will be reviewed for each specific project; however, in general, the MMP was prepared such that the items highlighted in yellow are the details that will be required to be confirmed, updated, or added.

Finally, all relevant and appropriate documentation should be provided following completion of the approved RCRA or MMP work, including but not limited to:

- Maps, drawings, and/or cross sections that depict how contaminated material was managed.
- A synopsis of the work conducted and an explanation as to how it complied with the MMP.
- A description of any changes made to the planned management activity and an explanation as to why they were necessary for the project.
- Any field observations or results of monitoring conducted during the management activity.
- A description of how new site conditions are protective of human health, safety, welfare and the environment.
- Fieldnotes.
- Waste Characterization Lab Data.
- Photo Logs.
- Waste Manifest.

## Soil Management Plan Attachments

**Attachment 1** – RCRA Component Figures

- 1 – Site Plan with RCRA Components (cover areas, phyto-plots, vertical barrier walls, groundwater monitoring wells, and GWCTS extraction wells)

- 2-1 – GWCTS Extraction System
- 2-2 – GWCTS Extraction System Electrical
- 3-1 – Pump Down Program Extraction System
- 3-2 – Pump Down Program Conveyance System (to GWCTS)

**Attachment 2** – MMP Template

# References

CH2M HILL, Inc. (CH2M). 2010a. *Operation and Maintenance Plan, Revision 1 for Onsite Groundwater Management September 2010.* Submitted to EPA. October 5.

CH2M HILL Engineers, Inc. (CH2M). 2010b. *Draft Cover Maintenance Plan – Revision 1, Onsite Soil Areas.* Submitted to USEPA. December 22. This was approved by EPA/WDNR in 2011.

Jacobs Engineering Group Inc. (Jacobs). 2019. *Addendum to 2015 Barrier Wall Groundwater Monitoring Plan Update.* June 24.

U.S. Environmental Protection Agency (EPA). 2009. Resource Conservation and Recovery Act Administrative Order on Consent, Ansul, Incorporated. EPA Docket No. RCRA-05-2009-0007542-S-02-001. February 26.

# Soil Management Plan

**Planning Work Activities**
Subsurface work is identified

**RCRA Remedy Component Review**
Is a RCRA remedy component impacted by the subsurface work?[1]

No

Yes

**Prepare Plan to Address RCRA Remedy Component**
Any disturbance of a RCRA remedy component requires written approval by EPA prior to the start of work. Prepare a plan to restore the disturbed areas to conditions that achieve the standards in the applicable maintenance plan and obtain the necessary approval.[2]

**Waste Characterization**
Soil can be characterized using one of the three options:

1) No samples are collected and soil is treated/ handled as a hazardous waste ("over-characterization"). Sampling may still be required by the disposal facility.[3]
2) Soil sampling and analysis for waste determination performed in accordance with NR 718 sampling requirments.[4] Soil sampling activities per approved site QAPP and SOPs.[5]
3) Soil sampling performed for waste determination in accordance with an alternate plan that must be pre-approved by WDNR prior to sampling activities.

**Waste Determination**
What waste category does the soil fall into?

**Exempt Soil**
Clean soil; no MMP required except for standard BMPs for stormwater management/ erosion control

**Contaminated Soil (Not Hazardous)**
Manage in accordance with NR 718

**Hazardous Waste Soil**
Manage as RCRA hazardous waste in accordance with NR 600 to 699 and 40 CFR Parts 262 and 268 (hazardous waste soil must be directly loaded into truck or container)

Offsite Disposal

Managed or Reused Onsite

**Soil Loading/Management**
Will the soil be directly loaded into a container or truck and disposed of at an approved landfill or managed using a temporary stockpile per NR 718.05 (3)[6]?

No

**MMP Required**
MMP will need to be prepared per NR 718.12 and/or NR718.05 that includes a written exemption from location standards under NR 718.12 (1) NR 718.05 (2) and requires approval by WDNR prior to the start of work (using MMP template Attachment 2)

Yes

**No MMP Needed**
MMP is not required prior to the start of work – directly load soil and/or follow requirements and BMPs under NR 718.05 (3)[6]

Notes
1 – RCRA remedy components include cover areas, phyto-plots, vertical barrier walls, groundwater monitoring wells, Pump Down Program components or Groundwater Collection and treatment System components and other components relevant to the integrity of the remedy identified in the Legend on Figure 1 of Attachment 1 (RCRA Component Figures – Attachment 1)
2 – Maintenance plan information sources include the following: Cover Maintenance Plan (CH2M Hill 2010); Operations and Maintenance Plan – Revision 1, Onsite Groundwater Management (CH2M Hill 2010); Revised BWGMPU (CH2M Hill 2015); and Addendum to 2015 BWGMPU (Jacobs 2019)
3 – Suggested sampling protocol for offsite disposal, may vary per waste disposal facility requirements –1 composite for first 600 CY (made up of samples of initial 100 CY increments) and 1 composite per 900 CY (composite of 300 CY increments) thereafter
4 – For NR 718 waste determination–100 cubic yards of soil, for the first 600 yards with a minimum of two samples being collected. >600 cubic yards, one sample for each additional 300 cubic yards shall be collected for analysis
5 – Site chemicals of concern include RCRA metals, volatile organic compounds, per- and polyfluoroalkyl substances, and limited to no semi-volatile organic compounds, documentation must include analytical results as well as field notes and photo logs
6 – Contains up to 2,500 cubic yards of excavated contaminated soil that is stored for 15 days or less, for the purpose of loading the soil into transfer vehicles or containers

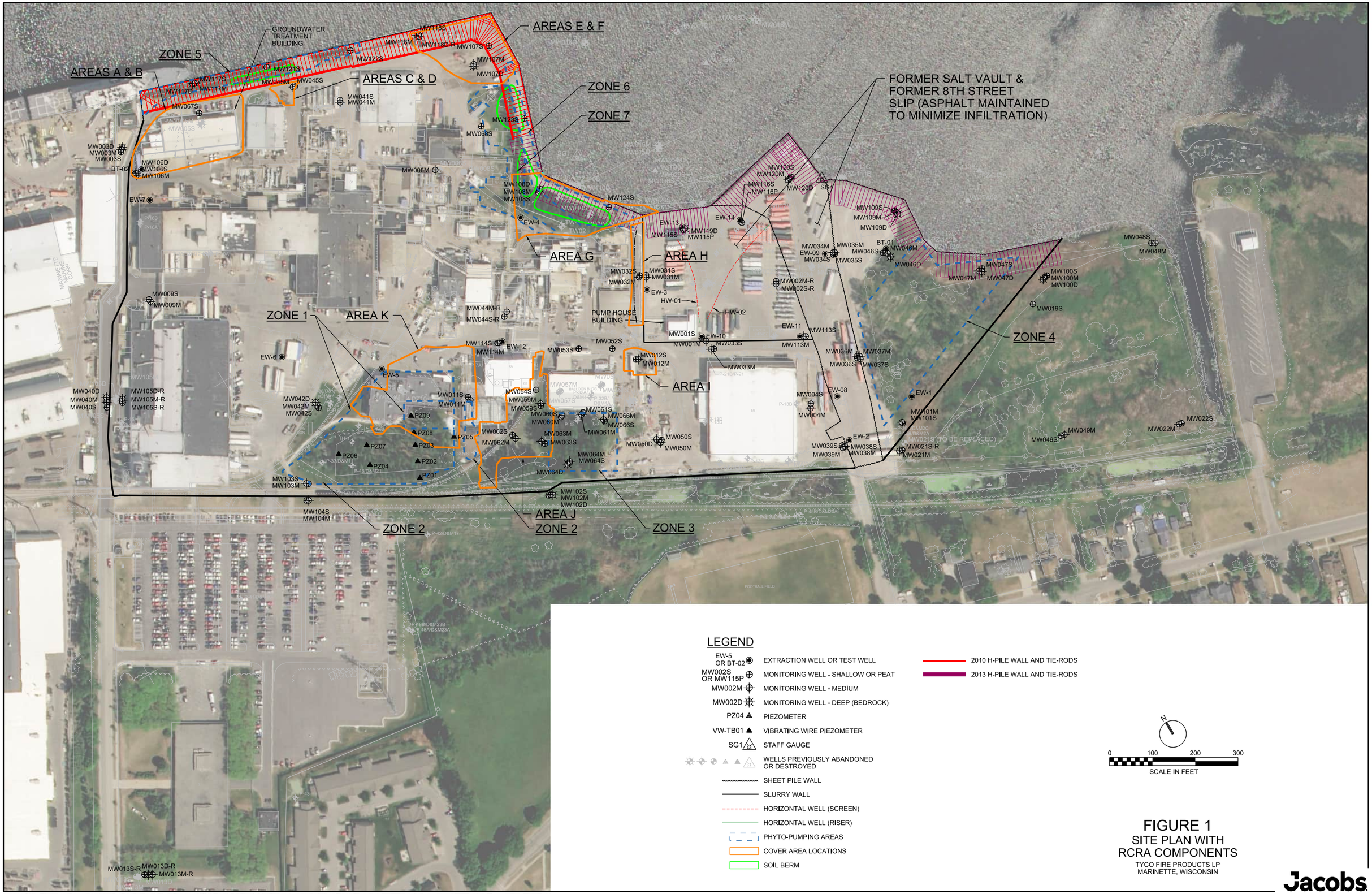
BMPs – best management practices
MMP – Material Management Plan
BWGMPU – Barrier Wall Groundwater Monitoring Plan Updated
SOP – Standard Operating Procedure
QAPP – Quality Assurance Project Plan
RCRA – Resource Conservation and Recovery Act
EPA – U.S. Environmental Protection Agency
WDNR – Wisconsin Department of Natural Resources
NR 718 – Wisconsin Administrative Code (WAC) Chapter NR 718 Management of Contaminated Soil or Solid Wastes Excavated During Response Actions
NR 600 to 699 – WAC Chapters NR 600-699; Environmental Protection – Hazardous Waste Management
40 CFR – Title 40 of the Code of Federal Regulations Parts 262 (Standards Applicable to Generators of Hazardous Waste) and 268 (Land Disposal Restrictions)

