



August 10, 2021

John T. Hunt  
Wisconsin Department of Natural Resources  
223 East Steinfest Road  
Antigo, WI 54409-2777

Re: **Updated Materials Management Plan**  
**Portions of Parcels 06-806-00739-05 and 06-806-00739-00**  
**2929 Halvor Lane**  
**Superior, Wisconsin**  
**BRRTS#: 07-16-583046**  
**BBJ Group Project No. R2112**

Dear Mr. Hunt

BBJ Group, LLC (BBJ Group) on behalf of HCI Limited Partnership, respectfully submits this Updated Materials Management Plan for soils on portions of parcels 06-806-00739-05 and 06-806-00739-00 associated with the FedEx expansion at 2929 Halvor Lane in Superior, Wisconsin.

This Updated Materials Management Plan reflects requested updates after the discussion held on June 28, 2021. BBJ Group and the Stormwater Design Engineer from TKDA clarified that the stormwater pond is a dry pond used to help regulate stormwater surges from runoff. The pond is designed to have all the water drained within 24 hours. In addition to this clarification, a 30 MIL PVC Geomembrane Liner is also being added to the base of the pond for further protection.

The Updated Materials Management Plan also further defines the soil berm to have a 30 MIL PVC Geomembrane Liner with a grass seed mix 10 or 70 used for vegetation. The grass will be mowed on a regular basis by FedEx and will be follow required maintenance log submissions to the DNR. The sloping of the berm was also clarified and deemed acceptable during that call.

BBJ Group has also clarified that there will be five wells removed as part of this project. The Antea Work Plans and Memos are attached.

Please contact Mr. Justin Button-Hutchens at (224) 433-8544 or [jbutton@bbjgroup.com](mailto:jbutton@bbjgroup.com) with any questions regarding this plan.

Sincerely,

**BBJ GROUP, LLC**

A handwritten signature in blue ink that reads "Justin Button-Hutchens".

Justin Button-Hutchens, P.E.  
Project Engineer

*Attachments: Updated Materials Management Plan  
Figures  
Analytical Summary Table  
Lab Report  
RR980 Maintenance Plan and Inspection Log  
Antea Well Abandonment Work Plan Request  
Antea Abandonment and Transmissivity Memo*

**UPDATED MATERIALS MANAGEMENT PLAN**

## Purpose

The purpose of this document is to provide an optional template format for a request to manage material under Wis. Admin. Code § NR 718.12 or NR 718.15. This document may be included as part of an interim or remedial action plan (RAP) or post-closure modification request, or can be submitted by itself depending on the activities conducted at the site. Using this recommended format will likely result in a faster Department of Natural Resources (DNR) review. At a minimum, all requests must satisfy the requirements outlined in Wis. Admin. Code § NR 718.12 (1) and (2) (b).

## Introduction

Contaminated soil and other solid waste generated from a response action site as part of an interim or remedial action may be managed at a site or facility that is not an operating licensed landfill if an exemption from the Waste and Materials Management Program requirements established in Wis. Stat. ch. 289 and Wis. Admin. Code ch. NR 500 to NR 538 is obtained under Wis. Admin. Code §§ NR 718.12 or NR 718.15. An approval under Wis. Admin. Code § NR 718.12 can be granted when contaminated soil is being managed as part of an interim action under Wis. Admin. Code ch. NR 708 or a remedial action under Wis. Admin. Code ch. NR 722. An approval through Wis. Admin. Code § NR 718.15 can be granted when other solid waste material is managed as part of an interim or remedial action on the site from which it was generated. Managing material under either section requires prior written approval from the DNR. For more information see "Management of Contaminated Soil and Other Solid Wastes, Wis. Admin. Code §§ NR 718.12 and NR 718.15" (RR-060), by visiting [dnr.wi.gov](http://dnr.wi.gov), search "RR-060."

If this approval request involves contaminated material impacted by a discharge of a hazardous substance that has not been reported to the DNR, a "Notification for Hazardous Substance Discharge (non-emergency)", DNR Form 4400-225, must be completed and submitted immediately as required by Wis. Admin. Code § NR 706, unless an alternate method of reporting is approved by the DNR. This form can be found by visiting [dnr.wi.gov](http://dnr.wi.gov), search "4400-225."

This template is not intended to be used for immediate actions under Wis. Admin. Code § NR 708.05, as prior DNR approval is not required if: 1) the requirements of Wis. Admin. Code § NR 718.12 (1) are met, 2) contaminant concentrations do not exceed Wis. Admin. Code ch. NR 720 soil residual contaminant levels, 3) and the quantity of material managed is less than 100 cubic yards total.

Requests to manage material under Wis. Admin. Code ch. NR 718 for projects involving large-scale disposal or requiring items such as a liner system, leachate treatment and an engineered cap, or projects proposing to place the material below the groundwater table, should not be requested using this template. Consult with DNR staff before submitting such a proposal

## Document Instructions

In order to expedite processing, complete all applicable sections of this document as instructed. **Fields/sections required by administrative code are marked with a red asterisk (\*)**. All other fields are optional and are included to assist DNR staff in gathering additional information to expedite review of the request.

Some portions of the document may be filled in directly as indicated, other responses may need to be completed separately and attached. If a field is not relevant, explaining why will further assist staff in reviewing the request.

In this document, "generating site or facility" means the site or facility where the response action is generating the contaminated material subject to this approval request. "Receiving site or facility" means the site or facility where the contaminated material is proposed to be managed. The "receiving site or facility" may be the same site or facility as the generating site or facility, or it may be a different site or facility.

## Submittal Instructions

Please submit this form and related documents using the RR Program Submittal Portal at [dnr.wi.gov](http://dnr.wi.gov), search "RR Submittal Portal". All accompanying attachments should be combined into a separate PDF. Please see [RR-690](http://dnr.wi.gov) for up-to-date information on submitting documents.

**For questions on this form, please contact Judy Fassbender at [judy.fassbender@wisconsin.gov](mailto:judy.fassbender@wisconsin.gov).**

## Recommended Template for Request to Manage Materials under Wis. Admin. Code § NR 718.12 or NR 718.15

Form 4400-315 (R 11/20)

Page 2 of 12

### Section 1 – Purpose of Request

Identify the purpose of the request by checking each box that applies:

- Manage contaminated soil as part of an interim or remedial action or post-closure modification on the same response action site from which it was generated (Wis. Admin. Code §§ NR 718.12 (1) and (2)).
- Manage contaminated soil as part of an interim or remedial action or post-closure modification at a site or facility that is different from the response action site from which it was generated (Wis. Admin. Code §§ NR 718.12 (1) and (2)).
- Manage other solid waste other than contaminated soil, as part of a response action, at the same site from which it was generated (Wis. Admin. Code § NR 718.15).

If none of the above boxes are checked, the proposed materials management activity cannot be exempted from solid waste rules under Wis. Admin. Code ch. NR 718. Management of solid waste material generated as a result of a non-NR 700 action may be allowed after obtaining a “low hazard exemption” from the DNR Waste and Material Management Program. Please see the DNR publication “Exempting Low-Hazard Wastes from Solid Waste Regulations” (PUB-WA 1645), which can be found by visiting [dnr.wi.gov](http://dnr.wi.gov), search “WA1645.”

### Section 2 – Applicable Fees

Fees are assessed for each type of Wis. Admin. Code § NR 718.12 or NR 718.15 request (plus database fee) **per site or facility** where contaminated material is excavated or managed. The below tables are provided to assist you in calculating the appropriate Wis. Admin. Code § NR 749 fee required for the review of your submittal.

Identify the Wis. Admin. Code § NR 749 review fees for this submittal by checking the applicable “On-Site Management Fee” in section A, column D. If material will be managed at a site(s) or facility(ies) other than the response action site, also select the appropriate “Off-Site Management Fee” in section B, and indicate the number of applicable receiving sites in column E. Please send a single check to the regional office managing your request. Specific directions will be detailed in your submittal confirmation.

A. Fee Assessed to Excavate or Manage Soil or Other Solid Waste on the Generating Site or Facility			
A	B	C	D
Action	Action Fee	Database Fee	On-Site Mgmt Fee
MMP as part of Interim Action per NR 708.11, with residual soil CO	\$700	\$300	<input type="checkbox"/> \$1000
MMP as part of Interim Action per NR 708.11, without residual soil CO	\$700	No fee	<input type="checkbox"/> \$700
MMP as part of Remedial Action Plan approval, with residual soil CO	\$1050	\$300	<input type="checkbox"/> \$1350
MMP as part of a Remedial Action Plan approval without residual soil CO	\$1050	No fee	<input type="checkbox"/> \$1050
Closed Sites: MMP as part of a CO modification action, with residual soil CO	\$1050	\$300	<input type="checkbox"/> \$1350
Closed Sites: MMP as part of a CO modification action, without residual soil CO	\$1050	No fee	<input type="checkbox"/> \$1050
MMP separate from RAP or CO mod, with residual soil CO	\$700	\$300	<input checked="" type="checkbox"/> \$1000
MMP separate from RAP or CO mod, without residual soil CO	\$700	No fee	<input type="checkbox"/> \$700

B. Fee Assessed to Manage Soil on a Site or Facility other than the Generating Site or Facility					
A	B	C	D	E	F
Action	Action Fee	Database Fee	Off-Site Mgmt Fee	# of receiving sites subject to action	Total for row
MMP as part of interim action, remedial action, modification to COs, etc., with residual soil CO	\$700	\$300	<input type="checkbox"/> \$1000		
MMP as part of interim action, remedial action, modification to COs, etc., without residual soil CO	\$700	No fee	<input type="checkbox"/> \$700		
Total of Off-Site Management Fee					\$0
<b>Total of On-Site and Off-Site Management Fee</b>					<b>\$1,000</b>

- 1) **MMP** – A Material Management Plan submitted in accordance with Wis. Admin. Code §§ NR 718.12 (1) and (2) or NR 718.15.
- 2) **“With residual soil CO”** - site will have a residual soil continuing obligation (e.g. engineering control, cap, or cover) applied at the generating site or facility at the end of the applicable action; remedial action approval, or approval by an addendum to the closure letter.
- 3) **“Without residual soil CO”** - site that will not have a residual soil continuing obligation applied at the generating site or facility at the end of the applicable action.

## Recommended Template for Request to Manage Materials under Wis. Admin. Code § NR 718.12 or NR 718.15

Form 4400-315 (R 11/20)

Page 3 of 12

### Section 3 –Property and Contact Information

#### A. Information about the generating site or facility (from which material is proposed to be excavated)

BRRTS #(s) (include Materials Management #s and VPLE #s if assigned)	BRRTS Activity (Site) Name(s)	FID #(s)
0 7 - 1 6 - 5 8 3 0 4 6	FEDEX FACILITY	
- - - - -		

**Response Action Site Address\*** (physical, not mailing address)

2929 Halvor Ln, Superior, WI 54880

<b>City*</b> Superior	<b>State*</b> WI	<b>Parcel ID #(s)</b> 06-806-00739-00, 06-806-00739-05	
<b>County*</b> Douglas		<b>ZIP Code*</b> 54880	
<b>WTM Coordinates*</b> X: <u>1</u> <u>4</u> <u>2</u> <u>6</u> <u>9</u> <u>1</u> Y: <u>3</u> <u>0</u> <u>7</u> <u>4</u> <u>5</u> <u>6</u>		<b>Lat/Long Coordinates</b> decimal degrees (min. of 6 digits right of decimal, e.g., -89.123456)* Lat: <u>46.725929</u> Long: <u>-92.121249</u>	
<b>Coordinates Represent:</b> <input type="radio"/> Center of Project <input type="radio"/> Parcel Center			
$\frac{1}{4}$ * NE $\frac{1}{4}$ * SE		<b>Section*</b> 16	<b>Township*</b> 49 N
<b>Current Zoning:</b> Commercial		<b>Current Land Use:</b> Commercial	
		Range* 14 <input type="radio"/> E <input checked="" type="radio"/> W	

#### B. Responsible Party (RP) of the generating site or facility

*The Wis. Admin. Code §§ NR 718.12 or NR 718.15 approval will be issued to the Wis. Admin. Code NR 700 series responsible party identified below and to the owner of the receiving site or facility, if different than the generating site or facility. If there is more than one responsible party or property owner, include the information requested below for each.*

<b>Responsible Party (RP) Name*</b> BP Products North America		<b>Organization / Business Name</b>	
<b>Mailing Address*</b> 201 Helios Way		<b>City*</b> Houston	<b>State*</b> TX
		<b>ZIP Code*</b> 77079	
<b>Phone # (include area code)*</b>	<b>Email*</b>		

#### C. Property owner(s) information for generating site or facility if different than RP

Check here if the property owner of the generating site or facility is different than the responsible party, and enter the property owner's information below.

<b>Property Owner Name(s)</b> HCI Limited Partnership		<b>Organization / Business Name</b>	
<b>Mailing Address</b> 2910 River Oaks Drive		<b>City</b> Monroe	<b>State</b> LA
		<b>ZIP Code</b> 71201	
<b>Phone # (include area code)</b>	<b>Email</b>		

#### D. Consultant / contractor information

<b>Consultant / Contractor Name*</b> Justin Button-Hutchens		<b>Organization / Business Name*</b> BBJ Group, LLC	
<b>Mailing Address*</b> 140 S Dearborn Steet, Suite 1520		<b>City*</b> Chicago	<b>State*</b> IL
		<b>ZIP Code*</b> 60603	
<b>Phone # (include area code)*</b> (312) 219-7787	<b>Email</b> jbutton@bbjgroup.com		

## Recommended Template for Request to Manage Materials under Wis. Admin. Code § NR 718.12 or NR 718.15

Form 4400-315 (R 11/20)

Page 4 of 12

### E. Contact information for questions about this request

<b>Contact Name</b> Justin Button-Hutchens		<b>Organization / Business Name</b> BBJ Group, LLC	
<b>Mailing Address</b> 140 S Dearborn St, Suite 1520		<b>City</b> Chicago	<b>State</b> IL
<b>Phone # (include area code)</b> (312) 219-7787		<b>Email</b> jbutton@bbjgroup.com	
<b>Relationship to the Requestor (Same, Consultant, Developer, Etc.):</b> Consultant			

### Section 4 – Results of Analyses Performed and Characteristics of Waste

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (1) (d) 1, NR 718.12 (2) (b) 2. and NR 718.12 (2) (b) 6. In this section, 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. Narrative boxes have a limit of 2500 characters. Please attach additional pages if necessary, clearly labeling the section of the form to which you are responding.

- A. Enter the total volume of contaminated soil and/or other solid waste to be managed (cubic yards) \*:  
3,600
- B. Describe the 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.  
Surficial geology is primarily glacial lake deposits consisting of clay, silt, and sand. Excavated soils will primarily consist of silts and clays. Excavated soils only anticipated to go approximately 4 feet below ground surface.

- C. Describe the historic and current land use of the generating site or facility where the contaminated soil or other solid waste originates, including how this site or facility is zoned.  
The Subject Property historically operated as part of a 42-acre bulk petroleum storage terminal (Former Terminal) which was operated by various entities dating back to the late 1800s and later by Standard Oil/Amoco from 1908 until 1999. All ASTs were removed by 2003. Investigation and remediation of the Former Terminal are still ongoing for the open Wisconsin Department of Natural Resources (WDNR) Bureau for Remediation and Redevelopment Tracking System (BRRTS) # 02-16-000331 – AMOCO OIL TERMINAL , for which Atlantic Richfield Co. [a British Petroleum (BP) affiliated Company ] is designated as the responsible party.

Current land use is zoned as commercial/industrial, and property is vacant. The property has been purchased for redevelopment as parking area for the FedEx facility.

- D. Describe identified contaminants and the source(s). Indicate whether contaminant concentrations exceed Wis. Admin. Code § NR 720 Residual Contaminant Levels.  
VOCs, specifically BTEX compounds, are the primary constituents of concern in the soil. The source of the contamination was due to historical refinery operations. One sample location exceeded the industrial land use direct contact (DC) RCLs for benzene and bromodichloromethane. There were also exceedances of the Groundwater RCLs for 1,2,4-trimethylbenzene, 1,2-dichloroethane, 1,3,5-trimethylbenzene, benzene, bromodichloromethane, ethylbenzene, m&p-xylene, naphthalene, o-xylene, and toluene at one or more sample locations. Analytical results can be found in Table 1. Sample locations can be found on Figure 1 in the attached Phase II report.
- E. Describe 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.  
Soil samples were collected December 16 and December 17, 2020. Soil samples were collected from borings at 2 foot intervals which exhibited the presence of “worst-case” conditions, i.e., the sample exhibiting the highest field screening measurement (as determined by photoionization detector (PID) headspace readings), visual signs of impact (e.g., one sample was stained and the other samples were not at the boring location), olfactory indications of impact, or a combination of any of these. Soil samples were analyzed for VOCs (USEPA Method 8260), PAHs (USEPA Method 8270), and RCRA Metals (USEPA 6020/7471).

**Recommended Template for Request to Manage Materials  
under Wis. Admin. Code § NR 718.12 or NR 718.15**

Form 4400-315 (R 11/20)

Page 5 of 12

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. Samples were collected over entire anticipated area that will be subject to excavation for the redevelopment of the parcels. Samples were collected up to 16 feet bgs, with a majority of samples collected in the anticipated excavation depths of the Subject Property (i.e. within 0 to 5 feet BGS)

G. Enter the total number of samples collected from this material and analyzed for contaminants of concern.  
15

H. Enter the rate of sample collection per volume. One sample per 240 yards of contaminated material.

- i. Wis. Admin. Code § 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.

**Section 5 – Project description/material management plan**

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (2) (b) (5), (7) and (8). In this section, describe how the contaminated materials will be managed, the proposed schedule for managing the material, and provide sufficient information to justify that the placement of the contaminated materials will meet the requirements of Wis. Admin. Code §§ NR 726.12 (1) (b) 1. to 5. Narrative boxes have a limit of 2500 characters. Please attach additional pages if necessary, clearly labeling the section of the form to which you are responding.

- 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.

The construction project will require the excavation and displacement of approximately 3,600 CY of soil from subsurface. An overall site plan is attached as Attachment 2. Analytical results from soil samples collected within or near the excavation areas can be found in Table 1 and the sample locations can be found in Figure 1 in the attached Phase II. .

Excavation of soil will be generated from site grading and the cut for the dry stormwater pond. As soil is excavated, it will be visually inspected for signs of impacts such as staining, debris and/or free product and olfactory detections.

Excavated soils will be displaced on the site for grading purposes, and covered with an engineered barrier (i.e. asphalt parking area). Excess soils that are displaced will be moved to the eastern portion of the Subject Property and placed within a berm. The berm will consist of the displaced soils covered by a 30 MIL PVC Geomembrane Liner. There will be an 8-inch layer of clean imported topsoil placed on top of the 30 MIL PVC Geomembrane liner, which will be secured in place by vegetation (i.e. grass) of a seed mix 10 or 70.

- B. Summarize the proposed schedule for implementation of the activities including anticipated start and end dates. \*  
The start date of the excavation is planned for August 2021. Excavation activities are planned to last the summer of 2021, and will end by fall 2021.



**Recommended Template for Request to Manage Materials  
under Wis. Admin. Code § NR 718.12 or NR 718.15**

Form 4400-315 (R 11/20)

Page 6 of 12

- C. Confirm the proposed management activities will comply with Wis. Admin. Code § NR 726.13 (1) (b) 1. through 5.\*  
The proposed management activities do not
1. Pose a threat to public health, safety, or welfare or the environment.
  2. Cause a violation of a ch. NR 140 groundwater quality enforcement standard at any applicable point of standards application, except where the department has granted an exemption under s. NR 140.28 for a specific hazardous substance or the criteria under s. NR 726.05(6) are met.
  3. Cause a violation of surface water quality standards in chs. NR 102 to 106.
  4. Cause a violation of air quality standards contained in chs. NR 400 to 499.
  5. Cause a vapor action level in indoor air to be attained or exceeded.

- D. Describe any procedures that have been established, or methods that will be used, to identify previously undocumented 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.  
Excavated soil will be visually inspected for impacts.

- 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.  
The excavation will be inspected prior to the commencement of work each day. Proper sloping techniques or shielding methods will be used on all excavations 4' or deeper. Daily health and safety tailgates will be required and a sign-in sheet will be utilized to keep track of workers entering the excavation area.

**Section 6 - Receiving site or facility information**

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (2) (c) 3. In this section, describe the site or facility receiving the material by addressing the following items. Narrative boxes have a limit of 2500 characters. Please attach additional pages if necessary, clearly labeling the section of the form to which you are responding.

- A. Briefly discuss the geology and hydrogeology of the receiving site(s) or facility(ies), including information from any previous remedial investigations, and well logs or well construction records from nearby wells. Please also provide the information requested below, indicating whether the response is based on regional or site-specific information.\*  
The Subject Property is the proposed receiving site. A receiving disposal facility is not proposed at this time.

Depth to Bedrock (ft. below ground surface):	_____	<input type="radio"/> Regional	<input type="radio"/> Site Specific
Bedrock Type:	<input checked="" type="radio"/> Sandstone	<input type="radio"/> Limestone / Dolomite	<input type="radio"/> Metamorphic / Igneous
High Groundwater Level (ft. below ground surface):	10	<input type="radio"/> Regional	<input checked="" type="radio"/> Site Specific
Groundwater Flow Direction:	N/NW	<input type="radio"/> Regional	<input type="radio"/> Site Specific

- B. Briefly describe any previous environmental site investigations or remedial actions conducted at the receiving site(s) or facility(ies). Describe the environmental condition of the portion of the receiving site(s) or facility(ies) where material will be placed including what contaminants are present, the environmental sampling conducted in that area, and whether identified contaminant concentrations exceed applicable standards.\*  
No receiving facility is proposed other than the Site at this time.

**Recommended Template for Request to Manage Materials  
under Wis. Admin. Code § NR 718.12 or NR 718.15**

Form 4400-315 (R 11/20)

Page 7 of 12

C. Describe any environmentally sensitive areas at or near the receiving site(s) or facility(s) where the contaminated material will be managed.

HCI Limited Partnership has investigated and found no environmentally sensitive areas at the Site.

D. Describe the historic, current and proposed land use of the receiving site(s) or facility(ies) where the contaminated soil or other solid waste will be managed. How are these site(s) or facility(ies) zoned?

HCI Limited Partnership owns the Site.

E. Identify current uses of all properties adjacent to the receiving site or facility. Check all that apply.

Agricultural	<input type="checkbox"/>	N	<input type="checkbox"/>	S	<input type="checkbox"/>	E	<input type="checkbox"/>	W	<input type="checkbox"/>	NE	<input type="checkbox"/>	NW	<input type="checkbox"/>	SE	<input type="checkbox"/>	SW
Industrial	<input type="checkbox"/>	N	<input type="checkbox"/>	S	<input type="checkbox"/>	E	<input checked="" type="checkbox"/>	W	<input checked="" type="checkbox"/>	NE	<input type="checkbox"/>	NW	<input type="checkbox"/>	SE	<input type="checkbox"/>	SW
Recreational	<input type="checkbox"/>	N	<input type="checkbox"/>	S	<input type="checkbox"/>	E	<input type="checkbox"/>	W	<input type="checkbox"/>	NE	<input type="checkbox"/>	NW	<input type="checkbox"/>	SE	<input type="checkbox"/>	SW
Residential	<input type="checkbox"/>	N	<input type="checkbox"/>	S	<input type="checkbox"/>	E	<input type="checkbox"/>	W	<input type="checkbox"/>	NE	<input type="checkbox"/>	NW	<input type="checkbox"/>	SE	<input type="checkbox"/>	SW
Undeveloped	<input checked="" type="checkbox"/>	N	<input checked="" type="checkbox"/>	S	<input type="checkbox"/>	E	<input type="checkbox"/>	W	<input type="checkbox"/>	NE	<input type="checkbox"/>	NW	<input type="checkbox"/>	SE	<input type="checkbox"/>	SW
Commercial	<input type="checkbox"/>	N	<input type="checkbox"/>	S	<input checked="" type="checkbox"/>	E	<input type="checkbox"/>	W	<input type="checkbox"/>	NE	<input type="checkbox"/>	NW	<input type="checkbox"/>	SE	<input checked="" type="checkbox"/>	SW
Other	<input type="checkbox"/>	N	<input type="checkbox"/>	S	<input type="checkbox"/>	E	<input type="checkbox"/>	W	<input type="checkbox"/>	NE	<input type="checkbox"/>	NW	<input type="checkbox"/>	SE	<input type="checkbox"/>	SW

Describe "other" property use below:

F. Describe any other features of this property not addressed above that influence the suitability of the receiving site(s) or facility(ies) for the management of the contaminated soil or other solid waste.

Not applicable

**Section 7 – Locational criteria**

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (1) (c). Indicate if excavated material will be placed in any of the following locations\*:

- Within a floodplain.
- Within 100 feet of any wetland or critical habitat area.
- Within 300 feet of any navigable river, stream, lake, pond, or flowage.
- Within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well.
- Within three (3) feet of the high groundwater level.
- At a depth greater than the depth of the original excavation from which the contaminated soil was removed.

If any of the above boxes are checked, an exemption from the indicated criteria must be requested as described below. If none of the above boxes are checked, and the proposed placement of material will not otherwise pose a threat to the public health, safety, or welfare or the environment, the proposed management activities will comply with the locational criteria of Wis. Admin. Code § NR 718.12 (1) (c) and you may skip the following question.

Include an explanation of why granting an exemption to the Wis. Admin. Code § NR 718.12 (1) (c) locational criteria will not cause a threat to public health, safety, or welfare or the environment 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. Consider the quantity and characteristics of the material being managed, the geologic and hydrogeological characteristics of the receiving site or facility, the unavailability of other environmentally suitable alternatives, and whether the activities will comply with other state and federal regulations including other portions of Wis. Admin. Code chs. NR 700 to NR 754.

**Recommended Template for Request to Manage Materials  
under Wis. Admin. Code § NR 718.12 or NR 718.15**

Form 4400-315 (R 11/20)

Page 8 of 12

**Section 8 – Additional information for non-metallic mine receiving sites or facilities**

If the material to be managed is proposed for use in reclaiming a non-metallic mine, the disposal of such a material must be specifically allowed in the mine's reclamation plan. If not, the reclamation plan needs to be modified prior to DNR approving the management of the contaminated soil at the mine. Complete this section if the proposed receiving site or facility is a non-metallic mine.

A. Current depth to groundwater at facility (feet below ground surface): \_\_\_\_\_

B. Has the facility been dewatered to allow mining?  Yes  No

If yes, indicate the expected natural groundwater level when dewatering is terminated (feet below ground surface):

C. Is material proposed to be placed within 10 feet of the natural water table?  Yes\*  No

If yes, provide information to justify a variance approval under Wis. Admin. Code ch. NR 503.

D. Include a copy of the reclamation plan indicating the placement of low level contaminated material is acceptable.

E. Describe any design criteria established for the disposal site, include restrictions on material placement, engineered barrier requirements, etc.

**Section 9 – Continuing obligations at receiving site or facility**

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (2) (d) and (e). Check the applicable boxes to indicate which continuing obligations will be specifically required to address the material being managed on the receiving site or facility. The associated language will appear in the Wis. Admin. Code ch. NR 718 Approval Letter.

No Continuing Obligations

Residual Soil Contamination:

If contaminated soil that was managed as proposed in the material management plan is excavated in the future, the property owner at the time of excavation will have the following responsibilities per Wis. Admin. Code § NR 725.05 (l) (d):

- determine if contamination is present,
- determine whether the soil is considered solid or hazardous waste; and
- ensure that any storage, is in compliance with applicable statutes and rules.

Excavated contaminated soil may be managed in accordance with Wis. Admin. Code ch. NR 718, with prior DNR approval. In addition, all current and future property owners and occupants of the property and right-of-way holders need to be aware that excavation of the contaminated soil may pose a hazard and special precautions may be necessary to prevent a health threat to humans. A historic fill exemption is required prior to construction of any structures over fill materials.

Depending on site-specific conditions, construction over contaminated soil or groundwater may also result in vapor migration of contaminants into enclosed structures or migration along underground utility lines. The potential for vapor intrusion and means of mitigation should be evaluated when planning any future redevelopment, and measures may need to be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

## Recommended Template for Request to Manage Materials under Wis. Admin. Code § NR 718.12 or NR 718.15

Form 4400-315 (R 11/20)

Page 9 of 12

Maintenance of a cover:

A soil cover/engineered cover/other is proposed to be installed and maintained over contaminated soil. Inspections will be required per Wis. Admin. Code § NR 724.13, and submittal of inspection reports may be required per Wis. Admin. Code § NR 727.05 (1) (b) 3. Certain activities which would disturb the cover or barrier will be prohibited. If the cover is approved for industrial land use, notification of the DNR is required before changing to a non-industrial use, to determine if the cover will be protective for that use per Wis. Admin. Code § NR 727.07 (3). A maintenance plan is attached, which describes the maintenance activities to be required. An updated maintenance plan must be provided to the DNR once the barrier has been constructed if changes are required and must address actual site conditions (Wis. Admin. Code § NR 724.15 (3) (h)). A map is attached which shows the location of the extent of contaminated materials and the extent of the cover.

Use of Industrial Land Use Soil Standards:

Direct contact risk posed by contaminated material managed under this approval was assessed using residual contaminant levels for industrial land use. The DNR must be notified if the property land use will change from industrial use to a non-industrial land use per Wis. Admin. Code § NR 727.07 (3). Additional investigation and remediation may be required prior to the change in land use to ensure the site conditions are protective for the planned land use.

Vapor: Future Actions to Address Vapor Intrusion:

While vapor intrusion does not currently exist, if a building is constructed or reconstructed on this property, or if use of an existing building is changed to a non-industrial use, vapor intrusion may become a concern. The DNR must be notified before construction of a building or changing the use of an existing building to non-industrial use per Wis. Admin. Code § NR 727.07. The use of vapor control technologies or an assessment of the potential for vapor intrusion will be required at that time per Wis. Admin. Code §§ NR 722.15 (2) (e) 4 and 5.

Site specific condition:

Describe the site specific condition:

The Site will continue to operate as a FedEx facility. Soil that is excavated will be covered with an engineered barrier (i.e. asphalt) and will also be placed within a berm along the eastern portion of the property. The berm will be covered in clean soil and will be seeded for vegetation. Maintenance and inspection of the berm will be done regularly.

### Section 10 – Figures

Providing figures as part of the material management plan will allow DNR staff to more quickly evaluate the compliance of the request with the requirements of Wis. Admin. Code §§ NR 718.12 (1) and (2) and NR 718.15. The following are recommended figures to be submitted with this request.

The DNR recommends that all maps are drawn to scale not larger than 1 inch equal to 100 feet and labeled with the site or facility name and address. The location of the property and the specific management area should be provided in sufficient detail to allow DNR personnel to inspect these areas in the future. Providing a “cut/fill” map that clearly depicts how much material will be removed or added to different areas of the involved property(ies) and depicting how material will be moved across the site is also highly recommended. Providing cross sections that depict site conditions before and after material management activities is also recommended.

Attach appropriate figures to this form. Use the following checklist to ensure recommended items are included in the attached figures.

- The boundaries of each property involved in the project as well as named and unnamed roads or access points, buildings and other surface features, underground utilities, land uses on adjacent properties, and known and potential sources of hazardous substances.
- The location of wetlands, critical habitat areas, floodplains, surface water bodies, water supply wells, or other possible receptors located near or within the area where material will be managed.
- The lateral extent and depth of planned excavation, grading, or otherwise disturbed areas.
- The lateral extent and thickness of excavated material placement locations.

## Recommended Template for Request to Manage Materials under Wis. Admin. Code § NR 718.12 or NR 718.15

Form 4400-315 (R 11/20)

Page 10 of 12

- Soil sample locations at the response action site and receiving site(s) or facility(ies). Depict applicable soil contaminant concentration data and sample depths. Indicate the extent of contamination exceeding a RCL.
- Depth to groundwater.
- The extent of any performance standards (such as a barrier or cap) that will be required at the completion of management activities.

### Section 11 - Additional Attachments

The following documents are recommended for inclusion with a Wis. Admin. Code § NR 718.12 or a Wis. Admin. Code § 718.15 request. Indicate which of these documents are included in this request by checking the boxes below.

- A table summarizing the analytical results of all soil/waste samples collected at the generating site or facility that meets the requirements of Wis. Admin. Code § 716.15 (4) (e). Clearly indicate which of these samples were collected from material that is proposed to be managed.
- The analytical package for all samples listed on the above table. The package should include the sample results, chain of custody, sampling methods, and QA/QC data.
- A maintenance plan for any performance standard needed to address the material proposed to be managed. The plan should follow the format found in DNR Form 4400-202, Attachment D.
- A copy of the reclamation plan for the receiving site or facility if it is a nonmetallic mine. Confirm the plan allows for acceptance of contaminated soil by marking relevant plan sections.
- Power of Attorney (if applicable, see Section 12).
- Deed for the property receiving the contaminated material. If a certified survey map or plat map is referenced by this deed then also include those documents.
- Provide a copy of a parcel map depicting the property(ies) boundaries.

**Recommended Template for Request to Manage Materials  
under Wis. Admin. Code § NR 718.12 or NR 718.15**

Form 4400-315 (R 11/20)

Page 11 of 12

**Section 12 - Certification Statements**

Wis. Admin. Code ch. NR 712, entitled "Personnel Qualifications for Conducting Environmental Response Actions," establishes minimum standards for experience and professional qualifications for persons who perform certain environmental services. All requests submitted to manage contaminated soil or other solid waste as an interim action or remedial action under Wis. Admin. Code chs. NR 708 or NR 722 must be prepared by, or prepared under, the supervision of a professional engineer per Wis. Admin. Code ch. NR 712. The professional engineer who prepared or supervised this request should complete the following section. This law applies to work conducted under Wis. Admin. Code ch. NR 718, unless specifically exempted.

Per Wis. Admin. Code § NR 712.09 (3) (a), the following certification shall be attached to any submittal that is required to be prepared by, or under the supervision of, a professional engineer under s. NR 712.07 (2), (3) or (5):

"I, Justin Button-Hutchens, 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."



*Justin Button-Hutchens*

E-48325

Signature, title and P.E. number

In addition, if the work certified included investigation or evaluation of groundwater conditions, or groundwater related conclusions or recommendations, Wis. Admin. Code § NR 712.09 (3) (b) requires the following certification shall be attached to any submittal that is required to be prepared or to have its preparation supervised by a certified hydrogeologist under s. NR 712.07 (2), (4) or (5):

"I, \_\_\_\_\_, 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, all of the 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

Date

**Recommended Template for Request to Manage Materials  
under Wis. Admin. Code § NR 718.12 or NR 718.15**

Form 4400-315 (R 11/20)

Page 12 of 12

**Section 13 - Signatures**

**Owner(s) of receiving site(s) or facility(ies)** if different than generating site

Each property owner of receiving site(s) or facility(ies) involved in the management project must provide their signature as part of this request. If one of the owners of the receiving site(s) or facility(ies) is acting on behalf of other owners, a power of attorney form or statement must be signed and attached to this agreement clearly granting the agent the authority to accept the contaminated materials on behalf of all other owners of the receiving site(s) or facility(ies) whose signatures are not included on this agreement.

I understand that by signing this application I certify that I will follow the conditions and limitations required by law and specified in the approval issued to me as owner of the site or facility that will receive the contaminated soil. Further, I certify that the contaminated soil proposed to be managed under this approval will be at a property that meets the definition of "site" or "facility" under Wis. Stats. ch.292 and Wis. Admin. Code chs. NR 700 – 799, and I understand that the material must be managed any time in the future as a solid waste with the department's approval. I understand that this approval will be tracked in the Wisconsin Remediation and Redevelopment Database, and if required, will include maintenance and inspection by me of any continuing obligations, such as maintaining an engineering control or barrier over the contaminated soil, and will also be subject to inspection by the department. I understand that the conditions on my site or facility may be subject to Wis. Stats. ch. 709, Disclosures by Owners of Real Estate. I believe that the legal description for all properties where material will be managed is included with this submittal.

Receiving site or facility address as listed in Section 3F: \_\_\_\_\_

Print Name	Signature	Date
------------	-----------	------

Print Name	Signature	Date
------------	-----------	------

## CONSTRUCTION FIGURES



CONSTRUCTION PLANS FOR:

**FEDEX SITE IMPROVEMENTS**  
 CITY OF SUPERIOR, WISCONSIN  
 CONSTRUCTION PLANS FOR SITE GRADING, PARKING  
 LOT LAYOUT & STORMWATER CONTROLS.

**SPECIFICATION REFERENCE**

- 1.) THE WISCONSIN DNR SITE EROSION & SEDIMENT CONTROL STANDARDS SHALL APPLY.
- 2.) THE AUGUST 2020 CONSTRUCTION CODE OF THE CITY OF SUPERIOR, WISCONSIN SHALL APPLY.
- 3.) THE 2021 STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION SHALL APPLY.

**LEGEND**

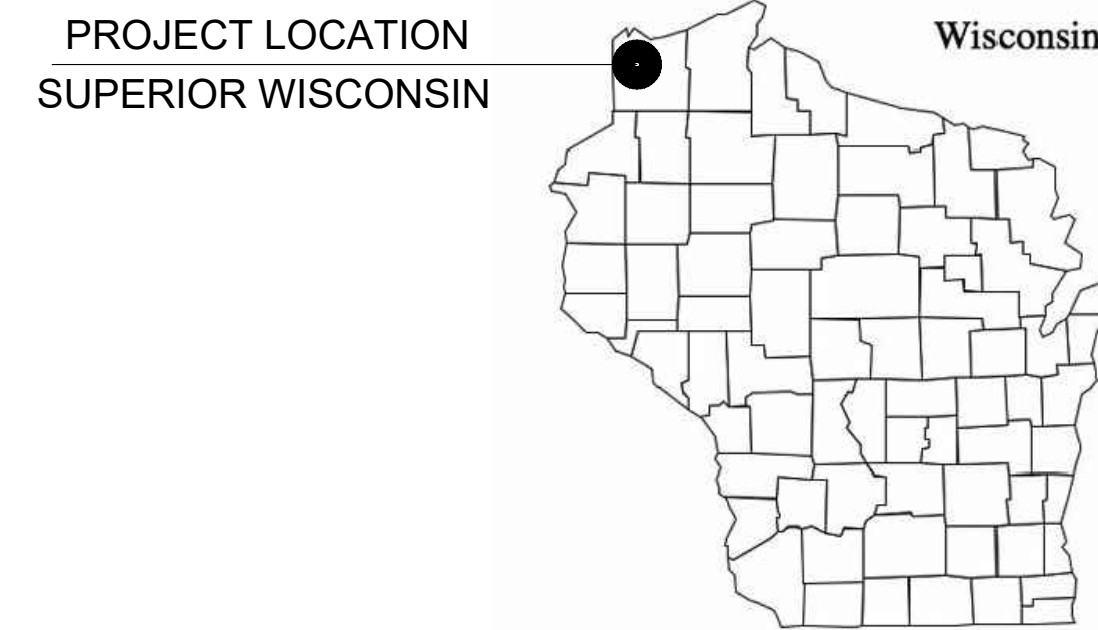
**EXISTING**

- PROPERTY LINE (SEE SEPARATE BOUNDARY SURVEY)
- UTILITY EASEMENT
- RIGHT OF WAY LINE
- X-X-X-X- CHAINLINK FENCE
- G-G-G-G- UNDERGROUND GAS
- UF-UF-UF- UNDERGROUND TELEPHONE
- ⊙ SANITARY SEWER W/ CLEANOUT, MH
- ⊙ STORM SEWER W/ MH, END SECTION, CB
- ⊙ UNDERGROUND ELECTRIC W/ L POLE
- ⊙ OVER HEAD ROUND ELECTRIC W/ P POLE
- PARKING STRIPE
- CONTOUR - MAJOR
- CONTOUR - MINOR
- ▬ CONCRETE
- ▬ CURB AND GUTTER
- ▬ BITUMINOUS
- ⊙ ELECTRIC PLUG
- ⊙ WATER HYDRANT, VALVE
- ⊙ SIGN
- ⊙ MONITORING WELL
- ⊙ GUARDPOST

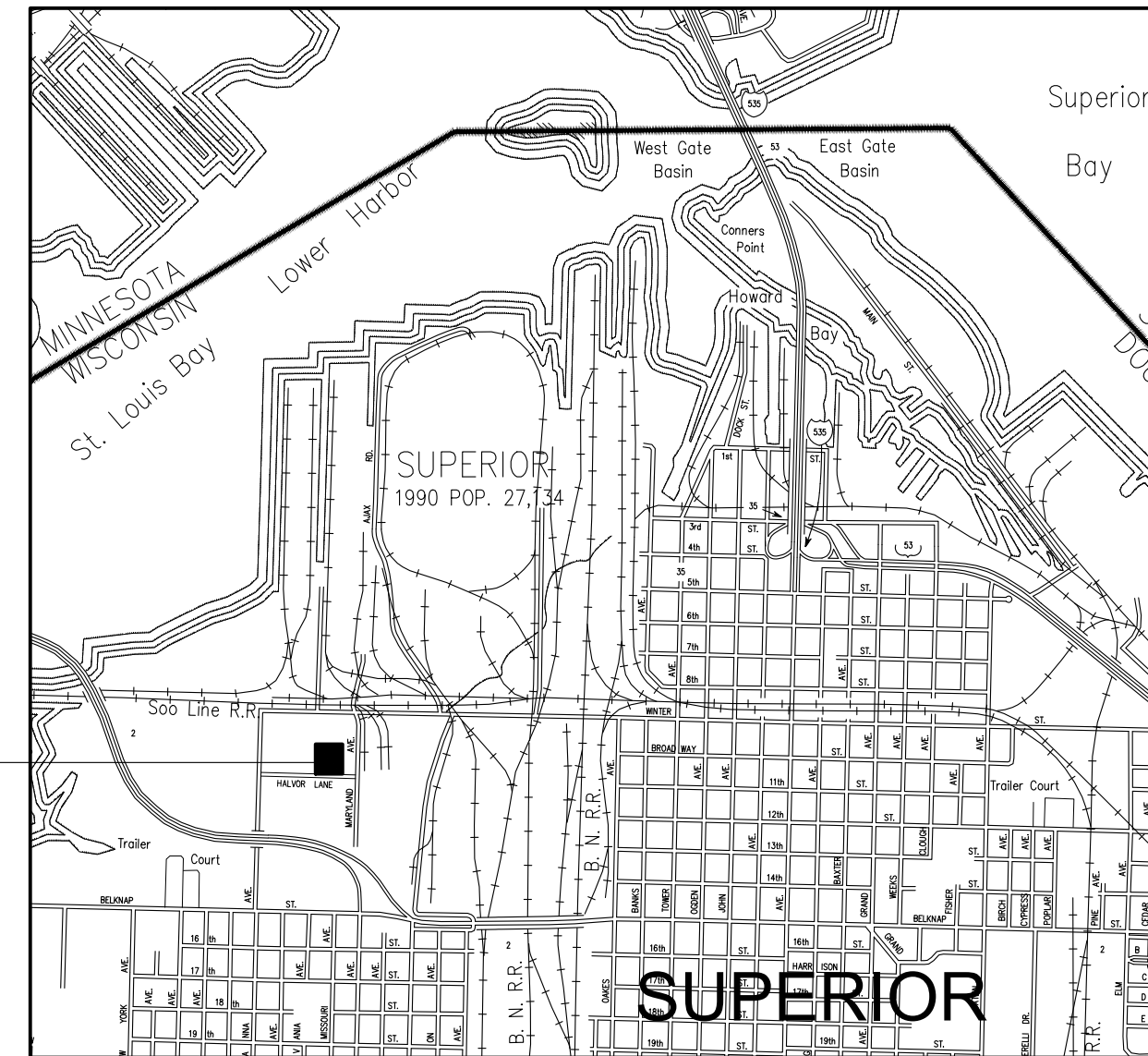
**PROPOSED**

- PROPOSED CONTOUR - MAJOR (5')
- PROPOSED CONTOUR - MINOR (1')
- ▬ PROPOSED BUILDING
- ▬ BITUMINOUS PAVEMENT

**VICINITY MAP**

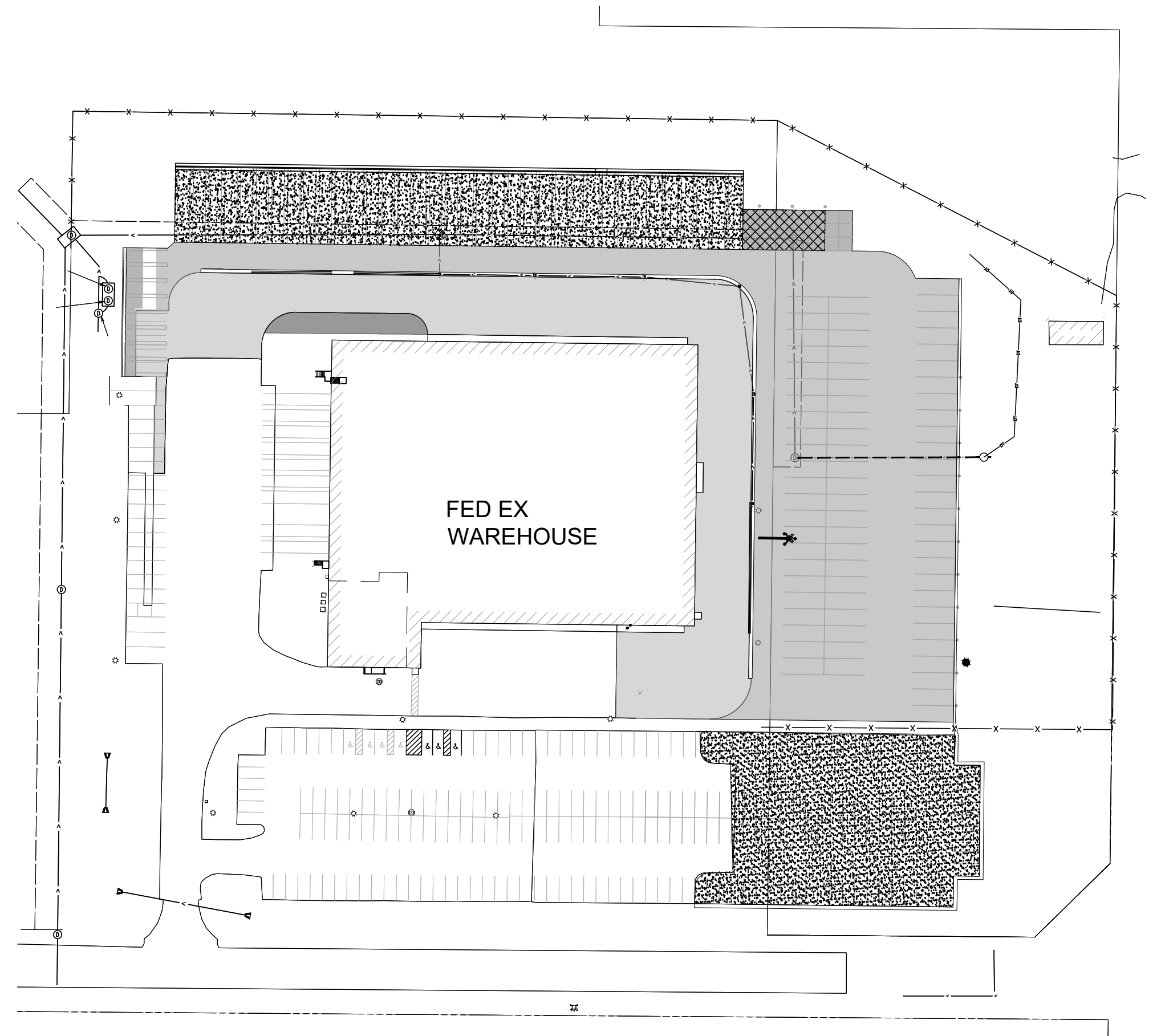


**LOCATION MAP**



**PROJECT SITE**

**SITE MAP**



**EXISTING UTILITY LOCATIONS**

THE CONTRACTOR SHALL VERIFY ALL EXISTING UNDERGROUND UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. ALL INPLACE UTILITIES MAY NOT BE SHOWN ON THIS PLAN & THOSE THAT ARE SHOWN, MAY NOT BE SHOWN IN THE EXACT LOCATIONS.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL "D". THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA.

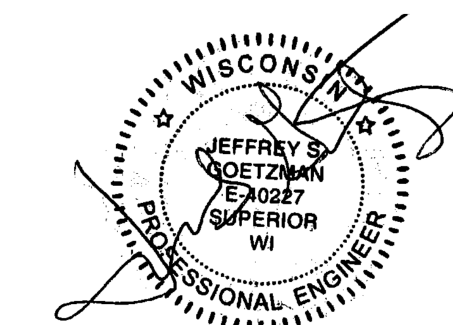


WISCONSIN'S ONE CALL CENTER  
 811  
 (800) 242.8511  
 EMERGENCY ONLY:  
 (262)432.7910  
 (877)500.9592  
<http://www.diggershotline.com>

**PROJECT LOCATION:**  
 DOUGLAS COUNTY  
 CITY OF SUPERIOR  
 SECTION 16, T 49 N, R 14 W  
 SE1/4

CONTRACTOR TO NOTIFY 911  
 PERSONNEL PRIOR TO ALL  
 ROAD CLOSURES

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN



JEFFREY S. GOETZMAN  
 07/19/2021 LIC. NO. 40227 DATE

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
C 100	TITLE SHEET
C 101	EXISTING CONDITIONS AND REMOVALS
C 102	LAYOUT PLAN
C 103	GRADING PLAN
C 104	GRADING DETAILS
C 105	PROFILES
C 106	CROSS SECTIONS
C 107	EROSION CONTROL
C 108	SWPPP
C 109	DETAILS
C 110	DETAILS

THIS PLAN SET CONTAINS 11 SHEETS

PLOT DATE: Jul 20, 2021 - 12:40pm  
 FILENAME: K:\g-m\JDC\Properties\18052000\04\_Production\01\_CAD\02\_Sheets\C101\_Title.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

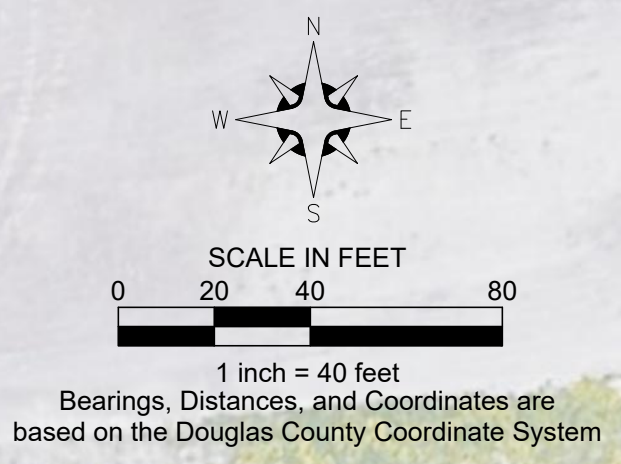
DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
DRAWN	JK, TM	
CHECKED	JG	
SIGNATURE: <i>Jeffrey S. Goetzman</i>		DATE: 07/19/2021
NAME: Jeffrey S. Goetzman		LIC. NO.: 40227

**TKDA**  
 11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

**FedEx PARKING LOT EXPANSION**

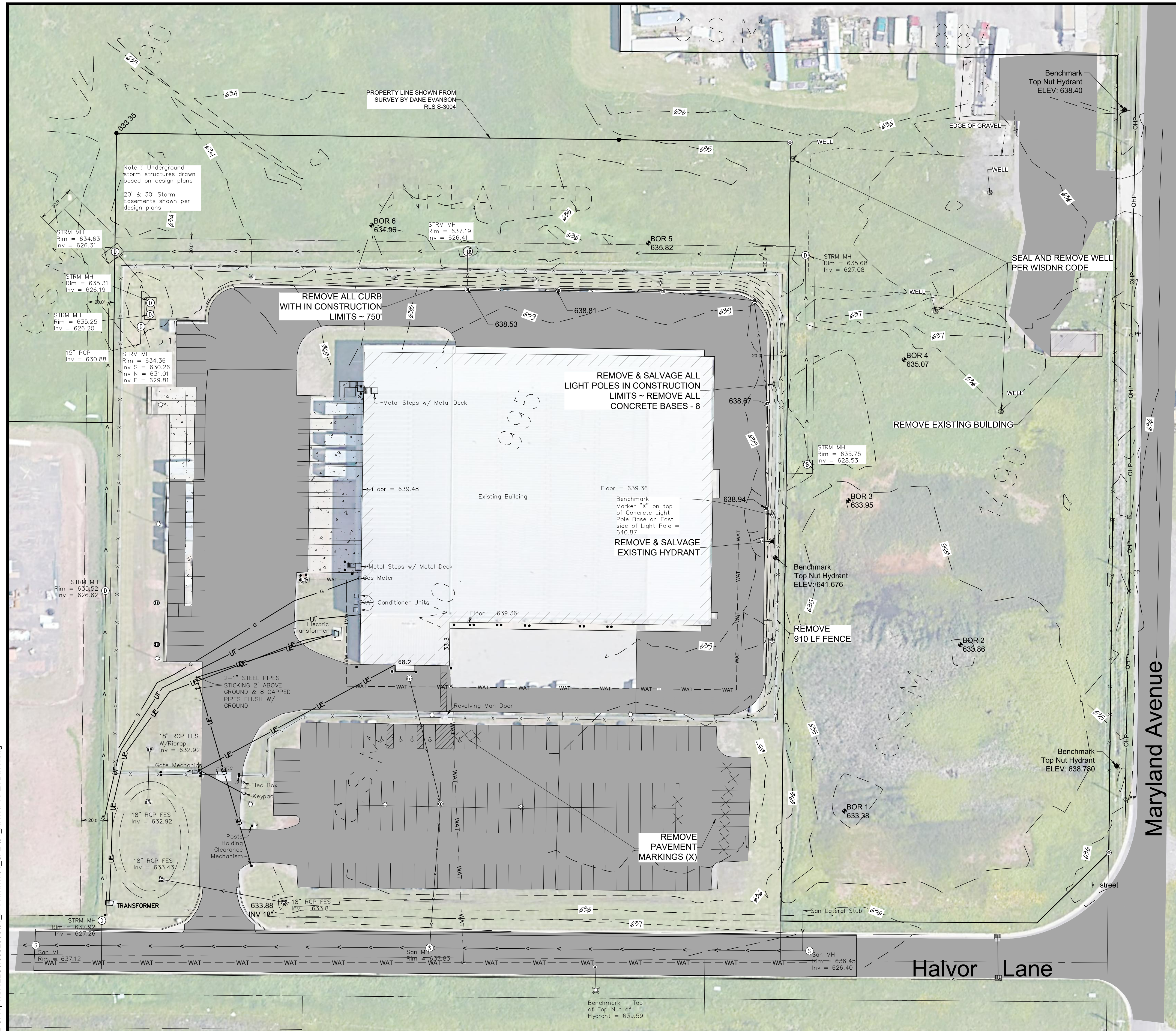
**TITLE SHEET**

PROJ. NO.	18052.000
DRAWING NO.	C100



**LEGEND**

- PROPERTY LINE (SEE SEPARATE BOUNDARY SURVEY)
- - - UTILITY EASEMENT
- - - RIGHT OF WAY LINE
- - - CHAINLINK FENCE
- - - UNDERGROUND GAS
- - - UNDERGROUND TELEPHONE
- SANITARY SEWER W/ CLEANOUT, MH
- STORM SEWER W/ MH, END SECTION, CB
- UNDERGROUND ELECTRIC W/ L POLE
- OVER HEAD ROUND ELECTRIC W/ P POLE
- PARKING STRIPE
- CONTOUR - MAJOR
- CONTOUR - MINOR
- CONCRETE
- CURB AND GUTTER
- BITUMINOUS
- ⊕ ELECTRIC PLUG
- ⊕ WATER HYDRANT, VALVE
- ⊕ SIGN
- ⊕ MONITORING WELL
- GUARDPOST



Maryland Avenue

Halvor Lane

PLOT DATE: Jul 20, 2021 - 12:40pm  
 FILENAME: K:\g-n\JDC\Properties\LCV1805200004\_Production\01\_CAD\01\_Xrefs\Fed Ex Base.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
DRAWN	JK	
CHECKED	JG	
SIGNATURE: <i>Jeffrey S. Goetzman</i>		DATE: 07/19/2021
NAME: Jeffrey S. Goetzman		LIC. NO.: 40227

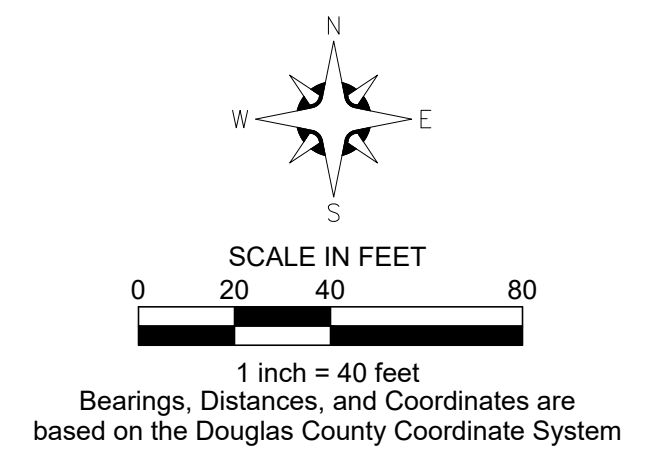
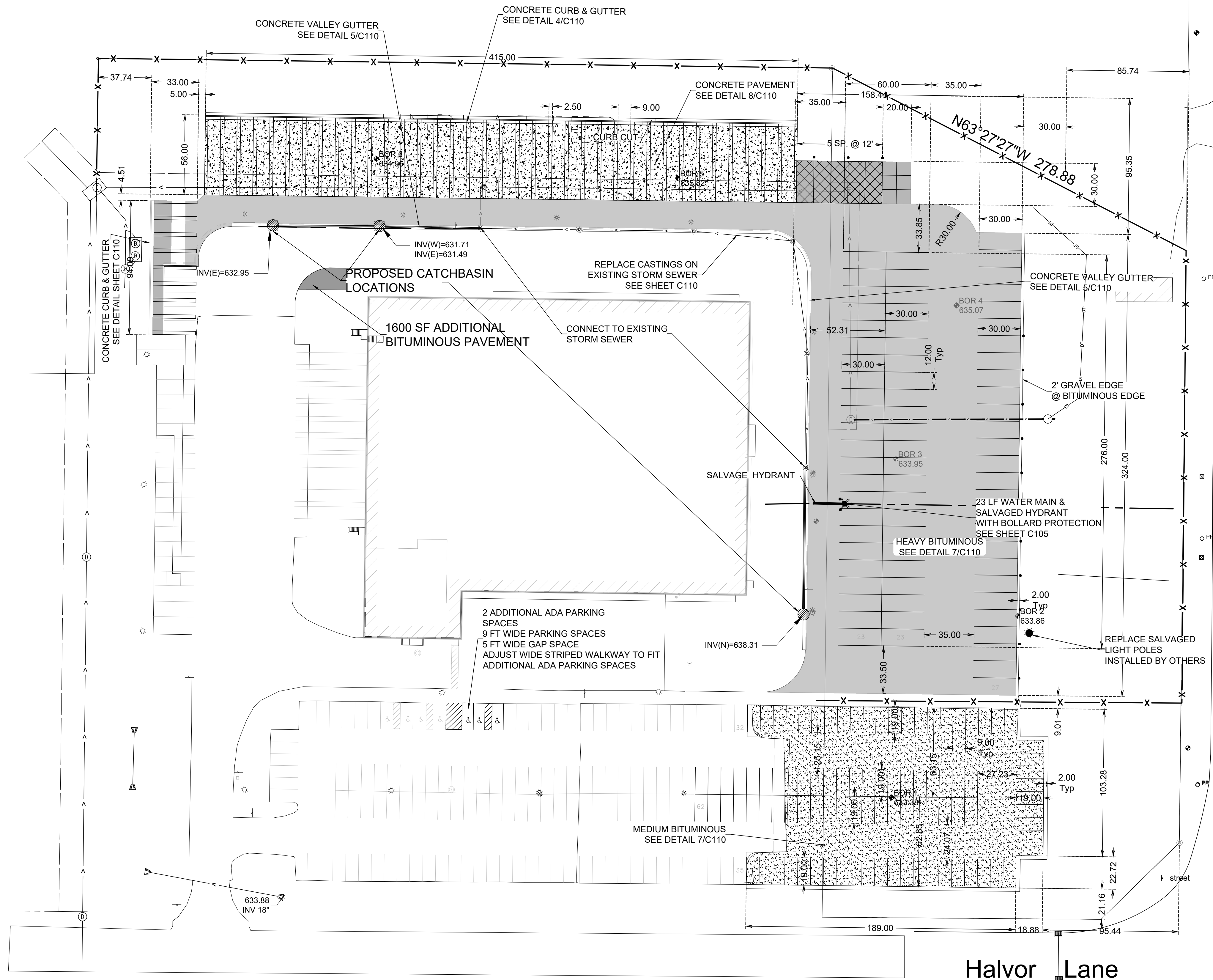
11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

## FedEx PARKING LOT EXPANSION

## EXISTING CONDITIONS - REMOVALS

PROJ. NO.	18052.000
DRAWING NO.	C101

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\LC18052000\04\_Production\01\_CAD\01\_Xrais\Fed Ex Pro Base-redevelopment.dwg



- LEGEND**
- CONCRETE PAVING
  - HEAVY DUTY BITUMINOUS PAVING
  - MEDIUM DUTY BITUMINOUS PAVING
  - SEAL COAT
  - CHAIN LINK FENCE

NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/7/2021	JG	PIPE INVERTS ADDED

DESIGNED: JL  
 DRAWN: JK, TM  
 CHECKED: JG

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

SIGNATURE: DATE: 07/19/2021  
 NAME: Jeffrey S. Goetzman LIC. NO.: 40227

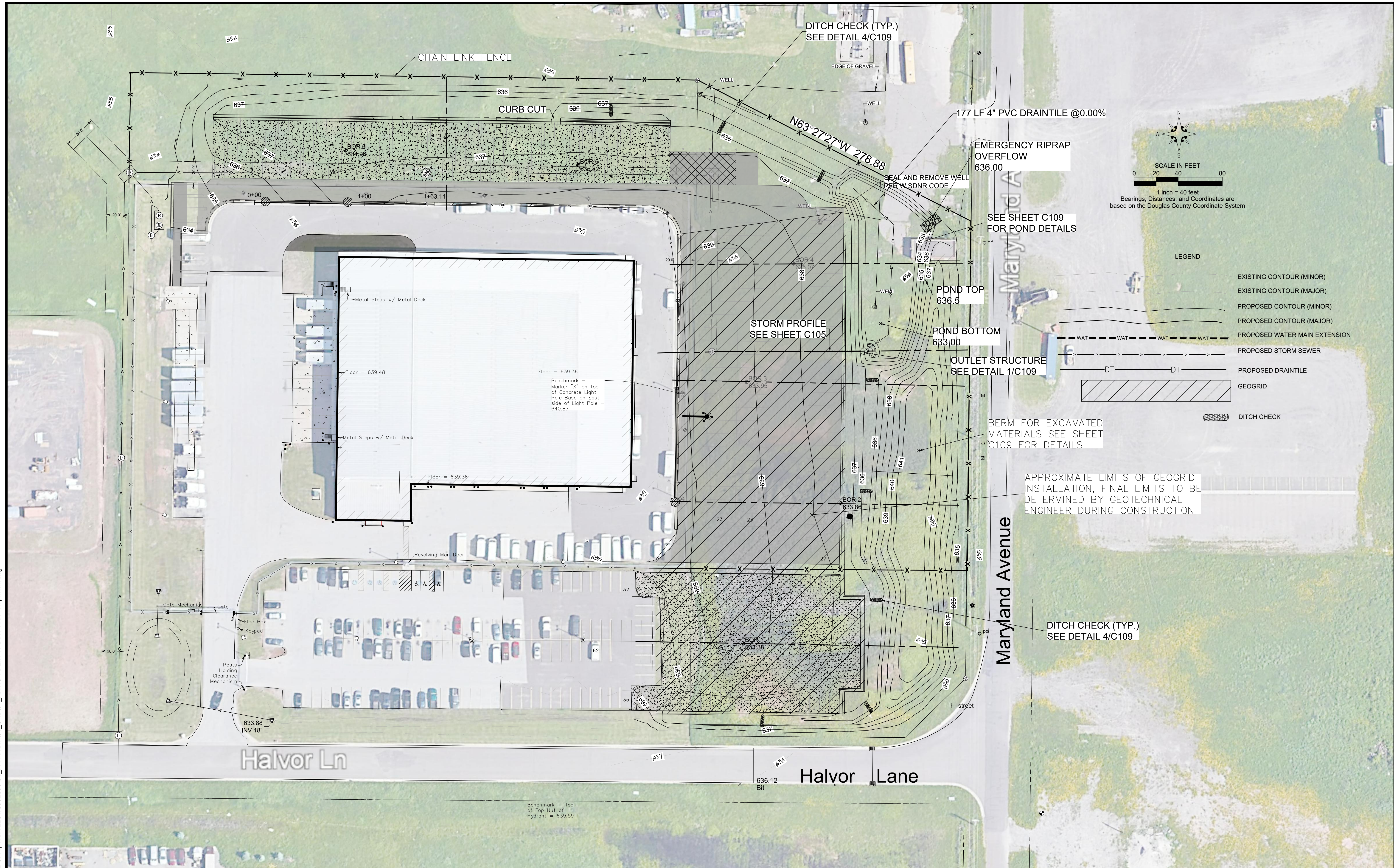
11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

**FedEx PARKING LOT EXPANSION**

**LAYOUT PLAN**

PROJ. NO. 18052.000  
 DRAWING NO. C102

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\LLC\18052000\04\_Production\01\_CAD\01\_Xreis\Fed Ex Pro Base-redevelopment.dwg



NO.	DATE	BY	DESCRIPTION OF REVISIONS
1			
2	7/7/2021	JG	STONE WEEPER DETAILS ADDED

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.  SIGNATURE: <i>[Signature]</i> DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

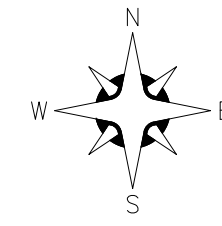
11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

## FedEx PARKING LOT EXPANSION

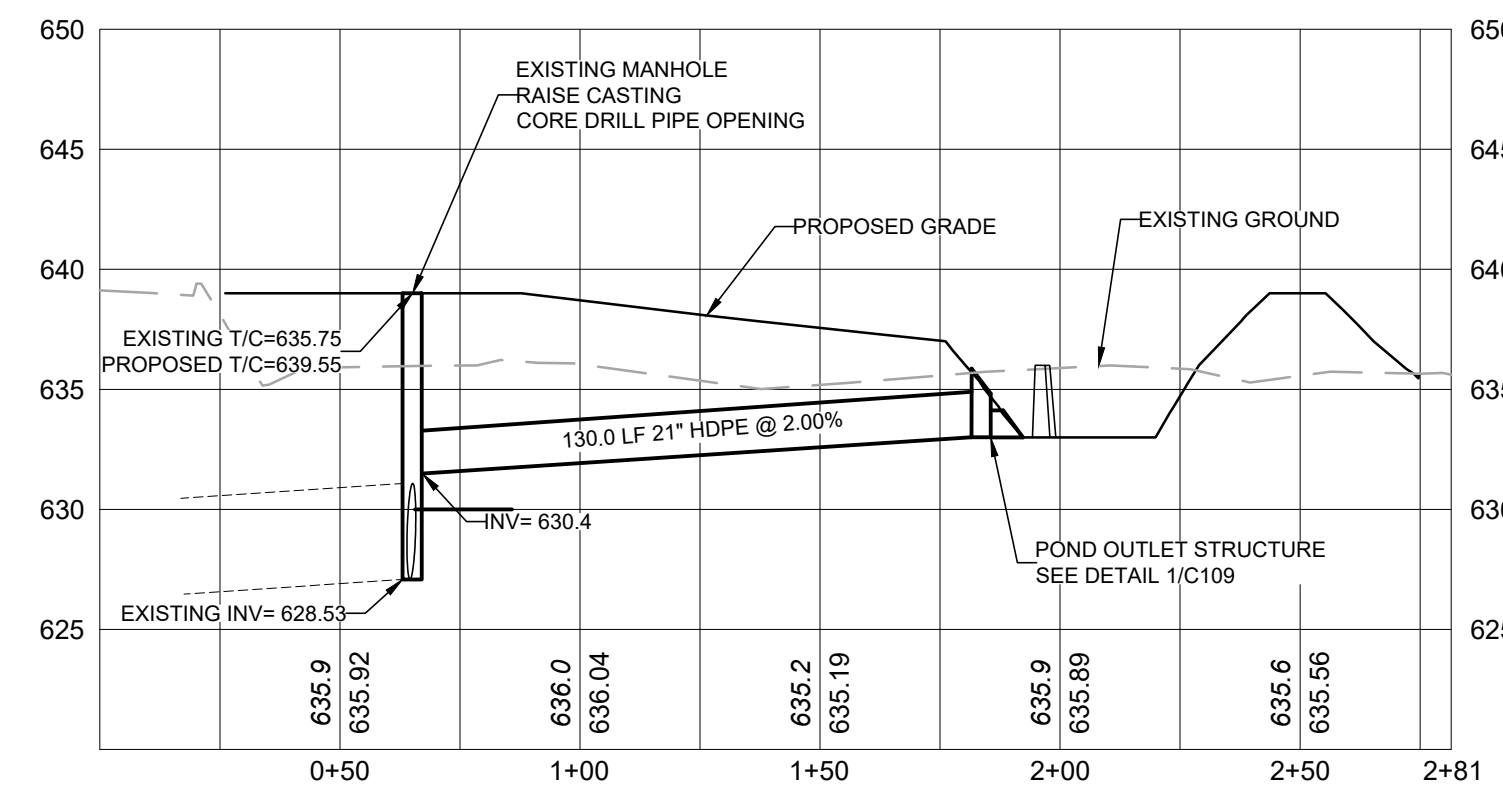
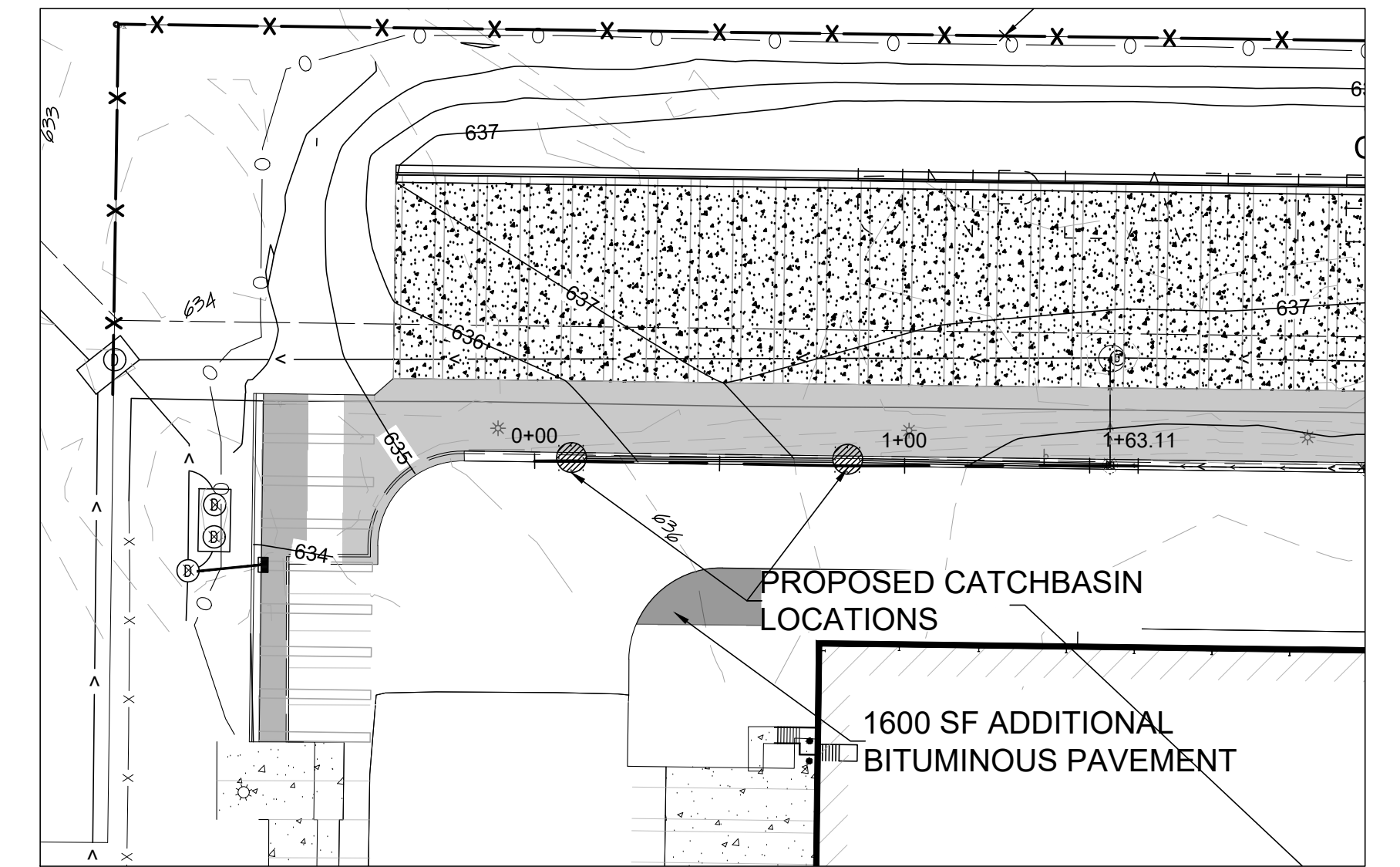
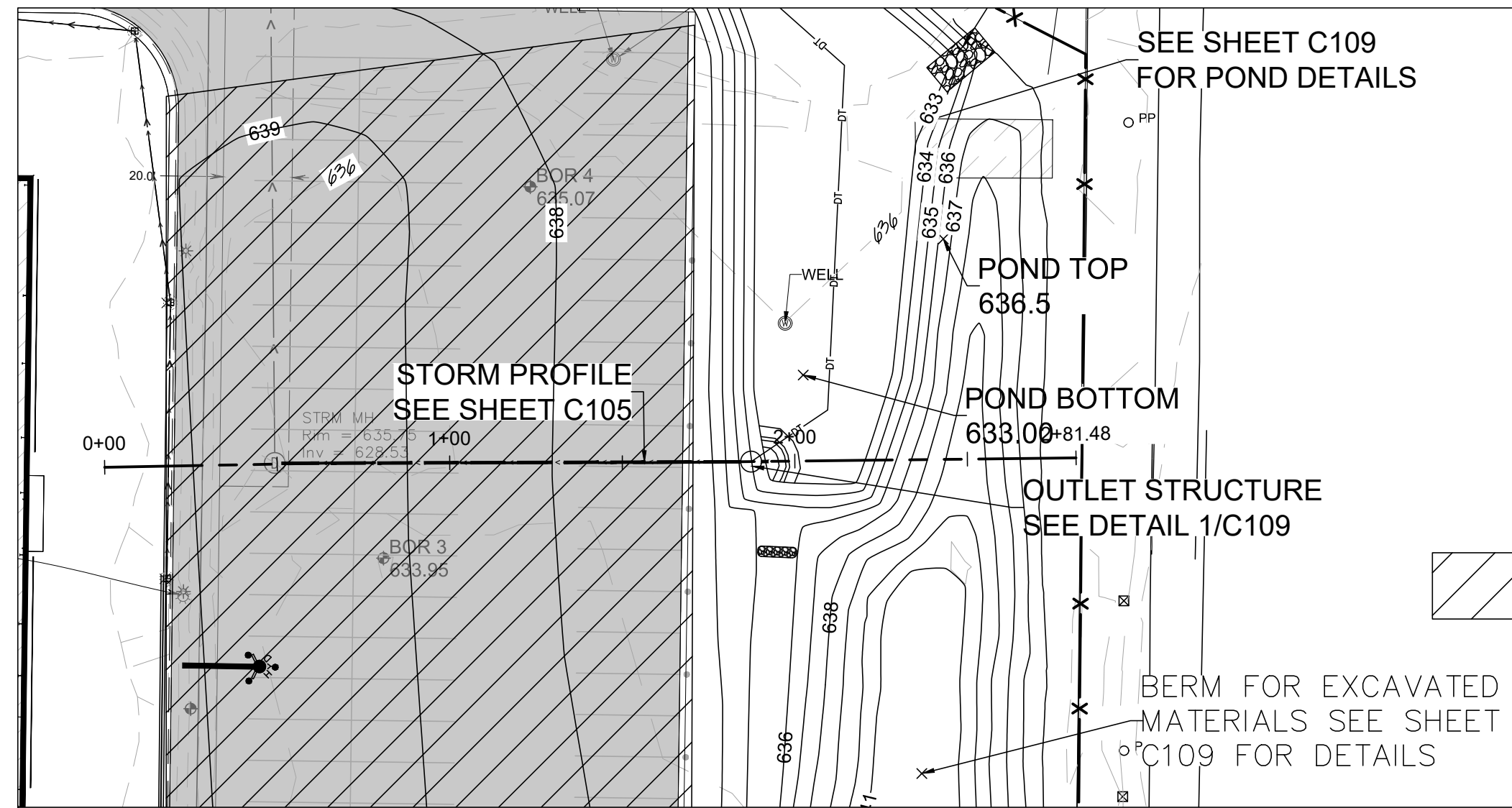
## GRADING PLAN

PROJ. NO.	18052.000
DRAWING NO.	C103

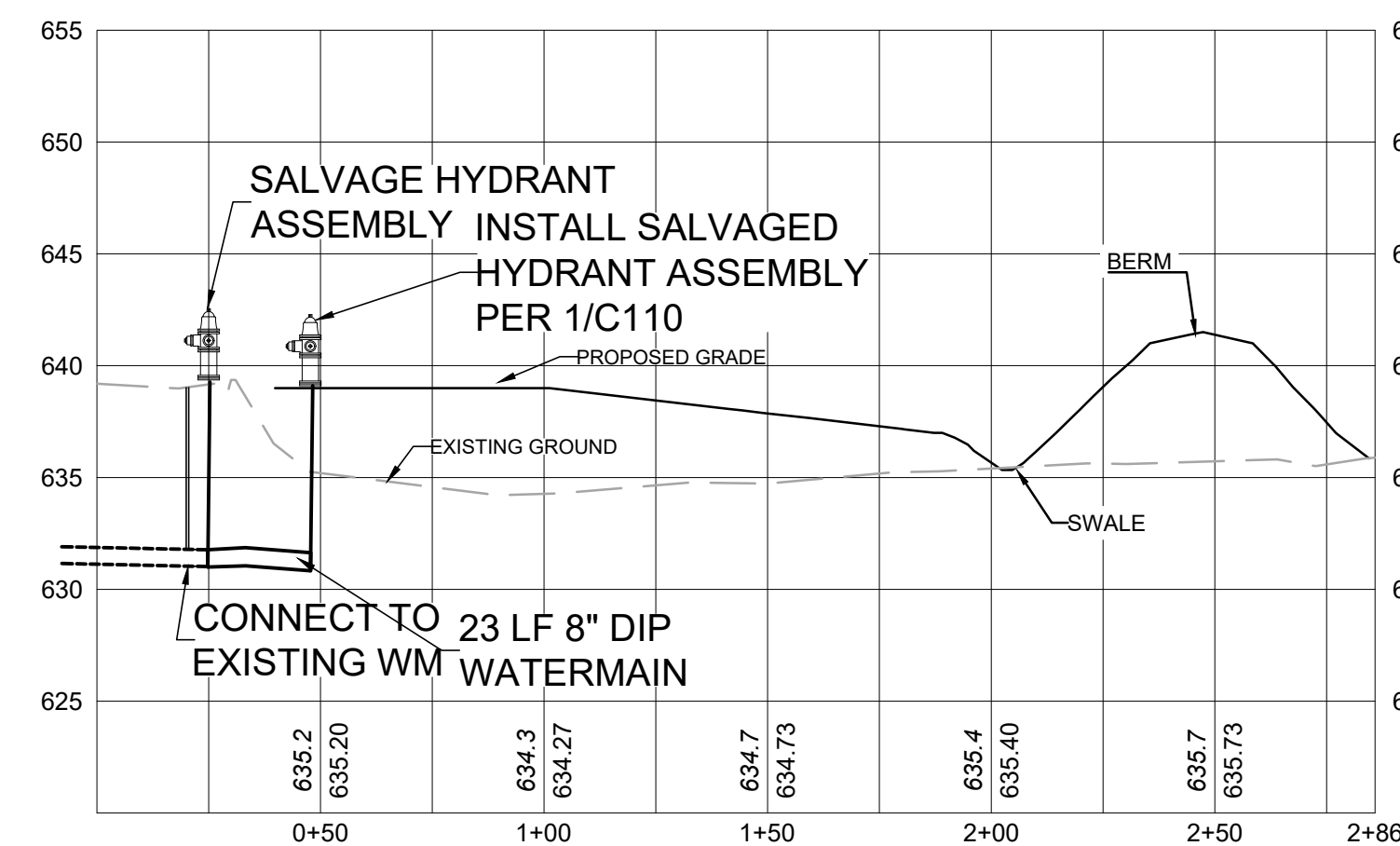




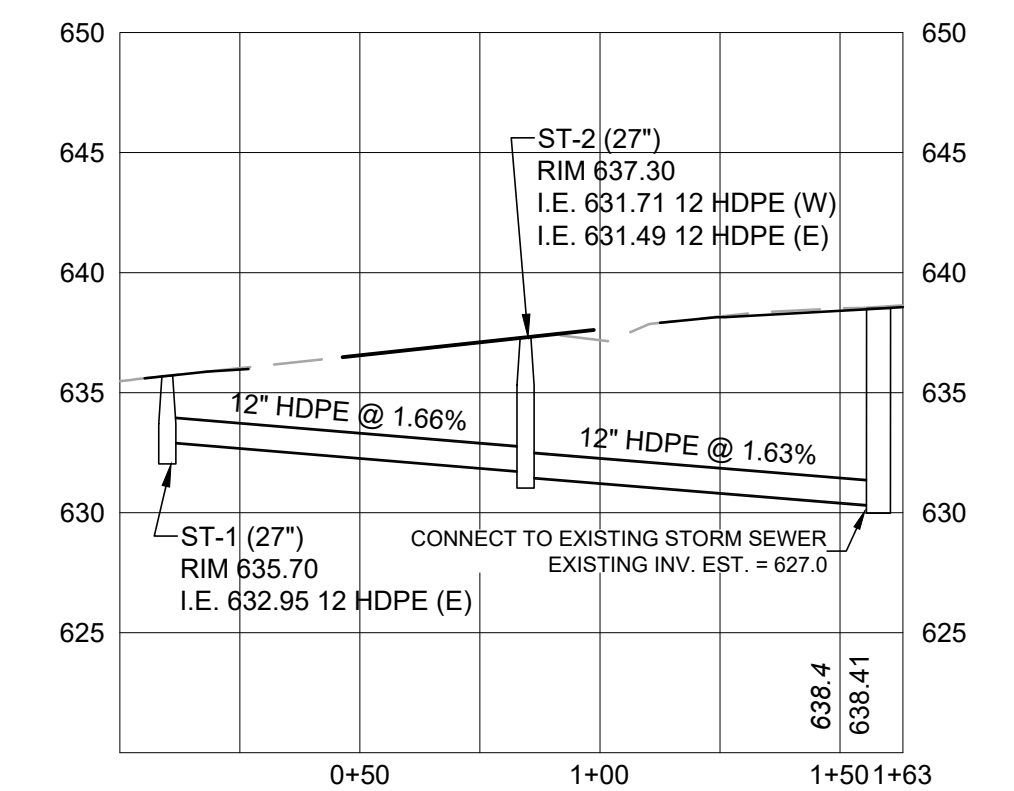
SCALE IN FEET  
 0 20 40 80  
 1 inch = 40 feet  
 Bearings, Distances, and Coordinates are based on the Douglas County Coordinate System