# Soil Management Plan

*Tyco Fire Products LP, Marinette, WI*

Jacobs

# Attachment 1
# RCRA Component Figures



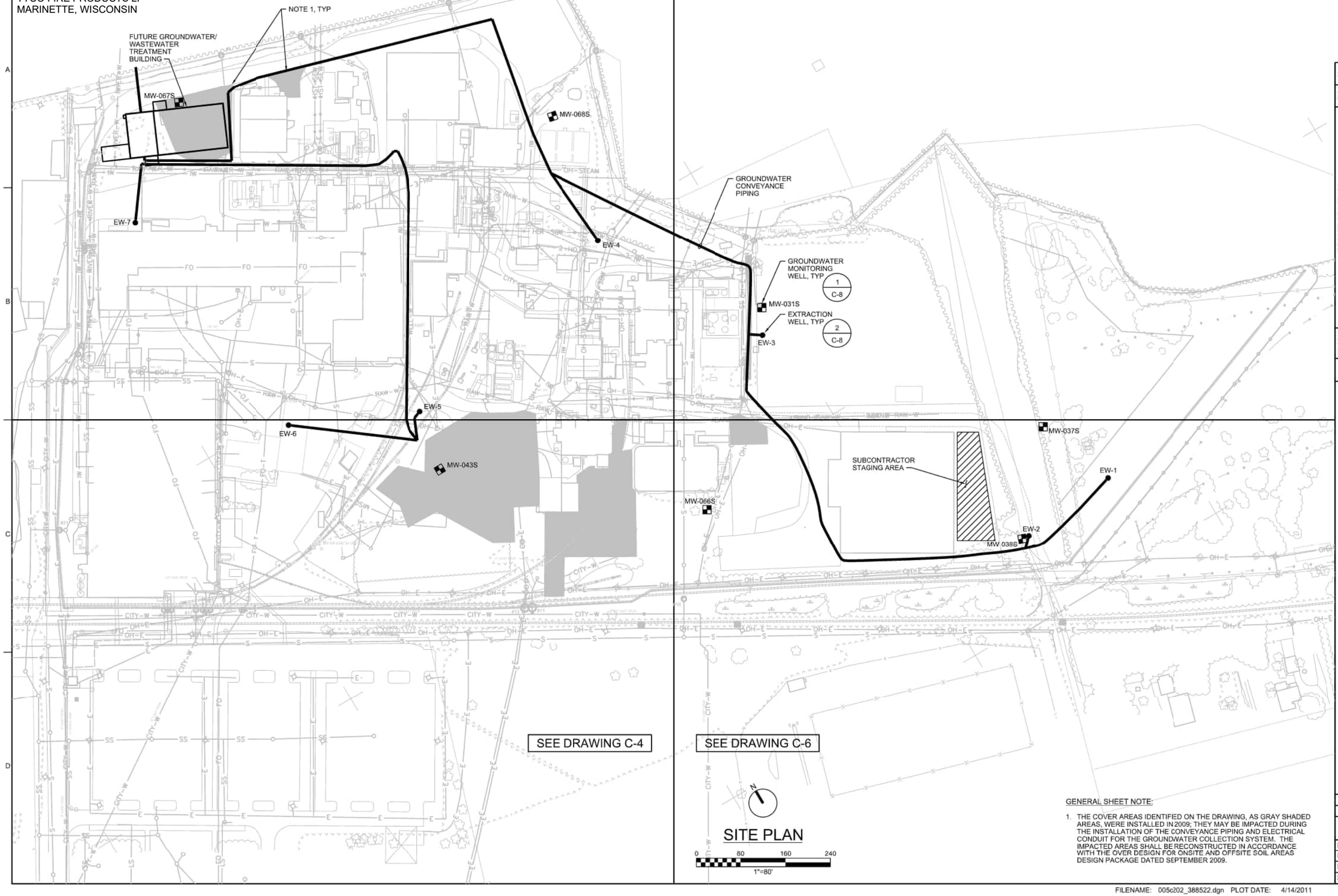

# FIGURE 1
## SITE PLAN WITH RCRA COMPONENTS

TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN

Jacobs

FILENAME: Figure1RCRA_D3766600.dgn PLOT DATE: 2/21/2024 PLOT TIME: 11:52:24 AM

# FIGURE 2-1
## GWCTS EXTRACTION SYSTEM
TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN




GENERAL SHEET NOTE:

1. THE COVER AREAS IDENTIFIED ON THE DRAWING, AS GRAY SHADED AREAS, WERE INSTALLED IN 2009; THEY MAY BE IMPACTED DURING THE INSTALLATION OF THE CONVEYANCE PIPING AND ELECTRICAL CONDUIT FOR THE GROUNDWATER COLLECTION SYSTEM. THE IMPACTED AREAS SHALL BE RECONSTRUCTED IN ACCORDANCE WITH THE OVER DESIGN FOR ONSITE AND OFFSITE SOIL AREAS DESIGN PACKAGE DATED SEPTEMBER 2009.

| NO. | DATE | REVISION | BY | APVD |
|---|---|---|---|---|
| DSGN | C. WALKER | DR D. KIERZEK | CHK K. MEHIGH | APVD S. LANG |