1 STORM WATER PIPING  
C105



2 HYDRANT RELOCATION  
C105



3 STORM WATER PIPING  
C105

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\18052000\04\_Production\01\_CAD\01\_Xrefs\Fed Ex Pro Base-redevelopment.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/7/2021	JG	PROFILE 2 UPDATED WITH STONE WEEPER DETAILS

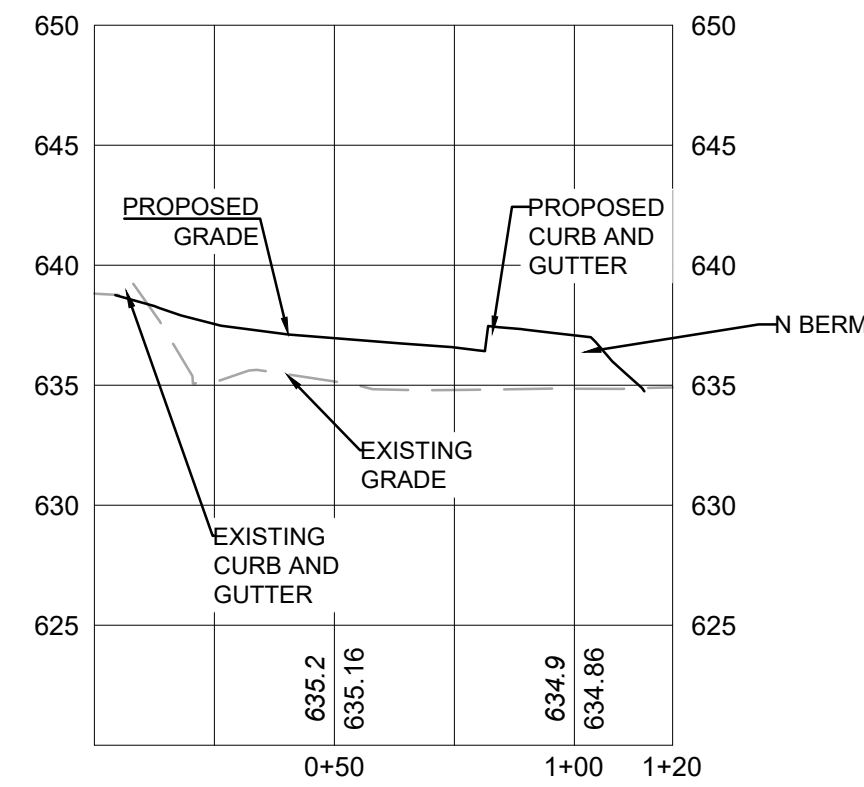
DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN. SIGNATURE:  DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

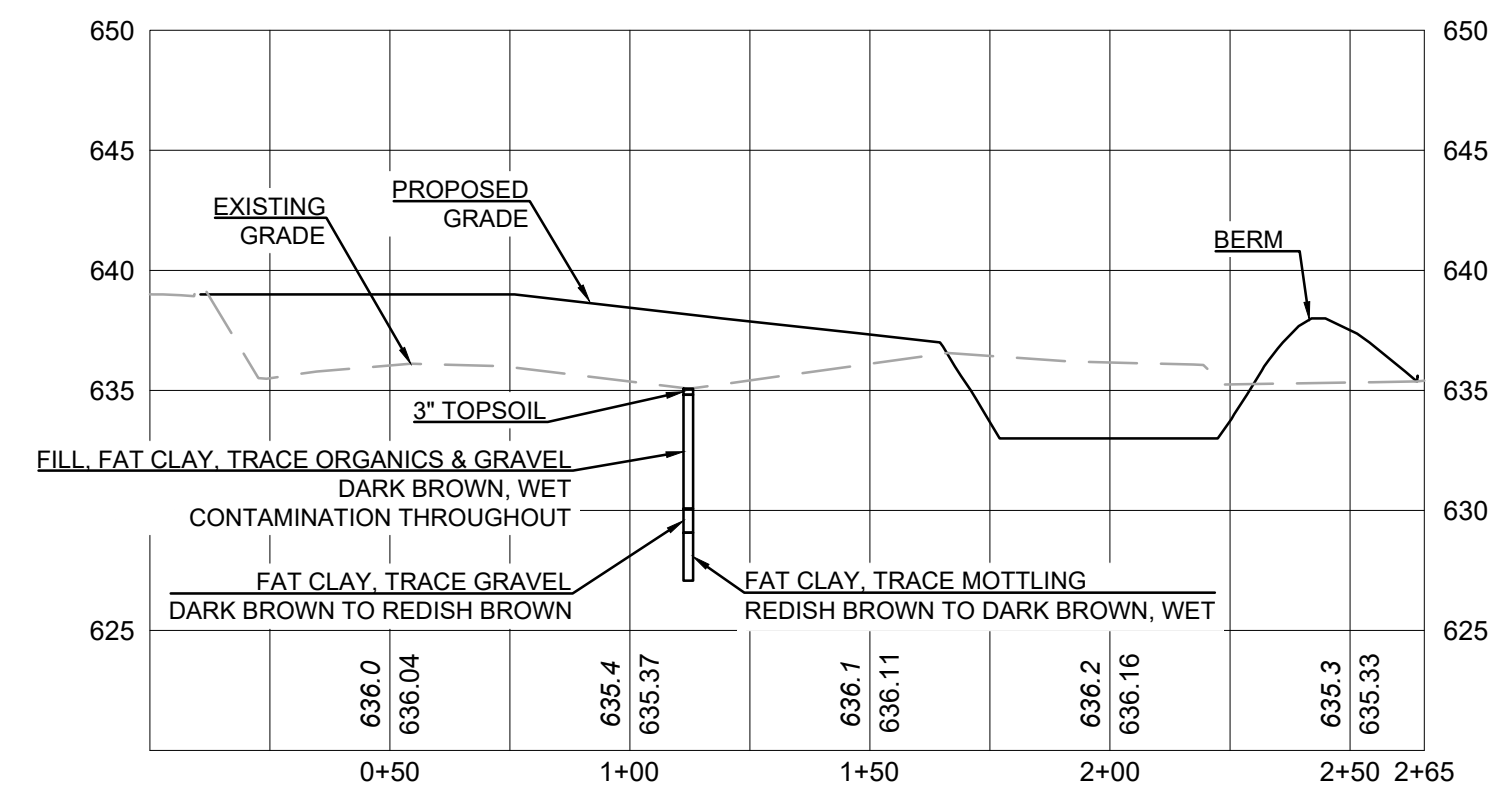
# FedEx PARKING LOT EXPANSION

# PROFILES

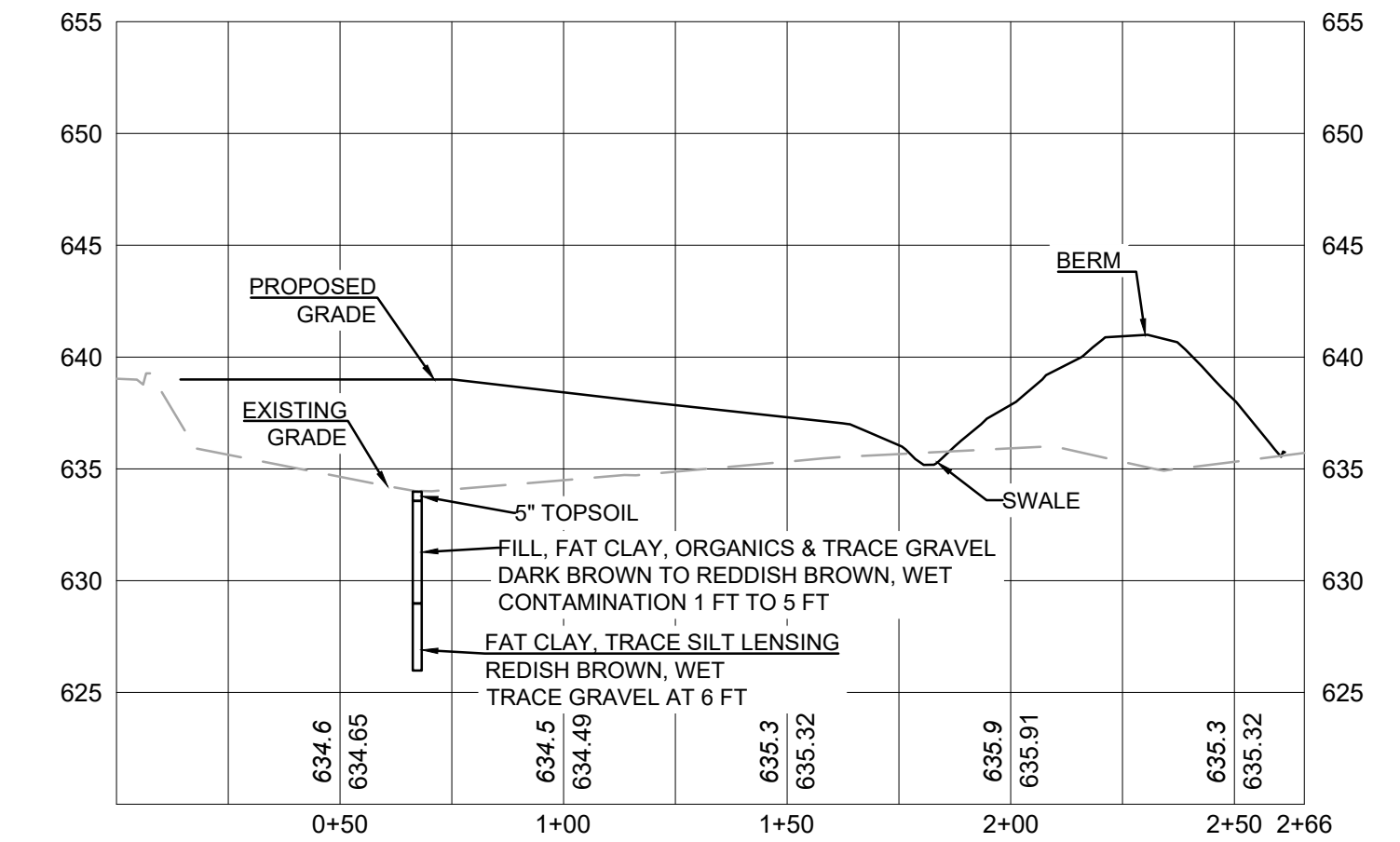
PROJ. NO. 18052.000  
 DRAWING NO. C105



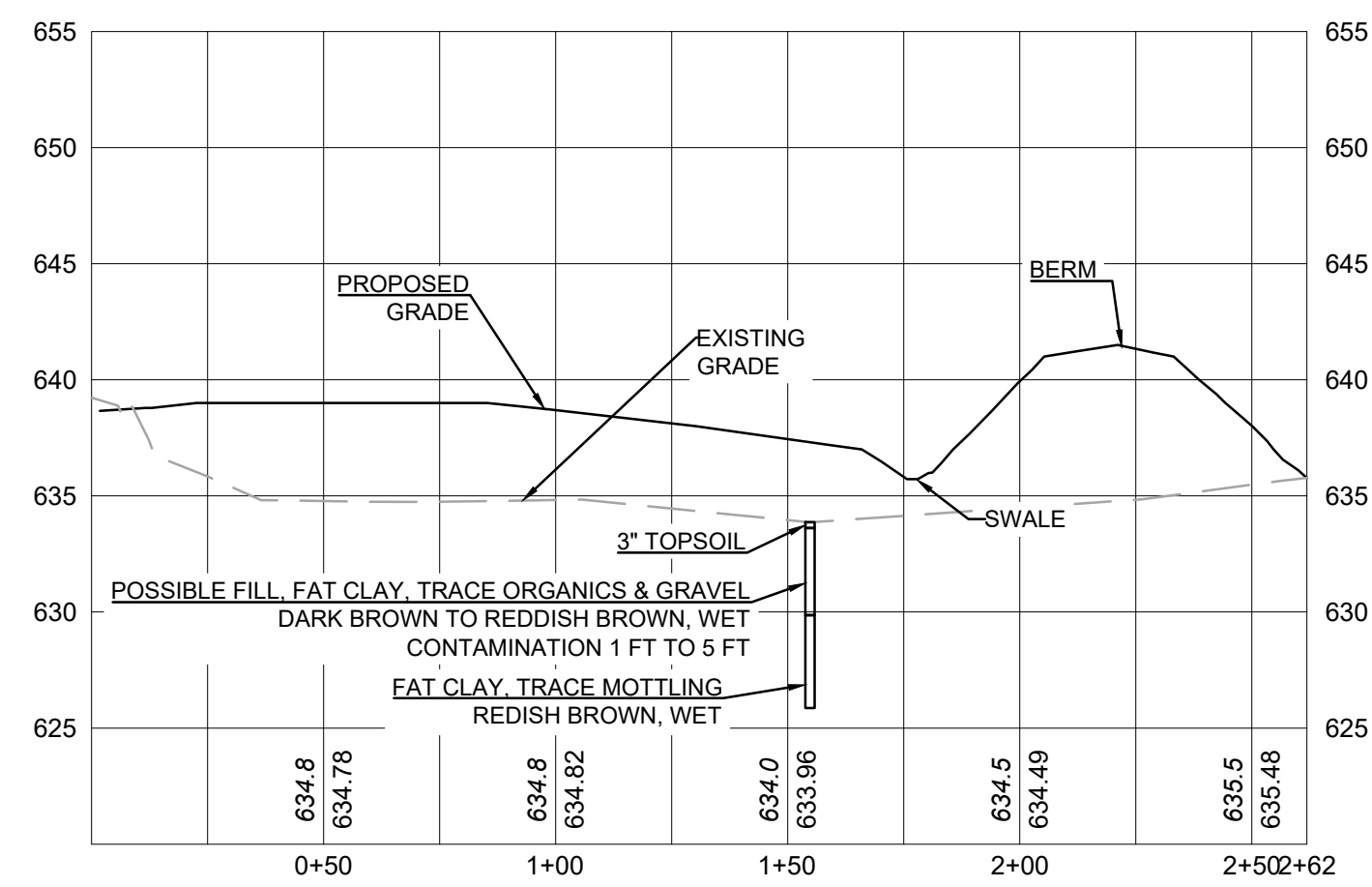
1 CONCRETE SECTION  
C106



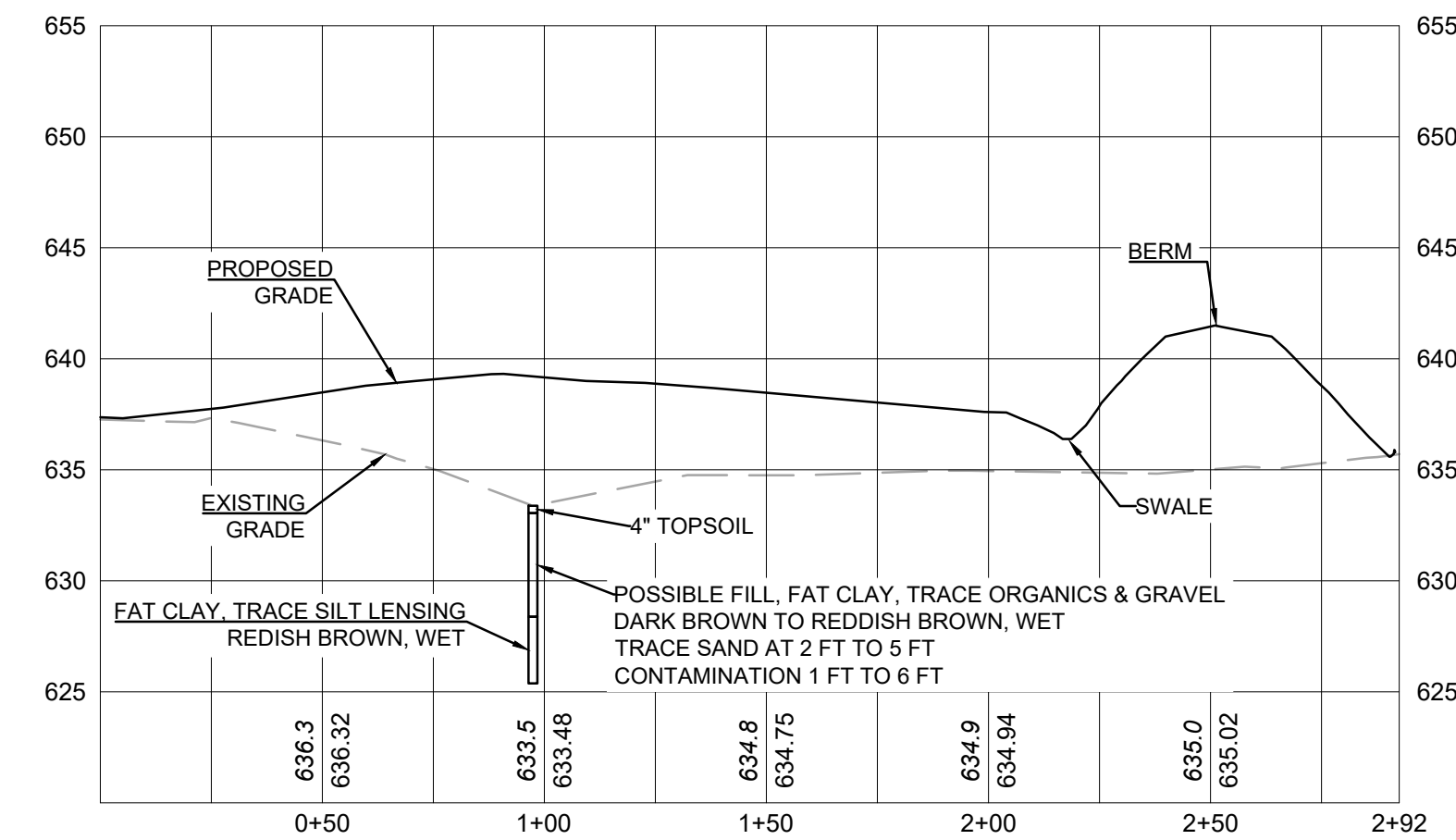
2 SOIL BORING 4  
C106



3 SOIL BORING 3  
C106




4 SOIL BORING 2  
C106




5 SOIL BORING 1  
C106

PLOT DATE: Jul 20, 2021 - 12:41pm  
FILENAME: K:\g-n\JDC\Properties\LC18052000\04\_Production\01\_CAD\01\_Xreis\Fed Ex Pro Base-redevelopment.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.  SIGNATURE:  DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

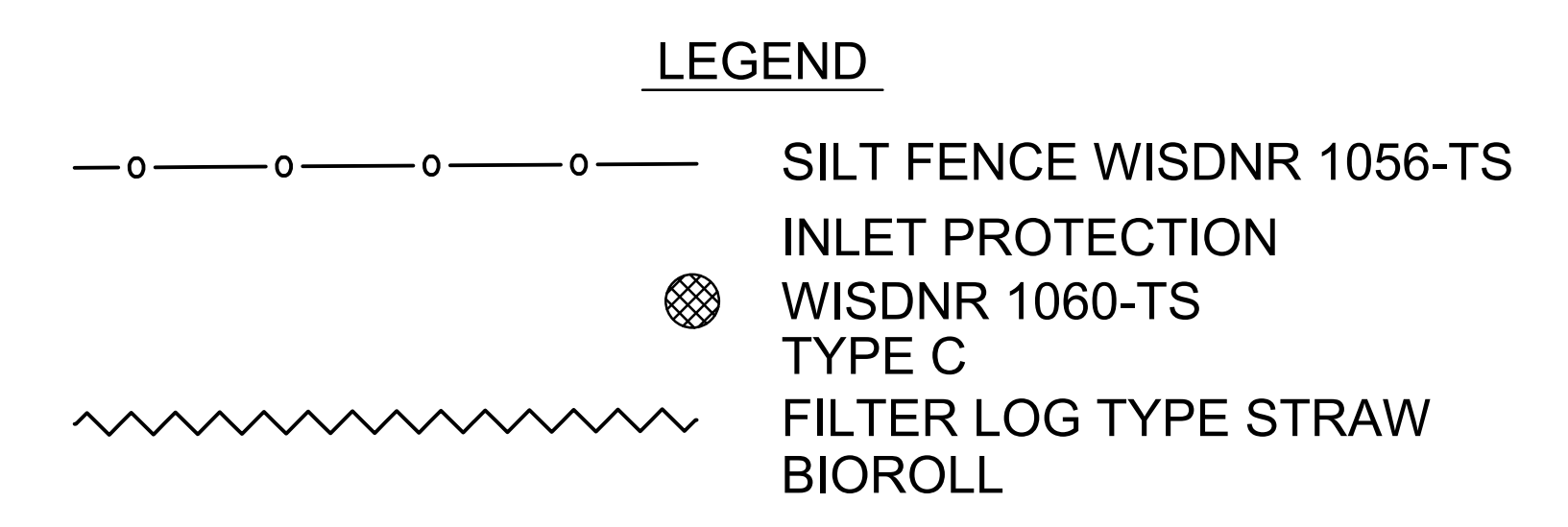
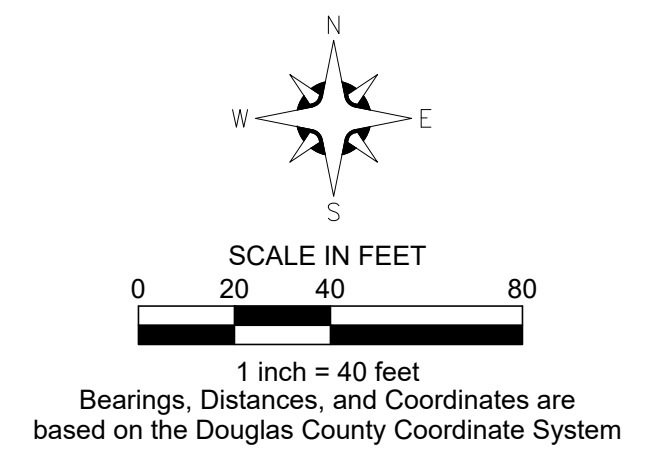
11 E. Superior Street, Suite 420  
Duluth, MN 55802  
218.724.8578  
tkda.com



## FedEx PARKING LOT EXPANSION

## CROSS SECTIONS

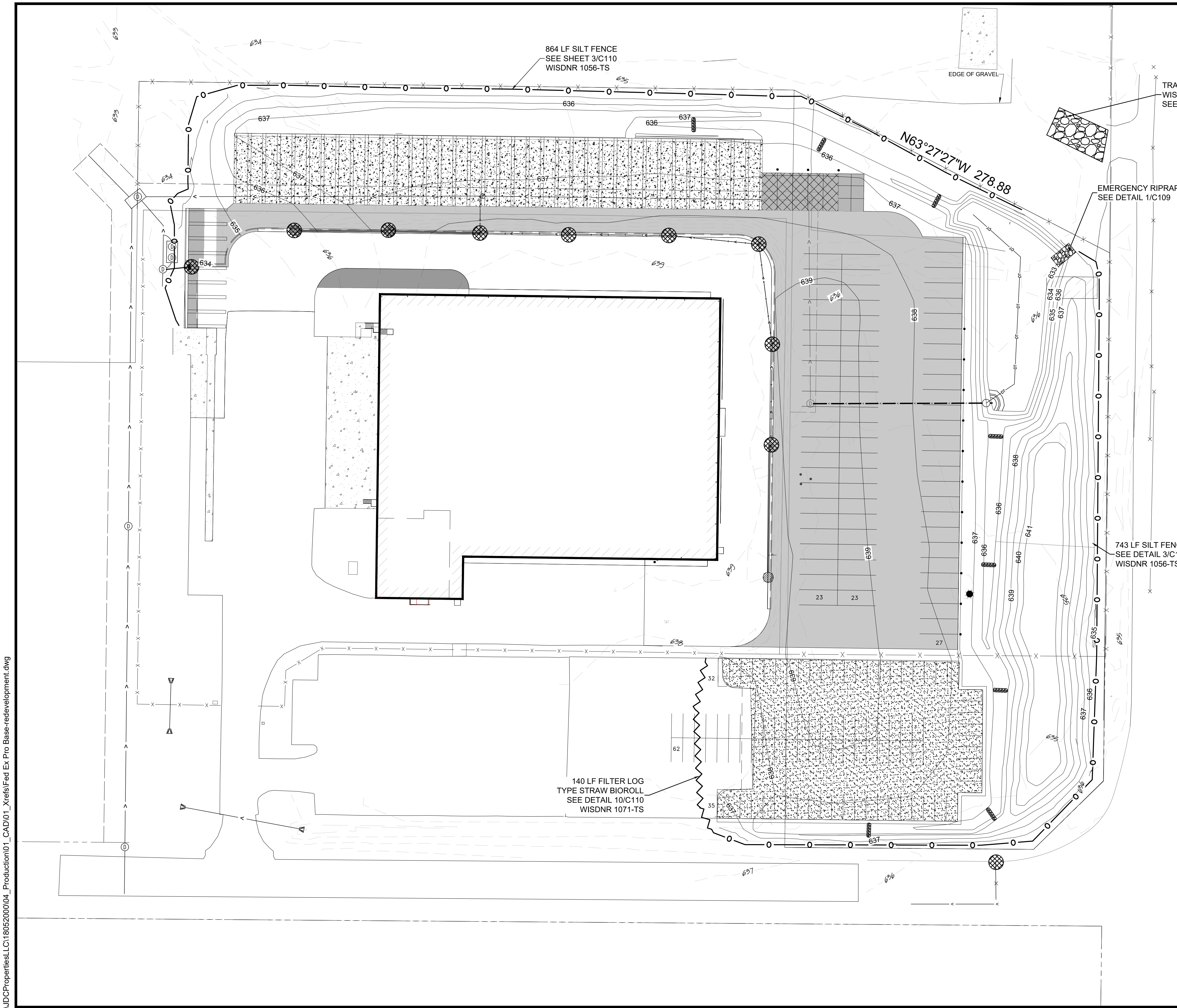
PROJ. NO.	18052.000
DRAWING NO.	C106



- NOTES**
- ALL DISTURBED AREAS SHALL BE RESTORED WITH 6" TOPSOIL AND TYPE 10 OR 70 SEED.
  - CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL DEVICES, INCLUDING INSTALLATION, MAINTENANCE, AND REMOVAL.
  - ALL STORM SEWER CONNECTIONS TO CITY OF SUPERIOR OWNED STRUCTURES SHALL BE TO CITY OF SUPERIOR ENVIRONMENTAL SERVICES DIVISION STANDARDS.
  - CONTRACTOR TO PROVIDE TEMPORARY SOIL STABILIZATION AS DESCRIBED IN THE WISDNR TECHNICAL STANDARDS AND THE PLANS SEE TABLE A: WISCONSIN DNR TECHNICAL STANDARDS.
  - NO BMPs REMOVED BEFORE PERMIT IS CLOSED OUT.


TABLE A: WISCONSIN DNR TECHNICAL STANDARDS

1052	NON-CHANNEL EROSION MAT
1053	CHANNEL EROSION MAT
1056	SILT FENCE
1057	TRACKOUT CONTROL PRACTICES
1060	STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES
1061	DE-WATERING PRACTICES FOR SEDIMENT CONTROL
1067	GRADING PRACTICES FOR EROSION CONTROL - TEMPORARY
1071	INTERIM MANUFACTURED PERIMETER CONTROL & SLOPE INTERRUPTION



PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\LC18052000\04\_Production\01\_CAD\01\_Xrefs\Fed Ex Pro Base-redevelopment.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/17/2021	JG	INLET PROTECTION AND EMERGENCY OVERFLOW DETAILS ADDED

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.  SIGNATURE:  DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	


 11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

## FedEx PARKING LOT EXPANSION

## EROSION CONTROL

PROJ. NO.  
 18052.000  
 DRAWING NO.  
**C107**



# STORM WATER POLLUTION PREVENTION PLAN

## PROJECT DESCRIPTION

THIS PROJECT INCLUDES GRADING SUBSURFACE PREPERATION AND PAVING OF PARKING LOTS AT THE FEDEX WAREHOUSE. THE SITE DEVELOPMENT WILL INCLUDE 2 BITUMINOUS PAVED PARKING LOTS, POND, INSTALLATION STORMWATER PIPE, MOVING A HYDRANT AND FENCING.

SWPPP IMPLEMENTATION CONTACTS			
AGENCY	PERMIT		PHONE/ EMAIL
PROJECT MANAGER	N/A	CLAY VANICE	913.461.5528 cvanice@jonesdevco.com
CONTRACTOR'S EROSION CONTROL SUPERVISOR	N/A	T.B.D.	PHONE EMAIL
CITY OF SUPERIOR	N/A	MICHAEL KRICK	XXX.XXX.XXXX krickm@ci.superior.wi.us
PROJECT ENGINEER	N/A	JEFF GOETZMAN, PE	218.491.7385 jeff.goetzman@tdka.com
WISCONSIN DNR	WPES	MATTHEW JACOBSON	715.928.0485 matthew.jacobson@wisconsin.gov

## TIMING OF BMP INSTALLATION:

THE CITY OF SUPERIOR AND THE WISCONSIN STATE DEPARTMENT OF NATURAL RESOURCES ARE THE AGENCIES RESPONSIBLE FOR PERMITTING THE PROPOSED SITE DISTURBANCES AND PROPOSED STORMWATER CONTROLS. A PERMIT IS REQUIRED FROM BOTH AGENCIES PRIOR TO CONSTRUCTION RELATED ACTIVITIES, INCLUDING THE INSTALLATION OF EROSION CONTROL MEASURES SHALL BEGIN.

- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION/RESTORATION AS DISPLAYED ON THE APPROVED PLAN, AND SHALL MEET THE WPDES PERMIT PART 2.4 CONSTRUCTION SITE POLLUTION CONTROL REQUIREMENTS.
- ONCE BMPS AND EROSION CONTROL DEVICES HAVE BEEN INSTALLED, A PRE-CONSTRUCTION INSPECTION WITH THE CITY OF SUPERIOR ESD IS REQUIRED. UPON APPROVAL, CONSTRUCTION ACTIVITIES MAY BEGIN.
- UNTIL THE SITE HAS ACHIEVED FINAL STABILIZATION, THE CONTRACTOR MUST PERFORM AND RECORD STORMWATER CONSTRUCTION INSPECTIONS. STORMWATER INSPECTIONS MUST BE RECORDED BY A COMPETENT (CERTIFIED/TRAINED) INDIVIDUAL AND SUBMITTED TO THE CITY OF SUPERIOR ESD. AT A MINIMUM, STORMWATER INSPECTIONS MUST BE COMPLETED WITHIN 7 DAYS OF THE LAST INSPECTION. STORMWATER INSPECTIONS ARE ALSO REQUIRED WITHIN 24 HOURS OF ANY RAIN EVENT THAT IS  $\geq 0.5"$ . RECORDS AND UPDATED STORMWATER PLAN MUST BE MAINTAINED ONSITE AND PERIODICALLY SUBMITTED TO THE CITY OF SUPERIOR ESD. THE CONTRACTOR SHALL TAKE RECORD PHOTOS OF PRE AND POST CONSTRUCTION SITE CONDITIONS AND INCLUDE WITH THE STORMWATER INSPECTION REPORTS. ANY CHANGES MADE TO THE APPROVED STORMWATER MANAGEMENT PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY OF SUPERIOR ESD PRIOR TO BEING IMPLEMENTED. ALL APPROVED CHANGES MUST BE PROVIDED TO THE WISCONSIN DNR.
- CITY OF SUPERIOR SHALL BE CALLED WHEN SITE REACHES 70% GOOD VEGETATIVE COVER TO SET UP FINAL INSPECTION; (E/S CONTROL SHALL STILL BE IN PLACE UNTIL AFTER N.O.T. IS ISSUED)
- ONCE N.O.T. INSPECTION IS PASSED THE E/S CONTROL BMPS WILL BE REMOVED AND CONTRACTOR SHALL PROVIDE OWNER WITH INFORMATION TO SUBMIT WISDNR N.O.T. FOR CONSTRUCTION STORMWATER PERMIT. ONCE N.O.T. HAS BEEN ACCEPTED, THEREFORE TERMINATING THE SWM PERMIT COVERAGE; NO MORE WORK SHALL OCCUR AFTER THIS POINT. ALL BMPS MUST REMAIN IN PLACE UNTIL N.O.T IS ISSUED.
- ALL DISTURBED AREAS SHALL REACH FINAL STABILIZATION PRIOR TO THE END OF THE 2021 CONSTRUCTION SEASON.
- PERMANENT AND TEMPORARY SEDIMENT TRAPS AND BASINS (IF APPLICABLE) WILL BE CONSTRUCTED BEFORE ANY SITE DISTURBANCES ARE PERMITTED.
- DITCHES/ WET SWALES SHALL BE EXCAVATED TO GRADING GRADE AND PROTECTED WITH BALE CHECKS AND SILT FENCE UNTIL ROAD AND UTILITY CONSTRUCTION HAS BEEN STABILIZED. FINAL DITCH GRADES AND FILTER MEDIUM SHALL BE PLACED PRIOR TO TURF ESTABLISHMENT.
- TOPSOIL, SEED, EROSION CONTROL BLANKET AND NECESSARY ADDITIONAL TEMPORARY EROSION CONTROL BMPS (IF APPLICABLE) SHALL BE PLACED WITHIN 7 DAYS OF COMPLETION OF ANY EMBANKMENT (WisDNR 1059).
- PLACEMENT OF RIPRAP SHALL BE COMPLETED WITHIN 24 HOURS OF CULVERT PLACEMENT, AND DONE IN ONE CONTINUOUS OPERATION.
- DISTURBED AREAS IN WHICH CONSTRUCTION ACTIVITIES HAVE CEASED OR WILL BE SUSPENDED FOR 7 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT BMPS FOR EROSION.

## CALCULATIONS

TOTAL DISTURBED AREA = 5.07 ACRES  
 POST CONSTRUCTION IMPERVIOUS AREA = 7.14 ACRES  
 EXISTING IMPERVIOUS AREA = 4.67 ACRES  
 IMPERVIOUS NET = 2.47 ACRES  
 (INCREASE)

## CONTACTS

THE SWPPP ENGINEER IS:  
 JEFF GOETZMAN, P.E.  
 TKDA - 11 EAST SUPERIOR STREET  
 DULUTH, MN 55811  
 218.724.8578  
 jeff.goetzman@tkda.com

## CONSTRUCTION NOTES

CONSTRUCTION SHALL BE GOVERNED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSTRUCTION SITE EROSION & SEDIMENT CONTROL STANDARDS AND THE CITY OF SUPERIOR STORMWATER MANAGEMENT STANDARDS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL BMPS FOR THE DURATION OF THE PROJECT.

THE CONTRACTOR SHALL KEEP THE INSPECTION AND MAINTENANCE LOGS IN ACCORDANCE WITH THIS SWPPP, ALL PERMITS, ALL INSPECTION AND MAINTENANCE RECORDS AND DESIGN CALCULATIONS. THE CONTRACTOR SHALL MAINTAIN A RESPONSIBLY SIZED STOCKPILE OF EROSION CONTROL DEVICES.

- The current State of Wisconsin Department of Natural Resources and City of Superior Stormwater Management requirements shall apply. Contractor will be permittee for the WPDES stormwater construction permit for this project - Contractors signature on permit is required. Submit Initial Erosion Control (EC) schedule at or before PreCon. Submit EC schedule alterations/adjustments weekly thereafter for Engineers approval.
- The Contractor is responsible for EC Quality Control on this project. Contractor shall phase/sequence the project to minimize exposure to erosion. Contractor shall place or otherwise construct erosion control and sediment containment devices to minimize the runoff, tracking and sediment loss from disturbed areas of the project site.
- Sediment and erosion control devices shall be functional before site is disturbed. See "Timing of BMP Installation on sheet C107 for further details.
- Total disturbed area is 5.07 acres, beginning impervious area is 4.67 acres, and post construction impervious area will be 7.14 acres.
- Receiving water is St Louis River.
- Disturbed slopes not actively worked shall be protected from soil erosion with temporary or permanent cover within permit requirements but in no case greater than 7 days of being worked. Use erosion control blanket with soil staples, or engineer approved equal (WisDNR 1052).
- At minimum, the following controls will be implemented at the construction site:
  - Trackout controls
  - Sediment control logs shall be used in conjunction with other erosion BMPs.
  - Rock ditch checks, or approved equal, are to be used to reduce ditch velocities and reduce erosion (WisDNR 1062).
  - Storm inlets and outlet area shall be protected with rip rap.
  - Stone Tracking Pad shall be constructed at site entrance to control sediment tracking (WisDNR - 1057).
  - Storm inlets shall be continuously protected by Type D-M or D-HR bag device, rock bag combination as necessary (WisDNR 1060).
  - Permanent vegetation shall be seeded/planted and protected immediately after topsoil is re-spread.
  - Control all site waste, debris, material storage, concrete washout, to prevent impacts to any drainage way.
  - All exposed soil areas with a slope of 3:1 or steeper, that have a continuous positive slope to a special water must have temporary erosion protection or permanent cover within 3 days after the area is no longer actively being worked. All other slopes that have a continuous positive slope to a special water must have temporary erosion protection or permanent cover within 7 days after the area is no longer actively being worked.
- All slopes and ditches shall be stabilized prior to opening new culverts into existing drainage ways.
- If any stockpile is to remain in place for more than 3 days, sediment and erosion control devices shall be used.
- Water pumped or otherwise discharged from the site during construction dewatering shall be pumped through a non-woven fabric dewatering bag (WisDNR 1061).
- Site dust generation must be controlled by application of water by spray trucks or similarly effective means of dust control (WisDNR 1068).
- The contractor shall take all possible precautions to prevent appreciable soil tracking onto roadways. Where sediment has been tracked-out from the site onto the surface of off-site streets, other paved areas, and sidewalks, the deposited sediment must be removed by the end of the same work day in which the trackout occurs or by the end of the next work day if track-out occurs on a non-work day. The tracked sediment must be removed by dry sweeping, wet sweeping, shoveling, vacuuming, or by using other similarly effective means of sediment removal. Hosing or sweeping tracked out sediment into any stormwater conveyance, storm drain inlet, or surface water is prohibited (WisDNR 1057).
- Stabilized construction entrance(s) shall be removed and area restored after grading is complete. This may only occur once all traffic ceases on site. Including but not limited to machinery such as loaders, excavators, skid steers, and/or vehicle traffic.
- Until the site has achieved final stabilization, the contractor must perform and record stormwater construction inspections. Stormwater inspections must be recorded on the attached template by a competent (certified/trained) individual and submitted to the City of Superior ESD. At a minimum, stormwater inspections must be completed within 7 days of the last inspection and are required within 24 hours of any rain event that is  $\geq 0.5"$ . Records and an updated stormwater plan must be maintained onsite and periodically submitted to the City of Superior ESD. The City of Superior ESD prefers inspections to be completed consistently on the same day of the week to ease the review process. The contractor shall take record photos of pre and post construction site conditions and include with the stormwater inspection reports.