RECORD DRAWINGS
03/2011
PK
SL



TYCO FIRE PRODUCTS LP
GWCT SYSTEM
PHASE I: COLLECTION SYSTEM DESIGN
MARINETTE, WISCONSIN

CH2MHILL

CIVIL

MONITORING WELL AND EXTRACTION WELL LOCATIONS SITE PLAN

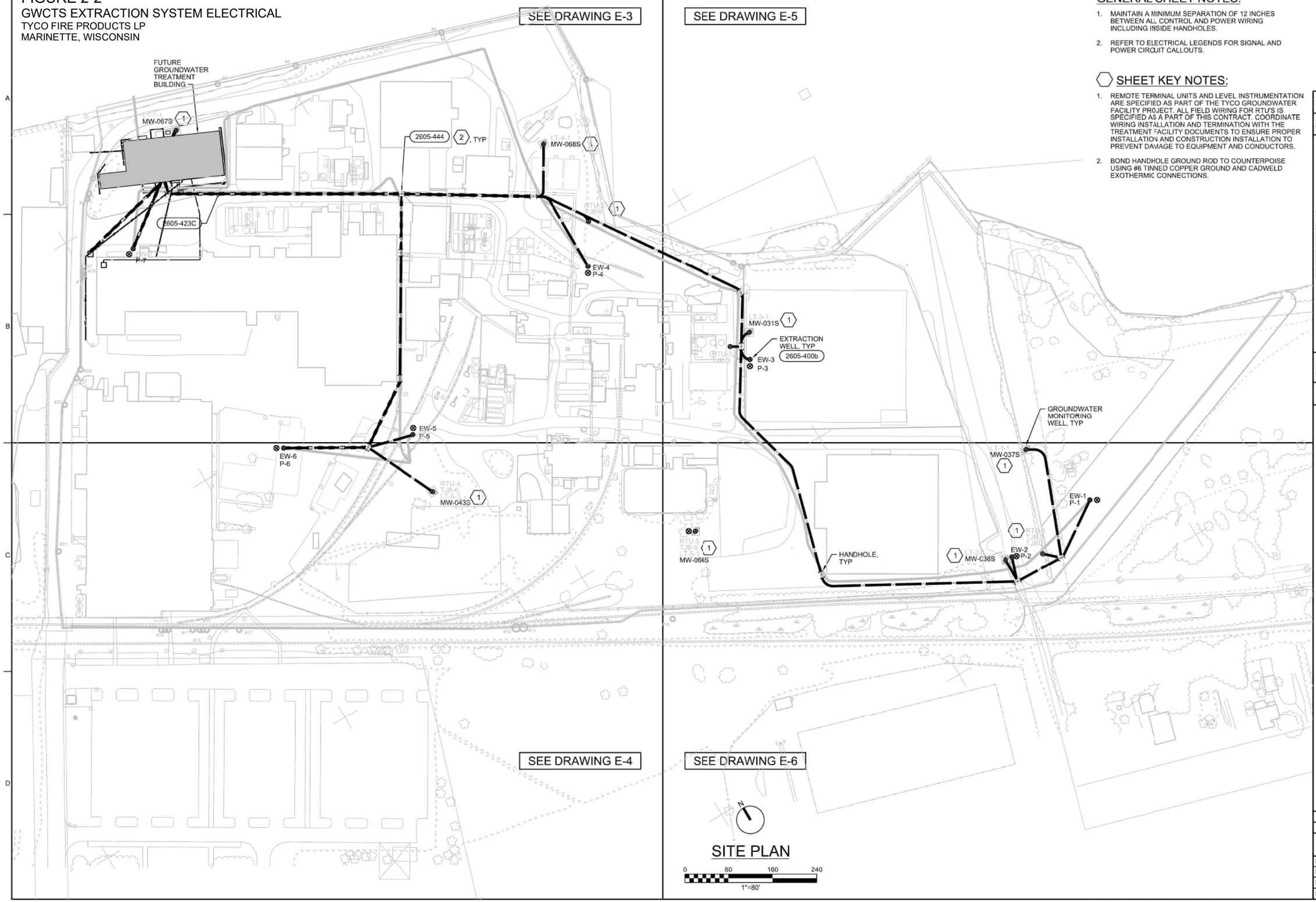
RECORD DRAWINGS

1" = 80'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

| | |
|---|---|
| DATE | APRIL 2010 |
| PROJ | 388522 |
| DWG | C-2 |
| SHEET | 7 |

FILENAME: 005c202_388522.dgn PLOT DATE: 4/14/2011 PLOT TIME: 11:39:34 AM

# FIGURE 2-2
## GWCTS EXTRACTION SYSTEM ELECTRICAL
TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN




## GENERAL SHEET NOTES:

1. MAINTAIN A MINIMUM SEPARATION OF 12 INCHES BETWEEN ALL CONTROL AND POWER WIRING INCLUDING INSIDE HANDHOLES.
2. REFER TO ELECTRICAL LEGENDS FOR SIGNAL AND POWER CIRCUIT CALLOUTS.

## SHEET KEY NOTES:

1. REMOTE TERMINAL UNITS AND LEVEL INSTRUMENTATION ARE SPECIFIED AS PART OF THE TYCO GROUNDWATER FACILITY PROJECT. ALL FIELD WIRING FOR RTU'S IS SPECIFIED AS A PART OF THIS CONTRACT. COORDINATE WIRING INSTALLATION AND TERMINATION WITH THE TREATMENT FACILITY DOCUMENTS TO ENSURE PROPER INSTALLATION AND CONSTRUCTION INSTALLATION TO PREVENT DAMAGE TO EQUIPMENT AND CONDUCTORS.
2. BOND HANDHOLE GROUND ROD TO COUNTERPOISE USING #6 TINNED COPPER GROUND AND CADWELD EXOTHERMIC CONNECTIONS.

| NO. | DATE | REVISION | BY | APVD |
|---|---|---|---|---|
| | | | PK | SL |
| | 03/2011 | RECORD DRAWINGS | | |

DSGN N. ANDERSON DR C. DAHL CHK A. SODEIFI APVD S. LANG



TYCO FIRE PRODUCTS LP
GWCT SYSTEM
PHASE I: COLLECTION SYSTEM DESIGN
MARINETTE, WISCONSIN

CH2MHILL

ELECTRICAL
DUCT BANK LOCATIONS
OVERALL SITE PLAN

1" = 80'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

| | |
|---|---|
| DATE | APRIL 2010 |
| PROJ | 388522 |
| DWG | E-2 |
| SHEET | 16 |

RECORD DRAWINGS

FILENAME: 006e201_388522.dgn PLOT DATE: 4/14/2011 PLOT TIME: 11:55:10 AM

# FIGURE 3-1
## PUMP DOWN PROGRAM EXTRACTION SYSTEM
TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN

MENOMINEE RIVER

EW-14

EW-13

~~PROPOSED~~ WELL HEAD STRUCTURE AND CONNECTION TO HW-02 (1/8)

APPROXIMATE LOCATION OF SHEET PILE WALL SEPARATING THE SALT VAULT & SLIP

~~PROPOSED~~ WELL HEAD STRUCTURE AND CONNECTION TO EW-09 (1/8)

EW-09

FORMER SLIP W/ ASPHALT CAP

~~PROPOSED~~ (1) 3" SECONDARY CONTAINMENT CONDUIT (3/9)

CONCRETE OUTFALL STRUCTURE W/ STORMWATER GATE

SALT VAULT W/ ASPHALT CAP

FUTURE EXTRACTION PIPING (BY OTHERS)

FUTURE EXTRACTION PIPING (BY OTHERS)

EXISTING HORIZONTAL WELL HW-01 (2/8 SHT 5)

EXISTING HORIZONTAL WELL HW-02 (SHT 6 2/8)

LOCATION OF EXPOSED SLURRY WALL

FUTURE CONVEYANCE PIPING TO ON-SITE GWTP (BY OTHERS)

EXTRACTION BUILDING (BY OTHERS)

TRUCK BAY (BY OTHERS)

~~PROPOSED~~ WELL VAULT (1/7)

TEMPORARY TRAILER W/ PUMPS & CONTAINMENT

TEMPORARY DOUBLE-WALL AST

TEMPORARY ELECTRIC SKID

EXPOSED CONCRETE FOUNDATION FROM FORMER STRUCTURE

EW-10

EW-11

FUTURE EXTRACTION PIPING (BY OTHERS)

APPROXIMATE LOCATION OF BURIED SLURRY WALL

PAINTED FIRE LANE

~~PROPOSED~~ JUNCTION VAULT 100 (2/7)

~~PROPOSED~~ UNDERGROUND ELECTRIC SERVICE (BY OTHERS)

~~PROPOSED~~ (2) 3" SECONDARY CONTAINMENT CONDUITS (2/9)

~~PROPOSED~~ 3" SECONDARY CONTAINMENT CONDUIT DUCT PACKAGE FROM INSIDE NEW BUILDING TO NEW WELL VAULT (BY OTHERS)

~~PROPOSED~~ (1) 3" SECONDARY CONTAINMENT CONDUIT (3/9)

STORAGE/WAREHOUSE BUILDING 59

~~PROPOSED~~ WELL HEAD STRUCTURE AND CONNECTION TO EW-08 (1/8)

EW-08

0 25' 50'

SURVEY PERFORMED BY ENDPOINT SOLUTIONS CORP. ON 01/14/2020 USING SURVEY GRADE GPS.

ALL UTILITIES SHOWN ARE APPROXIMATE AND MUST BE FIELD VERIFIED.

| REV | DATE | |
|---|---|---|
| 6 | - | - |
| 5 | 12/14/21 | RECORD DRAWINGS |
| 4 | 04/08/21 | HORIZONTAL WELLS RECORD DRAWING |
| 3 | 03/09/21 | REVISED FOR RE-BID AND CONSTRUCTION |
| 2 | 10/20/20 | REVISED ROUTE TO JV-100 & EW-08 & EW-09 |
| 1 | 09/23/20 | REVISED FOR ADDENDUM #1 |
| 0 | 09/03/20 | 100% ISSUED FOR BID |

Endpoint Solutions
6871 S. LOVERS LANE
FRANKLIN, WI 53132
PHONE: (414) 427-1200

TYCO SALT VAULT EXTRACTION SYSTEM (EXTRACTION PLANS)

# ~~PROPOSED~~ SITE LAYOUT

ONE STANTON STREET
MARINETTE, WISCONSIN 54143

| | | |
|---|---|---|
| DRAWN BY: | JAH/NWD | DATE: |
| CHECKED BY: | NWD | 12/14/2021 |
| APPROVED BY: | WCW | |

PROJECT NO. 415-001-005

THIS BAR REPRESENTS 1/2 INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE

SHEET NO.
2R5

P:\Tyco - 415\CAD\001-005 Salt Vault Extraction System Design\Record Drawings Set #2 Extraction Well System\SHT 02_415-001-005 Site Layout EWS.dwg

# FIGURE 3-2
## PUMP DOWN PROGRAM CONVEYANCE SYSTEM
TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN

APPROXIMATE LOCATION OF ABANDONED STORM SEWER. CUT, REMOVE AND SEAL AS NECESSARY

8/10 PROPOSED ELECTRICAL PULL BOX

PROPOSED (2) BELOW GRADE SECONDARY CONTAINMENT CONDUITS, CONVEYANCE PIPING, AND ELECTRICAL 3/9

8/10 PROPOSED ELECTRICAL PULL BOX

APPROXIMATE LOCATION OF ABANDONED STORM SEWER. CUT, REMOVE AND SEAL AS NECESSARY

PROPOSED JUNCTION VAULT JV-102. HEAT TRACE SPLICE CONNECTION LOCATION (HT-4 AND HT-5) 1/9

STORM SEWER CROSSING. CONTACT ENGINEER WITH ANY FIELD ADJUSTMENTS.