## CONSTRUCTION PRACTICES TO MINIMIZE STORM WATER CONTAMINATION

TO PREVENT STORM WATER CONTAMINATION FROM OCCURRING, THE FOLLOWING BMPS WILL BE IMPLEMENTED:

- All rough graded slopes shall be track walked at the end of the day to create horizontal ridges and decrease the length of uninterrupted flow. Slopes shall be left in a state ready for application of blankets, mulch, or other protective covers (WisDNR 1067).
- A stabilized construction entrance/exit will be constructed to reduce vehicle tracking of sediments off the project right of way (WisDNR 1057).
- All non-hazardous waste materials will be collected and stored in a securely lidded metal dumpster or other approved containment method at the end of each day. Any alternative to a metal dumpster must be submitted in writing for approval by the project engineer. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as necessary to function as intended for debris collection. No construction materials will be buried on-site. The contractor's erosion control supervisor will instruct all personnel regarding the correct procedure for disposal.
- A licensed sanitary waste management contractor will collect all sanitary waste from the portable units at a rate necessary to maintain design function.
- All vehicles on site will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage.
- Fertilizers will be stored in a covered shed and partially used bags will be transferred to a sealable bin to reduce chance of spillage.
- Petroleum products will be stored in tightly sealed containers, which are clearly labeled.
- Spill kits will be included with all fueling sources and maintenance activities. Secondary containment measures will be installed and maintained by the contractor.
- Any asphalt substances used on site will be applied in accordance with manufacturers recommendations.
- All paint containers and curing compounds will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm water system but will be properly disposed of according to manufacturer's instructions.
- Materials and equipment necessary for spill clean up will be kept in an enclosed trailer or shed on site. Equipment will include, but not limited to, brooms, mops, dust pans, rags, gloves, absorbent (kitty litter). Oil absorbent brooms and diapers, and buckets.
- All spills will be contained and cleaned up immediately upon discovery. Any and All spills ( $\geq 5$  gal) will be reported immediately to the Wisconsin DNR Spill Response Coordinator at 1.800.943.0003.
- Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site. Each concrete truck shall have a cleanout kit onboard and return wash water to the plant or other approved disposal site. Discharging concrete wash water onsite is prohibited.
- Form release oil used for concrete work must be applied over a pallet containing absorbent to collect excess liquid. The absorbent material will be replaced and properly disposed of when saturated.
- Discharges from basin dewatering operations that are turbid or sediment laden shall be discharged to temporary sediment basin or filter bag in accordance with WisDNR 1061 prior to discharge to a water of the state.
- Clogged or compromised filters must be replaced. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, deposited sediment shall be removed by the end of the same work day on which it is found or by the end of the following work day if removal by the same work day is not feasible.
- Accumulated sediment shall be removed where the depth of sediment has reached half of the working height of the sediment retaining device. Sediment shall be removed by the end of the work day on which it is found or by the end of the following work day if removal by the same work day is not feasible.

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-m\JDC\Properties\LCV1805200004\_Production\01\_CAD\02\_Sheets\SWPPP.dwg

---	---	---	---
---	---	---	---
---	---	---	---
---	---	---	---
2	7/17/2021	JG	EDITED NOTES
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
DRAWN	JK, TM	
CHECKED	JG	SIGNATURE: _____ DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227

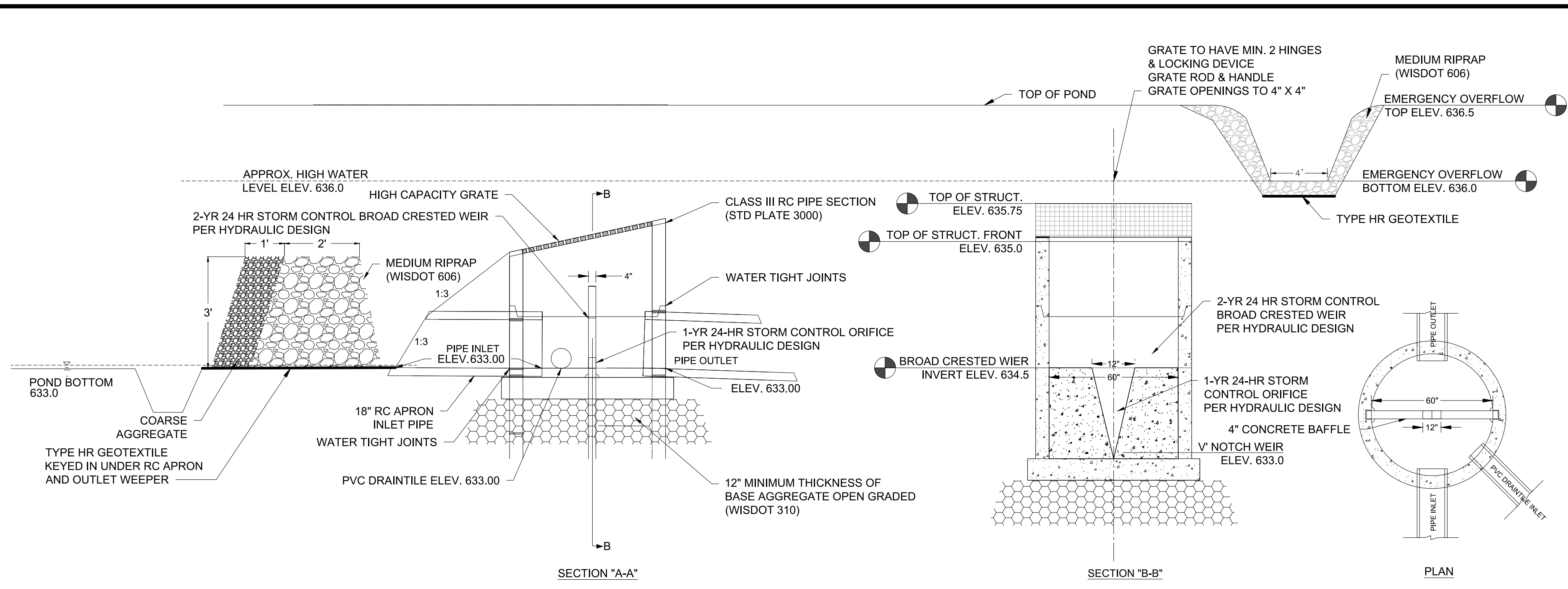


11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

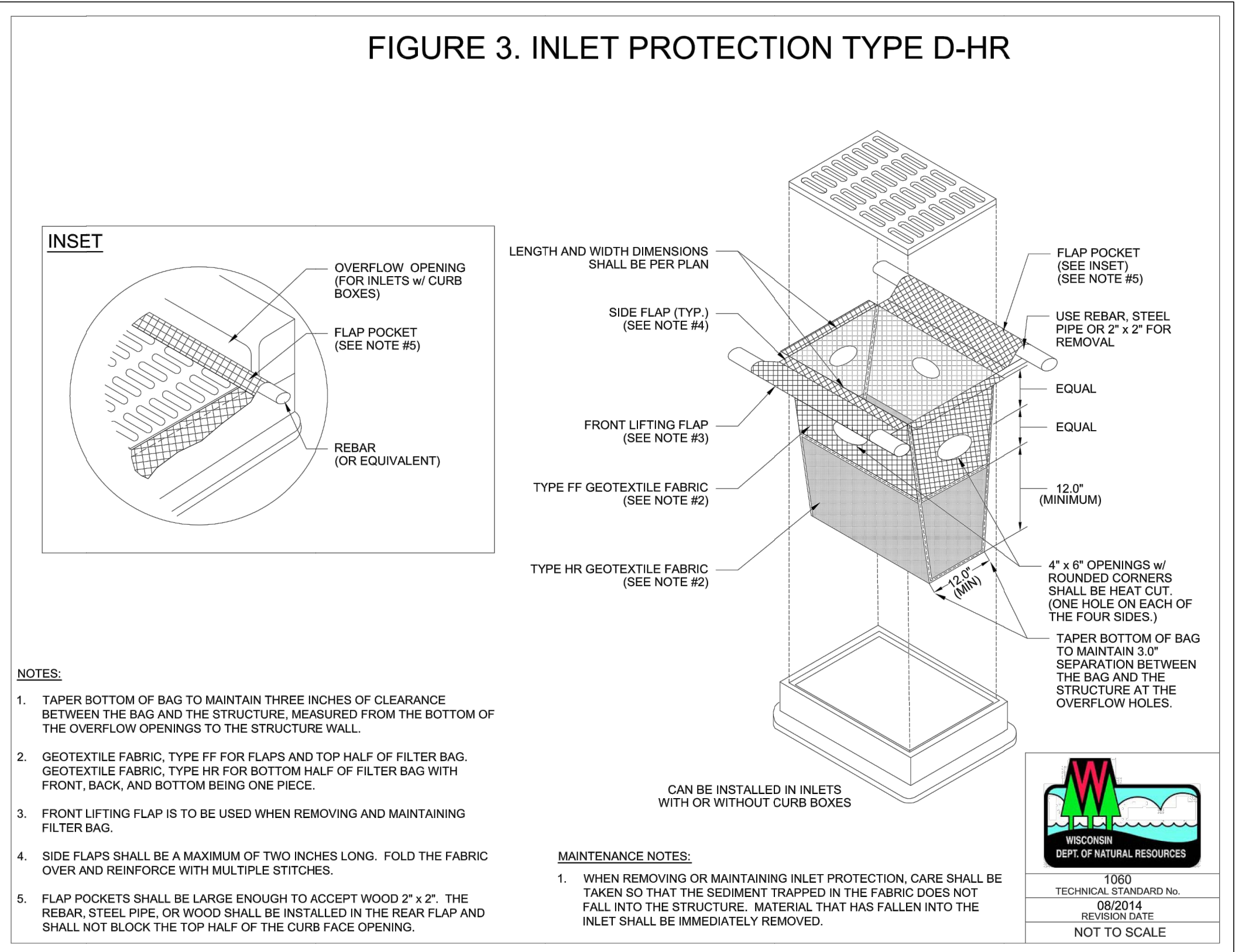
**FedEx PARKING LOT EXPANSION**

**SWPPP**

PROJ. NO.	18052.000
DRAWING NO.	C108



1 POND OUTLET STRUCTURE (NO SCALE) C109



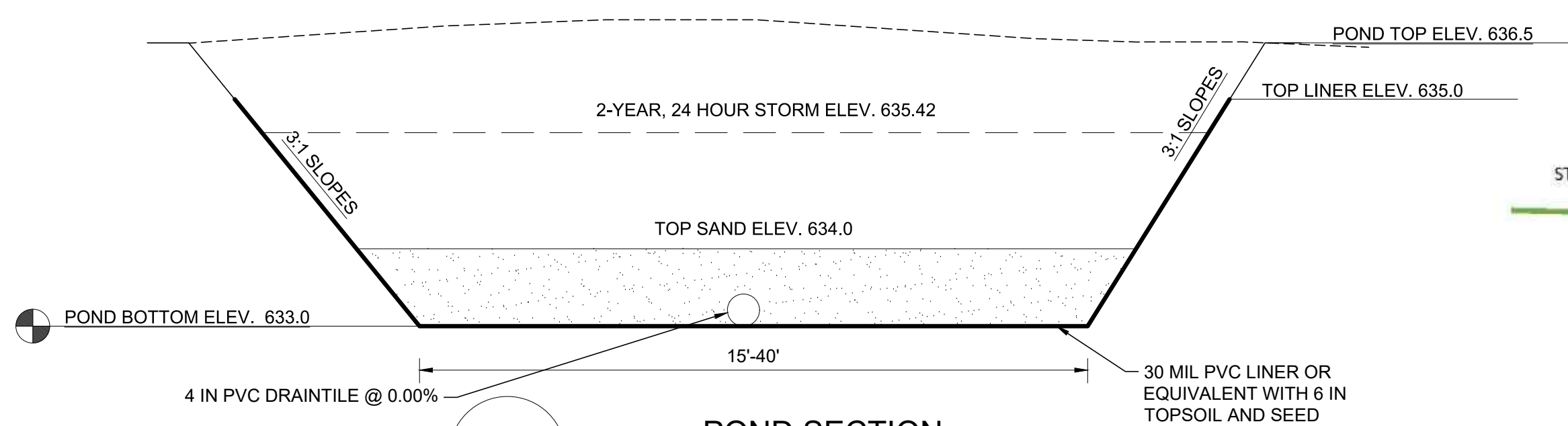
**NOTES:**

- TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.
- GEOTEXTILE FABRIC, TYPE FF FOR FLAPS AND TOP HALF OF FILTER BAG. GEOTEXTILE FABRIC, TYPE HR FOR BOTTOM HALF OF FILTER BAG WITH FRONT, BACK, AND BOTTOM BEING ONE PIECE.
- FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING AND MAINTAINING FILTER BAG.
- SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.
- FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" x 2". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

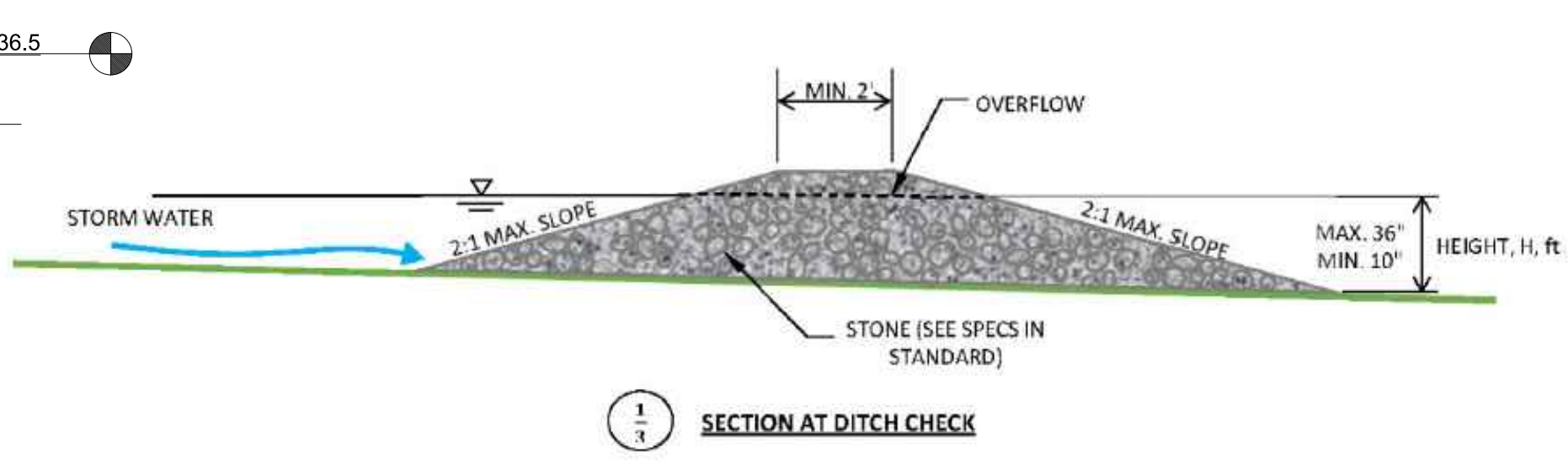
**MAINTENANCE NOTES:**

- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.

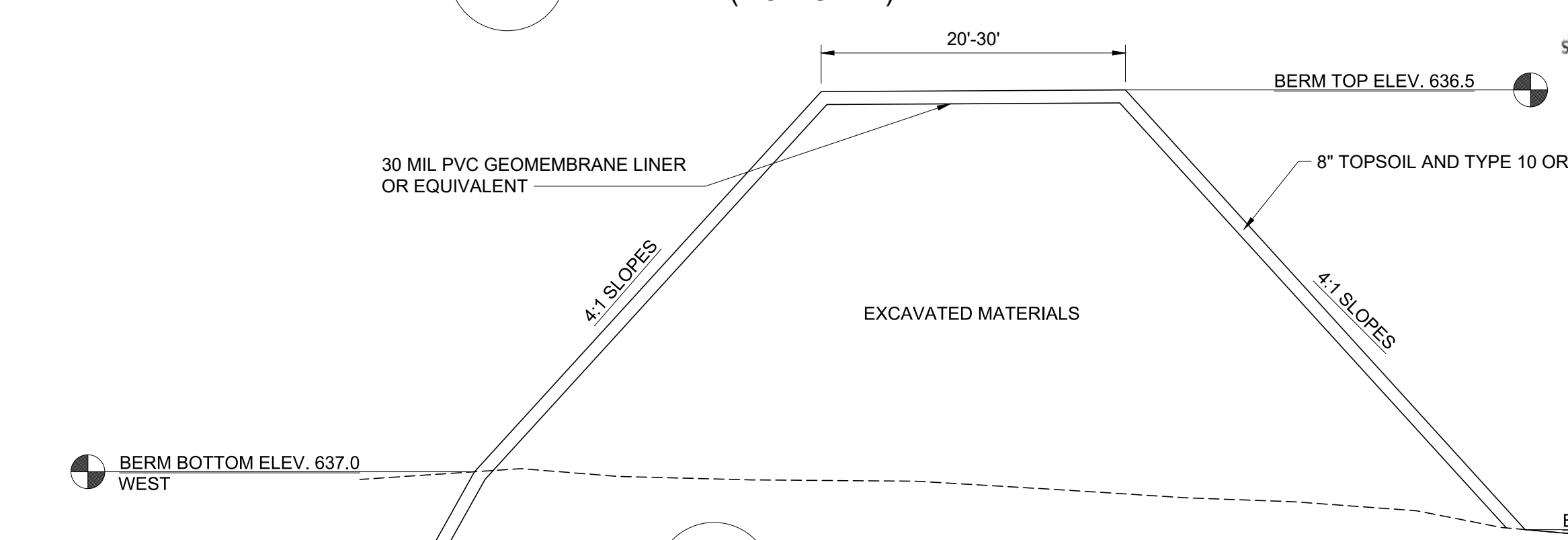
1080 TECHNICAL STANDARD No. 092014 REVISION DATE NOT TO SCALE



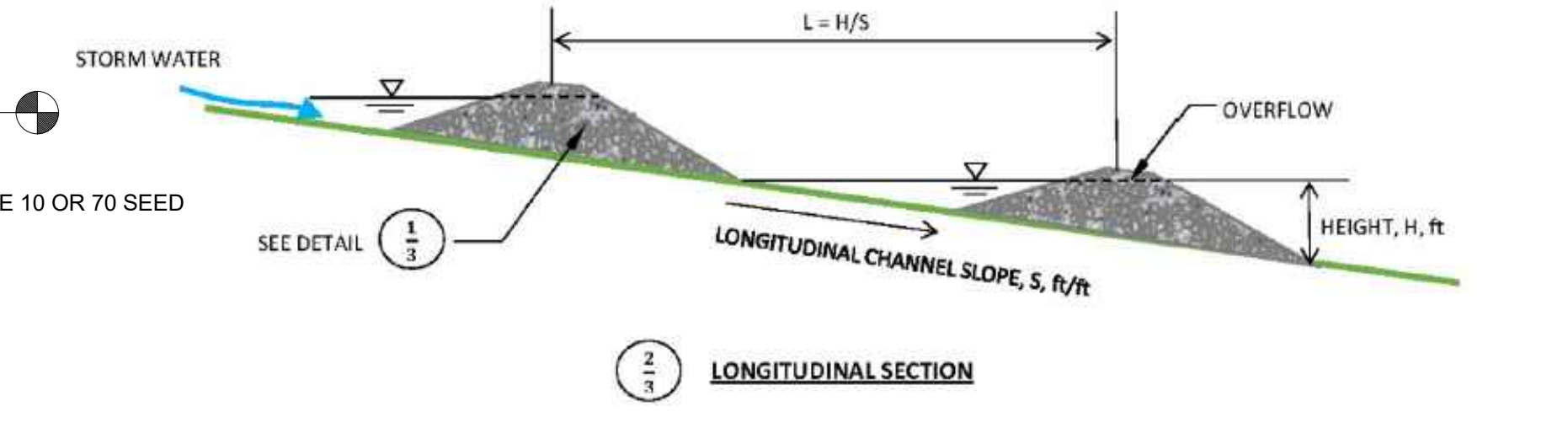
2 POND SECTION (NO SCALE) C109



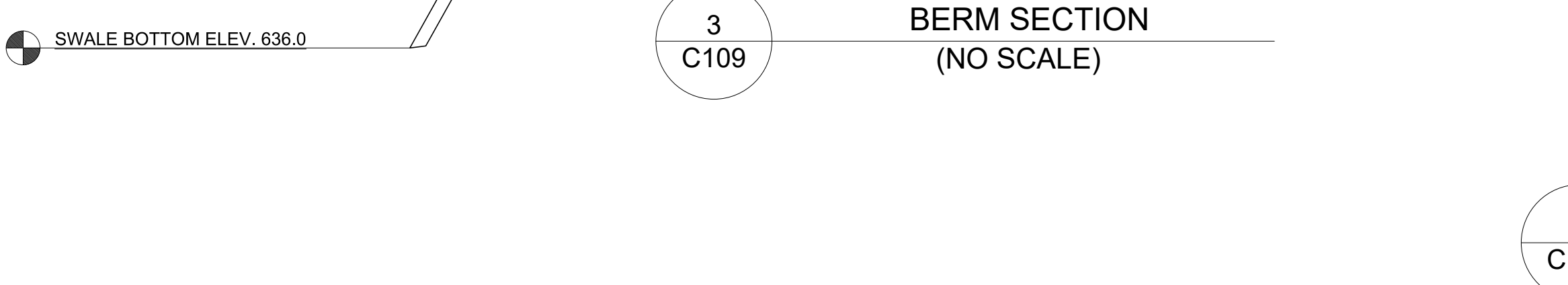
3 SECTION AT DITCH CHECK (NO SCALE) C109



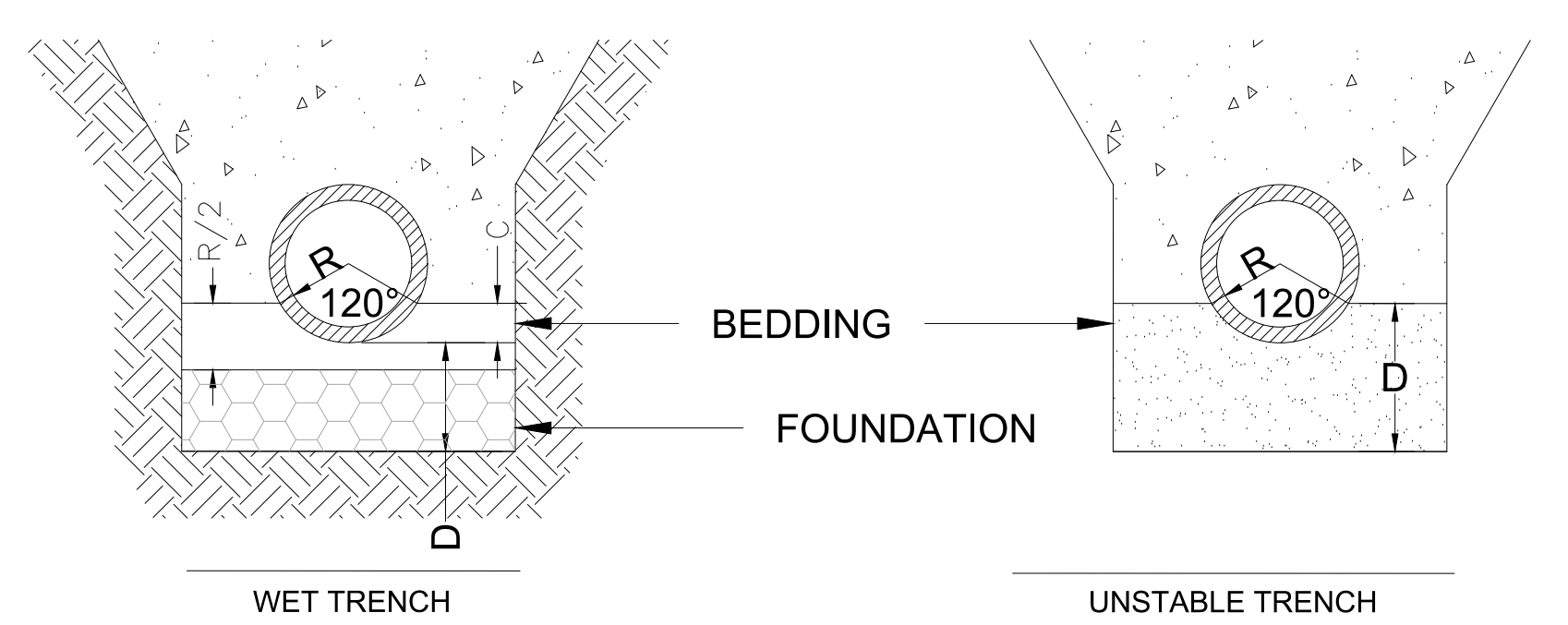
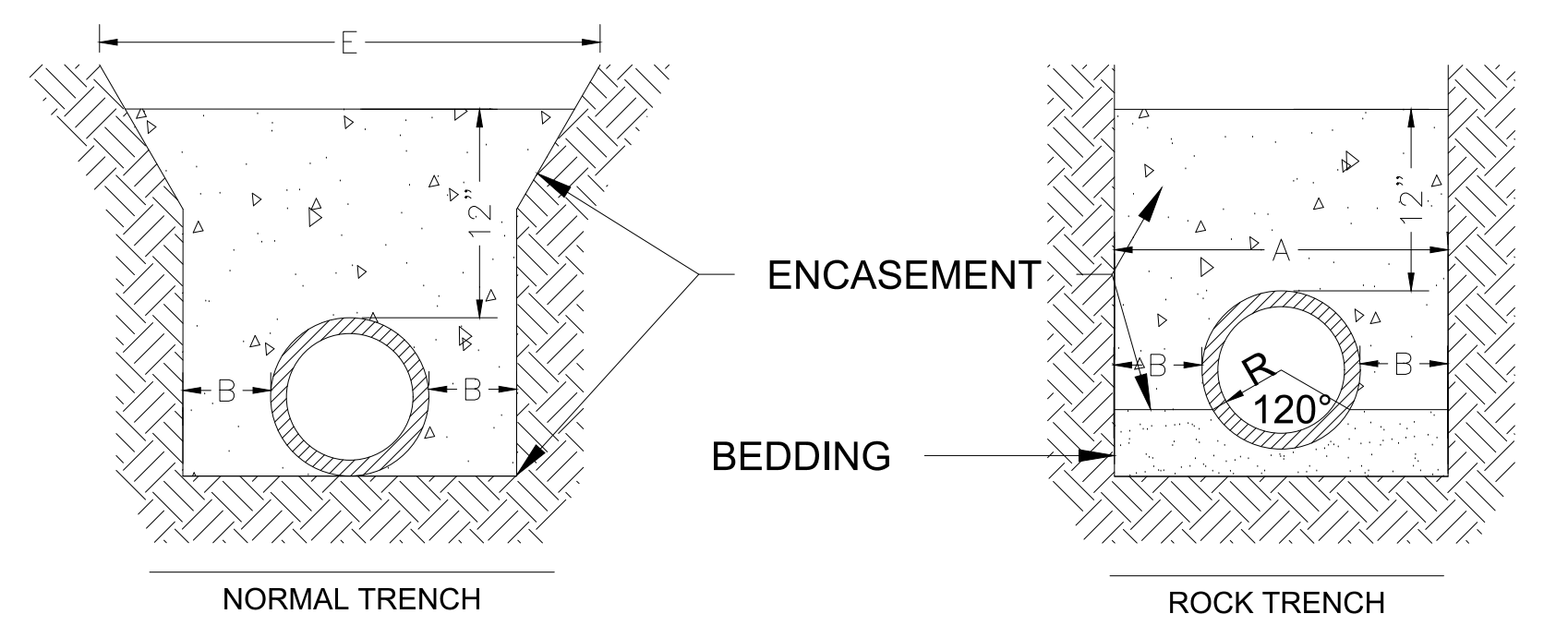
3 BERM SECTION (NO SCALE) C109



4 LONGITUDINAL SECTION (NO SCALE) C109



4 DITCH CHECK (NO SCALE) C109



5 PIPE BEDDING (NO SCALE) C109

**NOTES:**

- DIMENSIONS:
  - A. MAXIMUM WIDTH - O.D. PIPE + 24"
  - B. MINIMUM - 6"
  - C. 3" BELOW BARREL
  - D. DETERMINED BY ENGINEER
  - E. MAXIMUM PAY WIDTH (SURFACE RESTORATION) O.D. PIPE + 36"
- ENCASUREMENT ZONE SHALL NOT CONTAIN STONE OVER 2 INCH CINDER, REFUSE, LUMBER, FROZEN EARTH, OR OTHER OBJECTIONABLE MATERIAL.
- BEDDING MATERIAL MAY BE SAND OR GRAVEL CONTAINING NO STONES LARGER THAN 2 INCH SIZE.
- FOUNDATION SHALL BE UNIFORM 1 INCH TO 1 1/2 INCH WASHED OR CRUSHED STONE.

PLOT DATE: Jul 20, 2021 - 12:42pm  
 FILENAME: K:\g-m\JDC\Properties\LC1805200004\_Production\01\_CAD\02\_Sheets\C109\_Details.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/7/2021	JG	DETAIL ADDED, UPDATED DETAIL 1 & 2

DESIGNED: JL  
 DRAWN: JK, TM  
 CHECKED: JG

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

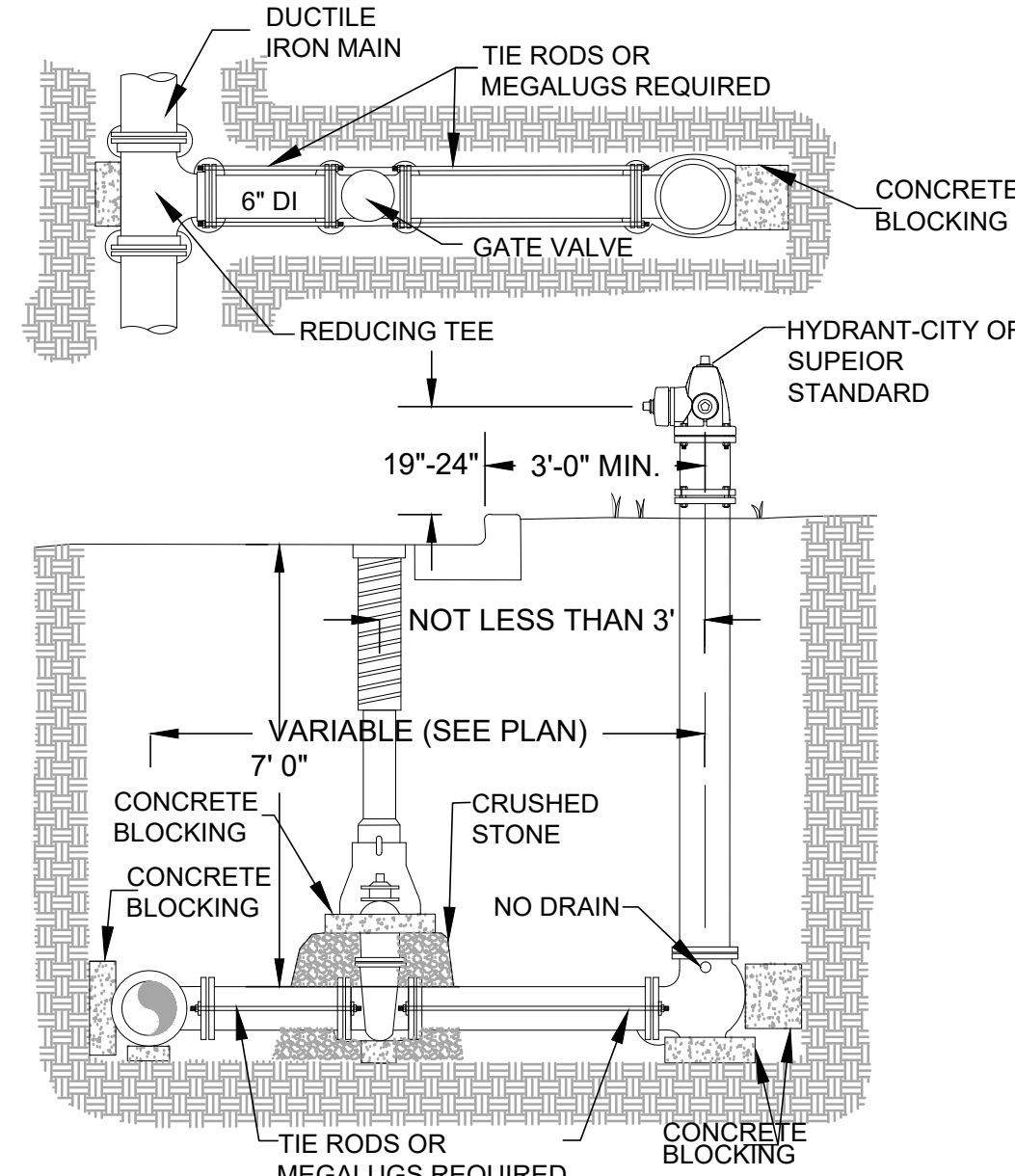
SIGNATURE: *Jeffrey S. Goetzman* DATE: 07/19/2021  
 NAME: Jeffrey S. Goetzman LIC. NO.: 40227

11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

**FedEx PARKING LOT EXPANSION**

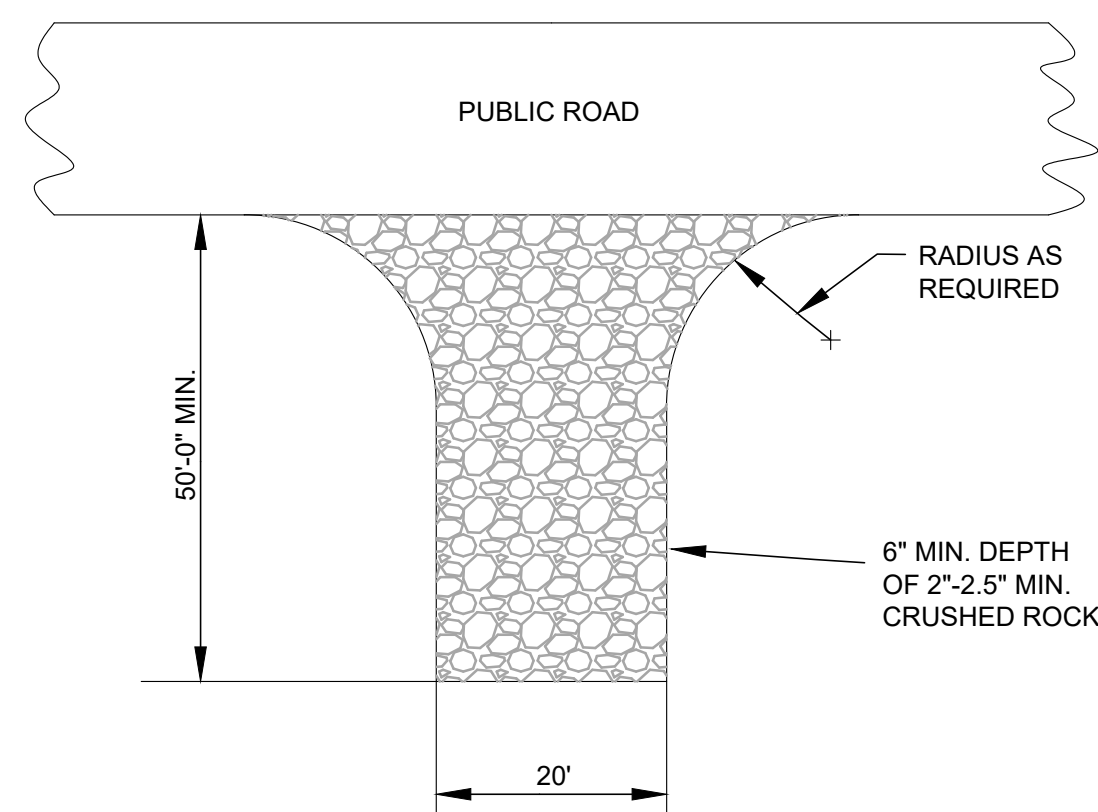
**DETAIL**

PROJ. NO. 18052.000  
 DRAWING NO. C109



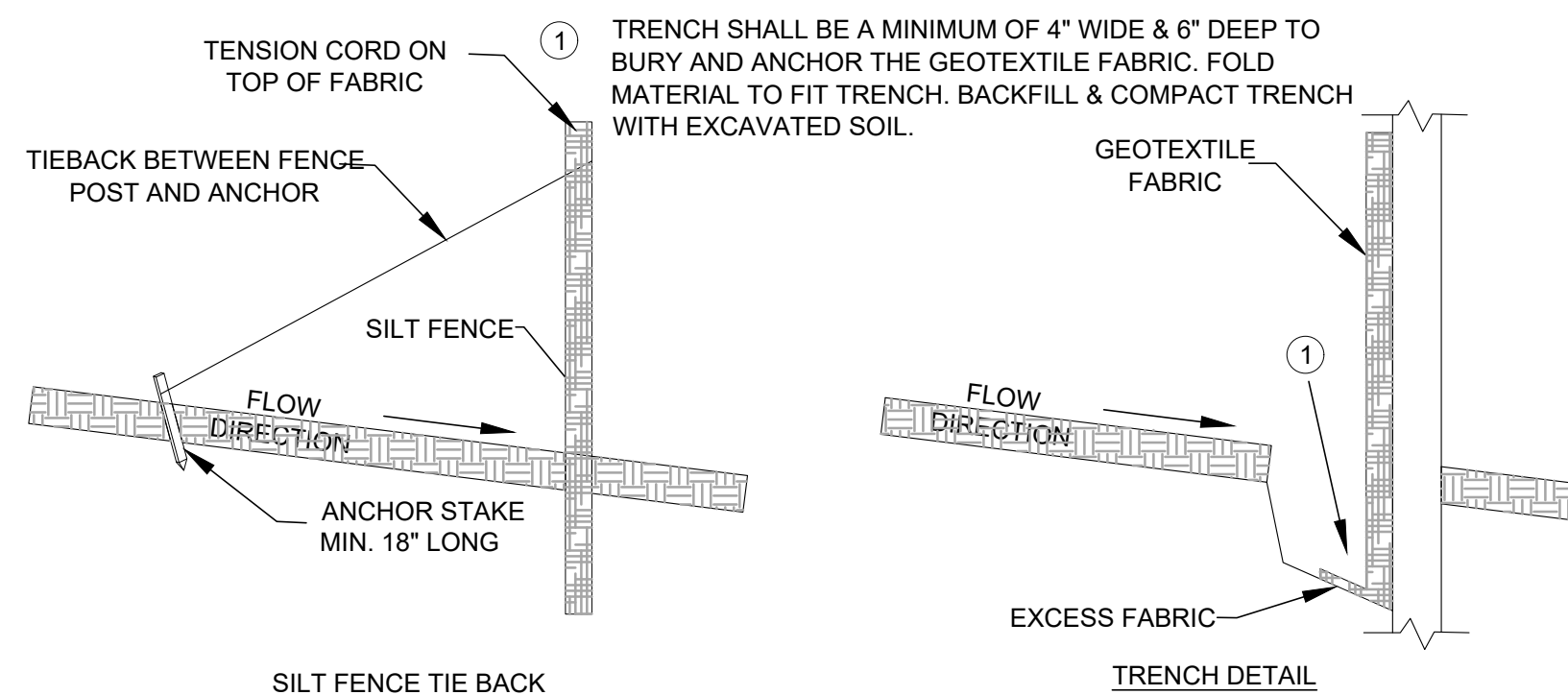
- NOTES:
1. VALVES SHALL BE CONNECTED DIRECTLY TO AN ANCHORING TEE. WHENEVER DIRECT CONNECTION IS NOT POSSIBLE, TIE RODS OR MEGALUGS SHALL BE USED. TIE RODS SHALL BE GALVANIZED.
  2. USE EPOXY COATING ON VALVE AND HYDRANT BASE.
  3. ALL BOLTS SHALL BE COR-TEN WITH ZINC ANODE CAPS CONFORMING TO ASTM B-418 FOR ALL MECHANICAL JOINT FITTINGS. ANODE SIZE - REGULAR.

**1** FIRE HYDRANT SETTING DETAIL  
C110 NO SCALE

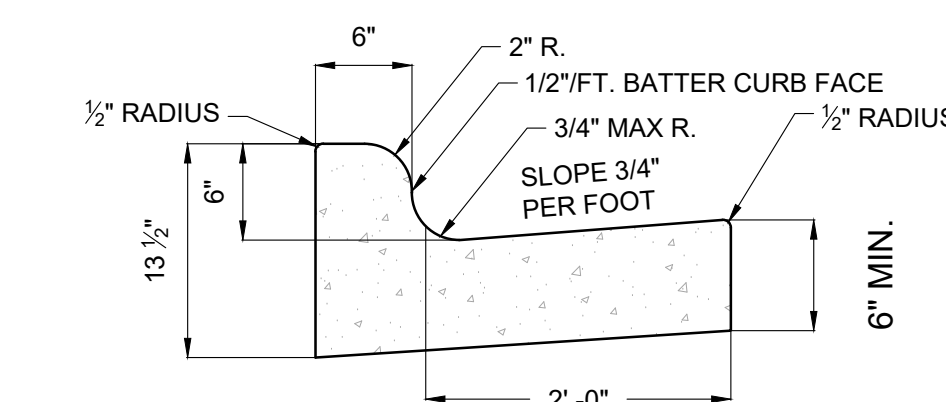


**2** TRACKOUT CONTROL WISDNR 1057-TS  
C110 NO SCALE

- ② ROCKS AT ENTRANCE CLEAN WORKSITE MUD OFF OF TRUCK TIRES BEFORE DRIVING ON MAIN ROAD. THIS WILL PREVENT AUTO DAMAGE. KEEP CONSTRUCTION SEDIMENT OUT OF DRAINAGESYSTEMS AND WETLANDS.