PROPOSED (2) BELOW GRADE SECONDARY CONTAINMENT CONDUITS,CONVEYANCE PIPING, AND ELECTRICAL 3/9

2/9 PROPOSED JUNCTION VAULT JV-103

STORM SEWER CROSSING. CONTACT ENGINEER WITH ANY FIELD ADJUSTMENTS. PIPE MAY BE ABANDONED AT TIME OF CONSTRUCTION (BY OTHERS) IF SO, CUT, REMOVE AND SEAL AS NECESSARY.

APPROXIMATE LOCATION OF ABANDONED WATER LINE. CUT, REMOVE AND SEAL AS NECESSARY.

STORM SEWER CROSSING. CONTACT ENGINEER WITH ANY FIELD ADJUSTMENTS.

SHT 2A
SHT 2B

8/10 PROPOSED ELECTRICAL PULL BOX

TURNING BASIN

SHT 2B
SHT 2C

PROPOSED BOLLARDS (TYPx3) 4/10

CONNECTIONS TO GROUNDWATER TREATMENT PLANT (GWTP) BUILDING

STORM SEWER CROSSING. CONTACT ENGINEER WITH ANY FIELD ADJUSTMENTS.

APPROXIMATE LOCATION OF ABANDONED WATER OR STORM SEWER. CUT, REMOVE AND SEAL AS NECESSARY.

PROPOSED (2) BELOW GRADE SECONDARY CONTAINMENT CONDUITS, CONVEYANCE PIPING, AND ELECTRICAL 3/9

PROPOSED JUNCTION VAULT JV-101. HEAT TRACE SPLICE CONNECT LOCATION (HT-2 AND HT-3) 2/9

TRANSITION FROM ABOVEGROUND SECONDARY CONTAINMENT CONDUIT TO BELOW GRADE SECONDARY CONTAINMENT CONDUIT AND CONVEYANCE PIPING. 2/9

PROPOSED (2) ABOVEGROUND SECONDARY CONTAINMENT CONDUITS, CONVEYANCE PIPING, AND ELECTRICAL. KEEP SOUTH OF GATE & SPAN ACROSS DRAINAGE DITCH.

FORMER SLIP W/ ASPHALT CAP

8/10 PROPOSED ELECTRICAL PULL BOX

PROPOSED JERSEY BARRIER

APPROXIMATE LOCATION OF ABANDONED WATER OR STORM SEWER. CUT, REMOVE AND SEAL AS NECESSARY.

CLEARED & GRUBBED TREES AS NECESSARY FOR TRENCHING

DITCH CROSSING PIPE SUPPORTS 4/9

SALT VAULT W/ ASPHALT CAP

PROPOSED (2) ABOVEGROUND SECONDARY CONTAINMENT CONDUITS, CONVEYANCE PIPING, AND ELECTRICAL W/ SUPPORTS 3/5 10

FUTURE EXTRACTION PIPING (BY OTHERS)

HORIZONTAL WELLS

WELL VAULT

TEMPORARY TRAILER W/ PUMPS & CONTAINMENT

PROPOSED JERSEY BARRIERS

CONNECTIONS TO EXTRACTION BUILDING

PROPOSED EXTRACTION BUILDING & TRUCK BAY (BY OTHERS)

BALLOON BLDG.

PROPANE LOADING STATION

PROPANE TANK

BLENDER / VAPORIZER

RAZED

BASEMAP PROVIDED BY TYCO FIRE PRODUCTS LP. PARTIAL SITE SURVEY PERFORMED BY ENDPOINT SOLUTIONS CORP. ON 01/14/2020 AND 07/13/2020 USING SURVEY GRADE GPS. COORDINATES ARE BASED ON NAD 83 WI STATE PLAN CENTRAL ZONE, US FOOT, VERTICAL DATUM NAVD 88.

ALL UTILITIES AND SUBSURFACE STRUCTURES SHOWN ARE APPROXIMATE AND MUST BE FIELD VERIFIED BY CONTRACTOR.

| REV | DATE | |
|---|---|---|
| 6 | - | - |
| 5 | - | - |
| 4 | 12/14/21 | RECORD DRAWINGS |
| 3 | 08/10/21 | REVISED PER ARCADIS STORM DRAINAGE DESIGN |
| 2 | 05/04/21 | ADDENDUM NO. 1 |
| 1 | 03/31/21 | ISSUED FOR CONSTRUCTION |
| 0 | 03/15/21 | 100% ISSUED FOR BIDDING |

Endpoint Solutions
6871 S. LOVERS LANE
FRANKLIN, WI 53132
PHONE: (414) 427-1200

TYCO SALT VAULT & 8TH STREET SLIP CONVEYANCE SYSTEM
# PROPOSED SITE LAYOUT
ONE STANTON STREET
MARINETTE, WISCONSIN 54143

DRAWN BY: NWD
CHECKED BY: WCW
APPROVED BY: WCW
DATE: 12/14/2021
PROJECT NO. 415-001-005

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING; USE TO VERIFY FIGURE REPRODUCTION SCALE

SHEET NO.
2R4

P:\Tyco - 415\CAD\001-005 Salt Vault Extraction System Design\Record Drawings Set #4 Conveyance to GWTP\SHT 02_415-001-005 Site Layout CS.dwg

# Attachment 2
# Material Management Plan Template

# NR 718 Material Management Plan

## 1.0 Purpose of Request

The property located at One Stanton Street, Marinette, Wisconsin (Property) is an operating manufacturing facility, located on the banks of the Menomonee River. Tyco Fire Products LP (Tyco) is the owner of and also has operations on the Property and also leases a portion of the Property to ChemDesign Products, Inc. Tyco entered into a Resource Conservation and Recovery Act (RCRA) Administrative Order on Consent (AOC) in 2009 with the U.S. Environmental Protection Agency (EPA) under which Tyco has performed corrective actions and maintains institutional controls. No RCRA corrective measures will be impacted during the work associated with this Material Management Plan (MMP).

This MMP is specific to ADD BRIEF DESCRIPTION OF THE PROJECT/WORK TO BE PERFORMED AND, IF APPLICABLE, WHAT RCRA AOC COMPONENT(S) WILL BE IMPACTED AND THE REQUEST TO EPA THAT DOCUMENTS THE WORK.

As required by Wisconsin Administrative Code Chapter NR 718 Management of Contaminated Soil or Solid Wastes Excavated During Response Actions (NR 718), this MMP provides procedures to be implemented at the Property to properly manage contaminated soil onsite during earth moving and other onsite subsurface activities. The MMP is consistent with the MMP previously submitted by Tyco for other work on the Property.

ONSITE REUSE ONLY

Tyco is requesting an exemption from the NR 718.12 (1) (c) location standard requirements so that contaminated soil can be managed, stockpiled, and backfilled within the general area from which it is excavated, as allowed in NR 718.12 (1) (d). It is anticipated that the stockpiled soil will be backfilled or containerized within fifteen (15) days.

ONSITE MANAGEMENT/STORAGE AND ONSITE REUSE

Tyco is requesting an exemption from the NR 718.05 (2) (a) and NR 718.12 (1) (c) location standard requirements so that contaminated soil can be managed, stockpiled, and stored on the Property, and, if needed, backfilled within the general area from which it is excavated, as allowed in 718.05 (2) (b) NR 718.12 (1) (d). It is anticipated that the stockpiled soil will be backfilled or containerized within fifteen (15) days, however, the location standard exemption for NR 718.05 (2) (a) is requested to extend the duration soils can be stored in case a lack of regional availability of roll-off containers restricts the amount of soil that can be containerized.

## 2.0 Contact and Property Information

**Information About the Property Where Material is Proposed to be Excavated and Stored**

| | |
|---|---|
| Property Name | Tyco Fire Products LP |
| Other Property Names | Tyco, Ansul |
| BRRTS #s | 02-38-000011 |
| FID # | 438039470 |
| Address | One Stanton Street, Marinette, WI 54143 |

| | |
|---|---|
| County | Marinette |
| Location | NW 1/4 of the SW 1/4 of Sec 05, T30N, R24E |
| Parcel IDs | 251-4273.1, 251-4273.2, 251-4273.5, 251-4273.8, 251-4273.9 |
| WTM Coordinates | - |
| Latitude/Longitude | 45.0978639, -87.6160825 |
| Current Zoning | Industrial |
| Current Land Use | Manufacturing |

**Contact Information**

| | |
|---|---|
| Responsible Party, Property Owner and Requestor | Denice Nelson, Senior Director, Remediation and Strategy UPDATE AS APPROPRIATE<br>Johnson Controls<br>5757 North Green Bay Avenue<br>Glendale, WI 53209<br>denice.karen.nelson@jci.com<br>651.280.7259 |
| Environmental Consultant | Heather Ziegelbauer, Project Manager UPDATE AS APPROPRIATE<br>Jacobs<br>1610 N. 2nd Street, Suite 201<br>Milwaukee, WI 53202<br>heather.ziegelbauer@jacobs.com<br>262.644.6167 |
| Wisconsin Department of Natural Resources (WDNR) Contact | Sarah Kreuger UPDATE AS APPROPRIATE<br>WDNR<br>2984 Shawano Avenue<br>Green Bay, WI 54313<br>sarah.krueger@wisconsin.gov<br>920.510.8277 |
| EPA Contact | Andrew Kleinberg, Project Manager – Geologist UPDATE AS APPROPRIATE<br>RCRA Corrective Action Section 2<br>Land, Chemicals & Redevelopment Division, Region 5, EPA<br>77 West Jackson Blvd. (LR-16J),<br>Chicago, IL 60604<br>Kleinberg.Andrew@epa.gov<br>312.353.4374 |
| Initiator for Proposed Activities | N/A – ONLY ADD IF DIFFERENT THAN ABOVE (SUCH AS CHEMDESIGN) |

## 3.0 Results of Analysis Performed and Characteristics of Waste

**Describe the characteristics of the contaminated soil and/or other solid waste material that will be managed under this request, describe the sampling activities conducted and demonstrate how it has been adequately characterized.**

| | |
|---|---|
| **A. Total volume of contaminated soil and/or other solid waste to be managed (cubic yards)** | An estimated X cubic yards ($yd^3$) are planned for removal. Of that X $yd^3$ are planned for offsite disposal at the Waste Management landfill located in Arlington, Oregon, and X $yd^3$ will be reused onsite as backfill.<br><br>IF NEEDED, ADD ADDITIONAL DETAILS. |
| **B. Characteristics of the material proposed to be managed (which may include general makeup, physical characteristics, the homogeneity of the material, the proportion of soil to other solid waste, and any other pertinent descriptors):** | Contaminated soil at the site would consist primarily of fill materials, native soil, and occasional debris. Fill and underlying native materials are described in Section 6.2 Geologic and Hydrogeologic Characteristics.<br><br>IF NEEDED, ADD OR REPLACE WITH PHYSICAL CHARACTERISTICS BASED ON SAMPLING (I.E. SANDY SILT, ETC.) |
| **C. Describe the historical and current land use of the generating site or facility where the contaminated soil or other solid waste originates.** | The Property was first used for lumber mill operations, sawdust disposal, and raw and cut lumber storage. After 1915, the Property has been used for the manufacturing of cattle feed, refrigerants, and specialty chemicals. Arsenical based agricultural herbicides were manufactured on the Property from 1957 to 1977. A byproduct of the manufacturing of this herbicide was a salt that contained approximately 2 percent arsenic by weight and was stockpiled at several locations on the Property and subsequently entered soil and groundwater. By 1978, production of arsenical based herbicides ceased and, since 1983, the Property has been used to produce fire extinguishers and fire suppression systems. Tyco operates on the Property, but also leases a portion of the Property to ChemDesign, which conducts chemical toll manufacturing services on the Property. Additional background and details on the Property can be obtained in the 2022 Barrier Wall Groundwater Monitoring Report (Jacobs 2023). |
| **D. Description of identified contaminants and the source(s) and whether contaminant** | The following contaminant types are known to be present at the Property at concentrations above |

| | |
|---|---|
| **concentrations exceed NR 720 Residual Contaminant Levels.** | applicable soil and/or groundwater standards (where applicable):<br>▪ RCRA metals: primarily arsenic and in some areas low level mercury<br>▪ Volatile Organic Compounds (VOCs): benzene, ethylbenzene, naphthalene, toluene, xylenes, chlorobenzene, chloromethane, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, cis-1,2-dichloroethene, methylene chloride, trichloroethene, vinyl chloride, acetone, 4-methyl-2-pentanone<br>▪ Per- and polyfluoroalkyl substances (PFAS)<br>▪ Limited to no semi-volatile organic compounds (SVOCs)<br>ADD TO OR REPLACE ABOVE BASED ON SAMPLING DATA. DOCUMENTATION SHOULD ALSO INCLUDE ANALYTICAL RESULTS AS WELL AS FIELD NOTES AND PHOTO LOGS. Recent waste soil sample analytical laboratory reports are included in Attachment A-1. |
| **E. Description of the sampling activities conducted to characterize the material including where the samples were collected, how sample locations were chosen, the sampling methods used, and when sampling activities were conducted.** | ADD DESCRIPTION AND SAMPLE LOCATIONS ON A PROPOSED WORK FIGURE(S) (Attachment A-2), AS APPROPRIATE. |
| **F. Explain how the sampling activities adequately characterized the contaminated soil or other solid waste proposed to be managed. Indicate whether the samples were analyzed for all contaminants previously identified at the generating site or facility and analyzed for all contaminants potentially present at the site or facility considering current and historic land use. Discuss how samples were collected from areas most likely to be contaminated and from material that will actually be managed under this request.** | Sampling activities were conducted per the approved site Quality Assurance Project Plans and Standard Operating Procedures.<br>ADD MORE INFORMATION, IF APPLICABLE. |
| **G. Total number of samples collected from this material and analyzed for contaminants of concern.** | X number of samples were collected. |

| | |
|---|---|
| **H. Rate of sample collection per volume.** | Approximately 1 sample per X $yd^3$ of material was sampled. This is based on the rate recommended in NR 718.12 (1) (e)[1]. An alternative sampling plan was not submitted. |

## 4.0 Project Description/Materials Management

**Describe how the contaminated materials will be managed, the proposed schedule for managing the material, and provides sufficient information to justify that the placement of the contaminated materials will meet the requirements of NR 726.12 (1) (b) 1. to 5.**

| | |
|---|---|
| **A. Describe the material management activities to take place. Provide details on how and where the material will be generated, transported, and placed. Describe the depth of the proposed excavation of contaminated soil or other solid waste, and the depth that it will be placed at the receiving site or facility. Describe any response actions proposed for the receiving site or facility to address the relocated contaminated material (such as the construction of a cap). Discuss how material management activities will fit in with the overall property remediation and/or redevelopment plans.** | ADD DESCRIPTION AND APPLICABLE PROPOSED WORK FIGURES – REVIEW NR 718 REQUIREMENTS FOR SOIL MANAGEMENT AND CONTAINER AND STOCKPILE STORAGE |
| **B. Summarize the proposed schedule for implementation of the activities including anticipated start and end dates.** | ADD SCHEDULE. |
| **C. Confirm the proposed management activities will comply with NR 726.13 (1) (b) 1. through 5.** | The Property is under an AOC and the RCRA remedy components are in place and under monitoring and operations and maintenance. Proposed activities will not change or impact the effectiveness of the RCRA remedy components. Materials taken offsite for disposal will be disposed of at the Waste Managment landfill located in Arlington, Oregon. |
| **D. Describe any procedures that have been established, or methods that will be used, to identify previously undocumented** | If materials not previously known to be present are encountered, the WDNR will be notified and these materials will be analyzed as necessary for offsite |

[1] NR 718.12 (1) (e) requires that samples collected to characterize soil be collected at a rate of one sample per 100 cubic yards (for the first 600 cubic yards) and one sample for each additional 300 cubic yards of material, with a minimum of two samples. If the DNR pre-approved an alternative sampling plan, describe how the sampling that was conducted complied with a pre-approved plan. Please also provide the date the sampling plan was pre-approved and the name of the DNR staff person who approved the plan.

| | |
|---|---|
| **contamination during the completion of this project (such as instrument field screening, visual inspections, etc.). Also describe any contingency procedures that have been established to address unexpected contamination.** | disposal. Unexpected subsurface conditions could include, but not limited to, the following:<br>▪ Drums, underground storage tanks, piping, sumps, etc.<br>▪ Suspect regulated materials (e.g., suspect asbestos containing debris)<br>▪ Significant uncharted utilities or subsurface obstructions/features |
| **E. Summarize how the proposed management activities will prevent or minimize adverse environmental impacts and potential threats to human health and welfare, including worker safety, by assessing how all potential exposure and migration pathways of concern, including direct contact exposure, vapor intrusion, ground water, surface water, sediment and any other relevant pathway will be addressed by the proposed management.** | See Section 6.0 Location Criteria Exemption Request for additional details.<br>ADD ANY ADDITIONAL DETAILS, AS APPLICABLE |

## 5.0 Receiving Site or Facility Information

**Describe the site or facility receiving the material.**

Contaminated soils at the Tyco site will either be reused onsite, as approved by WDNR and EPA, or sent offsite to an appropriate disposal facility. Soils are not planned to be brought to another receiving site or facility. Contaminated soil generated from the Property are planned to be disposed of at the Waste Managment landfill located in Arlington, Oregon.