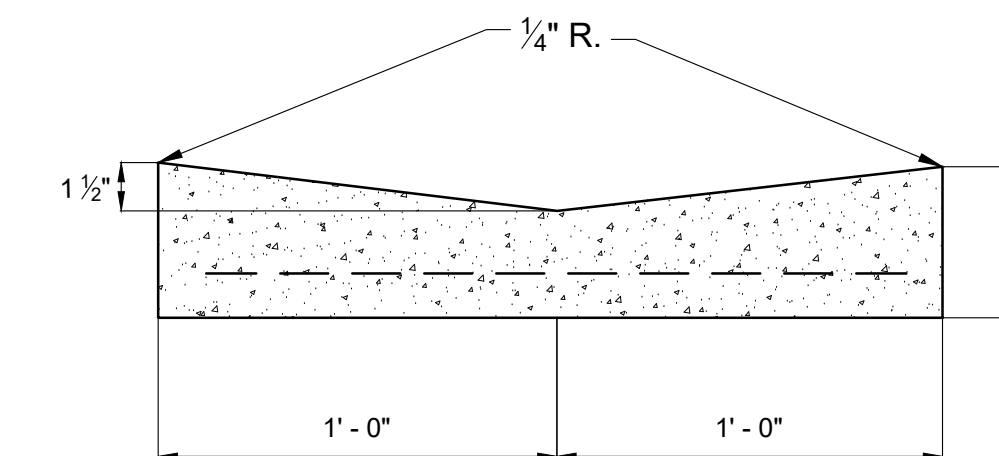


**3** SILT FENCE WISDNR 1056-TS  
C110 NO SCALE



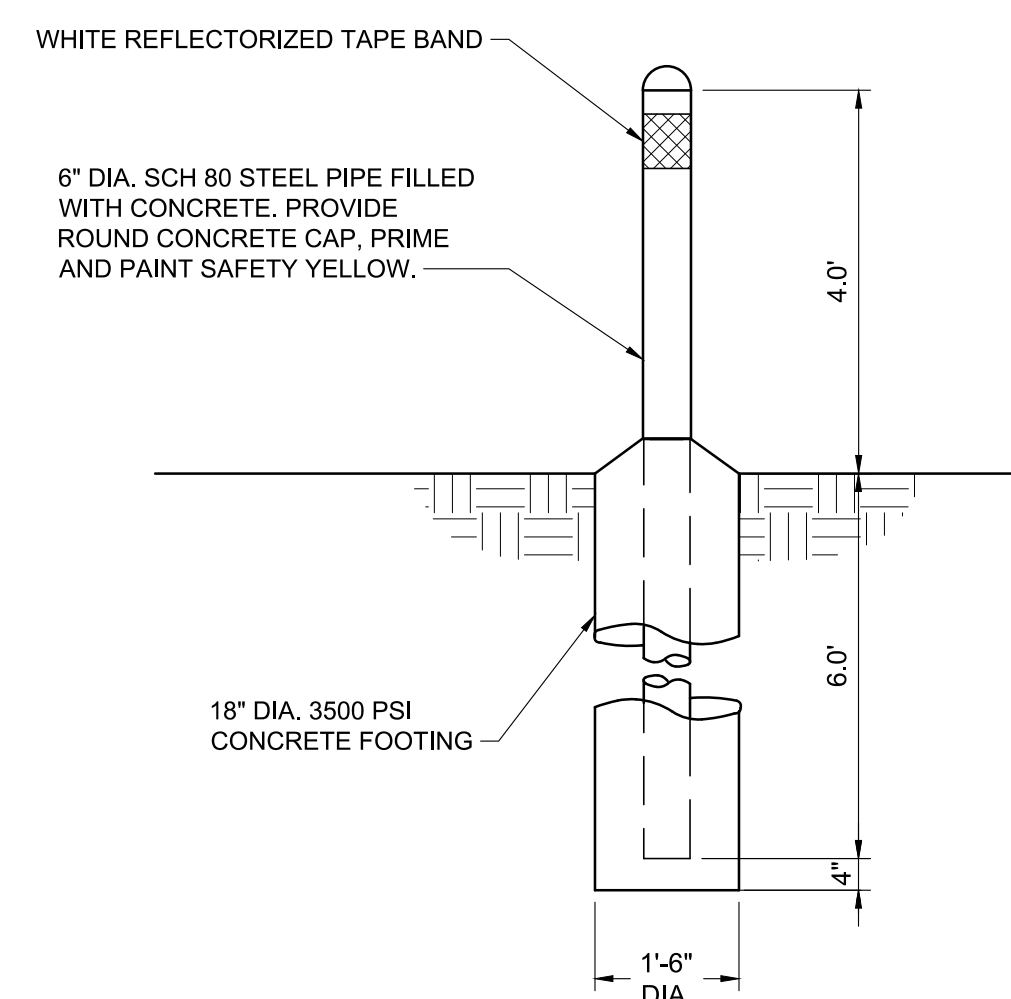
1. TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPE A.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6\"/>
- 3. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN PLANS.

**4** CURB AND GUTTER DETAIL  
C110 NO SCALE

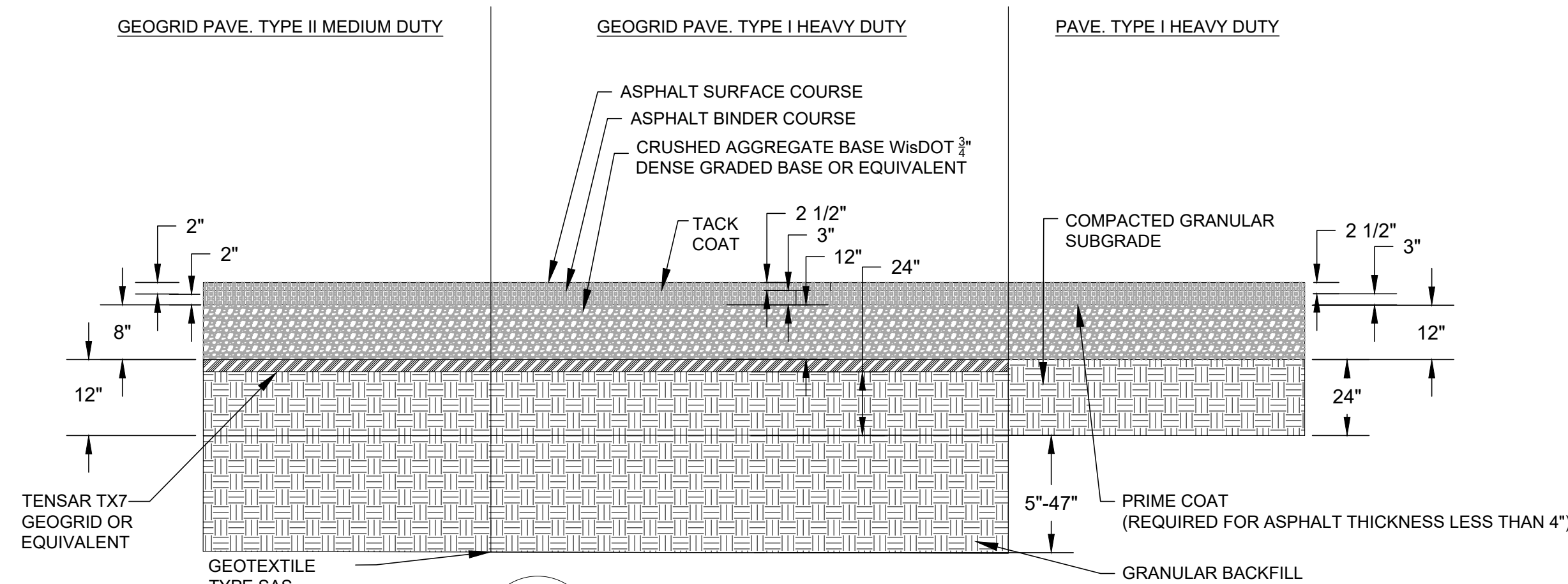


1. WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CONCRETE GUTTER 24\"/>

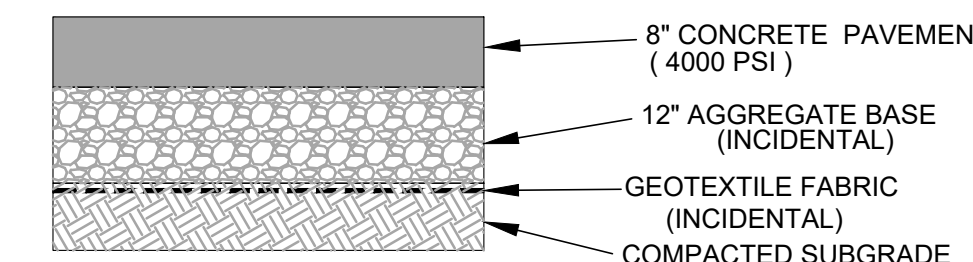
**5** CONCRETE VALLEY GUTTER  
C110 NO SCALE



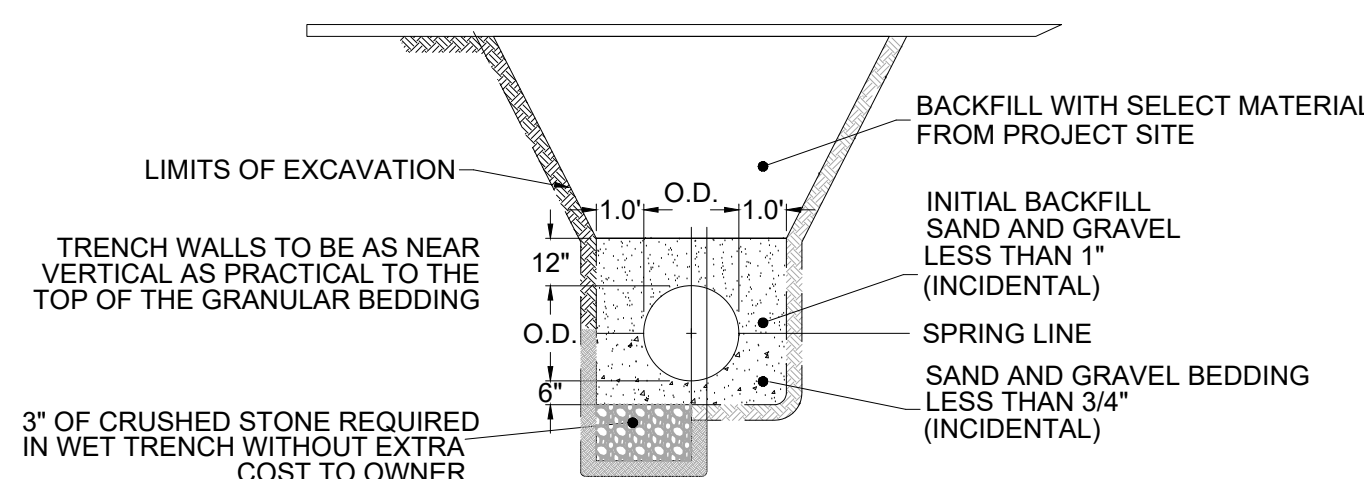
**6** PIPE BOLLARD - TYPE 1 DESIGN  
C110 (NO SCALE)



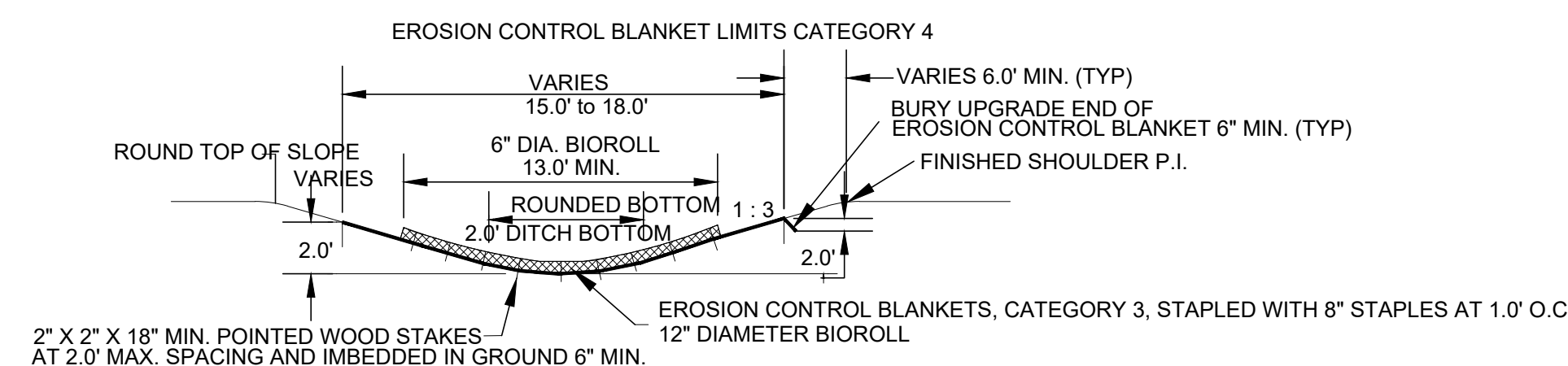
**7** ASPHALT PAVEMENT  
C110 NO SCALE



**8** CONCRETE PAVING  
C110 NO SCALE



**9** TYPICAL TRENCH SECTION FOR WATERMAIN  
C110 NO SCALE



**10** FILTER LOG TYPE STRAW BIOROLL WISDNR 1071-TS  
C110 NO SCALE

PLOT DATE: Jul 20, 2021 - 12:42pm  
FILENAME: K:\g-m\JDC\Properties\LC1805200004\_Production\01\_CAD\02\_Sheets\C110\_Details.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN. SIGNATURE: <i>[Signature]</i> DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

11 E. Superior Street, Suite 420  
Duluth, MN 55802  
218.724.8578  
tkda.com

**FedEx PARKING LOT EXPANSION**

**DETAIL**

PROJ. NO.	18052.000
DRAWING NO.	<b>C110</b>

## ANALYTICAL SUMMARY TABLE

Table 1: Summary of Soil Laboratory Analytical Results

Sample Location	Eastern Parcel (Parcel ID No. 0608060073900)								Northern Parcel (Parcel ID No. 068060073905)				Eastern Parcel (Parcel ID No. 0608060073900)								WI DNR NR 720 RCLs for Contaminated Soil <sup>1</sup>		Background Threshold Value <sup>2</sup>
	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	GP-13	GP-13	GP-14	GP-14	GP-15	GP-15					
Sample Identification	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	GP-13	GP-13	GP-14	GP-14	GP-15	GP-15	Protective of Direct Contact (Industrial)	Protective of Groundwater Quality	(mg/kg)		
Sample Depth (feet bgs)	1.25 - 3.25	3.25 - 5	1 - 3	3.25 - 5	3.75 - 5	2 - 5	1 - 3	0.5 - 4	0.5 - 1.5	3.5 - 5	1.5 - 5	0.75 - 3	0.5 - 2.75	15-16.5	0.25 - 2.5	10 - 13	0.5 - 2.75	5 - 7.5					
Sample Collection Date	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/16/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	(mg/kg)		
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
<b>Constituents of Concern:</b>																							
<b>RCRA Metals (USEPA 6020/7471)</b>																							
Arsenic	5.0	<7.1	4.9	<6.8	4.3	6.2	4.9	3.9	3.6	3.7	3.9	4.3	5.0	5.2	<6.5	3.9	<b>10.5</b>	5.2	3	0.584	8		
Barium	206	280	133	303	236	212	221	206	135	213	216	157	149	187	218	147	174	248	100,000	164.8	364		
Chromium, total	46.9	67	56.8	65	56.1	52.5	45.3	45.4	34.5	48.8	54.3	41.5	40	44.8	50.5	30.4	35.7	47.5	NSL	360,000	44		
Lead	29.3	12.2	13	11.8	12.9	33.2	<b>78.1</b>	12.1	<b>62.2</b>	9.9	10.4	39.7	51	11.5	10.2	6.9	43.8	11.1	800	27	52		
Selenium	<b>2.7</b>	<5.3	<2.6	<5.1	<2.6	<b>3.4</b>	<2.5	<2.3	1.4 J	<2.5	<2.6	<2.4	<2.6	<2.6	<4.9	<2.3	<b>2.6</b>	<2.4	5,110	0.52	NSL		
Mercury	<0.047	<0.046	<0.0047	<0.041	<0.043	<0.044	<0.041	<0.039	0.016 J	<0.040	<0.041	<0.040	<0.042	<0.044	<0.044	<0.042	<0.046	<0.045	3.13	0.208	NSL		
<b>VOCs (USEPA 8260)</b>																							
1,2,4-Trimethylbenzene	0.103	<0.0714	0.893	<b>2.66</b>	<0.0668	<b>6.64</b>	0.672	<0.0614	0.102	<0.0644	0.550	<0.0625	0.411	<b>19.0</b>	<0.0639	<0.0614	<b>15.4</b>	<b>4.46</b>	219	1.3787	NSL		
1,2-Dichloroethane	<0.0709	<0.0714	<0.0761	<0.154	<0.0668	<0.0771	<0.0655	<0.0614	<0.0581	<0.0644	<0.161	<0.0625	<0.0644	<0.066	<0.0639	<0.0614	<b>0.483</b>	<0.0647	2.87	0.0028	NSL		
1,3,5-Trimethylbenzene	<0.0709	<0.0714	0.353	<b>1.69</b>	<0.0668	<b>3.32</b>	0.293	<0.0614	0.0597	<0.0644	<b>2.89</b>	<0.0625	0.189	<b>5.94</b>	<0.0639	<0.0614	<b>7.3</b>	<b>1.92</b>	182	1.3787	NSL		
Benzene	<b>0.0684</b>	<0.0286	<b>0.426</b>	<b>1.9</b>	<0.0267	<b>4.51</b>	<b>0.0714</b>	<0.0246	<b>0.0598</b>	<0.0258	<b>0.171</b>	<0.025	<b>0.252</b>	<b>1.67</b>	<0.0255	<0.0246	<b>33.9</b>	<b>0.207</b>	7.07	0.0051	NSL		
Bromodichloromethane	<0.0709	<0.0714	<0.0761	<0.154	<0.0668	<0.0771	<0.0655	<0.0614	<0.0581	<0.0644	<b>0.390</b>	<0.0625	<0.0644	<0.066	<0.0639	<0.0614	<b>10.9</b>	<b>0.857</b>	1.83	0.0003	NSL		
Ethylbenzene	<0.0709	<0.0714	0.31	1.5	<0.0668	<b>3.22</b>	0.243	<0.0614	0.0426 J	<0.0644	0.366	<0.0625	0.147	<b>10.9</b>	<0.0639	<0.0614	<b>10.0</b>	1.2	35.4	1.57	NSL		
Isopropylbenzene (Cumene)	<0.0709	<0.0714	<0.0761	<0.154	<0.0668	0.23	<0.0655	<0.0614	<0.0581	<0.0644	0.292	<0.0625	<0.0644	1.64	<0.0639	<0.0614	0.42	0.226	268	NSL	NSL		
m&p-Xylene	<0.142	<0.143	1.75	<b>6.05</b>	<0.134	<b>12.7</b>	0.654	<0.123	0.147	0.694	<0.125	<0.129	0.784	<b>23.0</b>	<0.128	<0.123	<b>22.1</b>	1.01	NSL	3.96	NSL		
Naphthalene	<0.354	<0.357	0.425	<b>1.09</b>	<0.334	<b>0.879</b>	<b>0.743</b>	<0.307	0.0563 J	<0.322	<b>10.6</b>	<0.312	<0.322	<b>2.83</b>	<0.319	<0.307	<b>4.15</b>	<b>0.942</b>	26	0.6582	NSL		
n-Butylbenzene	<0.0709	<0.0714	<0.0761	<0.154	<0.0668	0.981	0.207	<0.0614	<0.0581	<0.0644	<0.161	<0.0625	<0.0644	2.71	<0.0639	<0.0614	<0.36	<0.0647	108	NSL	NSL		
n-Propylbenzene	<0.0709	<0.0714	0.111	0.502	<0.0668	1.0	0.176	<0.0614	0.018 J	<0.0644	0.555	<0.0625	<0.0644	3.82	<0.0639	<0.0614	1.67	0.77	264	NSL	NSL		
o-Xylene	<0.0709	<0.0714	0.538	2.37	<0.0668	<b>4.36</b>	0.190	<0.0614	0.0468 J	<0.0644	<0.161	<0.0625	<0.0644	<b>5.11</b>	<0.0639	<0.0614	<b>4.87</b>	<0.0647	434	3.96	NSL		
p-Isopropyltoluene	<0.0709	<0.0714	<0.0761	<0.154	<0.0668	0.0976	<0.0655	<0.0614	<0.0581	<0.0644	1.17	<0.0625	<0.0644	1.01	<0.0639	<0.0614	0.473	0.101	162	NSL	NSL		
sec-Butylbenzene	<0.0709	<0.0714	<0.0761	<0.154	<0.0668	0.107	<0.0655	<0.0614	<0.0581	<0.0644	0.513	<0.0625	<0.0644	0.879	<0.0639	<0.0614	<0.36	0.117	145	NSL	NSL		
Toluene	<0.0709	<0.0714	<b>1.23</b>	<b>5.52</b>	<0.0668	<b>11.6</b>	0.338	<0.0614	0.0721	<0.0644	<0.161	0.0824	0.648	<b>1.43</b>	<0.0639	<0.0614	<b>15.4</b>	<0.0647	818	1.1072	NSL		
<b>PAHs (USEPA 8270E)</b>																							
Acenaphthene	0.0136	<0.0021	0.261	<0.002	<0.002	<0.0099	<0.0097	<0.0018	<0.0086	<0.0019	0.228	<0.0019	<0.0096	<0.002	<0.0019	<0.0018	<0.0103	<0.0019	45,200	NSL	NSL		
Acenaphthylene	<0.0031	<0.0031	0.103	<0.003	<0.003	<0.0151	<0.0148	<0.0028	<0.0132	<0.0029	0.0662	<0.0028	<0.0146	<0.003	<0.0029	<0.0028	<0.0157	<0.0029	NSL	NSL	NSL		
Anthracene	0.0487	<0.0014	0.184	<0.0014	<0.0014	0.164	<0.0068	0.0213	0.118	<0.0013	0.514	<0.0013	0.0829	<0.0014	<0.0013	<0.0013	0.133	<0.0014	100,000	196.9492	NSL		
Benzo(a)anthracene	0.0743	<0.0019	0.0221	<0.0018	<0.0018	0.567	0.0893	0.0809	0.312	<0.0018	0.325	<0.0017	0.291	<0.0018	<0.0017	<0.0017	0.422	<0.0018	20.8	NSL	NSL		
Benzo(a)pyrene	0.0745	<0.0026	0.0175	<0.0025	<0.0025	<b>0.647</b>	0.107	0.0899	0.315	<0.0024	0.0916	<0.0023	0.345	<0.0025	<0.0024	<0.0028	<b>0.535</b>	<0.0024	2.11	0.47	NSL		
Benzo(b)fluoranthene	0.099	<0.0021	0.024	<0.0021	<0.0021	<b>0.571</b>	0.102	0.0943	0.407	<0.0020	0.175	<0.0019	0.35	<0.002	<0.002	<0.0019	0.445	<0.0020	21.1	0.48	NSL		
Benzo(g,h,i)perylene	0.0508	<0.0021	<0.0022	<0.0021	0.0187	0.76	0.128	0.0836	0.248	<0.0020	0.0256	<0.0019	0.369	<0.002	<0.002	<0.0019	1.29	<0.0020	NSL	NSL	NSL		
Benzo(k)fluoranthene	0.0365	<0.0022	<0.0022	<0.0021	<0.0021	0.165	<0.0104	0.0292	0.173	<0.0020	0.0837	<0.002	0.104	<0.0021	<0.002	<0.002	0.1	<0.0021	211	NSL	NSL		
Chrysene	0.0976	<0.0018	0.0254	<0.0018	0.0177	<b>0.992</b>	0.143	0.128	<b>0.364</b>	<0.0017	<b>0.176</b>	<0.0017	<b>0.475</b>	<0.0018	<0.0017	<0.0016	<b>0.899</b>	<0.0017	2,110	0.1442	NSL		
Dibenz(a,h)anthracene	<0.003	<0.003	<0.003	<0.0029	<0.0029	0.286	<0.0142	0.0297	0.0635	<0.0028	0.0131	<0.0027	0.132	<0.0029	<0.0028	<0.0027	0.194	<0.0028	2.11	NSL	NSL		
Fluoranthene	0.208	<0.0028	0.0703	<0.0027	<0.0027	0.545	0.0845	0.108	0.667	<0.0026	1.6	<0.0025	0.340	<0.0026	<0.0026	<0.0025	0.422	<0.0026	30,100	88.9	NSL		
Fluorene	0.0147	<0.0028	0.584	0.0157	<0.0027	0.0988	<0.013	<0.0024	<0.0116	<0.0026	0.88	<0.0025	<0.0129	<0.0026	<0.0025	<0.0025	0.0727	<0.0026	30,100	14.8	NSL		
Indeno(1,2,3-cd)pyrene	0.0522	<0.0025	<0.0025	<0.0024	<0.0024	0.362	0.076	0.0536	0.239	<0.0023	0.0443	<0.0022	0.220	<0.0023	<0.0023	<0.0022	0.394	<0.0023	21.1	NSL	NSL		
Naphthalene	<0.002	<0.0021	<b>3.43</b>	<0.002	0.0282	<b>4.05</b>	0.235	<0.0018	<0.0087	<0.0019	<b>2.13</b>	<0.0019	0.431	<0.002	<0.0019	<0.0018	<b>2.04</b>	0.037	24.1	0.66	NSL		
Phenanthrene	0.185	<0.0032	1.25	0.0483	<0.0031	0.766	0.143	0.0978	0.441	<0.0030	3.11	<0.0029	0.355	<0.0031	<0.003	<0.0029	0.535	<0.003	NSL	NSL	NSL		
Pyrene	0.17	<0.003	0.0619	<0.0029	<0.0029	0.788	0.117	0.115	0.588	<0.0028	1.24	<0.0027	0.409	<0.0028	<0.0027	<0.0026	1.04	<0.0028	22,600	54.54	NSL		

**Notes:**  
**Bold** indicates an exceedance above a WI DNR NR 720 RCLs for Contaminated Soils criteria protective of Industrial Direct Contact, Protective of Groundwater Quality, and/or Background Threshold Value.  
 Background Threshold Values may be used as the applicable RCL during instances when the value exceeds an RCL.  
 Only detected compounds above laboratory quantitation limits, adjusted for dilution factor, percent moisture, initial weight and final volume, are shown. See laboratory report for further details.  
 Non-detect results reported as < LOQ.  
 J - Result is less than the LOQ but greater than or equal to the LOD and the concentration is an approximate value.  
<sup>1</sup> As presented in Ch. NR 720, Wis. Adm. Code, dated December 2018, <https://dnr.wisconsin.gov/topic/Brownfields/soil.html>  
<sup>2</sup> As presented for Background Threshold Values for element maximum levels in Wisconsin surface soils according to the United States Geological Survey Report, revised February 2013

**Acronyms:**  
 bgs - below ground surface  
 GP - geoprobe location  
 LOD - limit of detection  
 LOQ - limit of quantitation  
 mg/kg - milligrams per kilogram  
 NR - Natural Resources  
 NSL - no screening level  
 PAHs - polynuclear aromatic hydrocarbons  
 RCLs - Residual Contaminant Levels  
 RCRA - Resource Conservation and Recovery Act  
 RL - Reporting Limit  
 USEPA - United States Environmental Protection Agency  
 VOCs - volatile organic compounds  
 WI DNR - Wisconsin Department of Natural Resources

LAB REPORT

January 05, 2021

Anna Avila  
BBJ Group  
200 32nd Ave NW  
Owatonna, MN 55060

RE: Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

Dear Anna Avila:

Enclosed are the analytical results for sample(s) received by the laboratory on December 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay
- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jared Dickinson  
jared.dickinson@pacelabs.com  
(612)607-1700  
Project Manager

Enclosures

cc: Tarek Aboueid, BBJ Group  
Victoria Kunz, BBJ Group



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

---

### Pace Analytical Services - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Massachusetts DWP Certification #: via MN 027-053-137  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Certification #: via MN 027-053-137  
Minnesota Petrofund Certification #: 1240\*

Mississippi Certification #: MN00064  
Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification #: CL101  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #:74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## SAMPLE SUMMARY

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10542920001	GP-1	Solid	12/16/20 14:55	12/18/20 14:13
10542920002	GP-2	Solid	12/16/20 13:44	12/18/20 14:13
10542920003	GP-3	Solid	12/16/20 13:55	12/18/20 14:13
10542920004	GP-4	Solid	12/16/20 14:05	12/18/20 14:13
10542920005	GP-5	Solid	12/16/20 13:58	12/18/20 14:13
10542920006	GP-6	Solid	12/16/20 14:09	12/18/20 14:13
10542920007	GP-7	Solid	12/16/20 15:40	12/18/20 14:13
10542920008	GP-8	Solid	12/16/20 12:25	12/18/20 14:13
10542920009	GP-9	Solid	12/16/20 10:45	12/18/20 14:13
10542920010	GP-10	Solid	12/16/20 11:15	12/18/20 14:13
10542920011	GP-11	Solid	12/16/20 11:25	12/18/20 14:13
10542920012	GP-12	Solid	12/16/20 11:25	12/18/20 14:13
10542920013	GP-13 A	Solid	12/17/20 08:40	12/18/20 14:13
10542920014	GP-13 B	Solid	12/17/20 09:20	12/18/20 14:13
10542920015	GP-14 A	Solid	12/17/20 10:25	12/18/20 14:13
10542920016	GP-14 B	Solid	12/17/20 11:15	12/18/20 14:13
10542920017	GP-15 A	Solid	12/17/20 11:20	12/18/20 14:13
10542920018	GP-15 B	Solid	12/17/20 11:35	12/18/20 14:13
10542920019	Trip Blank	Solid	12/16/20 08:00	12/18/20 14:13
10542920020	Equipment Rinse	Water	12/17/20 08:15	12/18/20 14:13

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10542920001	GP-1	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JZ	18	PASI-M
		EPA 8260	MDS	64	PASI-G
10542920002	GP-2	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
10542920003	GP-3	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
10542920004	GP-4	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
10542920005	GP-5	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
10542920006	GP-6	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
10542920007	GP-7	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
10542920008	GP-8	EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10542920009	GP-9	ASTM D2974	JDL	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
10542920010	GP-10	ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
10542920011	GP-11	ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
10542920012	GP-12	ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
10542920013	GP-13 A	ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
10542920014	GP-13 B	ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
10542920015	GP-14 A	ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
		EPA 8260	MDS, SMT	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10542920016	GP-14 B	EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
10542920017	GP-15 A	EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
10542920018	GP-15 B	EPA 8260	MDS	64	PASI-G
		EPA 6020	KXS	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		ASTM D2974	RD1	1	PASI-M
		EPA 8270E by SIM	JNG	18	PASI-M
10542920019	Trip Blank	EPA 8260	MDS	64	PASI-G
		EPA 8260	SMT	64	PASI-G
10542920020	Equipment Rinse	EPA 6020	KXS	7	PASI-G
		EPA 7470	AJT	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay  
PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-1**      **Lab ID: 10542920001**      Collected: 12/16/20 14:55      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020    Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	5.0	mg/kg	3.6	1.1	20	12/28/20 08:06	12/31/20 17:05	7440-38-2	
Barium	206	mg/kg	3.5	1.1	20	12/28/20 08:06	12/31/20 17:05	7440-39-3	M0
Cadmium	ND	mg/kg	2.7	0.40	20	12/28/20 08:06	12/31/20 17:05	7440-43-9	D3
Chromium	46.9	mg/kg	8.2	2.5	20	12/28/20 08:06	12/31/20 17:05	7440-47-3	
Lead	29.3	mg/kg	2.7	0.74	20	12/28/20 08:06	12/31/20 01:43	7439-92-1	M0
Selenium	2.7	mg/kg	2.7	0.74	20	12/28/20 08:06	12/31/20 17:05	7782-49-2	
Silver	ND	mg/kg	1.4	0.39	20	12/28/20 08:06	12/31/20 17:05	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471    Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.047	0.013	1	12/29/20 11:56	12/30/20 11:20	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	26.5	%	0.10	0.10	1		12/29/20 13:28		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	13.6	ug/kg	2.0	0.61	1	12/18/20 16:56	12/23/20 15:28	83-32-9	
Acenaphthylene	ND	ug/kg	3.1	0.93	1	12/18/20 16:56	12/23/20 15:28	208-96-8	R1
Anthracene	48.7	ug/kg	1.4	0.43	1	12/18/20 16:56	12/23/20 15:28	120-12-7	
Benzo(a)anthracene	74.3	ug/kg	1.9	0.56	1	12/18/20 16:56	12/23/20 15:28	56-55-3	
Benzo(a)pyrene	74.5	ug/kg	2.5	0.77	1	12/18/20 16:56	12/23/20 15:28	50-32-8	
Benzo(b)fluoranthene	99.0	ug/kg	2.1	0.63	1	12/18/20 16:56	12/23/20 15:28	205-99-2	lp
Benzo(g,h,i)perylene	50.8	ug/kg	2.1	0.63	1	12/18/20 16:56	12/23/20 15:28	191-24-2	
Benzo(k)fluoranthene	36.5	ug/kg	2.2	0.65	1	12/18/20 16:56	12/23/20 15:28	207-08-9	lp
Chrysene	97.6	ug/kg	1.8	0.55	1	12/18/20 16:56	12/23/20 15:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3.0	0.89	1	12/18/20 16:56	12/23/20 15:28	53-70-3	
Fluoranthene	208	ug/kg	2.7	0.82	1	12/18/20 16:56	12/23/20 15:28	206-44-0	M1,R1
Fluorene	14.7	ug/kg	2.7	0.82	1	12/18/20 16:56	12/23/20 15:28	86-73-7	
Indeno(1,2,3-cd)pyrene	52.2	ug/kg	2.4	0.73	1	12/18/20 16:56	12/23/20 15:28	193-39-5	
Naphthalene	ND	ug/kg	2.0	0.61	1	12/18/20 16:56	12/23/20 15:28	91-20-3	L2,R1
Phenanthrene	185	ug/kg	3.2	0.96	1	12/18/20 16:56	12/23/20 15:28	85-01-8	M1,R1
Pyrene	170	ug/kg	2.9	0.88	1	12/18/20 16:56	12/23/20 15:28	129-00-0	M1
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	63	%	30-138		1	12/18/20 16:56	12/23/20 15:28	321-60-8	
p-Terphenyl-d14 (S)	77	%	30-143		1	12/18/20 16:56	12/23/20 15:28	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	70.9	17.0	1	12/24/20 08:15	12/24/20 20:23	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	70.9	18.1	1	12/24/20 08:15	12/24/20 20:23	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	70.9	25.6	1	12/24/20 08:15	12/24/20 20:23	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	70.9	25.8	1	12/24/20 08:15	12/24/20 20:23	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-1**      **Lab ID: 10542920001**      Collected: 12/16/20 14:55      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	70.9	18.1	1	12/24/20 08:15	12/24/20 20:23	75-34-3	
1,1-Dichloroethene	ND	ug/kg	70.9	23.5	1	12/24/20 08:15	12/24/20 20:23	75-35-4	
1,1-Dichloropropene	ND	ug/kg	70.9	23.0	1	12/24/20 08:15	12/24/20 20:23	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	354	78.9	1	12/24/20 08:15	12/24/20 20:23	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	70.9	34.4	1	12/24/20 08:15	12/24/20 20:23	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	354	58.4	1	12/24/20 08:15	12/24/20 20:23	120-82-1	
1,2,4-Trimethylbenzene	<b>103</b>	ug/kg	70.9	21.1	1	12/24/20 08:15	12/24/20 20:23	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	354	55.0	1	12/24/20 08:15	12/24/20 20:23	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	70.9	19.4	1	12/24/20 08:15	12/24/20 20:23	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	70.9	22.0	1	12/24/20 08:15	12/24/20 20:23	95-50-1	
1,2-Dichloroethane	ND	ug/kg	70.9	16.3	1	12/24/20 08:15	12/24/20 20:23	107-06-2	
1,2-Dichloropropane	ND	ug/kg	70.9	16.9	1	12/24/20 08:15	12/24/20 20:23	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	70.9	22.8	1	12/24/20 08:15	12/24/20 20:23	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	70.9	19.4	1	12/24/20 08:15	12/24/20 20:23	541-73-1	
1,3-Dichloropropane	ND	ug/kg	70.9	15.4	1	12/24/20 08:15	12/24/20 20:23	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	70.9	19.4	1	12/24/20 08:15	12/24/20 20:23	106-46-7	
2,2-Dichloropropane	ND	ug/kg	70.9	19.1	1	12/24/20 08:15	12/24/20 20:23	594-20-7	
2-Chlorotoluene	ND	ug/kg	70.9	23.0	1	12/24/20 08:15	12/24/20 20:23	95-49-8	
4-Chlorotoluene	ND	ug/kg	70.9	26.9	1	12/24/20 08:15	12/24/20 20:23	106-43-4	
Benzene	<b>68.4</b>	ug/kg	28.3	16.9	1	12/24/20 08:15	12/24/20 20:23	71-43-2	
Bromobenzene	ND	ug/kg	70.9	27.6	1	12/24/20 08:15	12/24/20 20:23	108-86-1	
Bromochloromethane	ND	ug/kg	70.9	19.4	1	12/24/20 08:15	12/24/20 20:23	74-97-5	
Bromodichloromethane	ND	ug/kg	70.9	16.9	1	12/24/20 08:15	12/24/20 20:23	75-27-4	
Bromoform	ND	ug/kg	354	312	1	12/24/20 08:15	12/24/20 20:23	75-25-2	
Bromomethane	ND	ug/kg	354	99.3	1	12/24/20 08:15	12/24/20 20:23	74-83-9	
Carbon tetrachloride	ND	ug/kg	70.9	15.6	1	12/24/20 08:15	12/24/20 20:23	56-23-5	
Chlorobenzene	ND	ug/kg	70.9	8.5	1	12/24/20 08:15	12/24/20 20:23	108-90-7	
Chloroethane	ND	ug/kg	354	29.9	1	12/24/20 08:15	12/24/20 20:23	75-00-3	
Chloroform	ND	ug/kg	354	50.7	1	12/24/20 08:15	12/24/20 20:23	67-66-3	
Chloromethane	ND	ug/kg	70.9	26.9	1	12/24/20 08:15	12/24/20 20:23	74-87-3	
Dibromochloromethane	ND	ug/kg	354	242	1	12/24/20 08:15	12/24/20 20:23	124-48-1	
Dibromomethane	ND	ug/kg	70.9	21.0	1	12/24/20 08:15	12/24/20 20:23	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	70.9	30.5	1	12/24/20 08:15	12/24/20 20:23	75-71-8	L1
Diisopropyl ether	ND	ug/kg	70.9	17.6	1	12/24/20 08:15	12/24/20 20:23	108-20-3	
Ethylbenzene	ND	ug/kg	70.9	16.9	1	12/24/20 08:15	12/24/20 20:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	354	141	1	12/24/20 08:15	12/24/20 20:23	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	70.9	19.1	1	12/24/20 08:15	12/24/20 20:23	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	70.9	20.8	1	12/24/20 08:15	12/24/20 20:23	1634-04-4	
Methylene Chloride	ND	ug/kg	70.9	19.7	1	12/24/20 08:15	12/24/20 20:23	75-09-2	
Naphthalene	ND	ug/kg	354	22.1	1	12/24/20 08:15	12/24/20 20:23	91-20-3	
Styrene	ND	ug/kg	70.9	18.1	1	12/24/20 08:15	12/24/20 20:23	100-42-5	
Tetrachloroethene	ND	ug/kg	70.9	27.5	1	12/24/20 08:15	12/24/20 20:23	127-18-4	
Toluene	ND	ug/kg	70.9	17.9	1	12/24/20 08:15	12/24/20 20:23	108-88-3	
Trichloroethene	ND	ug/kg	70.9	26.5	1	12/24/20 08:15	12/24/20 20:23	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-1**      **Lab ID: 10542920001**      Collected: 12/16/20 14:55      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	70.9	20.5	1	12/24/20 08:15	12/24/20 20:23	75-69-4	
Vinyl chloride	ND	ug/kg	70.9	14.3	1	12/24/20 08:15	12/24/20 20:23	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	70.9	15.2	1	12/24/20 08:15	12/24/20 20:23	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	354	46.8	1	12/24/20 08:15	12/24/20 20:23	10061-01-5	
m&p-Xylene	ND	ug/kg	142	29.9	1	12/24/20 08:15	12/24/20 20:23	179601-23-1	
n-Butylbenzene	ND	ug/kg	70.9	32.5	1	12/24/20 08:15	12/24/20 20:23	104-51-8	
n-Propylbenzene	<b>126</b>	ug/kg	70.9	17.0	1	12/24/20 08:15	12/24/20 20:23	103-65-1	
o-Xylene	ND	ug/kg	70.9	21.3	1	12/24/20 08:15	12/24/20 20:23	95-47-6	
p-Isopropyltoluene	ND	ug/kg	70.9	21.5	1	12/24/20 08:15	12/24/20 20:23	99-87-6	
sec-Butylbenzene	ND	ug/kg	70.9	17.3	1	12/24/20 08:15	12/24/20 20:23	135-98-8	
tert-Butylbenzene	ND	ug/kg	70.9	22.2	1	12/24/20 08:15	12/24/20 20:23	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	70.9	15.3	1	12/24/20 08:15	12/24/20 20:23	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	354	203	1	12/24/20 08:15	12/24/20 20:23	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	85	%	56-140		1	12/24/20 08:15	12/24/20 20:23	2037-26-5	
4-Bromofluorobenzene (S)	86	%	52-137		1	12/24/20 08:15	12/24/20 20:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	82	%	50-150		1	12/24/20 08:15	12/24/20 20:23	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-2**      **Lab ID: 10542920002**      Collected: 12/16/20 13:44      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020    Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	ND	mg/kg	7.1	2.1	40	12/28/20 08:06	01/04/21 23:42	7440-38-2	D3
Barium	<b>280</b>	mg/kg	3.5	1.1	20	12/28/20 08:06	12/31/20 17:32	7440-39-3	
Cadmium	ND	mg/kg	5.3	0.78	40	12/28/20 08:06	01/04/21 23:42	7440-43-9	D3
Chromium	<b>67.0</b>	mg/kg	8.1	2.4	20	12/28/20 08:06	12/31/20 17:32	7440-47-3	
Lead	<b>12.2</b>	mg/kg	2.7	0.73	20	12/28/20 08:06	12/31/20 02:10	7439-92-1	
Selenium	ND	mg/kg	5.3	1.5	40	12/28/20 08:06	01/04/21 23:42	7782-49-2	D3
Silver	ND	mg/kg	2.7	0.76	40	12/28/20 08:06	01/04/21 23:42	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471    Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.046	0.013	1	12/29/20 11:56	12/30/20 11:22	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>27.8</b>	%	0.10	0.10	1		12/29/20 13:28		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 16:34	83-32-9	
Acenaphthylene	ND	ug/kg	3.1	0.94	1	12/18/20 16:56	12/23/20 16:34	208-96-8	
Anthracene	ND	ug/kg	1.4	0.44	1	12/18/20 16:56	12/23/20 16:34	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 16:34	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.6	0.78	1	12/18/20 16:56	12/23/20 16:34	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2.1	0.64	1	12/18/20 16:56	12/23/20 16:34	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	2.1	0.64	1	12/18/20 16:56	12/23/20 16:34	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.2	0.66	1	12/18/20 16:56	12/23/20 16:34	207-08-9	
Chrysene	ND	ug/kg	1.8	0.55	1	12/18/20 16:56	12/23/20 16:34	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3.0	0.90	1	12/18/20 16:56	12/23/20 16:34	53-70-3	
Fluoranthene	ND	ug/kg	2.8	0.83	1	12/18/20 16:56	12/23/20 16:34	206-44-0	
Fluorene	ND	ug/kg	2.8	0.83	1	12/18/20 16:56	12/23/20 16:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.5	0.74	1	12/18/20 16:56	12/23/20 16:34	193-39-5	
Naphthalene	ND	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 16:34	91-20-3	L2
Phenanthrene	ND	ug/kg	3.2	0.97	1	12/18/20 16:56	12/23/20 16:34	85-01-8	
Pyrene	ND	ug/kg	3.0	0.89	1	12/18/20 16:56	12/23/20 16:34	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	68	%	30-138		1	12/18/20 16:56	12/23/20 16:34	321-60-8	
p-Terphenyl-d14 (S)	72	%	30-143		1	12/18/20 16:56	12/23/20 16:34	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	71.4	17.1	1	12/24/20 08:15	12/24/20 20:43	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	71.4	18.3	1	12/24/20 08:15	12/24/20 20:43	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	71.4	25.9	1	12/24/20 08:15	12/24/20 20:43	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	71.4	26.0	1	12/24/20 08:15	12/24/20 20:43	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-2**      **Lab ID: 10542920002**      Collected: 12/16/20 13:44      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	71.4	18.3	1	12/24/20 08:15	12/24/20 20:43	75-34-3	
1,1-Dichloroethene	ND	ug/kg	71.4	23.7	1	12/24/20 08:15	12/24/20 20:43	75-35-4	
1,1-Dichloropropene	ND	ug/kg	71.4	23.1	1	12/24/20 08:15	12/24/20 20:43	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	357	79.6	1	12/24/20 08:15	12/24/20 20:43	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	71.4	34.7	1	12/24/20 08:15	12/24/20 20:43	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	357	58.9	1	12/24/20 08:15	12/24/20 20:43	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	71.4	21.3	1	12/24/20 08:15	12/24/20 20:43	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	357	55.4	1	12/24/20 08:15	12/24/20 20:43	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	71.4	19.6	1	12/24/20 08:15	12/24/20 20:43	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	71.4	22.1	1	12/24/20 08:15	12/24/20 20:43	95-50-1	
1,2-Dichloroethane	ND	ug/kg	71.4	16.4	1	12/24/20 08:15	12/24/20 20:43	107-06-2	
1,2-Dichloropropane	ND	ug/kg	71.4	17.0	1	12/24/20 08:15	12/24/20 20:43	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	71.4	23.0	1	12/24/20 08:15	12/24/20 20:43	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	71.4	19.6	1	12/24/20 08:15	12/24/20 20:43	541-73-1	
1,3-Dichloropropane	ND	ug/kg	71.4	15.6	1	12/24/20 08:15	12/24/20 20:43	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	71.4	19.6	1	12/24/20 08:15	12/24/20 20:43	106-46-7	
2,2-Dichloropropane	ND	ug/kg	71.4	19.3	1	12/24/20 08:15	12/24/20 20:43	594-20-7	
2-Chlorotoluene	ND	ug/kg	71.4	23.1	1	12/24/20 08:15	12/24/20 20:43	95-49-8	
4-Chlorotoluene	ND	ug/kg	71.4	27.1	1	12/24/20 08:15	12/24/20 20:43	106-43-4	
Benzene	ND	ug/kg	28.6	17.0	1	12/24/20 08:15	12/24/20 20:43	71-43-2	
Bromobenzene	ND	ug/kg	71.4	27.9	1	12/24/20 08:15	12/24/20 20:43	108-86-1	
Bromochloromethane	ND	ug/kg	71.4	19.6	1	12/24/20 08:15	12/24/20 20:43	74-97-5	
Bromodichloromethane	ND	ug/kg	71.4	17.0	1	12/24/20 08:15	12/24/20 20:43	75-27-4	
Bromoform	ND	ug/kg	357	314	1	12/24/20 08:15	12/24/20 20:43	75-25-2	
Bromomethane	ND	ug/kg	357	100	1	12/24/20 08:15	12/24/20 20:43	74-83-9	
Carbon tetrachloride	ND	ug/kg	71.4	15.7	1	12/24/20 08:15	12/24/20 20:43	56-23-5	
Chlorobenzene	ND	ug/kg	71.4	8.6	1	12/24/20 08:15	12/24/20 20:43	108-90-7	
Chloroethane	ND	ug/kg	357	30.1	1	12/24/20 08:15	12/24/20 20:43	75-00-3	
Chloroform	ND	ug/kg	357	51.1	1	12/24/20 08:15	12/24/20 20:43	67-66-3	
Chloromethane	ND	ug/kg	71.4	27.1	1	12/24/20 08:15	12/24/20 20:43	74-87-3	
Dibromochloromethane	ND	ug/kg	357	244	1	12/24/20 08:15	12/24/20 20:43	124-48-1	
Dibromomethane	ND	ug/kg	71.4	21.1	1	12/24/20 08:15	12/24/20 20:43	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	71.4	30.7	1	12/24/20 08:15	12/24/20 20:43	75-71-8	L1
Diisopropyl ether	ND	ug/kg	71.4	17.7	1	12/24/20 08:15	12/24/20 20:43	108-20-3	
Ethylbenzene	ND	ug/kg	71.4	17.0	1	12/24/20 08:15	12/24/20 20:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	357	142	1	12/24/20 08:15	12/24/20 20:43	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	71.4	19.3	1	12/24/20 08:15	12/24/20 20:43	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	71.4	21.0	1	12/24/20 08:15	12/24/20 20:43	1634-04-4	
Methylene Chloride	ND	ug/kg	71.4	19.9	1	12/24/20 08:15	12/24/20 20:43	75-09-2	
Naphthalene	ND	ug/kg	357	22.3	1	12/24/20 08:15	12/24/20 20:43	91-20-3	
Styrene	ND	ug/kg	71.4	18.3	1	12/24/20 08:15	12/24/20 20:43	100-42-5	
Tetrachloroethene	ND	ug/kg	71.4	27.7	1	12/24/20 08:15	12/24/20 20:43	127-18-4	
Toluene	ND	ug/kg	71.4	18.0	1	12/24/20 08:15	12/24/20 20:43	108-88-3	
Trichloroethene	ND	ug/kg	71.4	26.7	1	12/24/20 08:15	12/24/20 20:43	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-2**      **Lab ID: 10542920002**      Collected: 12/16/20 13:44      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	71.4	20.7	1	12/24/20 08:15	12/24/20 20:43	75-69-4	
Vinyl chloride	ND	ug/kg	71.4	14.4	1	12/24/20 08:15	12/24/20 20:43	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	71.4	15.3	1	12/24/20 08:15	12/24/20 20:43	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	357	47.1	1	12/24/20 08:15	12/24/20 20:43	10061-01-5	
m&p-Xylene	ND	ug/kg	143	30.1	1	12/24/20 08:15	12/24/20 20:43	179601-23-1	
n-Butylbenzene	ND	ug/kg	71.4	32.7	1	12/24/20 08:15	12/24/20 20:43	104-51-8	
n-Propylbenzene	ND	ug/kg	71.4	17.1	1	12/24/20 08:15	12/24/20 20:43	103-65-1	
o-Xylene	ND	ug/kg	71.4	21.4	1	12/24/20 08:15	12/24/20 20:43	95-47-6	
p-Isopropyltoluene	ND	ug/kg	71.4	21.7	1	12/24/20 08:15	12/24/20 20:43	99-87-6	
sec-Butylbenzene	ND	ug/kg	71.4	17.4	1	12/24/20 08:15	12/24/20 20:43	135-98-8	
tert-Butylbenzene	ND	ug/kg	71.4	22.4	1	12/24/20 08:15	12/24/20 20:43	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	71.4	15.4	1	12/24/20 08:15	12/24/20 20:43	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	357	204	1	12/24/20 08:15	12/24/20 20:43	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	76	%	56-140		1	12/24/20 08:15	12/24/20 20:43	2037-26-5	
4-Bromofluorobenzene (S)	78	%	52-137		1	12/24/20 08:15	12/24/20 20:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	79	%	50-150		1	12/24/20 08:15	12/24/20 20:43	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-3**      **Lab ID: 10542920003**      Collected: 12/16/20 13:55      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	<b>4.9</b>	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 17:46	7440-38-2	
Barium	<b>133</b>	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 17:46	7440-39-3	
Cadmium	ND	mg/kg	2.6	0.38	20	12/28/20 08:06	12/31/20 17:46	7440-43-9	D3
Chromium	<b>56.8</b>	mg/kg	7.9	2.4	20	12/28/20 08:06	12/31/20 17:46	7440-47-3	
Lead	<b>13.0</b>	mg/kg	2.6	0.70	20	12/28/20 08:06	12/31/20 02:24	7439-92-1	
Selenium	ND	mg/kg	2.6	0.71	20	12/28/20 08:06	12/31/20 17:46	7782-49-2	D3
Silver	ND	mg/kg	1.3	0.37	20	12/28/20 08:06	12/31/20 17:46	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.047	0.014	1	12/29/20 11:56	12/30/20 11:24	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>29.3</b>	%	0.10	0.10	1		12/29/20 13:28		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	<b>261</b>	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 17:17	83-32-9	
Acenaphthylene	<b>103</b>	ug/kg	3.2	0.95	1	12/18/20 16:56	12/23/20 17:17	208-96-8	
Anthracene	<b>184</b>	ug/kg	1.5	0.44	1	12/18/20 16:56	12/23/20 17:17	120-12-7	
Benzo(a)anthracene	<b>22.1</b>	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 17:17	56-55-3	
Benzo(a)pyrene	<b>17.5</b>	ug/kg	2.6	0.78	1	12/18/20 16:56	12/23/20 17:17	50-32-8	
Benzo(b)fluoranthene	<b>24.0</b>	ug/kg	2.2	0.65	1	12/18/20 16:56	12/23/20 17:17	205-99-2	lp
Benzo(g,h,i)perylene	ND	ug/kg	2.2	0.65	1	12/18/20 16:56	12/23/20 17:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.2	0.67	1	12/18/20 16:56	12/23/20 17:17	207-08-9	lp
Chrysene	<b>25.4</b>	ug/kg	1.9	0.56	1	12/18/20 16:56	12/23/20 17:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3.0	0.92	1	12/18/20 16:56	12/23/20 17:17	53-70-3	
Fluoranthene	<b>70.3</b>	ug/kg	2.8	0.84	1	12/18/20 16:56	12/23/20 17:17	206-44-0	
Fluorene	<b>584</b>	ug/kg	14.0	4.2	5	12/18/20 16:56	12/23/20 16:56	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.5	0.75	1	12/18/20 16:56	12/23/20 17:17	193-39-5	
Naphthalene	<b>3430</b>	ug/kg	20.9	6.3	10	12/18/20 16:56	12/28/20 13:39	91-20-3	L2
Phenanthrene	<b>1250</b>	ug/kg	16.3	4.9	5	12/18/20 16:56	12/23/20 16:56	85-01-8	
Pyrene	<b>61.9</b>	ug/kg	3.0	0.90	1	12/18/20 16:56	12/23/20 17:17	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	62	%	30-138		1	12/18/20 16:56	12/23/20 17:17	321-60-8	
p-Terphenyl-d14 (S)	74	%	30-143		1	12/18/20 16:56	12/23/20 17:17	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	76.1	18.3	1	12/24/20 08:15	12/24/20 21:03	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	76.1	19.5	1	12/24/20 08:15	12/24/20 21:03	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	76.1	27.5	1	12/24/20 08:15	12/24/20 21:03	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	76.1	27.7	1	12/24/20 08:15	12/24/20 21:03	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