## 6.0 Locational Criteria Exemption Request

**Indicate if excavated contaminated soil will be stored in any of the following locations:**

| | |
|---|---|
| **Within a floodplain** | Yes, see attached Property Figures (Attachment A-3, Figures 3 and 4) |
| **Within 100 feet of any wetland or critical habitat area** | Yes, WDNR mapped wetlands on the eastern edge of the Property as shown in attached Property Figures (Attachment A-3, Figure 4) |
| **Within 300 feet of any navigable river, stream, lake, pond, or flowage** | Yes, Menominee River adjacent to the north edge of the Property, see attached Property Figures (Attachment A-3, Figures 1-4) |
| **Within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well** | No |

| | |
|---|---|
| **Within three (3) feet of the high groundwater level** | Yes, groundwater ranges from approximately 1 to 5 feet below the ground surface (Section 6.2 Geologic and Hydrogeologic Characteristics) |
| **At a depth greater than the depth of the original excavation from which the contaminated soil was removed** | No |

**Provide the justification for exempting the proposed soil management activity from the indicated criteria as described below.**

**Explain below why granting an exception to the NR 718.12 (1) (c) location criteria will not cause a threat to public health, safety, welfare, and the environment by assessing how all potential exposure and migration pathways of concern (including direct contact exposure, vapor intrusion, groundwater, surface water, sediment, and any other relevant pathway) will be addressed by the proposed management. Consider the quantity and characteristics of the waste being managed, the geologic and hydrogeological characteristics of the receiving site, the unavailability of other environmentally suitable alternatives, and whether the activities will comply with other state and federal regulations including other portions of NR 700 to NR 754.**

The reuse of excavated soil as backfill will not cause a threat to public health, safety, welfare and the environment. The primary exposure pathways for the backfilled soil will be direct contact, vapor intrusion and groundwater. Potential for direct contact with the soil will be addressed by placing asphalt, concrete, 6-inches of clean topsoil or, for the cover areas, geo-fabric and clean topsoil, over the backfilled soil at the conclusion of the work. Based on the constituents and the relatively low concentrations of the detected VOCs, the vapor intrusion pathway is not considered viable. Finally, the groundwater pathway is addressed through an existing barrier wall and groundwater collection and treatment system at the Property, which was installed pursuant to the AOC, as the area where the soil will be backfilled is within the barrier wall.

Tyco is requesting an exemption from the NR 718.12 (1) (c) and NR 718. 05 (2) (a) location standard requirements so that contaminated soil can be managed and stockpiled and stored and, if needed, reused as backfill on the Property, as allowed in NR 718.12 (1) (d) and NR 718.05 (2) (b). The soil will be backfilled within the general area from which it is excavated and will remain onsite. It is anticipated that the stockpiled soil will be backfilled or containerized within approximately fifteen (15) days, however, the location standard exemption for NR 718.05 (2) (a) is requested to extend the duration soils can be stored in case a lack of regional availability of roll-off containers restricts the amount of soil that can be containerized.

This MMP will provide procedures to properly manage contaminated soil on the Property. Additional details are provided in the following Subsections. UPDATE BELOW AS NECESSARY

## 6.1 Waste Characteristics and Quantities

Soil excavation activities are anticipated within areas where RCRA metal, VOCs, PFAS impacted soil will be encountered. Contaminated material would consist primarily of fill materials, native soil, and occasional debris. Fill and underlying native materials are described in the Section 6.2. Subsurface activities will include, but are not limited to, stripping of topsoil, site leveling, excavation, constructing building foundations, utility trenching, and horizontal and vertical drilling to install wells and utilities. Quantities would vary by activity. Soil and groundwater have been characterized through historical investigations and

laboratory analytical results, and Tyco currently has approved waste profiles for disposal of both soil and groundwater. The recent waste soil sample analytical laboratory reports are included in Attachment A-1.

## 6.2 Geologic and Hydrogeologic Characteristics

Geology at the Property consists of an upper soil layer consisting of sand/gravel fill. Based on historical documentation, the fill material has been placed on the Property periodically for over 100 years of various operations. Beneath the fill layer is a loose to medium dense alluvial deposits consisting of fine- to coarse-grained sand and gravel. Some of these alluvial deposits consist of an organic-rich, fine-grained peat material. Underlying the alluvial stratigraphy is a layer of dense silty sand to sandy silt that transitions to an even denser sandy silt and clay-compacted glacial till deposit. Below this is dolomitic bedrock at approximately 40 feet below ground surface (bgs).

Groundwater, when encountered at the Property, has typically been present between 3 and 5 feet bgs, but depending on Property conditions can approach 1-foot bgs in some areas. Regional groundwater flow beneath the Property is generally northeast toward the Menominee River. Noted variations in historical groundwater flow (before construction of the barrier wall) were observed in the northwestern portion of the Property: groundwater flow was from the southeast toward the northwest, likely the result of a filled-in slip that is present along the western border of the Property. Other local preferential pathways of migration may be present at the Property. The direction of groundwater flow is affected near the Property because of the presence of the vertical barrier wall (that contains groundwater at the Property), which was completed in fall 2010. Regional groundwater flow outside the Property likely remains generally toward the Menominee River but is diverted around the barrier wall directly south of the Property.

VOCs and total arsenic are monitored as part of the barrier wall groundwater monitoring plan activities per the 2015 Revised Barrier Wall Groundwater Monitoring Plan Update (BWGMPU; CH2M 2015) and June 24, 2019, Addendum to 2015 Revised Barrier Wall Groundwater Monitoring Plan Update (Jacobs 2019). Concentrations were reported at levels exceeding their respective NR 140 preventative action limits (PALs) and/or NR 140 enforcement standards (ESs).

Groundwater on the Property is relatively shallow and is contained by the barrier wall and treated by the groundwater treatment system. Property groundwater levels within the containment barrier walls are also maintained by a groundwater treatment system. As a result, storage of impacted soil/fill will not have any additional impact on groundwater quality at the Property. If dewatering is required as part of subsurface activities, groundwater will be collected in containers and will be disposed of offsite or treated at the groundwater treatment system.

## 6.3 Unavailability of Environmentally Suitable Alternatives

The corrective measures conducted at the Property, as required in the AOC included components to address historical impacts at the Property and be protective of human health and the environment. The main component consisted of onsite groundwater management, which includes the containment barrier wall, engineered groundwater collection and treatment system, and a phyto-pumping system. We believe it would be less protective of the environment to move contaminated soil from the Property for off-site disposal. The Property is already contained and monitored and has restricted access and 24-hour security; therefore, temporary onsite storage and/or reuse of the excavated soil as backfill is a practical and environmentally suitable option with this MMP in place to provide procedures to properly manage contaminated soil.

## 6.4 Compliance with Other State and Federal Regulations

Soil management will follow other state and federal regulations. Contaminated soil would also be managed in accordance with stormwater requirements and other NR 718 requirements. Soil will be managed per the MMP that includes proper erosion control (to prevent the potential runoff or surface migration of contaminants during subsurface activities) and other measures to be implemented at the Property, designed to be protective of human health and the environment.

The approval of Tyco, EPA, and WDNR will be required for proposed work that involves any disturbance or replacement of the existing corrective measures required by the AOC.

## 6.5 Public Health, Safety, or Welfare or the Environment

If this exemption is not granted, excavated soil would have to be transported offsite for disposal, which we believe elevates potential environmental risk and risk to the community. If this exemption is granted, a portion of the soil can be reused as backfill material for the excavation, thus reducing the potential environmental risk and risk to the community. The Property already has RCRA AOC corrective measures in place with monitoring requirements. The Property has restricted access and 24-hour security to keep the public away from stored contaminated soil. The proposed soil handling and onsite storage procedures do not pose an unacceptable threat to public health, safety, welfare, or the environment, including worker safety. Potential exposure and migration pathways of concern are addressed below.

**Vapor Intrusion**

Identified contamination associated with groundwater and soil may consists of VOCs, SVOCs, metals, and PFAS. The metals, SVOCs, and PFAS constituents do not pose a threat to human health or safety from vapor migration to underlying soils. VOCs were detected at concentrations exceeding the PALs and ESs in groundwater at the Property. Storage and stockpiling of contaminated soils managed in accordance with the MMP are not expected to provide a complete pathway for vapor intrusion. Soils will also be placed back in the same area from which they were removed. Therefore, a vapor intrusion risk is not expected. IF VOC IMPACTED SOILS ARE PROPOSED TO BE REUSED ONSITE IN A DIFFERENT LOCATION THAN WHERE IT WAS EXCAVATED, ADDITIONAL EVALUATION MAY BE NEEDED IN THIS SECTION.

**Sediment/Surface Water**

Storm water discharge at the Property is regulated by the WPDES Industrial Stormwater General Permit; coverage under the Construction Stormwater General Permit would be obtained if applicable. ADD DETAILS IF PERMIT IS REQUIRED, GREATER THAN 1 ACRE DISTURBED. Appropriate storm water and erosion control measures will be put in place prior to subsurface activities to minimize erosion and storm water runoff. To prevent tracking of soil on and off the Property, access areas will be made clear for loading trucks/containers and trucks/containers and equipment will be cleaned of soil prior to leaving the area. As practicable, the weather forecast shall be used to schedule subsurface activities to minimize the potential for significant storm water accumulation. However, potentially impacted groundwater and storm water may accumulate in areas requiring removal. Impacted liquids will be collected and disposed offsite or treated at the groundwater treatment system.

**Air Quality**

Contaminated soil piles will be covered when not actively being managed, limiting volatilization of residual VOCs. Subsurface activities will include best management practices to limit particulate emissions. Contractors will be required to adequately wet soil during dry periods to prevent dust emissions.