Sample: GP-3 Lab ID: 10542920003 Collected: 12/16/20 13:55 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	76.1	19.5	1	12/24/20 08:15	12/24/20 21:03	75-34-3	
1,1-Dichloroethene	ND	ug/kg	76.1	25.2	1	12/24/20 08:15	12/24/20 21:03	75-35-4	
1,1-Dichloropropene	ND	ug/kg	76.1	24.6	1	12/24/20 08:15	12/24/20 21:03	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	380	84.7	1	12/24/20 08:15	12/24/20 21:03	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	76.1	37.0	1	12/24/20 08:15	12/24/20 21:03	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	380	62.7	1	12/24/20 08:15	12/24/20 21:03	120-82-1	
1,2,4-Trimethylbenzene	893	ug/kg	76.1	22.7	1	12/24/20 08:15	12/24/20 21:03	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	380	59.0	1	12/24/20 08:15	12/24/20 21:03	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	76.1	20.8	1	12/24/20 08:15	12/24/20 21:03	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	76.1	23.6	1	12/24/20 08:15	12/24/20 21:03	95-50-1	
1,2-Dichloroethane	ND	ug/kg	76.1	17.5	1	12/24/20 08:15	12/24/20 21:03	107-06-2	
1,2-Dichloropropane	ND	ug/kg	76.1	18.1	1	12/24/20 08:15	12/24/20 21:03	78-87-5	
1,3,5-Trimethylbenzene	353	ug/kg	76.1	24.5	1	12/24/20 08:15	12/24/20 21:03	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	76.1	20.8	1	12/24/20 08:15	12/24/20 21:03	541-73-1	
1,3-Dichloropropane	ND	ug/kg	76.1	16.6	1	12/24/20 08:15	12/24/20 21:03	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	76.1	20.8	1	12/24/20 08:15	12/24/20 21:03	106-46-7	
2,2-Dichloropropane	ND	ug/kg	76.1	20.5	1	12/24/20 08:15	12/24/20 21:03	594-20-7	
2-Chlorotoluene	ND	ug/kg	76.1	24.6	1	12/24/20 08:15	12/24/20 21:03	95-49-8	
4-Chlorotoluene	ND	ug/kg	76.1	28.9	1	12/24/20 08:15	12/24/20 21:03	106-43-4	
Benzene	426	ug/kg	30.4	18.1	1	12/24/20 08:15	12/24/20 21:03	71-43-2	
Bromobenzene	ND	ug/kg	76.1	29.7	1	12/24/20 08:15	12/24/20 21:03	108-86-1	
Bromochloromethane	ND	ug/kg	76.1	20.8	1	12/24/20 08:15	12/24/20 21:03	74-97-5	
Bromodichloromethane	ND	ug/kg	76.1	18.1	1	12/24/20 08:15	12/24/20 21:03	75-27-4	
Bromoform	ND	ug/kg	380	335	1	12/24/20 08:15	12/24/20 21:03	75-25-2	
Bromomethane	ND	ug/kg	380	107	1	12/24/20 08:15	12/24/20 21:03	74-83-9	
Carbon tetrachloride	ND	ug/kg	76.1	16.7	1	12/24/20 08:15	12/24/20 21:03	56-23-5	
Chlorobenzene	ND	ug/kg	76.1	9.1	1	12/24/20 08:15	12/24/20 21:03	108-90-7	
Chloroethane	ND	ug/kg	380	32.1	1	12/24/20 08:15	12/24/20 21:03	75-00-3	
Chloroform	ND	ug/kg	380	54.5	1	12/24/20 08:15	12/24/20 21:03	67-66-3	
Chloromethane	ND	ug/kg	76.1	28.9	1	12/24/20 08:15	12/24/20 21:03	74-87-3	
Dibromochloromethane	ND	ug/kg	380	260	1	12/24/20 08:15	12/24/20 21:03	124-48-1	
Dibromomethane	ND	ug/kg	76.1	22.5	1	12/24/20 08:15	12/24/20 21:03	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	76.1	32.7	1	12/24/20 08:15	12/24/20 21:03	75-71-8	L1
Diisopropyl ether	ND	ug/kg	76.1	18.9	1	12/24/20 08:15	12/24/20 21:03	108-20-3	
Ethylbenzene	310	ug/kg	76.1	18.1	1	12/24/20 08:15	12/24/20 21:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	380	151	1	12/24/20 08:15	12/24/20 21:03	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	76.1	20.5	1	12/24/20 08:15	12/24/20 21:03	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	76.1	22.4	1	12/24/20 08:15	12/24/20 21:03	1634-04-4	
Methylene Chloride	ND	ug/kg	76.1	21.1	1	12/24/20 08:15	12/24/20 21:03	75-09-2	
Naphthalene	425	ug/kg	380	23.7	1	12/24/20 08:15	12/24/20 21:03	91-20-3	
Styrene	ND	ug/kg	76.1	19.5	1	12/24/20 08:15	12/24/20 21:03	100-42-5	
Tetrachloroethene	ND	ug/kg	76.1	29.5	1	12/24/20 08:15	12/24/20 21:03	127-18-4	
Toluene	1230	ug/kg	76.1	19.2	1	12/24/20 08:15	12/24/20 21:03	108-88-3	
Trichloroethene	ND	ug/kg	76.1	28.4	1	12/24/20 08:15	12/24/20 21:03	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-3**      **Lab ID: 10542920003**      Collected: 12/16/20 13:55      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	76.1	22.1	1	12/24/20 08:15	12/24/20 21:03	75-69-4	
Vinyl chloride	ND	ug/kg	76.1	15.4	1	12/24/20 08:15	12/24/20 21:03	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	76.1	16.3	1	12/24/20 08:15	12/24/20 21:03	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	380	50.2	1	12/24/20 08:15	12/24/20 21:03	10061-01-5	
m&p-Xylene	<b>1750</b>	ug/kg	152	32.1	1	12/24/20 08:15	12/24/20 21:03	179601-23-1	
n-Butylbenzene	ND	ug/kg	76.1	34.8	1	12/24/20 08:15	12/24/20 21:03	104-51-8	
n-Propylbenzene	<b>111</b>	ug/kg	76.1	18.3	1	12/24/20 08:15	12/24/20 21:03	103-65-1	
o-Xylene	<b>538</b>	ug/kg	76.1	22.8	1	12/24/20 08:15	12/24/20 21:03	95-47-6	
p-Isopropyltoluene	ND	ug/kg	76.1	23.1	1	12/24/20 08:15	12/24/20 21:03	99-87-6	
sec-Butylbenzene	ND	ug/kg	76.1	18.6	1	12/24/20 08:15	12/24/20 21:03	135-98-8	
tert-Butylbenzene	ND	ug/kg	76.1	23.9	1	12/24/20 08:15	12/24/20 21:03	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	76.1	16.4	1	12/24/20 08:15	12/24/20 21:03	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	380	218	1	12/24/20 08:15	12/24/20 21:03	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	98	%	56-140		1	12/24/20 08:15	12/24/20 21:03	2037-26-5	
4-Bromofluorobenzene (S)	103	%	52-137		1	12/24/20 08:15	12/24/20 21:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	50-150		1	12/24/20 08:15	12/24/20 21:03	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-4**      **Lab ID: 10542920004**      Collected: 12/16/20 14:05      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	ND	mg/kg	6.8	2.0	40	12/28/20 08:06	01/04/21 23:56	7440-38-2	D3
Barium	<b>303</b>	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 17:53	7440-39-3	
Cadmium	ND	mg/kg	5.1	0.75	40	12/28/20 08:06	01/04/21 23:56	7440-43-9	D3
Chromium	<b>65.0</b>	mg/kg	7.8	2.3	20	12/28/20 08:06	12/31/20 17:53	7440-47-3	
Lead	<b>11.8</b>	mg/kg	2.6	0.70	20	12/28/20 08:06	12/31/20 02:30	7439-92-1	
Selenium	ND	mg/kg	5.1	1.4	40	12/28/20 08:06	01/04/21 23:56	7782-49-2	D3
Silver	ND	mg/kg	2.6	0.74	40	12/28/20 08:06	01/04/21 23:56	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.041	0.012	1	12/29/20 11:56	12/30/20 11:27	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>25.3</b>	%	0.10	0.10	1		12/29/20 13:29		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 17:39	83-32-9	
Acenaphthylene	ND	ug/kg	3.0	0.91	1	12/18/20 16:56	12/23/20 17:39	208-96-8	
Anthracene	ND	ug/kg	1.4	0.42	1	12/18/20 16:56	12/23/20 17:39	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.8	0.55	1	12/18/20 16:56	12/23/20 17:39	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.5	0.75	1	12/18/20 16:56	12/23/20 17:39	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 17:39	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 17:39	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.1	0.64	1	12/18/20 16:56	12/23/20 17:39	207-08-9	
Chrysene	ND	ug/kg	1.8	0.53	1	12/18/20 16:56	12/23/20 17:39	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.9	0.87	1	12/18/20 16:56	12/23/20 17:39	53-70-3	
Fluoranthene	ND	ug/kg	2.7	0.80	1	12/18/20 16:56	12/23/20 17:39	206-44-0	
Fluorene	<b>15.7</b>	ug/kg	2.7	0.80	1	12/18/20 16:56	12/23/20 17:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.4	0.71	1	12/18/20 16:56	12/23/20 17:39	193-39-5	
Naphthalene	ND	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 17:39	91-20-3	L2
Phenanthrene	<b>48.3</b>	ug/kg	3.1	0.93	1	12/18/20 16:56	12/23/20 17:39	85-01-8	
Pyrene	ND	ug/kg	2.9	0.86	1	12/18/20 16:56	12/23/20 17:39	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	70	%	30-138		1	12/18/20 16:56	12/23/20 17:39	321-60-8	
p-Terphenyl-d14 (S)	74	%	30-143		1	12/18/20 16:56	12/23/20 17:39	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	154	36.9	2	12/24/20 08:15	12/25/20 02:45	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	154	39.4	2	12/24/20 08:15	12/25/20 02:45	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	154	55.7	2	12/24/20 08:15	12/25/20 02:45	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	154	56.0	2	12/24/20 08:15	12/25/20 02:45	79-00-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-4**      **Lab ID: 10542920004**      Collected: 12/16/20 14:05      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	154	39.4	2	12/24/20 08:15	12/25/20 02:45	75-34-3	
1,1-Dichloroethene	ND	ug/kg	154	51.1	2	12/24/20 08:15	12/25/20 02:45	75-35-4	
1,1-Dichloropropene	ND	ug/kg	154	49.9	2	12/24/20 08:15	12/25/20 02:45	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	770	171	2	12/24/20 08:15	12/25/20 02:45	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	154	74.8	2	12/24/20 08:15	12/25/20 02:45	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	770	127	2	12/24/20 08:15	12/25/20 02:45	120-82-1	
1,2,4-Trimethylbenzene	<b>2660</b>	ug/kg	154	45.9	2	12/24/20 08:15	12/25/20 02:45	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	770	119	2	12/24/20 08:15	12/25/20 02:45	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	154	42.2	2	12/24/20 08:15	12/25/20 02:45	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	154	47.7	2	12/24/20 08:15	12/25/20 02:45	95-50-1	
1,2-Dichloroethane	ND	ug/kg	154	35.4	2	12/24/20 08:15	12/25/20 02:45	107-06-2	
1,2-Dichloropropane	ND	ug/kg	154	36.6	2	12/24/20 08:15	12/25/20 02:45	78-87-5	
1,3,5-Trimethylbenzene	<b>1690</b>	ug/kg	154	49.6	2	12/24/20 08:15	12/25/20 02:45	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	154	42.2	2	12/24/20 08:15	12/25/20 02:45	541-73-1	
1,3-Dichloropropane	ND	ug/kg	154	33.6	2	12/24/20 08:15	12/25/20 02:45	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	154	42.2	2	12/24/20 08:15	12/25/20 02:45	106-46-7	
2,2-Dichloropropane	ND	ug/kg	154	41.6	2	12/24/20 08:15	12/25/20 02:45	594-20-7	
2-Chlorotoluene	ND	ug/kg	154	49.9	2	12/24/20 08:15	12/25/20 02:45	95-49-8	
4-Chlorotoluene	ND	ug/kg	154	58.5	2	12/24/20 08:15	12/25/20 02:45	106-43-4	
Benzene	<b>1900</b>	ug/kg	61.6	36.6	2	12/24/20 08:15	12/25/20 02:45	71-43-2	
Bromobenzene	ND	ug/kg	154	60.0	2	12/24/20 08:15	12/25/20 02:45	108-86-1	
Bromochloromethane	ND	ug/kg	154	42.2	2	12/24/20 08:15	12/25/20 02:45	74-97-5	
Bromodichloromethane	ND	ug/kg	154	36.6	2	12/24/20 08:15	12/25/20 02:45	75-27-4	
Bromoform	ND	ug/kg	770	677	2	12/24/20 08:15	12/25/20 02:45	75-25-2	
Bromomethane	ND	ug/kg	770	216	2	12/24/20 08:15	12/25/20 02:45	74-83-9	
Carbon tetrachloride	ND	ug/kg	154	33.9	2	12/24/20 08:15	12/25/20 02:45	56-23-5	
Chlorobenzene	ND	ug/kg	154	18.4	2	12/24/20 08:15	12/25/20 02:45	108-90-7	
Chloroethane	ND	ug/kg	770	64.9	2	12/24/20 08:15	12/25/20 02:45	75-00-3	
Chloroform	ND	ug/kg	770	110	2	12/24/20 08:15	12/25/20 02:45	67-66-3	
Chloromethane	ND	ug/kg	154	58.5	2	12/24/20 08:15	12/25/20 02:45	74-87-3	
Dibromochloromethane	ND	ug/kg	770	526	2	12/24/20 08:15	12/25/20 02:45	124-48-1	
Dibromomethane	ND	ug/kg	154	45.6	2	12/24/20 08:15	12/25/20 02:45	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	154	66.2	2	12/24/20 08:15	12/25/20 02:45	75-71-8	L1
Diisopropyl ether	ND	ug/kg	154	38.2	2	12/24/20 08:15	12/25/20 02:45	108-20-3	
Ethylbenzene	<b>1500</b>	ug/kg	154	36.6	2	12/24/20 08:15	12/25/20 02:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	770	306	2	12/24/20 08:15	12/25/20 02:45	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	154	41.6	2	12/24/20 08:15	12/25/20 02:45	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	154	45.2	2	12/24/20 08:15	12/25/20 02:45	1634-04-4	
Methylene Chloride	ND	ug/kg	154	42.8	2	12/24/20 08:15	12/25/20 02:45	75-09-2	
Naphthalene	<b>1090</b>	ug/kg	770	48.0	2	12/24/20 08:15	12/25/20 02:45	91-20-3	
Styrene	ND	ug/kg	154	39.4	2	12/24/20 08:15	12/25/20 02:45	100-42-5	
Tetrachloroethene	ND	ug/kg	154	59.7	2	12/24/20 08:15	12/25/20 02:45	127-18-4	
Toluene	<b>5520</b>	ug/kg	154	38.8	2	12/24/20 08:15	12/25/20 02:45	108-88-3	
Trichloroethene	ND	ug/kg	154	57.6	2	12/24/20 08:15	12/25/20 02:45	79-01-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-4**      **Lab ID: 10542920004**      Collected: 12/16/20 14:05      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	154	44.6	2	12/24/20 08:15	12/25/20 02:45	75-69-4	
Vinyl chloride	ND	ug/kg	154	31.1	2	12/24/20 08:15	12/25/20 02:45	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	154	32.9	2	12/24/20 08:15	12/25/20 02:45	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	770	102	2	12/24/20 08:15	12/25/20 02:45	10061-01-5	
m&p-Xylene	<b>6050</b>	ug/kg	308	64.9	2	12/24/20 08:15	12/25/20 02:45	179601-23-1	
n-Butylbenzene	ND	ug/kg	154	70.5	2	12/24/20 08:15	12/25/20 02:45	104-51-8	
n-Propylbenzene	<b>502</b>	ug/kg	154	36.9	2	12/24/20 08:15	12/25/20 02:45	103-65-1	
o-Xylene	<b>2370</b>	ug/kg	154	46.2	2	12/24/20 08:15	12/25/20 02:45	95-47-6	
p-Isopropyltoluene	ND	ug/kg	154	46.8	2	12/24/20 08:15	12/25/20 02:45	99-87-6	
sec-Butylbenzene	ND	ug/kg	154	37.6	2	12/24/20 08:15	12/25/20 02:45	135-98-8	
tert-Butylbenzene	ND	ug/kg	154	48.3	2	12/24/20 08:15	12/25/20 02:45	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	154	33.2	2	12/24/20 08:15	12/25/20 02:45	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	770	440	2	12/24/20 08:15	12/25/20 02:45	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	92	%	56-140		2	12/24/20 08:15	12/25/20 02:45	2037-26-5	D3
4-Bromofluorobenzene (S)	96	%	52-137		2	12/24/20 08:15	12/25/20 02:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	85	%	50-150		2	12/24/20 08:15	12/25/20 02:45	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-5**      **Lab ID: 10542920005**      Collected: 12/16/20 13:58      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020    Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	4.3	mg/kg	3.5	1.0	20	12/28/20 08:06	12/31/20 18:13	7440-38-2	
Barium	236	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 18:13	7440-39-3	
Cadmium	ND	mg/kg	2.6	0.38	20	12/28/20 08:06	12/31/20 18:13	7440-43-9	D3
Chromium	56.1	mg/kg	8.0	2.4	20	12/28/20 08:06	12/31/20 18:13	7440-47-3	
Lead	12.9	mg/kg	2.6	0.71	20	12/28/20 08:06	12/31/20 02:51	7439-92-1	
Selenium	ND	mg/kg	2.6	0.72	20	12/28/20 08:06	12/31/20 18:13	7782-49-2	D3
Silver	ND	mg/kg	1.3	0.38	20	12/28/20 08:06	12/31/20 18:13	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471    Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.043	0.012	1	12/29/20 11:56	12/30/20 11:29	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	25.2	%	0.10	0.10	1		12/29/20 13:29		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 18:01	83-32-9	
Acenaphthylene	ND	ug/kg	3.0	0.91	1	12/18/20 16:56	12/23/20 18:01	208-96-8	
Anthracene	ND	ug/kg	1.4	0.42	1	12/18/20 16:56	12/23/20 18:01	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.8	0.55	1	12/18/20 16:56	12/23/20 18:01	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.5	0.75	1	12/18/20 16:56	12/23/20 18:01	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 18:01	205-99-2	
Benzo(g,h,i)perylene	18.7	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 18:01	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.1	0.64	1	12/18/20 16:56	12/23/20 18:01	207-08-9	
Chrysene	17.7	ug/kg	1.8	0.54	1	12/18/20 16:56	12/23/20 18:01	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.9	0.88	1	12/18/20 16:56	12/23/20 18:01	53-70-3	
Fluoranthene	ND	ug/kg	2.7	0.81	1	12/18/20 16:56	12/23/20 18:01	206-44-0	
Fluorene	ND	ug/kg	2.7	0.80	1	12/18/20 16:56	12/23/20 18:01	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.4	0.71	1	12/18/20 16:56	12/23/20 18:01	193-39-5	
Naphthalene	28.2	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 18:01	91-20-3	L2
Phenanthrene	ND	ug/kg	3.1	0.94	1	12/18/20 16:56	12/23/20 18:01	85-01-8	
Pyrene	ND	ug/kg	2.9	0.86	1	12/18/20 16:56	12/23/20 18:01	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	70	%	30-138		1	12/18/20 16:56	12/23/20 18:01	321-60-8	
p-Terphenyl-d14 (S)	79	%	30-143		1	12/18/20 16:56	12/23/20 18:01	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	66.8	16.0	1	12/24/20 08:15	12/24/20 22:04	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	66.8	17.1	1	12/24/20 08:15	12/24/20 22:04	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	66.8	24.2	1	12/24/20 08:15	12/24/20 22:04	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	66.8	24.3	1	12/24/20 08:15	12/24/20 22:04	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-5**      **Lab ID: 10542920005**      Collected: 12/16/20 13:58      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	66.8	17.1	1	12/24/20 08:15	12/24/20 22:04	75-34-3	
1,1-Dichloroethene	ND	ug/kg	66.8	22.2	1	12/24/20 08:15	12/24/20 22:04	75-35-4	
1,1-Dichloropropene	ND	ug/kg	66.8	21.7	1	12/24/20 08:15	12/24/20 22:04	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	334	74.4	1	12/24/20 08:15	12/24/20 22:04	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	66.8	32.5	1	12/24/20 08:15	12/24/20 22:04	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	334	55.1	1	12/24/20 08:15	12/24/20 22:04	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	66.8	19.9	1	12/24/20 08:15	12/24/20 22:04	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	334	51.9	1	12/24/20 08:15	12/24/20 22:04	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	66.8	18.3	1	12/24/20 08:15	12/24/20 22:04	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	66.8	20.7	1	12/24/20 08:15	12/24/20 22:04	95-50-1	
1,2-Dichloroethane	ND	ug/kg	66.8	15.4	1	12/24/20 08:15	12/24/20 22:04	107-06-2	
1,2-Dichloropropane	ND	ug/kg	66.8	15.9	1	12/24/20 08:15	12/24/20 22:04	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	66.8	21.5	1	12/24/20 08:15	12/24/20 22:04	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	66.8	18.3	1	12/24/20 08:15	12/24/20 22:04	541-73-1	
1,3-Dichloropropane	ND	ug/kg	66.8	14.6	1	12/24/20 08:15	12/24/20 22:04	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	66.8	18.3	1	12/24/20 08:15	12/24/20 22:04	106-46-7	
2,2-Dichloropropane	ND	ug/kg	66.8	18.0	1	12/24/20 08:15	12/24/20 22:04	594-20-7	
2-Chlorotoluene	ND	ug/kg	66.8	21.7	1	12/24/20 08:15	12/24/20 22:04	95-49-8	
4-Chlorotoluene	ND	ug/kg	66.8	25.4	1	12/24/20 08:15	12/24/20 22:04	106-43-4	
Benzene	ND	ug/kg	26.7	15.9	1	12/24/20 08:15	12/24/20 22:04	71-43-2	
Bromobenzene	ND	ug/kg	66.8	26.1	1	12/24/20 08:15	12/24/20 22:04	108-86-1	
Bromochloromethane	ND	ug/kg	66.8	18.3	1	12/24/20 08:15	12/24/20 22:04	74-97-5	
Bromodichloromethane	ND	ug/kg	66.8	15.9	1	12/24/20 08:15	12/24/20 22:04	75-27-4	
Bromoform	ND	ug/kg	334	294	1	12/24/20 08:15	12/24/20 22:04	75-25-2	
Bromomethane	ND	ug/kg	334	93.7	1	12/24/20 08:15	12/24/20 22:04	74-83-9	
Carbon tetrachloride	ND	ug/kg	66.8	14.7	1	12/24/20 08:15	12/24/20 22:04	56-23-5	
Chlorobenzene	ND	ug/kg	66.8	8.0	1	12/24/20 08:15	12/24/20 22:04	108-90-7	
Chloroethane	ND	ug/kg	334	28.2	1	12/24/20 08:15	12/24/20 22:04	75-00-3	
Chloroform	ND	ug/kg	334	47.8	1	12/24/20 08:15	12/24/20 22:04	67-66-3	
Chloromethane	ND	ug/kg	66.8	25.4	1	12/24/20 08:15	12/24/20 22:04	74-87-3	
Dibromochloromethane	ND	ug/kg	334	228	1	12/24/20 08:15	12/24/20 22:04	124-48-1	
Dibromomethane	ND	ug/kg	66.8	19.8	1	12/24/20 08:15	12/24/20 22:04	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	66.8	28.7	1	12/24/20 08:15	12/24/20 22:04	75-71-8	L1
Diisopropyl ether	ND	ug/kg	66.8	16.6	1	12/24/20 08:15	12/24/20 22:04	108-20-3	
Ethylbenzene	ND	ug/kg	66.8	15.9	1	12/24/20 08:15	12/24/20 22:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	334	133	1	12/24/20 08:15	12/24/20 22:04	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	66.8	18.0	1	12/24/20 08:15	12/24/20 22:04	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	66.8	19.6	1	12/24/20 08:15	12/24/20 22:04	1634-04-4	
Methylene Chloride	ND	ug/kg	66.8	18.6	1	12/24/20 08:15	12/24/20 22:04	75-09-2	
Naphthalene	ND	ug/kg	334	20.8	1	12/24/20 08:15	12/24/20 22:04	91-20-3	
Styrene	ND	ug/kg	66.8	17.1	1	12/24/20 08:15	12/24/20 22:04	100-42-5	
Tetrachloroethene	ND	ug/kg	66.8	25.9	1	12/24/20 08:15	12/24/20 22:04	127-18-4	
Toluene	ND	ug/kg	66.8	16.8	1	12/24/20 08:15	12/24/20 22:04	108-88-3	
Trichloroethene	ND	ug/kg	66.8	25.0	1	12/24/20 08:15	12/24/20 22:04	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-5**      **Lab ID: 10542920005**      Collected: 12/16/20 13:58      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay							
Trichlorofluoromethane	ND	ug/kg	66.8	19.4	1	12/24/20 08:15	12/24/20 22:04	75-69-4	
Vinyl chloride	ND	ug/kg	66.8	13.5	1	12/24/20 08:15	12/24/20 22:04	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	66.8	14.3	1	12/24/20 08:15	12/24/20 22:04	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	334	44.1	1	12/24/20 08:15	12/24/20 22:04	10061-01-5	
m&p-Xylene	ND	ug/kg	134	28.2	1	12/24/20 08:15	12/24/20 22:04	179601-23-1	
n-Butylbenzene	ND	ug/kg	66.8	30.6	1	12/24/20 08:15	12/24/20 22:04	104-51-8	
n-Propylbenzene	ND	ug/kg	66.8	16.0	1	12/24/20 08:15	12/24/20 22:04	103-65-1	
o-Xylene	ND	ug/kg	66.8	20.0	1	12/24/20 08:15	12/24/20 22:04	95-47-6	
p-Isopropyltoluene	ND	ug/kg	66.8	20.3	1	12/24/20 08:15	12/24/20 22:04	99-87-6	
sec-Butylbenzene	ND	ug/kg	66.8	16.3	1	12/24/20 08:15	12/24/20 22:04	135-98-8	
tert-Butylbenzene	ND	ug/kg	66.8	21.0	1	12/24/20 08:15	12/24/20 22:04	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	66.8	14.4	1	12/24/20 08:15	12/24/20 22:04	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	334	191	1	12/24/20 08:15	12/24/20 22:04	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	75	%	56-140		1	12/24/20 08:15	12/24/20 22:04	2037-26-5	
4-Bromofluorobenzene (S)	77	%	52-137		1	12/24/20 08:15	12/24/20 22:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	76	%	50-150		1	12/24/20 08:15	12/24/20 22:04	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-6**      **Lab ID: 10542920006**      Collected: 12/16/20 14:09      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020    Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	6.2	mg/kg	3.3	0.98	20	12/28/20 08:06	12/31/20 18:20	7440-38-2	
Barium	212	mg/kg	3.2	0.98	20	12/28/20 08:06	12/31/20 18:20	7440-39-3	
Cadmium	ND	mg/kg	2.5	0.36	20	12/28/20 08:06	12/31/20 18:20	7440-43-9	D3
Chromium	52.5	mg/kg	7.5	2.3	20	12/28/20 08:06	12/31/20 18:20	7440-47-3	
Lead	33.2	mg/kg	2.5	0.67	20	12/28/20 08:06	12/31/20 02:58	7439-92-1	
Selenium	3.4	mg/kg	2.5	0.68	20	12/28/20 08:06	12/31/20 18:20	7782-49-2	
Silver	ND	mg/kg	1.2	0.35	20	12/28/20 08:06	12/31/20 18:20	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471    Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.044	0.013	1	12/29/20 11:56	12/30/20 11:31	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	25.5	%	0.10	0.10	1		12/29/20 13:29		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	9.9	3.0	5	12/18/20 16:56	12/23/20 18:45	83-32-9	
Acenaphthylene	ND	ug/kg	15.1	4.5	5	12/18/20 16:56	12/23/20 18:45	208-96-8	
Anthracene	164	ug/kg	7.0	2.1	5	12/18/20 16:56	12/23/20 18:45	120-12-7	
Benzo(a)anthracene	567	ug/kg	9.1	2.7	5	12/18/20 16:56	12/23/20 18:45	56-55-3	
Benzo(a)pyrene	647	ug/kg	12.4	3.7	5	12/18/20 16:56	12/23/20 18:45	50-32-8	
Benzo(b)fluoranthene	571	ug/kg	10.3	3.1	5	12/18/20 16:56	12/23/20 18:45	205-99-2	lp
Benzo(g,h,i)perylene	760	ug/kg	10.3	3.1	5	12/18/20 16:56	12/23/20 18:45	191-24-2	
Benzo(k)fluoranthene	165	ug/kg	10.6	3.2	5	12/18/20 16:56	12/23/20 18:45	207-08-9	lp
Chrysene	992	ug/kg	8.9	2.7	5	12/18/20 16:56	12/23/20 18:45	218-01-9	
Dibenz(a,h)anthracene	286	ug/kg	14.5	4.4	5	12/18/20 16:56	12/23/20 18:45	53-70-3	
Fluoranthene	545	ug/kg	13.4	4.0	5	12/18/20 16:56	12/23/20 18:45	206-44-0	
Fluorene	98.8	ug/kg	13.3	4.0	5	12/18/20 16:56	12/23/20 18:45	86-73-7	
Indeno(1,2,3-cd)pyrene	362	ug/kg	11.8	3.6	5	12/18/20 16:56	12/23/20 18:45	193-39-5	
Naphthalene	4050	ug/kg	49.8	15.0	25	12/18/20 16:56	12/23/20 18:23	91-20-3	L2
Phenanthrene	766	ug/kg	15.6	4.7	5	12/18/20 16:56	12/23/20 18:45	85-01-8	
Pyrene	788	ug/kg	14.3	4.3	5	12/18/20 16:56	12/23/20 18:45	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	89	%	30-138		5	12/18/20 16:56	12/23/20 18:45	321-60-8	D3
p-Terphenyl-d14 (S)	96	%	30-143		5	12/18/20 16:56	12/23/20 18:45	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	77.1	18.5	1	12/24/20 08:15	12/24/20 22:24	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	77.1	19.7	1	12/24/20 08:15	12/24/20 22:24	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	77.1	27.9	1	12/24/20 08:15	12/24/20 22:24	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	77.1	28.1	1	12/24/20 08:15	12/24/20 22:24	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Sample: GP-6 Lab ID: 10542920006 Collected: 12/16/20 14:09 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	77.1	19.7	1	12/24/20 08:15	12/24/20 22:24	75-34-3	
1,1-Dichloroethene	ND	ug/kg	77.1	25.6	1	12/24/20 08:15	12/24/20 22:24	75-35-4	
1,1-Dichloropropene	ND	ug/kg	77.1	25.0	1	12/24/20 08:15	12/24/20 22:24	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	386	85.9	1	12/24/20 08:15	12/24/20 22:24	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	77.1	37.5	1	12/24/20 08:15	12/24/20 22:24	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	386	63.5	1	12/24/20 08:15	12/24/20 22:24	120-82-1	
1,2,4-Trimethylbenzene	6640	ug/kg	77.1	23.0	1	12/24/20 08:15	12/24/20 22:24	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	386	59.8	1	12/24/20 08:15	12/24/20 22:24	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	77.1	21.1	1	12/24/20 08:15	12/24/20 22:24	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	77.1	23.9	1	12/24/20 08:15	12/24/20 22:24	95-50-1	
1,2-Dichloroethane	ND	ug/kg	77.1	17.7	1	12/24/20 08:15	12/24/20 22:24	107-06-2	
1,2-Dichloropropane	ND	ug/kg	77.1	18.4	1	12/24/20 08:15	12/24/20 22:24	78-87-5	
1,3,5-Trimethylbenzene	3320	ug/kg	77.1	24.8	1	12/24/20 08:15	12/24/20 22:24	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	77.1	21.1	1	12/24/20 08:15	12/24/20 22:24	541-73-1	
1,3-Dichloropropane	ND	ug/kg	77.1	16.8	1	12/24/20 08:15	12/24/20 22:24	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	77.1	21.1	1	12/24/20 08:15	12/24/20 22:24	106-46-7	
2,2-Dichloropropane	ND	ug/kg	77.1	20.8	1	12/24/20 08:15	12/24/20 22:24	594-20-7	
2-Chlorotoluene	ND	ug/kg	77.1	25.0	1	12/24/20 08:15	12/24/20 22:24	95-49-8	
4-Chlorotoluene	ND	ug/kg	77.1	29.3	1	12/24/20 08:15	12/24/20 22:24	106-43-4	
Benzene	4510	ug/kg	30.8	18.4	1	12/24/20 08:15	12/24/20 22:24	71-43-2	
Bromobenzene	ND	ug/kg	77.1	30.1	1	12/24/20 08:15	12/24/20 22:24	108-86-1	
Bromochloromethane	ND	ug/kg	77.1	21.1	1	12/24/20 08:15	12/24/20 22:24	74-97-5	
Bromodichloromethane	ND	ug/kg	77.1	18.4	1	12/24/20 08:15	12/24/20 22:24	75-27-4	
Bromoform	ND	ug/kg	386	339	1	12/24/20 08:15	12/24/20 22:24	75-25-2	
Bromomethane	ND	ug/kg	386	108	1	12/24/20 08:15	12/24/20 22:24	74-83-9	
Carbon tetrachloride	ND	ug/kg	77.1	17.0	1	12/24/20 08:15	12/24/20 22:24	56-23-5	
Chlorobenzene	ND	ug/kg	77.1	9.2	1	12/24/20 08:15	12/24/20 22:24	108-90-7	
Chloroethane	ND	ug/kg	386	32.5	1	12/24/20 08:15	12/24/20 22:24	75-00-3	
Chloroform	ND	ug/kg	386	55.2	1	12/24/20 08:15	12/24/20 22:24	67-66-3	
Chloromethane	ND	ug/kg	77.1	29.3	1	12/24/20 08:15	12/24/20 22:24	74-87-3	
Dibromochloromethane	ND	ug/kg	386	264	1	12/24/20 08:15	12/24/20 22:24	124-48-1	
Dibromomethane	ND	ug/kg	77.1	22.8	1	12/24/20 08:15	12/24/20 22:24	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	77.1	33.2	1	12/24/20 08:15	12/24/20 22:24	75-71-8	L1
Diisopropyl ether	ND	ug/kg	77.1	19.1	1	12/24/20 08:15	12/24/20 22:24	108-20-3	
Ethylbenzene	3220	ug/kg	77.1	18.4	1	12/24/20 08:15	12/24/20 22:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	386	153	1	12/24/20 08:15	12/24/20 22:24	87-68-3	
Isopropylbenzene (Cumene)	230	ug/kg	77.1	20.8	1	12/24/20 08:15	12/24/20 22:24	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	77.1	22.7	1	12/24/20 08:15	12/24/20 22:24	1634-04-4	
Methylene Chloride	ND	ug/kg	77.1	21.4	1	12/24/20 08:15	12/24/20 22:24	75-09-2	
Naphthalene	879	ug/kg	386	24.1	1	12/24/20 08:15	12/24/20 22:24	91-20-3	
Styrene	ND	ug/kg	77.1	19.7	1	12/24/20 08:15	12/24/20 22:24	100-42-5	
Tetrachloroethene	ND	ug/kg	77.1	29.9	1	12/24/20 08:15	12/24/20 22:24	127-18-4	
Toluene	11600	ug/kg	77.1	19.4	1	12/24/20 08:15	12/24/20 22:24	108-88-3	
Trichloroethene	ND	ug/kg	77.1	28.8	1	12/24/20 08:15	12/24/20 22:24	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-6**      **Lab ID: 10542920006**      Collected: 12/16/20 14:09      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	77.1	22.4	1	12/24/20 08:15	12/24/20 22:24	75-69-4	
Vinyl chloride	ND	ug/kg	77.1	15.6	1	12/24/20 08:15	12/24/20 22:24	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	77.1	16.5	1	12/24/20 08:15	12/24/20 22:24	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	386	50.9	1	12/24/20 08:15	12/24/20 22:24	10061-01-5	
m&p-Xylene	<b>12700</b>	ug/kg	154	32.5	1	12/24/20 08:15	12/24/20 22:24	179601-23-1	
n-Butylbenzene	<b>981</b>	ug/kg	77.1	35.3	1	12/24/20 08:15	12/24/20 22:24	104-51-8	
n-Propylbenzene	<b>1000</b>	ug/kg	77.1	18.5	1	12/24/20 08:15	12/24/20 22:24	103-65-1	
o-Xylene	<b>4360</b>	ug/kg	77.1	23.1	1	12/24/20 08:15	12/24/20 22:24	95-47-6	
p-Isopropyltoluene	<b>97.6</b>	ug/kg	77.1	23.4	1	12/24/20 08:15	12/24/20 22:24	99-87-6	
sec-Butylbenzene	<b>107</b>	ug/kg	77.1	18.8	1	12/24/20 08:15	12/24/20 22:24	135-98-8	
tert-Butylbenzene	ND	ug/kg	77.1	24.2	1	12/24/20 08:15	12/24/20 22:24	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	77.1	16.7	1	12/24/20 08:15	12/24/20 22:24	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	386	221	1	12/24/20 08:15	12/24/20 22:24	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	92	%	56-140		1	12/24/20 08:15	12/24/20 22:24	2037-26-5	
4-Bromofluorobenzene (S)	96	%	52-137		1	12/24/20 08:15	12/24/20 22:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	93	%	50-150		1	12/24/20 08:15	12/24/20 22:24	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-7**      **Lab ID: 10542920007**      Collected: 12/16/20 15:40      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	4.9	mg/kg	3.3	1.0	20	12/28/20 08:06	12/31/20 18:27	7440-38-2	
Barium	221	mg/kg	3.3	1.0	20	12/28/20 08:06	12/31/20 18:27	7440-39-3	
Cadmium	ND	mg/kg	2.5	0.37	20	12/28/20 08:06	12/31/20 18:27	7440-43-9	D3
Chromium	45.3	mg/kg	7.7	2.3	20	12/28/20 08:06	12/31/20 18:27	7440-47-3	
Lead	78.1	mg/kg	2.5	0.69	20	12/28/20 08:06	12/31/20 03:05	7439-92-1	
Selenium	ND	mg/kg	2.5	0.69	20	12/28/20 08:06	12/31/20 18:27	7782-49-2	D3
Silver	ND	mg/kg	1.3	0.36	20	12/28/20 08:06	12/31/20 18:27	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.041	0.012	1	12/29/20 11:56	12/30/20 11:33	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	23.6	%	0.10	0.10	1		12/29/20 13:29		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	9.7	2.9	5	12/18/20 16:56	12/23/20 19:07	83-32-9	
Acenaphthylene	ND	ug/kg	14.8	4.4	5	12/18/20 16:56	12/23/20 19:07	208-96-8	
Anthracene	ND	ug/kg	6.8	2.0	5	12/18/20 16:56	12/23/20 19:07	120-12-7	
Benzo(a)anthracene	89.3	ug/kg	8.9	2.7	5	12/18/20 16:56	12/23/20 19:07	56-55-3	
Benzo(a)pyrene	107	ug/kg	12.2	3.7	5	12/18/20 16:56	12/23/20 19:07	50-32-8	
Benzo(b)fluoranthene	102	ug/kg	10.1	3.0	5	12/18/20 16:56	12/23/20 19:07	205-99-2	lp
Benzo(g,h,i)perylene	128	ug/kg	10.0	3.0	5	12/18/20 16:56	12/23/20 19:07	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	10.4	3.1	5	12/18/20 16:56	12/23/20 19:07	207-08-9	lp
Chrysene	143	ug/kg	8.7	2.6	5	12/18/20 16:56	12/23/20 19:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.2	4.3	5	12/18/20 16:56	12/23/20 19:07	53-70-3	
Fluoranthene	84.5	ug/kg	13.1	3.9	5	12/18/20 16:56	12/23/20 19:07	206-44-0	
Fluorene	ND	ug/kg	13.0	3.9	5	12/18/20 16:56	12/23/20 19:07	86-73-7	
Indeno(1,2,3-cd)pyrene	76.0	ug/kg	11.6	3.5	5	12/18/20 16:56	12/23/20 19:07	193-39-5	
Naphthalene	235	ug/kg	9.7	2.9	5	12/18/20 16:56	12/23/20 19:07	91-20-3	L2
Phenanthrene	143	ug/kg	15.2	4.6	5	12/18/20 16:56	12/23/20 19:07	85-01-8	
Pyrene	117	ug/kg	14.0	4.2	5	12/18/20 16:56	12/23/20 19:07	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	80	%	30-138		5	12/18/20 16:56	12/23/20 19:07	321-60-8	D3
p-Terphenyl-d14 (S)	86	%	30-143		5	12/18/20 16:56	12/23/20 19:07	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	65.5	15.7	1	12/24/20 08:15	12/24/20 22:44	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	65.5	16.8	1	12/24/20 08:15	12/24/20 22:44	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	65.5	23.7	1	12/24/20 08:15	12/24/20 22:44	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	65.5	23.8	1	12/24/20 08:15	12/24/20 22:44	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Sample: GP-7 Lab ID: 10542920007 Collected: 12/16/20 15:40 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	65.5	16.8	1	12/24/20 08:15	12/24/20 22:44	75-34-3	
1,1-Dichloroethene	ND	ug/kg	65.5	21.7	1	12/24/20 08:15	12/24/20 22:44	75-35-4	
1,1-Dichloropropene	ND	ug/kg	65.5	21.2	1	12/24/20 08:15	12/24/20 22:44	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	327	72.9	1	12/24/20 08:15	12/24/20 22:44	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	65.5	31.8	1	12/24/20 08:15	12/24/20 22:44	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	327	53.9	1	12/24/20 08:15	12/24/20 22:44	120-82-1	
1,2,4-Trimethylbenzene	672	ug/kg	65.5	19.5	1	12/24/20 08:15	12/24/20 22:44	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	327	50.8	1	12/24/20 08:15	12/24/20 22:44	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	65.5	17.9	1	12/24/20 08:15	12/24/20 22:44	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	65.5	20.3	1	12/24/20 08:15	12/24/20 22:44	95-50-1	
1,2-Dichloroethane	ND	ug/kg	65.5	15.1	1	12/24/20 08:15	12/24/20 22:44	107-06-2	
1,2-Dichloropropane	ND	ug/kg	65.5	15.6	1	12/24/20 08:15	12/24/20 22:44	78-87-5	
1,3,5-Trimethylbenzene	293	ug/kg	65.5	21.1	1	12/24/20 08:15	12/24/20 22:44	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	65.5	17.9	1	12/24/20 08:15	12/24/20 22:44	541-73-1	
1,3-Dichloropropane	ND	ug/kg	65.5	14.3	1	12/24/20 08:15	12/24/20 22:44	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	65.5	17.9	1	12/24/20 08:15	12/24/20 22:44	106-46-7	
2,2-Dichloropropane	ND	ug/kg	65.5	17.7	1	12/24/20 08:15	12/24/20 22:44	594-20-7	
2-Chlorotoluene	ND	ug/kg	65.5	21.2	1	12/24/20 08:15	12/24/20 22:44	95-49-8	
4-Chlorotoluene	ND	ug/kg	65.5	24.9	1	12/24/20 08:15	12/24/20 22:44	106-43-4	
Benzene	71.4	ug/kg	26.2	15.6	1	12/24/20 08:15	12/24/20 22:44	71-43-2	
Bromobenzene	ND	ug/kg	65.5	25.5	1	12/24/20 08:15	12/24/20 22:44	108-86-1	
Bromochloromethane	ND	ug/kg	65.5	17.9	1	12/24/20 08:15	12/24/20 22:44	74-97-5	
Bromodichloromethane	ND	ug/kg	65.5	15.6	1	12/24/20 08:15	12/24/20 22:44	75-27-4	
Bromoform	ND	ug/kg	327	288	1	12/24/20 08:15	12/24/20 22:44	75-25-2	
Bromomethane	ND	ug/kg	327	91.8	1	12/24/20 08:15	12/24/20 22:44	74-83-9	
Carbon tetrachloride	ND	ug/kg	65.5	14.4	1	12/24/20 08:15	12/24/20 22:44	56-23-5	
Chlorobenzene	ND	ug/kg	65.5	7.8	1	12/24/20 08:15	12/24/20 22:44	108-90-7	
Chloroethane	ND	ug/kg	327	27.6	1	12/24/20 08:15	12/24/20 22:44	75-00-3	
Chloroform	ND	ug/kg	327	46.9	1	12/24/20 08:15	12/24/20 22:44	67-66-3	
Chloromethane	ND	ug/kg	65.5	24.9	1	12/24/20 08:15	12/24/20 22:44	74-87-3	
Dibromochloromethane	ND	ug/kg	327	224	1	12/24/20 08:15	12/24/20 22:44	124-48-1	
Dibromomethane	ND	ug/kg	65.5	19.4	1	12/24/20 08:15	12/24/20 22:44	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	65.5	28.2	1	12/24/20 08:15	12/24/20 22:44	75-71-8	L1
Diisopropyl ether	ND	ug/kg	65.5	16.2	1	12/24/20 08:15	12/24/20 22:44	108-20-3	
Ethylbenzene	243	ug/kg	65.5	15.6	1	12/24/20 08:15	12/24/20 22:44	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	327	130	1	12/24/20 08:15	12/24/20 22:44	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	65.5	17.7	1	12/24/20 08:15	12/24/20 22:44	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	65.5	19.2	1	12/24/20 08:15	12/24/20 22:44	1634-04-4	
Methylene Chloride	ND	ug/kg	65.5	18.2	1	12/24/20 08:15	12/24/20 22:44	75-09-2	
Naphthalene	743	ug/kg	327	20.4	1	12/24/20 08:15	12/24/20 22:44	91-20-3	
Styrene	ND	ug/kg	65.5	16.8	1	12/24/20 08:15	12/24/20 22:44	100-42-5	
Tetrachloroethene	ND	ug/kg	65.5	25.4	1	12/24/20 08:15	12/24/20 22:44	127-18-4	
Toluene	338	ug/kg	65.5	16.5	1	12/24/20 08:15	12/24/20 22:44	108-88-3	
Trichloroethene	ND	ug/kg	65.5	24.5	1	12/24/20 08:15	12/24/20 22:44	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-7**      **Lab ID: 10542920007**      Collected: 12/16/20 15:40      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay							
Trichlorofluoromethane	ND	ug/kg	65.5	19.0	1	12/24/20 08:15	12/24/20 22:44	75-69-4	
Vinyl chloride	ND	ug/kg	65.5	13.2	1	12/24/20 08:15	12/24/20 22:44	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	65.5	14.0	1	12/24/20 08:15	12/24/20 22:44	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	327	43.2	1	12/24/20 08:15	12/24/20 22:44	10061-01-5	
m&p-Xylene	<b>654</b>	ug/kg	131	27.6	1	12/24/20 08:15	12/24/20 22:44	179601-23-1	
n-Butylbenzene	<b>207</b>	ug/kg	65.5	30.0	1	12/24/20 08:15	12/24/20 22:44	104-51-8	
n-Propylbenzene	<b>176</b>	ug/kg	65.5	15.7	1	12/24/20 08:15	12/24/20 22:44	103-65-1	
o-Xylene	<b>190</b>	ug/kg	65.5	19.6	1	12/24/20 08:15	12/24/20 22:44	95-47-6	
p-Isopropyltoluene	ND	ug/kg	65.5	19.9	1	12/24/20 08:15	12/24/20 22:44	99-87-6	
sec-Butylbenzene	ND	ug/kg	65.5	16.0	1	12/24/20 08:15	12/24/20 22:44	135-98-8	
tert-Butylbenzene	ND	ug/kg	65.5	20.6	1	12/24/20 08:15	12/24/20 22:44	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	65.5	14.1	1	12/24/20 08:15	12/24/20 22:44	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	327	187	1	12/24/20 08:15	12/24/20 22:44	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	94	%	56-140		1	12/24/20 08:15	12/24/20 22:44	2037-26-5	
4-Bromofluorobenzene (S)	98	%	52-137		1	12/24/20 08:15	12/24/20 22:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	95	%	50-150		1	12/24/20 08:15	12/24/20 22:44	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-8**      **Lab ID: 10542920008**      Collected: 12/16/20 12:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020    Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	3.9	mg/kg	3.0	0.91	20	12/28/20 08:06	12/31/20 18:34	7440-38-2	
Barium	206	mg/kg	3.0	0.91	20	12/28/20 08:06	12/31/20 18:34	7440-39-3	
Cadmium	ND	mg/kg	2.3	0.34	20	12/28/20 08:06	12/31/20 18:34	7440-43-9	D3
Chromium	45.4	mg/kg	7.0	2.1	20	12/28/20 08:06	12/31/20 18:34	7440-47-3	
Lead	12.1	mg/kg	2.3	0.63	20	12/28/20 08:06	12/31/20 03:11	7439-92-1	
Selenium	ND	mg/kg	2.3	0.63	20	12/28/20 08:06	12/31/20 18:34	7782-49-2	D3
Silver	ND	mg/kg	1.2	0.33	20	12/28/20 08:06	12/31/20 18:34	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471    Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.039	0.011	1	12/29/20 11:56	12/30/20 11:36	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	18.6	%	0.10	0.10	1		12/29/20 13:29		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	1.8	0.54	1	12/18/20 16:56	12/23/20 19:29	83-32-9	
Acenaphthylene	ND	ug/kg	2.8	0.83	1	12/18/20 16:56	12/23/20 19:29	208-96-8	
Anthracene	21.3	ug/kg	1.3	0.38	1	12/18/20 16:56	12/23/20 19:29	120-12-7	
Benzo(a)anthracene	80.9	ug/kg	1.7	0.50	1	12/18/20 16:56	12/23/20 19:29	56-55-3	
Benzo(a)pyrene	89.9	ug/kg	2.3	0.69	1	12/18/20 16:56	12/23/20 19:29	50-32-8	
Benzo(b)fluoranthene	94.3	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 19:29	205-99-2	lp
Benzo(g,h,i)perylene	83.6	ug/kg	1.9	0.56	1	12/18/20 16:56	12/23/20 19:29	191-24-2	
Benzo(k)fluoranthene	29.2	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 19:29	207-08-9	lp
Chrysene	128	ug/kg	1.6	0.49	1	12/18/20 16:56	12/23/20 19:29	218-01-9	
Dibenz(a,h)anthracene	29.7	ug/kg	2.7	0.80	1	12/18/20 16:56	12/23/20 19:29	53-70-3	
Fluoranthene	108	ug/kg	2.5	0.74	1	12/18/20 16:56	12/23/20 19:29	206-44-0	
Fluorene	ND	ug/kg	2.4	0.73	1	12/18/20 16:56	12/23/20 19:29	86-73-7	
Indeno(1,2,3-cd)pyrene	53.6	ug/kg	2.2	0.65	1	12/18/20 16:56	12/23/20 19:29	193-39-5	
Naphthalene	ND	ug/kg	1.8	0.55	1	12/18/20 16:56	12/23/20 19:29	91-20-3	L2
Phenanthrene	97.8	ug/kg	2.9	0.86	1	12/18/20 16:56	12/23/20 19:29	85-01-8	
Pyrene	115	ug/kg	2.6	0.79	1	12/18/20 16:56	12/23/20 19:29	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	67	%	30-138		1	12/18/20 16:56	12/23/20 19:29	321-60-8	
p-Terphenyl-d14 (S)	77	%	30-143		1	12/18/20 16:56	12/23/20 19:29	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	61.4	14.7	1	12/24/20 08:15	12/24/20 23:04	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	61.4	15.7	1	12/24/20 08:15	12/24/20 23:04	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	61.4	22.2	1	12/24/20 08:15	12/24/20 23:04	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	61.4	22.4	1	12/24/20 08:15	12/24/20 23:04	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-8**      **Lab ID: 10542920008**      Collected: 12/16/20 12:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	61.4	15.7	1	12/24/20 08:15	12/24/20 23:04	75-34-3	
1,1-Dichloroethene	ND	ug/kg	61.4	20.4	1	12/24/20 08:15	12/24/20 23:04	75-35-4	
1,1-Dichloropropene	ND	ug/kg	61.4	19.9	1	12/24/20 08:15	12/24/20 23:04	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	307	68.4	1	12/24/20 08:15	12/24/20 23:04	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	61.4	29.9	1	12/24/20 08:15	12/24/20 23:04	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	307	50.6	1	12/24/20 08:15	12/24/20 23:04	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	61.4	18.3	1	12/24/20 08:15	12/24/20 23:04	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	307	47.7	1	12/24/20 08:15	12/24/20 23:04	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/24/20 23:04	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	61.4	19.0	1	12/24/20 08:15	12/24/20 23:04	95-50-1	
1,2-Dichloroethane	ND	ug/kg	61.4	14.1	1	12/24/20 08:15	12/24/20 23:04	107-06-2	
1,2-Dichloropropane	ND	ug/kg	61.4	14.6	1	12/24/20 08:15	12/24/20 23:04	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	61.4	19.8	1	12/24/20 08:15	12/24/20 23:04	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/24/20 23:04	541-73-1	
1,3-Dichloropropane	ND	ug/kg	61.4	13.4	1	12/24/20 08:15	12/24/20 23:04	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/24/20 23:04	106-46-7	
2,2-Dichloropropane	ND	ug/kg	61.4	16.6	1	12/24/20 08:15	12/24/20 23:04	594-20-7	
2-Chlorotoluene	ND	ug/kg	61.4	19.9	1	12/24/20 08:15	12/24/20 23:04	95-49-8	
4-Chlorotoluene	ND	ug/kg	61.4	23.3	1	12/24/20 08:15	12/24/20 23:04	106-43-4	
Benzene	ND	ug/kg	24.6	14.6	1	12/24/20 08:15	12/24/20 23:04	71-43-2	
Bromobenzene	ND	ug/kg	61.4	24.0	1	12/24/20 08:15	12/24/20 23:04	108-86-1	
Bromochloromethane	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/24/20 23:04	74-97-5	
Bromodichloromethane	ND	ug/kg	61.4	14.6	1	12/24/20 08:15	12/24/20 23:04	75-27-4	
Bromoform	ND	ug/kg	307	270	1	12/24/20 08:15	12/24/20 23:04	75-25-2	
Bromomethane	ND	ug/kg	307	86.1	1	12/24/20 08:15	12/24/20 23:04	74-83-9	
Carbon tetrachloride	ND	ug/kg	61.4	13.5	1	12/24/20 08:15	12/24/20 23:04	56-23-5	
Chlorobenzene	ND	ug/kg	61.4	7.4	1	12/24/20 08:15	12/24/20 23:04	108-90-7	
Chloroethane	ND	ug/kg	307	25.9	1	12/24/20 08:15	12/24/20 23:04	75-00-3	
Chloroform	ND	ug/kg	307	44.0	1	12/24/20 08:15	12/24/20 23:04	67-66-3	
Chloromethane	ND	ug/kg	61.4	23.3	1	12/24/20 08:15	12/24/20 23:04	74-87-3	
Dibromochloromethane	ND	ug/kg	307	210	1	12/24/20 08:15	12/24/20 23:04	124-48-1	
Dibromomethane	ND	ug/kg	61.4	18.2	1	12/24/20 08:15	12/24/20 23:04	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	61.4	26.4	1	12/24/20 08:15	12/24/20 23:04	75-71-8	L1
Diisopropyl ether	ND	ug/kg	61.4	15.2	1	12/24/20 08:15	12/24/20 23:04	108-20-3	
Ethylbenzene	ND	ug/kg	61.4	14.6	1	12/24/20 08:15	12/24/20 23:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	307	122	1	12/24/20 08:15	12/24/20 23:04	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	61.4	16.6	1	12/24/20 08:15	12/24/20 23:04	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	61.4	18.1	1	12/24/20 08:15	12/24/20 23:04	1634-04-4	
Methylene Chloride	ND	ug/kg	61.4	17.1	1	12/24/20 08:15	12/24/20 23:04	75-09-2	
Naphthalene	ND	ug/kg	307	19.2	1	12/24/20 08:15	12/24/20 23:04	91-20-3	
Styrene	ND	ug/kg	61.4	15.7	1	12/24/20 08:15	12/24/20 23:04	100-42-5	
Tetrachloroethene	ND	ug/kg	61.4	23.8	1	12/24/20 08:15	12/24/20 23:04	127-18-4	
Toluene	ND	ug/kg	61.4	15.5	1	12/24/20 08:15	12/24/20 23:04	108-88-3	
Trichloroethene	ND	ug/kg	61.4	23.0	1	12/24/20 08:15	12/24/20 23:04	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-8**      **Lab ID: 10542920008**      Collected: 12/16/20 12:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay							
Trichlorofluoromethane	ND	ug/kg	61.4	17.8	1	12/24/20 08:15	12/24/20 23:04	75-69-4	
Vinyl chloride	ND	ug/kg	61.4	12.4	1	12/24/20 08:15	12/24/20 23:04	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	61.4	13.1	1	12/24/20 08:15	12/24/20 23:04	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	307	40.5	1	12/24/20 08:15	12/24/20 23:04	10061-01-5	
m&p-Xylene	ND	ug/kg	123	25.9	1	12/24/20 08:15	12/24/20 23:04	179601-23-1	
n-Butylbenzene	ND	ug/kg	61.4	28.1	1	12/24/20 08:15	12/24/20 23:04	104-51-8	
n-Propylbenzene	ND	ug/kg	61.4	14.7	1	12/24/20 08:15	12/24/20 23:04	103-65-1	
o-Xylene	ND	ug/kg	61.4	18.4	1	12/24/20 08:15	12/24/20 23:04	95-47-6	
p-Isopropyltoluene	ND	ug/kg	61.4	18.7	1	12/24/20 08:15	12/24/20 23:04	99-87-6	
sec-Butylbenzene	ND	ug/kg	61.4	15.0	1	12/24/20 08:15	12/24/20 23:04	135-98-8	
tert-Butylbenzene	ND	ug/kg	61.4	19.3	1	12/24/20 08:15	12/24/20 23:04	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	61.4	13.3	1	12/24/20 08:15	12/24/20 23:04	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	307	176	1	12/24/20 08:15	12/24/20 23:04	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	75	%	56-140		1	12/24/20 08:15	12/24/20 23:04	2037-26-5	
4-Bromofluorobenzene (S)	74	%	52-137		1	12/24/20 08:15	12/24/20 23:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	75	%	50-150		1	12/24/20 08:15	12/24/20 23:04	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-9**      **Lab ID: 10542920009**      Collected: 12/16/20 10:45      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	3.6	mg/kg	2.9	0.88	20	12/28/20 08:06	12/31/20 18:40	7440-38-2	
Barium	135	mg/kg	2.9	0.87	20	12/28/20 08:06	12/31/20 18:40	7440-39-3	
Cadmium	<0.32	mg/kg	2.2	0.32	20	12/28/20 08:06	12/31/20 18:40	7440-43-9	D3
Chromium	34.5	mg/kg	6.7	2.0	20	12/28/20 08:06	12/31/20 18:40	7440-47-3	
Lead	62.2	mg/kg	2.2	0.60	20	12/28/20 08:06	12/31/20 03:18	7439-92-1	
Selenium	1.4J	mg/kg	2.2	0.60	20	12/28/20 08:06	12/31/20 18:40	7782-49-2	D3
Silver	<0.32	mg/kg	1.1	0.32	20	12/28/20 08:06	12/31/20 18:40	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	0.016J	mg/kg	0.039	0.011	1	12/29/20 11:56	12/30/20 11:38	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	13.9	%	0.10	0.10	1		12/29/20 12:47		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	8.6	2.6	5	12/18/20 16:56	12/23/20 19:51	83-32-9	
Acenaphthylene	ND	ug/kg	13.2	3.9	5	12/18/20 16:56	12/23/20 19:51	208-96-8	
Anthracene	118	ug/kg	6.1	1.8	5	12/18/20 16:56	12/23/20 19:51	120-12-7	
Benzo(a)anthracene	312	ug/kg	7.9	2.4	5	12/18/20 16:56	12/23/20 19:51	56-55-3	
Benzo(a)pyrene	315	ug/kg	10.8	3.3	5	12/18/20 16:56	12/23/20 19:51	50-32-8	
Benzo(b)fluoranthene	407	ug/kg	9.0	2.7	5	12/18/20 16:56	12/23/20 19:51	205-99-2	lp
Benzo(g,h,i)perylene	248	ug/kg	8.9	2.7	5	12/18/20 16:56	12/23/20 19:51	191-24-2	
Benzo(k)fluoranthene	173	ug/kg	9.2	2.8	5	12/18/20 16:56	12/23/20 19:51	207-08-9	lp
Chrysene	364	ug/kg	7.7	2.3	5	12/18/20 16:56	12/23/20 19:51	218-01-9	
Dibenz(a,h)anthracene	63.5	ug/kg	12.6	3.8	5	12/18/20 16:56	12/23/20 19:51	53-70-3	
Fluoranthene	667	ug/kg	11.6	3.5	5	12/18/20 16:56	12/23/20 19:51	206-44-0	
Fluorene	ND	ug/kg	11.6	3.5	5	12/18/20 16:56	12/23/20 19:51	86-73-7	
Indeno(1,2,3-cd)pyrene	239	ug/kg	10.3	3.1	5	12/18/20 16:56	12/23/20 19:51	193-39-5	
Naphthalene	ND	ug/kg	8.7	2.6	5	12/18/20 16:56	12/23/20 19:51	91-20-3	L2
Phenanthrene	441	ug/kg	13.5	4.1	5	12/18/20 16:56	12/23/20 19:51	85-01-8	
Pyrene	588	ug/kg	12.4	3.7	5	12/18/20 16:56	12/23/20 19:51	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	79	%	30-138		5	12/18/20 16:56	12/23/20 19:51	321-60-8	D3
p-Terphenyl-d14 (S)	91	%	30-143		5	12/18/20 16:56	12/23/20 19:51	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	<13.9	ug/kg	58.1	13.9	1	12/24/20 08:15	12/24/20 23:24	630-20-6	
1,1,1-Trichloroethane	<14.9	ug/kg	58.1	14.9	1	12/24/20 08:15	12/24/20 23:24	71-55-6	
1,1,2,2-Tetrachloroethane	<21.0	ug/kg	58.1	21.0	1	12/24/20 08:15	12/24/20 23:24	79-34-5	
1,1,2-Trichloroethane	<21.1	ug/kg	58.1	21.1	1	12/24/20 08:15	12/24/20 23:24	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-9**      **Lab ID: 10542920009**      Collected: 12/16/20 10:45      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<14.9	ug/kg	58.1	14.9	1	12/24/20 08:15	12/24/20 23:24	75-34-3	
1,1-Dichloroethene	<19.3	ug/kg	58.1	19.3	1	12/24/20 08:15	12/24/20 23:24	75-35-4	
1,1-Dichloropropene	<18.8	ug/kg	58.1	18.8	1	12/24/20 08:15	12/24/20 23:24	563-58-6	
1,2,3-Trichlorobenzene	<64.7	ug/kg	290	64.7	1	12/24/20 08:15	12/24/20 23:24	87-61-6	
1,2,3-Trichloropropane	<28.2	ug/kg	58.1	28.2	1	12/24/20 08:15	12/24/20 23:24	96-18-4	
1,2,4-Trichlorobenzene	<47.8	ug/kg	290	47.8	1	12/24/20 08:15	12/24/20 23:24	120-82-1	
1,2,4-Trimethylbenzene	102	ug/kg	58.1	17.3	1	12/24/20 08:15	12/24/20 23:24	95-63-6	
1,2-Dibromo-3-chloropropane	<45.1	ug/kg	290	45.1	1	12/24/20 08:15	12/24/20 23:24	96-12-8	
1,2-Dibromoethane (EDB)	<15.9	ug/kg	58.1	15.9	1	12/24/20 08:15	12/24/20 23:24	106-93-4	
1,2-Dichlorobenzene	<18.0	ug/kg	58.1	18.0	1	12/24/20 08:15	12/24/20 23:24	95-50-1	
1,2-Dichloroethane	<13.4	ug/kg	58.1	13.4	1	12/24/20 08:15	12/24/20 23:24	107-06-2	
1,2-Dichloropropane	<13.8	ug/kg	58.1	13.8	1	12/24/20 08:15	12/24/20 23:24	78-87-5	
1,3,5-Trimethylbenzene	59.7	ug/kg	58.1	18.7	1	12/24/20 08:15	12/24/20 23:24	108-67-8	
1,3-Dichlorobenzene	<15.9	ug/kg	58.1	15.9	1	12/24/20 08:15	12/24/20 23:24	541-73-1	
1,3-Dichloropropane	<12.7	ug/kg	58.1	12.7	1	12/24/20 08:15	12/24/20 23:24	142-28-9	
1,4-Dichlorobenzene	<15.9	ug/kg	58.1	15.9	1	12/24/20 08:15	12/24/20 23:24	106-46-7	
2,2-Dichloropropane	<15.7	ug/kg	58.1	15.7	1	12/24/20 08:15	12/24/20 23:24	594-20-7	
2-Chlorotoluene	<18.8	ug/kg	58.1	18.8	1	12/24/20 08:15	12/24/20 23:24	95-49-8	
4-Chlorotoluene	<22.1	ug/kg	58.1	22.1	1	12/24/20 08:15	12/24/20 23:24	106-43-4	
Benzene	59.8	ug/kg	23.2	13.8	1	12/24/20 08:15	12/24/20 23:24	71-43-2	
Bromobenzene	<22.6	ug/kg	58.1	22.6	1	12/24/20 08:15	12/24/20 23:24	108-86-1	
Bromochloromethane	<15.9	ug/kg	58.1	15.9	1	12/24/20 08:15	12/24/20 23:24	74-97-5	
Bromodichloromethane	<13.8	ug/kg	58.1	13.8	1	12/24/20 08:15	12/24/20 23:24	75-27-4	
Bromoform	<255	ug/kg	290	255	1	12/24/20 08:15	12/24/20 23:24	75-25-2	
Bromomethane	<81.4	ug/kg	290	81.4	1	12/24/20 08:15	12/24/20 23:24	74-83-9	
Carbon tetrachloride	<12.8	ug/kg	58.1	12.8	1	12/24/20 08:15	12/24/20 23:24	56-23-5	
Chlorobenzene	<7.0	ug/kg	58.1	7.0	1	12/24/20 08:15	12/24/20 23:24	108-90-7	
Chloroethane	<24.5	ug/kg	290	24.5	1	12/24/20 08:15	12/24/20 23:24	75-00-3	
Chloroform	<41.6	ug/kg	290	41.6	1	12/24/20 08:15	12/24/20 23:24	67-66-3	
Chloromethane	<22.1	ug/kg	58.1	22.1	1	12/24/20 08:15	12/24/20 23:24	74-87-3	
Dibromochloromethane	<198	ug/kg	290	198	1	12/24/20 08:15	12/24/20 23:24	124-48-1	
Dibromomethane	<17.2	ug/kg	58.1	17.2	1	12/24/20 08:15	12/24/20 23:24	74-95-3	
Dichlorodifluoromethane	<25.0	ug/kg	58.1	25.0	1	12/24/20 08:15	12/24/20 23:24	75-71-8	L1
Diisopropyl ether	<14.4	ug/kg	58.1	14.4	1	12/24/20 08:15	12/24/20 23:24	108-20-3	
Ethylbenzene	42.6J	ug/kg	58.1	13.8	1	12/24/20 08:15	12/24/20 23:24	100-41-4	
Hexachloro-1,3-butadiene	<115	ug/kg	290	115	1	12/24/20 08:15	12/24/20 23:24	87-68-3	
Isopropylbenzene (Cumene)	<15.7	ug/kg	58.1	15.7	1	12/24/20 08:15	12/24/20 23:24	98-82-8	
Methyl-tert-butyl ether	<17.1	ug/kg	58.1	17.1	1	12/24/20 08:15	12/24/20 23:24	1634-04-4	
Methylene Chloride	<16.1	ug/kg	58.1	16.1	1	12/24/20 08:15	12/24/20 23:24	75-09-2	
Naphthalene	56.3J	ug/kg	290	18.1	1	12/24/20 08:15	12/24/20 23:24	91-20-3	
Styrene	<14.9	ug/kg	58.1	14.9	1	12/24/20 08:15	12/24/20 23:24	100-42-5	
Tetrachloroethene	<22.5	ug/kg	58.1	22.5	1	12/24/20 08:15	12/24/20 23:24	127-18-4	
Toluene	72.1	ug/kg	58.1	14.6	1	12/24/20 08:15	12/24/20 23:24	108-88-3	
Trichloroethene	<21.7	ug/kg	58.1	21.7	1	12/24/20 08:15	12/24/20 23:24	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-9**      **Lab ID: 10542920009**      Collected: 12/16/20 10:45      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	<16.8	ug/kg	58.1	16.8	1	12/24/20 08:15	12/24/20 23:24	75-69-4	
Vinyl chloride	<11.7	ug/kg	58.1	11.7	1	12/24/20 08:15	12/24/20 23:24	75-01-4	
cis-1,2-Dichloroethene	<12.4	ug/kg	58.1	12.4	1	12/24/20 08:15	12/24/20 23:24	156-59-2	
cis-1,3-Dichloropropene	<38.3	ug/kg	290	38.3	1	12/24/20 08:15	12/24/20 23:24	10061-01-5	
m&p-Xylene	147	ug/kg	116	24.5	1	12/24/20 08:15	12/24/20 23:24	179601-23-1	
n-Butylbenzene	<26.6	ug/kg	58.1	26.6	1	12/24/20 08:15	12/24/20 23:24	104-51-8	
n-Propylbenzene	18.0J	ug/kg	58.1	13.9	1	12/24/20 08:15	12/24/20 23:24	103-65-1	
o-Xylene	46.8J	ug/kg	58.1	17.4	1	12/24/20 08:15	12/24/20 23:24	95-47-6	
p-Isopropyltoluene	<17.7	ug/kg	58.1	17.7	1	12/24/20 08:15	12/24/20 23:24	99-87-6	
sec-Butylbenzene	<14.2	ug/kg	58.1	14.2	1	12/24/20 08:15	12/24/20 23:24	135-98-8	
tert-Butylbenzene	<18.2	ug/kg	58.1	18.2	1	12/24/20 08:15	12/24/20 23:24	98-06-6	
trans-1,2-Dichloroethene	<12.5	ug/kg	58.1	12.5	1	12/24/20 08:15	12/24/20 23:24	156-60-5	
trans-1,3-Dichloropropene	<166	ug/kg	290	166	1	12/24/20 08:15	12/24/20 23:24	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	94	%	56-140		1	12/24/20 08:15	12/24/20 23:24	2037-26-5	
4-Bromofluorobenzene (S)	91	%	52-137		1	12/24/20 08:15	12/24/20 23:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	95	%	50-150		1	12/24/20 08:15	12/24/20 23:24	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-10**      **Lab ID: 10542920010**      Collected: 12/16/20 11:15      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	3.7	mg/kg	3.3	0.98	20	12/28/20 08:06	12/31/20 18:47	7440-38-2	
Barium	213	mg/kg	3.2	0.98	20	12/28/20 08:06	12/31/20 18:47	7440-39-3	
Cadmium	ND	mg/kg	2.5	0.36	20	12/28/20 08:06	12/31/20 18:47	7440-43-9	D3
Chromium	48.8	mg/kg	7.5	2.3	20	12/28/20 08:06	12/31/20 18:47	7440-47-3	
Lead	9.9	mg/kg	2.5	0.67	20	12/28/20 08:06	12/31/20 03:25	7439-92-1	
Selenium	ND	mg/kg	2.5	0.68	20	12/28/20 08:06	12/31/20 18:47	7782-49-2	D3
Silver	ND	mg/kg	1.2	0.35	20	12/28/20 08:06	12/31/20 18:47	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.040	0.012	1	12/29/20 11:56	12/30/20 11:45	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	22.4	%	0.10	0.10	1		12/29/20 12:59		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 20:12	83-32-9	
Acenaphthylene	ND	ug/kg	2.9	0.87	1	12/18/20 16:56	12/23/20 20:12	208-96-8	
Anthracene	ND	ug/kg	1.3	0.40	1	12/18/20 16:56	12/23/20 20:12	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.8	0.53	1	12/18/20 16:56	12/23/20 20:12	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.4	0.72	1	12/18/20 16:56	12/23/20 20:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 20:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 20:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.0	0.62	1	12/18/20 16:56	12/23/20 20:12	207-08-9	
Chrysene	ND	ug/kg	1.7	0.51	1	12/18/20 16:56	12/23/20 20:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.8	0.84	1	12/18/20 16:56	12/23/20 20:12	53-70-3	
Fluoranthene	ND	ug/kg	2.6	0.77	1	12/18/20 16:56	12/23/20 20:12	206-44-0	
Fluorene	ND	ug/kg	2.6	0.77	1	12/18/20 16:56	12/23/20 20:12	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.3	0.68	1	12/18/20 16:56	12/23/20 20:12	193-39-5	
Naphthalene	ND	ug/kg	1.9	0.58	1	12/18/20 16:56	12/23/20 20:12	91-20-3	L2
Phenanthrene	ND	ug/kg	3.0	0.90	1	12/18/20 16:56	12/23/20 20:12	85-01-8	
Pyrene	ND	ug/kg	2.8	0.83	1	12/18/20 16:56	12/23/20 20:12	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	30-138		1	12/18/20 16:56	12/23/20 20:12	321-60-8	
p-Terphenyl-d14 (S)	72	%	30-143		1	12/18/20 16:56	12/23/20 20:12	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	64.4	15.5	1	12/24/20 08:15	12/24/20 23:44	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	64.4	16.5	1	12/24/20 08:15	12/24/20 23:44	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	64.4	23.3	1	12/24/20 08:15	12/24/20 23:44	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	64.4	23.4	1	12/24/20 08:15	12/24/20 23:44	79-00-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Sample: GP-10 Lab ID: 10542920010 Collected: 12/16/20 11:15 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	64.4	16.5	1	12/24/20 08:15	12/24/20 23:44	75-34-3	
1,1-Dichloroethene	ND	ug/kg	64.4	21.4	1	12/24/20 08:15	12/24/20 23:44	75-35-4	
1,1-Dichloropropene	ND	ug/kg	64.4	20.9	1	12/24/20 08:15	12/24/20 23:44	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	322	71.7	1	12/24/20 08:15	12/24/20 23:44	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	64.4	31.3	1	12/24/20 08:15	12/24/20 23:44	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	322	53.1	1	12/24/20 08:15	12/24/20 23:44	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	64.4	19.2	1	12/24/20 08:15	12/24/20 23:44	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	322	50.0	1	12/24/20 08:15	12/24/20 23:44	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/24/20 23:44	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	64.4	20.0	1	12/24/20 08:15	12/24/20 23:44	95-50-1	
1,2-Dichloroethane	ND	ug/kg	64.4	14.8	1	12/24/20 08:15	12/24/20 23:44	107-06-2	
1,2-Dichloropropane	ND	ug/kg	64.4	15.3	1	12/24/20 08:15	12/24/20 23:44	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	64.4	20.7	1	12/24/20 08:15	12/24/20 23:44	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/24/20 23:44	541-73-1	
1,3-Dichloropropane	ND	ug/kg	64.4	14.0	1	12/24/20 08:15	12/24/20 23:44	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/24/20 23:44	106-46-7	
2,2-Dichloropropane	ND	ug/kg	64.4	17.4	1	12/24/20 08:15	12/24/20 23:44	594-20-7	
2-Chlorotoluene	ND	ug/kg	64.4	20.9	1	12/24/20 08:15	12/24/20 23:44	95-49-8	
4-Chlorotoluene	ND	ug/kg	64.4	24.5	1	12/24/20 08:15	12/24/20 23:44	106-43-4	
Benzene	ND	ug/kg	25.8	15.3	1	12/24/20 08:15	12/24/20 23:44	71-43-2	
Bromobenzene	ND	ug/kg	64.4	25.1	1	12/24/20 08:15	12/24/20 23:44	108-86-1	
Bromochloromethane	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/24/20 23:44	74-97-5	
Bromodichloromethane	ND	ug/kg	64.4	15.3	1	12/24/20 08:15	12/24/20 23:44	75-27-4	
Bromoform	ND	ug/kg	322	283	1	12/24/20 08:15	12/24/20 23:44	75-25-2	
Bromomethane	ND	ug/kg	322	90.3	1	12/24/20 08:15	12/24/20 23:44	74-83-9	
Carbon tetrachloride	ND	ug/kg	64.4	14.2	1	12/24/20 08:15	12/24/20 23:44	56-23-5	
Chlorobenzene	ND	ug/kg	64.4	7.7	1	12/24/20 08:15	12/24/20 23:44	108-90-7	
Chloroethane	ND	ug/kg	322	27.2	1	12/24/20 08:15	12/24/20 23:44	75-00-3	
Chloroform	ND	ug/kg	322	46.1	1	12/24/20 08:15	12/24/20 23:44	67-66-3	
Chloromethane	ND	ug/kg	64.4	24.5	1	12/24/20 08:15	12/24/20 23:44	74-87-3	
Dibromochloromethane	ND	ug/kg	322	220	1	12/24/20 08:15	12/24/20 23:44	124-48-1	
Dibromomethane	ND	ug/kg	64.4	19.1	1	12/24/20 08:15	12/24/20 23:44	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	64.4	27.7	1	12/24/20 08:15	12/24/20 23:44	75-71-8	L1
Diisopropyl ether	ND	ug/kg	64.4	16.0	1	12/24/20 08:15	12/24/20 23:44	108-20-3	
Ethylbenzene	ND	ug/kg	64.4	15.3	1	12/24/20 08:15	12/24/20 23:44	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	322	128	1	12/24/20 08:15	12/24/20 23:44	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	64.4	17.4	1	12/24/20 08:15	12/24/20 23:44	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	64.4	18.9	1	12/24/20 08:15	12/24/20 23:44	1634-04-4	
Methylene Chloride	ND	ug/kg	64.4	17.9	1	12/24/20 08:15	12/24/20 23:44	75-09-2	
Naphthalene	ND	ug/kg	322	20.1	1	12/24/20 08:15	12/24/20 23:44	91-20-3	
Styrene	ND	ug/kg	64.4	16.5	1	12/24/20 08:15	12/24/20 23:44	100-42-5	
Tetrachloroethene	ND	ug/kg	64.4	25.0	1	12/24/20 08:15	12/24/20 23:44	127-18-4	
Toluene	ND	ug/kg	64.4	16.2	1	12/24/20 08:15	12/24/20 23:44	108-88-3	
Trichloroethene	ND	ug/kg	64.4	24.1	1	12/24/20 08:15	12/24/20 23:44	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-10**      **Lab ID: 10542920010**      Collected: 12/16/20 11:15      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	64.4	18.7	1	12/24/20 08:15	12/24/20 23:44	75-69-4	
Vinyl chloride	ND	ug/kg	64.4	13.0	1	12/24/20 08:15	12/24/20 23:44	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	64.4	13.8	1	12/24/20 08:15	12/24/20 23:44	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	322	42.5	1	12/24/20 08:15	12/24/20 23:44	10061-01-5	
m&p-Xylene	ND	ug/kg	129	27.2	1	12/24/20 08:15	12/24/20 23:44	179601-23-1	
n-Butylbenzene	ND	ug/kg	64.4	29.5	1	12/24/20 08:15	12/24/20 23:44	104-51-8	
n-Propylbenzene	ND	ug/kg	64.4	15.5	1	12/24/20 08:15	12/24/20 23:44	103-65-1	
o-Xylene	ND	ug/kg	64.4	19.3	1	12/24/20 08:15	12/24/20 23:44	95-47-6	
p-Isopropyltoluene	ND	ug/kg	64.4	19.6	1	12/24/20 08:15	12/24/20 23:44	99-87-6	
sec-Butylbenzene	ND	ug/kg	64.4	15.7	1	12/24/20 08:15	12/24/20 23:44	135-98-8	
tert-Butylbenzene	ND	ug/kg	64.4	20.2	1	12/24/20 08:15	12/24/20 23:44	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	64.4	13.9	1	12/24/20 08:15	12/24/20 23:44	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	322	184	1	12/24/20 08:15	12/24/20 23:44	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	84	%	56-140		1	12/24/20 08:15	12/24/20 23:44	2037-26-5	
4-Bromofluorobenzene (S)	83	%	52-137		1	12/24/20 08:15	12/24/20 23:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	82	%	50-150		1	12/24/20 08:15	12/24/20 23:44	2199-69-1	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-11**      **Lab ID: 10542920011**      Collected: 12/16/20 11:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	3.9	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 18:54	7440-38-2	
Barium	216	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 18:54	7440-39-3	
Cadmium	ND	mg/kg	2.6	0.38	20	12/28/20 08:06	12/31/20 18:54	7440-43-9	D3
Chromium	54.3	mg/kg	7.8	2.3	20	12/28/20 08:06	12/31/20 18:54	7440-47-3	
Lead	10.4	mg/kg	2.6	0.70	20	12/28/20 08:06	12/31/20 03:32	7439-92-1	
Selenium	ND	mg/kg	2.6	0.70	20	12/28/20 08:06	12/31/20 18:54	7782-49-2	D3
Silver	ND	mg/kg	1.3	0.37	20	12/28/20 08:06	12/31/20 18:54	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.041	0.012	1	12/29/20 11:56	12/30/20 11:47	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	22.4	%	0.10	0.10	1		12/29/20 13:02		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	228	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 20:56	83-32-9	
Acenaphthylene	66.2	ug/kg	2.9	0.88	1	12/18/20 16:56	12/23/20 20:56	208-96-8	
Anthracene	514	ug/kg	13.5	4.1	10	12/18/20 16:56	12/23/20 20:34	120-12-7	
Benzo(a)anthracene	325	ug/kg	1.8	0.53	1	12/18/20 16:56	12/23/20 20:56	56-55-3	
Benzo(a)pyrene	91.6	ug/kg	2.4	0.72	1	12/18/20 16:56	12/23/20 20:56	50-32-8	
Benzo(b)fluoranthene	175	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 20:56	205-99-2	lp
Benzo(g,h,i)perylene	25.6	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 20:56	191-24-2	
Benzo(k)fluoranthene	83.7	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 20:56	207-08-9	lp
Chrysene	176	ug/kg	1.7	0.52	1	12/18/20 16:56	12/23/20 20:56	218-01-9	
Dibenz(a,h)anthracene	13.1	ug/kg	2.8	0.84	1	12/18/20 16:56	12/23/20 20:56	53-70-3	
Fluoranthene	1600	ug/kg	25.8	7.8	10	12/18/20 16:56	12/23/20 20:34	206-44-0	
Fluorene	880	ug/kg	25.7	7.7	10	12/18/20 16:56	12/23/20 20:34	86-73-7	
Indeno(1,2,3-cd)pyrene	44.3	ug/kg	2.3	0.69	1	12/18/20 16:56	12/23/20 20:56	193-39-5	
Naphthalene	2130	ug/kg	19.2	5.8	10	12/18/20 16:56	12/23/20 20:34	91-20-3	L2
Phenanthrene	3110	ug/kg	30.0	9.0	10	12/18/20 16:56	12/23/20 20:34	85-01-8	
Pyrene	1240	ug/kg	27.6	8.3	10	12/18/20 16:56	12/23/20 20:34	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	63	%	30-138		1	12/18/20 16:56	12/23/20 20:56	321-60-8	
p-Terphenyl-d14 (S)	78	%	30-143		1	12/18/20 16:56	12/23/20 20:56	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	161	38.6	2.5	12/24/20 08:15	12/25/20 02:25	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	161	41.2	2.5	12/24/20 08:15	12/25/20 02:25	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	161	58.3	2.5	12/24/20 08:15	12/25/20 02:25	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	161	58.6	2.5	12/24/20 08:15	12/25/20 02:25	79-00-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