**Direct Contact Exposure**

The direct contact pathway will be protected by constructing a barrier, such as barricade tape or temporary fencing, for storage areas that are accessible to unauthorized workers and visitors. The contractor performing subsurface activities will evaluate potential health and safety hazards for their workers from potential exposure to contaminants in soil, sediment, buried waste, or groundwater while performing these activities and prepare an activity-specific plan to address these hazards. The plan must include the appropriate level of monitoring and personal protective equipment identified by the contractor based on known conditions. However, if actual conditions vary from expected hazards based on field observations, the contractor must stop work. The activity-specific plan should be reevaluated and updated by the contractor when appropriate. Workers that may come into contact with impacted soil must be informed of possible contaminant concentrations that may be encountered and must be properly trained in the handling of the soil by the contractor. In addition, based on the tasks that workers perform and whether they come in contact with groundwater, the contractor must determine if their staff have the required training.

At the conclusion of the proposed construction activities, all areas where excavated soil are used as backfill will be covered with either asphalt, concrete, 6-inches of clean topsoil or, for the cover areas, geo-fabric and clean topsoil, limiting the potential for direct contact by site personnel.

**Groundwater Quality/Water Supply**

Groundwater at this Property is impacted from historical activities and has detections above the NR 140 PALs and ESs. Groundwater is addressed by the barrier wall and an active groundwater collection and treatment system. Groundwater and liquids encountered in construction activities will be disposed of offsite or treated in the onsite groundwater treatment system. Surface water controls will be implemented by the contractor to prevent surface runoff that could result in surface water contact with the soil and groundwater, including the construction of berms if necessary. Any water which has been in contact with contaminated soil or groundwater shall be contained and may be replaced in the storage pile or shall be collected and sent offsite for disposal or treated at the groundwater treatment system. There are no water supply wells within 300 feet of the Property, only groundwater monitoring and extraction wells associated with the corrective measures.

## 7.0 Continuing Obligations at Receiving Site or Facility

**Indicate which continuing obligations will be specifically required to address the material being managed on the receiving site or facility.**

Not applicable. The receiving site or facility for contaminated soil and materials from Tyco would be a permitted facility, see Section 5.0 Receiving Site or Facility Information, subject to the permitted facility closure requirements.

## 8.0 Attachments

A-1 Analytical laboratory reports for recent waste characterization activities

A-2 Proposed Work Figures

a. Figure 1 – TBD

A-3 Property Figures

a. Figure 1 – Property Map

b. Figure 2 – Site Plan With RCRA Components

c. Figure 3 – FEMA Flood Insurance Rate Map

d. Figure 4 – Marinette County Map with parcels, 100-year flood plain and WDNR mapped wetlands

## 9.0 Certification Statement

"I, ADD NAME, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

SIGNATURE AND TITLE

P.E. # ADD

# Attachment A-1
# Waste Characterization Analytical Laboratory Reports

# ADD WASTE CHARACTERIZATION
# ANALYTICAL LABORATORY REPORTS

# Attachment A-2
# Proposed Work Figures

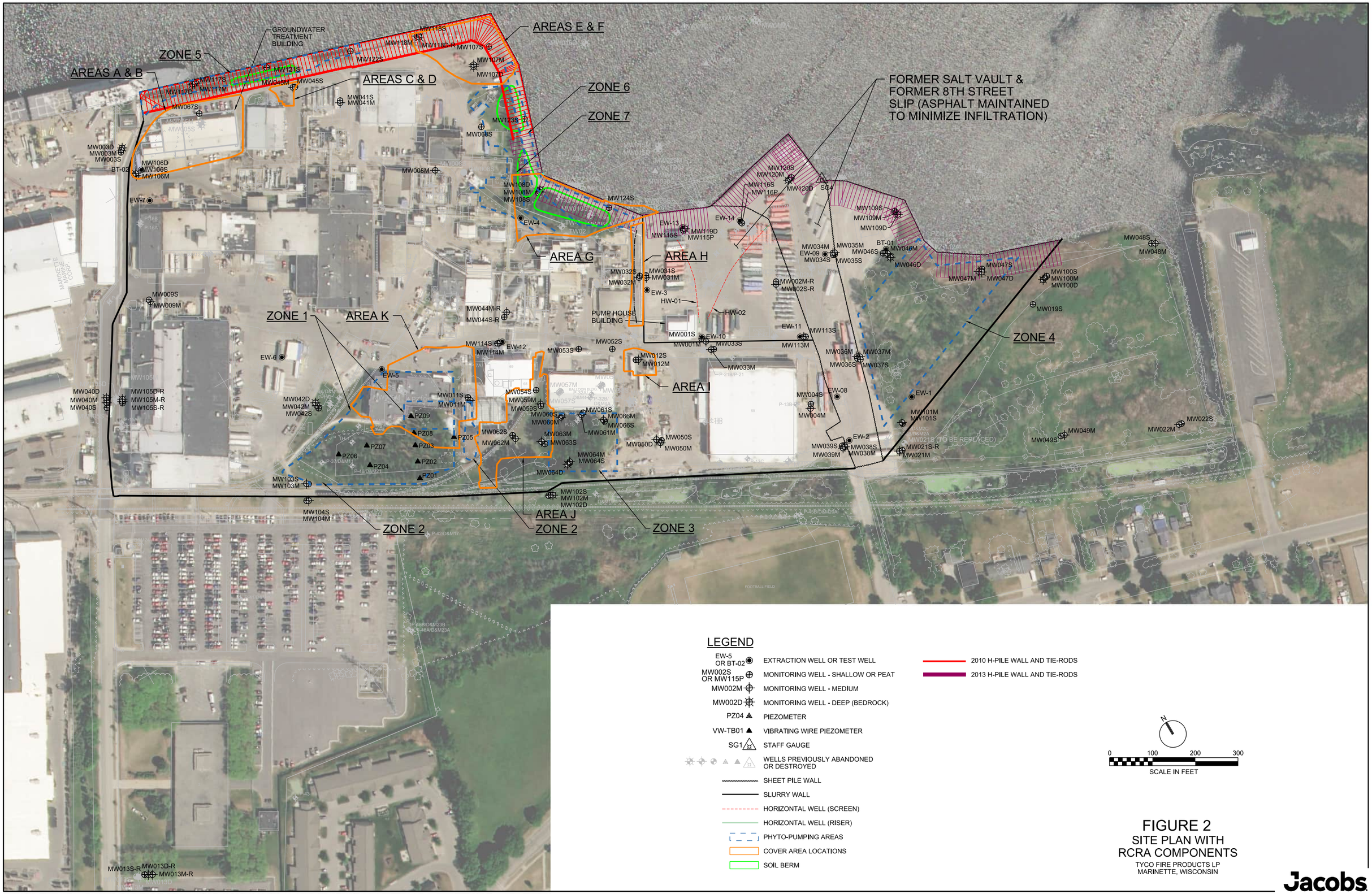
ADD PROPOSED
WORK FIGURES

# Attachment A-3
# Property Figures


**Figure 1. Site Map**
Tyco Fire Products LP
Marinette, WI

\\DC1VS01\GISPROJ\T\TYCO\TYCO\MAPFILES\2023\QUARTERLYREPORT\FIGURE 1 - SITE MAP.MXD JHANSEN1 1/12/2024 1:53:12 PM

Jacobs




## LEGEND

- EW-5 OR BT-02 — EXTRACTION WELL OR TEST WELL
- MW002S OR MW115P — MONITORING WELL - SHALLOW OR PEAT
- MW002M — MONITORING WELL - MEDIUM
- MW002D — MONITORING WELL - DEEP (BEDROCK)
- PZ04 — PIEZOMETER
- VW-TB01 — VIBRATING WIRE PIEZOMETER
- SG1 — STAFF GAUGE
- WELLS PREVIOUSLY ABANDONED OR DESTROYED
- SHEET PILE WALL
- SLURRY WALL
- HORIZONTAL WELL (SCREEN)
- HORIZONTAL WELL (RISER)
- PHYTO-PUMPING AREAS
- COVER AREA LOCATIONS
- SOIL BERM
- 2010 H-PILE WALL AND TIE-RODS
- 2013 H-PILE WALL AND TIE-RODS

N

0 100 200 300

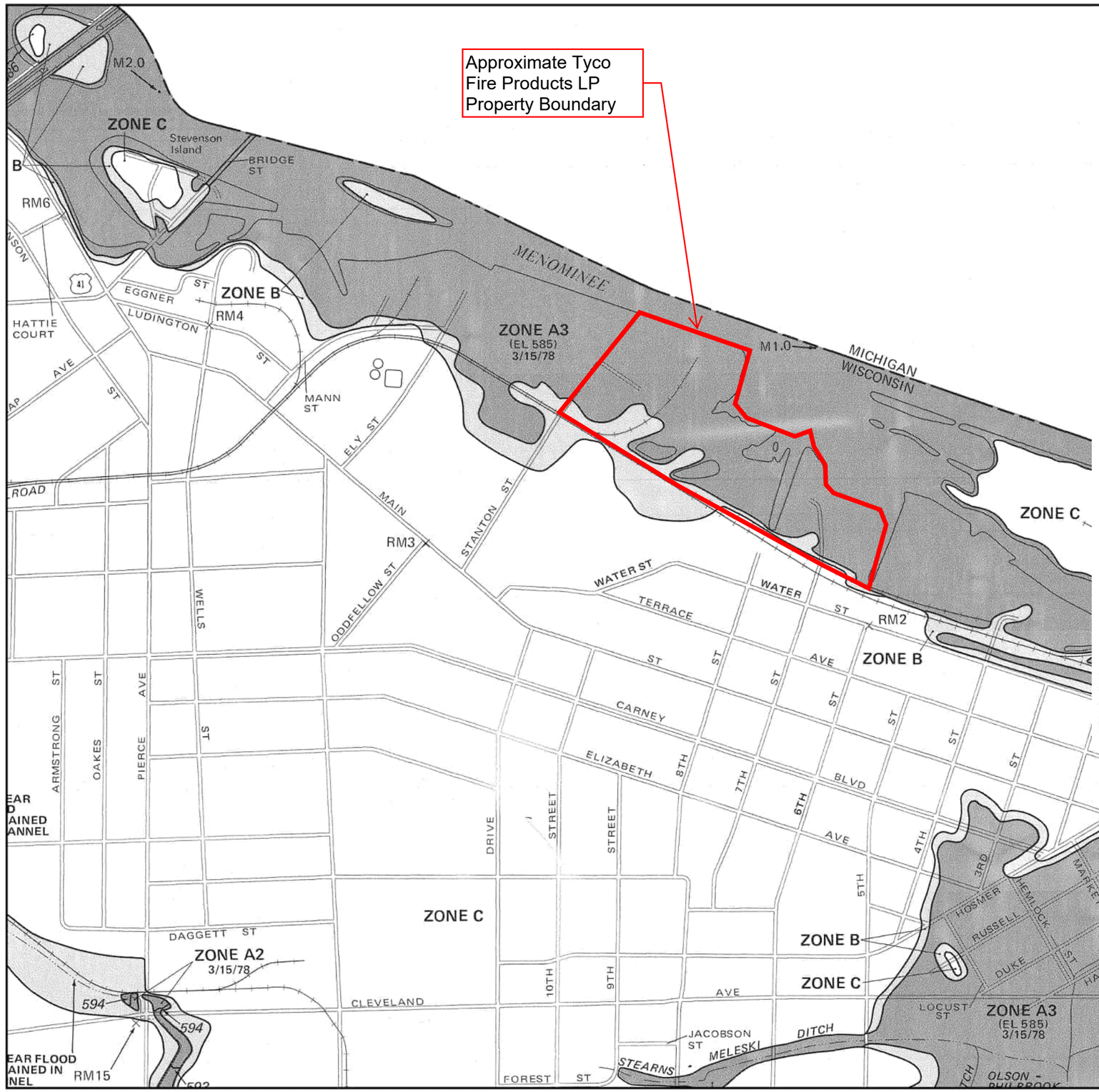
SCALE IN FEET

# FIGURE 2
## SITE PLAN WITH RCRA COMPONENTS

TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN

Jacobs

FILENAME: Figure1RCRA_D3766600.dgn PLOT DATE: 2/21/2024 PLOT TIME: 11:27:44 AM




## KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations* With Date of Identification e.g., 12/2/74
100-Year Flood Boundary
500-Year Flood Boundary

ZONE B
ZONE A1 DATE
ZONE A5 DATE
ZONE B

Base Flood Elevation Line With Elevation In Feet** — 513

Base Flood Elevation in Feet Where Uniform Within Zone** — (EL 987)

Elevation Reference Mark — RM7×

River Mile — • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

### *EXPLANATION OF ZONE DESIGNATIONS

| ZONE | EXPLANATION |
|---|---|
| A | Areas of 100-year flood; base flood elevations and flood hazard factors not determined. |
| A0 | Areas of 100-year shallow flooding with depth from 1 to 3 feet; product of flood depth (feet) and velocity (feet per second) less than 15. |
| A1 - A30 | Areas of 100-year flood; base flood elevations and flood hazard factors determined. |
| A99 | Areas of 100-year flood to be protected by a flood protection system under construction; base flood elevations and flood hazard factors not determined. |
| B | Areas between limits of 100-year flood and 500-year flood; or areas of 100-year shallow flooding with depth less than 1 foot. (Medium shading) |
| C | Areas of minimal flooding. (No shading) |
| D | Areas of undetermined, but possible, flood hazards. |
| V | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined. |
| V0 | Areas of 100-year shallow flooding with velocity; depth from 1 to 3 feet; product of depth (feet) and velocity (feet per second) more than 15. |
| V1 - V30 | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined. |

### NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

APPROXIMATE SCALE
800 0 800 FEET

NATIONAL FLOOD INSURANCE PROGRAM

# FLOOD INSURANCE RATE MAP

CITY OF
MARINETTE,
WISCONSIN
MARINETTE COUNTY

COMMUNITY-PANEL NUMBER
550261 0001 B

PAGE 1 OF 1

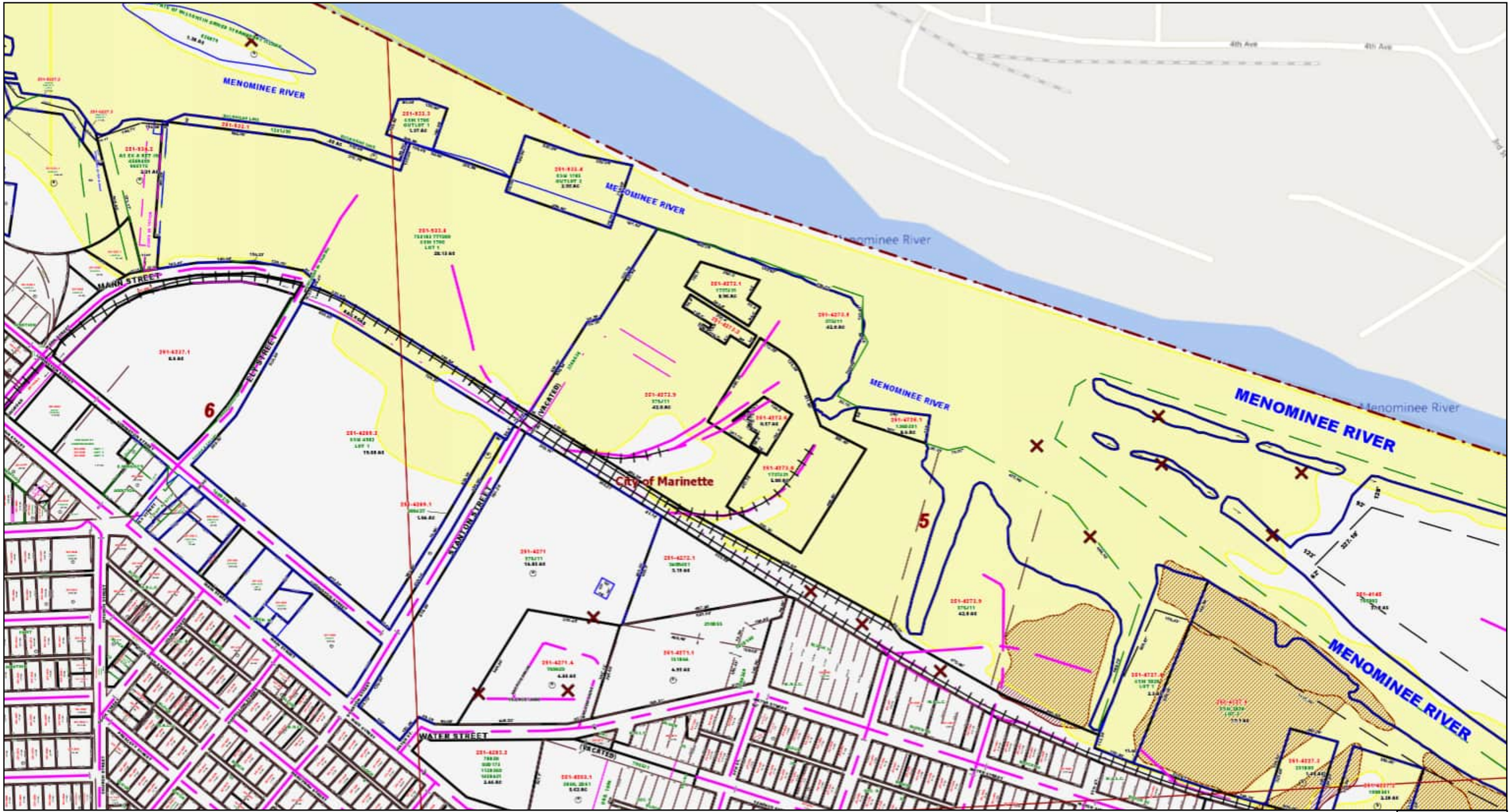
EFFECTIVE
MARCH 15, 1978

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

**Figure 3**

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at https://msc.fema.gov.

# Tyco Fire Products LP




https://mcgis.marinettecounty.com

**Figure 4**



Feet

0 383.9923988 767.98479