Sample: GP-11 Lab ID: 10542920011 Collected: 12/16/20 11:25 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	161	41.2	2.5	12/24/20 08:15	12/25/20 02:25	75-34-3	
1,1-Dichloroethene	ND	ug/kg	161	53.5	2.5	12/24/20 08:15	12/25/20 02:25	75-35-4	
1,1-Dichloropropene	ND	ug/kg	161	52.2	2.5	12/24/20 08:15	12/25/20 02:25	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	805	179	2.5	12/24/20 08:15	12/25/20 02:25	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	161	78.3	2.5	12/24/20 08:15	12/25/20 02:25	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	805	133	2.5	12/24/20 08:15	12/25/20 02:25	120-82-1	
1,2,4-Trimethylbenzene	550	ug/kg	161	48.0	2.5	12/24/20 08:15	12/25/20 02:25	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	805	125	2.5	12/24/20 08:15	12/25/20 02:25	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	161	44.1	2.5	12/24/20 08:15	12/25/20 02:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	161	49.9	2.5	12/24/20 08:15	12/25/20 02:25	95-50-1	
1,2-Dichloroethane	ND	ug/kg	161	37.0	2.5	12/24/20 08:15	12/25/20 02:25	107-06-2	
1,2-Dichloropropane	ND	ug/kg	161	38.3	2.5	12/24/20 08:15	12/25/20 02:25	78-87-5	
1,3,5-Trimethylbenzene	2890	ug/kg	161	51.8	2.5	12/24/20 08:15	12/25/20 02:25	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	161	44.1	2.5	12/24/20 08:15	12/25/20 02:25	541-73-1	
1,3-Dichloropropane	ND	ug/kg	161	35.1	2.5	12/24/20 08:15	12/25/20 02:25	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	161	44.1	2.5	12/24/20 08:15	12/25/20 02:25	106-46-7	
2,2-Dichloropropane	ND	ug/kg	161	43.5	2.5	12/24/20 08:15	12/25/20 02:25	594-20-7	
2-Chlorotoluene	ND	ug/kg	161	52.2	2.5	12/24/20 08:15	12/25/20 02:25	95-49-8	
4-Chlorotoluene	ND	ug/kg	161	61.2	2.5	12/24/20 08:15	12/25/20 02:25	106-43-4	
Benzene	171	ug/kg	64.4	38.3	2.5	12/24/20 08:15	12/25/20 02:25	71-43-2	
Bromobenzene	ND	ug/kg	161	62.8	2.5	12/24/20 08:15	12/25/20 02:25	108-86-1	
Bromochloromethane	ND	ug/kg	161	44.1	2.5	12/24/20 08:15	12/25/20 02:25	74-97-5	
Bromodichloromethane	390	ug/kg	161	38.3	2.5	12/24/20 08:15	12/25/20 02:25	75-27-4	
Bromoform	ND	ug/kg	805	708	2.5	12/24/20 08:15	12/25/20 02:25	75-25-2	
Bromomethane	ND	ug/kg	805	226	2.5	12/24/20 08:15	12/25/20 02:25	74-83-9	
Carbon tetrachloride	ND	ug/kg	161	35.4	2.5	12/24/20 08:15	12/25/20 02:25	56-23-5	
Chlorobenzene	ND	ug/kg	161	19.3	2.5	12/24/20 08:15	12/25/20 02:25	108-90-7	
Chloroethane	ND	ug/kg	805	67.9	2.5	12/24/20 08:15	12/25/20 02:25	75-00-3	
Chloroform	ND	ug/kg	805	115	2.5	12/24/20 08:15	12/25/20 02:25	67-66-3	
Chloromethane	ND	ug/kg	161	61.2	2.5	12/24/20 08:15	12/25/20 02:25	74-87-3	
Dibromochloromethane	ND	ug/kg	805	550	2.5	12/24/20 08:15	12/25/20 02:25	124-48-1	
Dibromomethane	ND	ug/kg	161	47.7	2.5	12/24/20 08:15	12/25/20 02:25	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	161	69.2	2.5	12/24/20 08:15	12/25/20 02:25	75-71-8	L1
Diisopropyl ether	ND	ug/kg	161	39.9	2.5	12/24/20 08:15	12/25/20 02:25	108-20-3	
Ethylbenzene	366	ug/kg	161	38.3	2.5	12/24/20 08:15	12/25/20 02:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	805	320	2.5	12/24/20 08:15	12/25/20 02:25	87-68-3	
Isopropylbenzene (Cumene)	292	ug/kg	161	43.5	2.5	12/24/20 08:15	12/25/20 02:25	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	161	47.3	2.5	12/24/20 08:15	12/25/20 02:25	1634-04-4	
Methylene Chloride	ND	ug/kg	161	44.8	2.5	12/24/20 08:15	12/25/20 02:25	75-09-2	
Naphthalene	10600	ug/kg	805	50.2	2.5	12/24/20 08:15	12/25/20 02:25	91-20-3	
Styrene	ND	ug/kg	161	41.2	2.5	12/24/20 08:15	12/25/20 02:25	100-42-5	
Tetrachloroethene	ND	ug/kg	161	62.5	2.5	12/24/20 08:15	12/25/20 02:25	127-18-4	
Toluene	ND	ug/kg	161	40.6	2.5	12/24/20 08:15	12/25/20 02:25	108-88-3	
Trichloroethene	ND	ug/kg	161	60.2	2.5	12/24/20 08:15	12/25/20 02:25	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-11**      **Lab ID: 10542920011**      Collected: 12/16/20 11:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	161	46.7	2.5	12/24/20 08:15	12/25/20 02:25	75-69-4	
Vinyl chloride	ND	ug/kg	161	32.5	2.5	12/24/20 08:15	12/25/20 02:25	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	161	34.5	2.5	12/24/20 08:15	12/25/20 02:25	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	805	106	2.5	12/24/20 08:15	12/25/20 02:25	10061-01-5	
m&p-Xylene	<b>694</b>	ug/kg	322	67.9	2.5	12/24/20 08:15	12/25/20 02:25	179601-23-1	
n-Butylbenzene	ND	ug/kg	161	73.7	2.5	12/24/20 08:15	12/25/20 02:25	104-51-8	
n-Propylbenzene	<b>555</b>	ug/kg	161	38.6	2.5	12/24/20 08:15	12/25/20 02:25	103-65-1	
o-Xylene	ND	ug/kg	161	48.3	2.5	12/24/20 08:15	12/25/20 02:25	95-47-6	
p-Isopropyltoluene	<b>1170</b>	ug/kg	161	48.9	2.5	12/24/20 08:15	12/25/20 02:25	99-87-6	
sec-Butylbenzene	<b>513</b>	ug/kg	161	39.3	2.5	12/24/20 08:15	12/25/20 02:25	135-98-8	
tert-Butylbenzene	ND	ug/kg	161	50.6	2.5	12/24/20 08:15	12/25/20 02:25	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	161	34.8	2.5	12/24/20 08:15	12/25/20 02:25	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	805	460	2.5	12/24/20 08:15	12/25/20 02:25	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	56-140		2.5	12/24/20 08:15	12/25/20 02:25	2037-26-5	
4-Bromofluorobenzene (S)	116	%	52-137		2.5	12/24/20 08:15	12/25/20 02:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	50-150		2.5	12/24/20 08:15	12/25/20 02:25	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-12**      **Lab ID: 10542920012**      Collected: 12/16/20 11:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	4.3	mg/kg	3.2	0.97	20	12/28/20 08:06	12/31/20 19:01	7440-38-2	
Barium	157	mg/kg	3.2	0.96	20	12/28/20 08:06	12/31/20 19:01	7440-39-3	
Cadmium	ND	mg/kg	2.4	0.36	20	12/28/20 08:06	12/31/20 19:01	7440-43-9	D3
Chromium	41.5	mg/kg	7.4	2.2	20	12/28/20 08:06	12/31/20 19:01	7440-47-3	
Lead	39.7	mg/kg	2.4	0.66	20	12/28/20 08:06	12/31/20 03:39	7439-92-1	
Selenium	ND	mg/kg	2.4	0.67	20	12/28/20 08:06	12/31/20 19:01	7782-49-2	D3
Silver	ND	mg/kg	1.2	0.35	20	12/28/20 08:06	12/31/20 19:01	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.040	0.011	1	12/29/20 11:56	12/30/20 11:50	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	20.0	%	0.10	0.10	1		12/29/20 13:06		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	1.9	0.56	1	12/18/20 16:56	12/23/20 21:18	83-32-9	
Acenaphthylene	ND	ug/kg	2.8	0.85	1	12/18/20 16:56	12/23/20 21:18	208-96-8	
Anthracene	ND	ug/kg	1.3	0.39	1	12/18/20 16:56	12/23/20 21:18	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.7	0.51	1	12/18/20 16:56	12/23/20 21:18	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.3	0.70	1	12/18/20 16:56	12/23/20 21:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	1.9	0.58	1	12/18/20 16:56	12/23/20 21:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	1.9	0.58	1	12/18/20 16:56	12/23/20 21:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 21:18	207-08-9	
Chrysene	ND	ug/kg	1.7	0.50	1	12/18/20 16:56	12/23/20 21:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.7	0.82	1	12/18/20 16:56	12/23/20 21:18	53-70-3	
Fluoranthene	ND	ug/kg	2.5	0.75	1	12/18/20 16:56	12/23/20 21:18	206-44-0	
Fluorene	ND	ug/kg	2.5	0.75	1	12/18/20 16:56	12/23/20 21:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.2	0.67	1	12/18/20 16:56	12/23/20 21:18	193-39-5	
Naphthalene	ND	ug/kg	1.9	0.56	1	12/18/20 16:56	12/23/20 21:18	91-20-3	L2
Phenanthrene	ND	ug/kg	2.9	0.88	1	12/18/20 16:56	12/23/20 21:18	85-01-8	
Pyrene	ND	ug/kg	2.7	0.81	1	12/18/20 16:56	12/23/20 21:18	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	30-138		1	12/18/20 16:56	12/23/20 21:18	321-60-8	
p-Terphenyl-d14 (S)	77	%	30-143		1	12/18/20 16:56	12/23/20 21:18	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	62.5	15.0	1	12/24/20 08:15	12/25/20 00:04	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	62.5	16.0	1	12/24/20 08:15	12/25/20 00:04	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	62.5	22.6	1	12/24/20 08:15	12/25/20 00:04	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	62.5	22.7	1	12/24/20 08:15	12/25/20 00:04	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-12**      **Lab ID: 10542920012**      Collected: 12/16/20 11:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	62.5	16.0	1	12/24/20 08:15	12/25/20 00:04	75-34-3	
1,1-Dichloroethene	ND	ug/kg	62.5	20.7	1	12/24/20 08:15	12/25/20 00:04	75-35-4	
1,1-Dichloropropene	ND	ug/kg	62.5	20.2	1	12/24/20 08:15	12/25/20 00:04	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	312	69.6	1	12/24/20 08:15	12/25/20 00:04	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	62.5	30.4	1	12/24/20 08:15	12/25/20 00:04	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	312	51.5	1	12/24/20 08:15	12/25/20 00:04	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	62.5	18.6	1	12/24/20 08:15	12/25/20 00:04	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	312	48.5	1	12/24/20 08:15	12/25/20 00:04	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	62.5	17.1	1	12/24/20 08:15	12/25/20 00:04	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	62.5	19.4	1	12/24/20 08:15	12/25/20 00:04	95-50-1	
1,2-Dichloroethane	ND	ug/kg	62.5	14.4	1	12/24/20 08:15	12/25/20 00:04	107-06-2	
1,2-Dichloropropane	ND	ug/kg	62.5	14.9	1	12/24/20 08:15	12/25/20 00:04	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	62.5	20.1	1	12/24/20 08:15	12/25/20 00:04	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	62.5	17.1	1	12/24/20 08:15	12/25/20 00:04	541-73-1	
1,3-Dichloropropane	ND	ug/kg	62.5	13.6	1	12/24/20 08:15	12/25/20 00:04	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	62.5	17.1	1	12/24/20 08:15	12/25/20 00:04	106-46-7	
2,2-Dichloropropane	ND	ug/kg	62.5	16.9	1	12/24/20 08:15	12/25/20 00:04	594-20-7	
2-Chlorotoluene	ND	ug/kg	62.5	20.2	1	12/24/20 08:15	12/25/20 00:04	95-49-8	
4-Chlorotoluene	ND	ug/kg	62.5	23.7	1	12/24/20 08:15	12/25/20 00:04	106-43-4	
Benzene	ND	ug/kg	25.0	14.9	1	12/24/20 08:15	12/25/20 00:04	71-43-2	
Bromobenzene	ND	ug/kg	62.5	24.4	1	12/24/20 08:15	12/25/20 00:04	108-86-1	
Bromochloromethane	ND	ug/kg	62.5	17.1	1	12/24/20 08:15	12/25/20 00:04	74-97-5	
Bromodichloromethane	ND	ug/kg	62.5	14.9	1	12/24/20 08:15	12/25/20 00:04	75-27-4	
Bromoform	ND	ug/kg	312	275	1	12/24/20 08:15	12/25/20 00:04	75-25-2	
Bromomethane	ND	ug/kg	312	87.6	1	12/24/20 08:15	12/25/20 00:04	74-83-9	
Carbon tetrachloride	ND	ug/kg	62.5	13.7	1	12/24/20 08:15	12/25/20 00:04	56-23-5	
Chlorobenzene	ND	ug/kg	62.5	7.5	1	12/24/20 08:15	12/25/20 00:04	108-90-7	
Chloroethane	ND	ug/kg	312	26.4	1	12/24/20 08:15	12/25/20 00:04	75-00-3	
Chloroform	ND	ug/kg	312	44.7	1	12/24/20 08:15	12/25/20 00:04	67-66-3	
Chloromethane	ND	ug/kg	62.5	23.7	1	12/24/20 08:15	12/25/20 00:04	74-87-3	
Dibromochloromethane	ND	ug/kg	312	214	1	12/24/20 08:15	12/25/20 00:04	124-48-1	
Dibromomethane	ND	ug/kg	62.5	18.5	1	12/24/20 08:15	12/25/20 00:04	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	62.5	26.9	1	12/24/20 08:15	12/25/20 00:04	75-71-8	L1
Diisopropyl ether	ND	ug/kg	62.5	15.5	1	12/24/20 08:15	12/25/20 00:04	108-20-3	
Ethylbenzene	ND	ug/kg	62.5	14.9	1	12/24/20 08:15	12/25/20 00:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	312	124	1	12/24/20 08:15	12/25/20 00:04	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	62.5	16.9	1	12/24/20 08:15	12/25/20 00:04	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	62.5	18.4	1	12/24/20 08:15	12/25/20 00:04	1634-04-4	
Methylene Chloride	ND	ug/kg	62.5	17.4	1	12/24/20 08:15	12/25/20 00:04	75-09-2	
Naphthalene	ND	ug/kg	312	19.5	1	12/24/20 08:15	12/25/20 00:04	91-20-3	
Styrene	ND	ug/kg	62.5	16.0	1	12/24/20 08:15	12/25/20 00:04	100-42-5	
Tetrachloroethene	ND	ug/kg	62.5	24.2	1	12/24/20 08:15	12/25/20 00:04	127-18-4	
Toluene	<b>82.4</b>	ug/kg	62.5	15.7	1	12/24/20 08:15	12/25/20 00:04	108-88-3	
Trichloroethene	ND	ug/kg	62.5	23.4	1	12/24/20 08:15	12/25/20 00:04	79-01-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-12**      **Lab ID: 10542920012**      Collected: 12/16/20 11:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay							
Trichlorofluoromethane	ND	ug/kg	62.5	18.1	1	12/24/20 08:15	12/25/20 00:04	75-69-4	
Vinyl chloride	ND	ug/kg	62.5	12.6	1	12/24/20 08:15	12/25/20 00:04	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	62.5	13.4	1	12/24/20 08:15	12/25/20 00:04	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	312	41.2	1	12/24/20 08:15	12/25/20 00:04	10061-01-5	
m&p-Xylene	ND	ug/kg	125	26.4	1	12/24/20 08:15	12/25/20 00:04	179601-23-1	
n-Butylbenzene	ND	ug/kg	62.5	28.6	1	12/24/20 08:15	12/25/20 00:04	104-51-8	
n-Propylbenzene	ND	ug/kg	62.5	15.0	1	12/24/20 08:15	12/25/20 00:04	103-65-1	
o-Xylene	ND	ug/kg	62.5	18.7	1	12/24/20 08:15	12/25/20 00:04	95-47-6	
p-Isopropyltoluene	ND	ug/kg	62.5	19.0	1	12/24/20 08:15	12/25/20 00:04	99-87-6	
sec-Butylbenzene	ND	ug/kg	62.5	15.2	1	12/24/20 08:15	12/25/20 00:04	135-98-8	
tert-Butylbenzene	ND	ug/kg	62.5	19.6	1	12/24/20 08:15	12/25/20 00:04	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	62.5	13.5	1	12/24/20 08:15	12/25/20 00:04	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	312	179	1	12/24/20 08:15	12/25/20 00:04	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	84	%	56-140		1	12/24/20 08:15	12/25/20 00:04	2037-26-5	
4-Bromofluorobenzene (S)	87	%	52-137		1	12/24/20 08:15	12/25/20 00:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	87	%	50-150		1	12/24/20 08:15	12/25/20 00:04	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-13 A**      **Lab ID: 10542920013**      Collected: 12/17/20 08:40      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	5.0	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 19:08	7440-38-2	
Barium	149	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 19:08	7440-39-3	
Cadmium	ND	mg/kg	2.6	0.37	20	12/28/20 08:06	12/31/20 19:08	7440-43-9	D3
Chromium	40.0	mg/kg	7.8	2.3	20	12/28/20 08:06	12/31/20 19:08	7440-47-3	
Lead	51.0	mg/kg	2.6	0.70	20	12/28/20 08:06	12/31/20 03:46	7439-92-1	
Selenium	ND	mg/kg	2.6	0.70	20	12/28/20 08:06	12/31/20 19:08	7782-49-2	D3
Silver	ND	mg/kg	1.3	0.37	20	12/28/20 08:06	12/31/20 19:08	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.042	0.012	1	12/29/20 11:56	12/30/20 11:52	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	22.3	%	0.10	0.10	1		12/29/20 13:08		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	9.6	2.9	5	12/18/20 16:56	12/23/20 21:40	83-32-9	
Acenaphthylene	ND	ug/kg	14.6	4.4	5	12/18/20 16:56	12/23/20 21:40	208-96-8	
Anthracene	82.9	ug/kg	6.8	2.0	5	12/18/20 16:56	12/23/20 21:40	120-12-7	
Benzo(a)anthracene	291	ug/kg	8.8	2.6	5	12/18/20 16:56	12/23/20 21:40	56-55-3	
Benzo(a)pyrene	345	ug/kg	12.0	3.6	5	12/18/20 16:56	12/23/20 21:40	50-32-8	
Benzo(b)fluoranthene	350	ug/kg	10	3.0	5	12/18/20 16:56	12/23/20 21:40	205-99-2	lp
Benzo(g,h,i)perylene	369	ug/kg	9.9	3.0	5	12/18/20 16:56	12/23/20 21:40	191-24-2	
Benzo(k)fluoranthene	104	ug/kg	10.3	3.1	5	12/18/20 16:56	12/23/20 21:40	207-08-9	lp
Chrysene	475	ug/kg	8.6	2.6	5	12/18/20 16:56	12/23/20 21:40	218-01-9	
Dibenz(a,h)anthracene	132	ug/kg	14.0	4.2	5	12/18/20 16:56	12/23/20 21:40	53-70-3	
Fluoranthene	340	ug/kg	12.9	3.9	5	12/18/20 16:56	12/23/20 21:40	206-44-0	
Fluorene	ND	ug/kg	12.9	3.9	5	12/18/20 16:56	12/23/20 21:40	86-73-7	
Indeno(1,2,3-cd)pyrene	220	ug/kg	11.4	3.4	5	12/18/20 16:56	12/23/20 21:40	193-39-5	
Naphthalene	431	ug/kg	9.6	2.9	5	12/18/20 16:56	12/23/20 21:40	91-20-3	L2
Phenanthrene	355	ug/kg	15.0	4.5	5	12/18/20 16:56	12/23/20 21:40	85-01-8	
Pyrene	409	ug/kg	13.8	4.2	5	12/18/20 16:56	12/23/20 21:40	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	73	%	30-138		5	12/18/20 16:56	12/23/20 21:40	321-60-8	D3
p-Terphenyl-d14 (S)	79	%	30-143		5	12/18/20 16:56	12/23/20 21:40	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	64.4	15.4	1	12/24/20 08:15	12/25/20 00:25	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	64.4	16.5	1	12/24/20 08:15	12/25/20 00:25	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	64.4	23.3	1	12/24/20 08:15	12/25/20 00:25	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	64.4	23.4	1	12/24/20 08:15	12/25/20 00:25	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-13 A**      **Lab ID: 10542920013**      Collected: 12/17/20 08:40      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	64.4	16.5	1	12/24/20 08:15	12/25/20 00:25	75-34-3	
1,1-Dichloroethene	ND	ug/kg	64.4	21.4	1	12/24/20 08:15	12/25/20 00:25	75-35-4	
1,1-Dichloropropene	ND	ug/kg	64.4	20.9	1	12/24/20 08:15	12/25/20 00:25	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	322	71.7	1	12/24/20 08:15	12/25/20 00:25	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	64.4	31.3	1	12/24/20 08:15	12/25/20 00:25	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	322	53.0	1	12/24/20 08:15	12/25/20 00:25	120-82-1	
1,2,4-Trimethylbenzene	<b>411</b>	ug/kg	64.4	19.2	1	12/24/20 08:15	12/25/20 00:25	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	322	49.9	1	12/24/20 08:15	12/25/20 00:25	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/25/20 00:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	64.4	19.9	1	12/24/20 08:15	12/25/20 00:25	95-50-1	
1,2-Dichloroethane	ND	ug/kg	64.4	14.8	1	12/24/20 08:15	12/25/20 00:25	107-06-2	
1,2-Dichloropropane	ND	ug/kg	64.4	15.3	1	12/24/20 08:15	12/25/20 00:25	78-87-5	
1,3,5-Trimethylbenzene	<b>189</b>	ug/kg	64.4	20.7	1	12/24/20 08:15	12/25/20 00:25	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/25/20 00:25	541-73-1	
1,3-Dichloropropane	ND	ug/kg	64.4	14.0	1	12/24/20 08:15	12/25/20 00:25	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/25/20 00:25	106-46-7	
2,2-Dichloropropane	ND	ug/kg	64.4	17.4	1	12/24/20 08:15	12/25/20 00:25	594-20-7	
2-Chlorotoluene	ND	ug/kg	64.4	20.9	1	12/24/20 08:15	12/25/20 00:25	95-49-8	
4-Chlorotoluene	ND	ug/kg	64.4	24.5	1	12/24/20 08:15	12/25/20 00:25	106-43-4	
Benzene	<b>252</b>	ug/kg	25.7	15.3	1	12/24/20 08:15	12/25/20 00:25	71-43-2	
Bromobenzene	ND	ug/kg	64.4	25.1	1	12/24/20 08:15	12/25/20 00:25	108-86-1	
Bromochloromethane	ND	ug/kg	64.4	17.6	1	12/24/20 08:15	12/25/20 00:25	74-97-5	
Bromodichloromethane	ND	ug/kg	64.4	15.3	1	12/24/20 08:15	12/25/20 00:25	75-27-4	
Bromoform	ND	ug/kg	322	283	1	12/24/20 08:15	12/25/20 00:25	75-25-2	
Bromomethane	ND	ug/kg	322	90.2	1	12/24/20 08:15	12/25/20 00:25	74-83-9	
Carbon tetrachloride	ND	ug/kg	64.4	14.2	1	12/24/20 08:15	12/25/20 00:25	56-23-5	
Chlorobenzene	ND	ug/kg	64.4	7.7	1	12/24/20 08:15	12/25/20 00:25	108-90-7	
Chloroethane	ND	ug/kg	322	27.2	1	12/24/20 08:15	12/25/20 00:25	75-00-3	
Chloroform	ND	ug/kg	322	46.1	1	12/24/20 08:15	12/25/20 00:25	67-66-3	
Chloromethane	ND	ug/kg	64.4	24.5	1	12/24/20 08:15	12/25/20 00:25	74-87-3	
Dibromochloromethane	ND	ug/kg	322	220	1	12/24/20 08:15	12/25/20 00:25	124-48-1	
Dibromomethane	ND	ug/kg	64.4	19.0	1	12/24/20 08:15	12/25/20 00:25	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	64.4	27.7	1	12/24/20 08:15	12/25/20 00:25	75-71-8	L1
Diisopropyl ether	ND	ug/kg	64.4	16.0	1	12/24/20 08:15	12/25/20 00:25	108-20-3	
Ethylbenzene	<b>147</b>	ug/kg	64.4	15.3	1	12/24/20 08:15	12/25/20 00:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	322	128	1	12/24/20 08:15	12/25/20 00:25	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	64.4	17.4	1	12/24/20 08:15	12/25/20 00:25	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	64.4	18.9	1	12/24/20 08:15	12/25/20 00:25	1634-04-4	
Methylene Chloride	ND	ug/kg	64.4	17.9	1	12/24/20 08:15	12/25/20 00:25	75-09-2	
Naphthalene	ND	ug/kg	322	20.1	1	12/24/20 08:15	12/25/20 00:25	91-20-3	
Styrene	ND	ug/kg	64.4	16.5	1	12/24/20 08:15	12/25/20 00:25	100-42-5	
Tetrachloroethene	ND	ug/kg	64.4	25.0	1	12/24/20 08:15	12/25/20 00:25	127-18-4	
Toluene	<b>648</b>	ug/kg	64.4	16.2	1	12/24/20 08:15	12/25/20 00:25	108-88-3	
Trichloroethene	ND	ug/kg	64.4	24.1	1	12/24/20 08:15	12/25/20 00:25	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-13 A**      **Lab ID: 10542920013**      Collected: 12/17/20 08:40      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	64.4	18.7	1	12/24/20 08:15	12/25/20 00:25	75-69-4	
Vinyl chloride	ND	ug/kg	64.4	13.0	1	12/24/20 08:15	12/25/20 00:25	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	64.4	13.8	1	12/24/20 08:15	12/25/20 00:25	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	322	42.5	1	12/24/20 08:15	12/25/20 00:25	10061-01-5	
m&p-Xylene	<b>784</b>	ug/kg	129	27.2	1	12/24/20 08:15	12/25/20 00:25	179601-23-1	
n-Butylbenzene	ND	ug/kg	64.4	29.5	1	12/24/20 08:15	12/25/20 00:25	104-51-8	
n-Propylbenzene	ND	ug/kg	64.4	15.4	1	12/24/20 08:15	12/25/20 00:25	103-65-1	
o-Xylene	<b>269</b>	ug/kg	64.4	19.3	1	12/24/20 08:15	12/25/20 00:25	95-47-6	
p-Isopropyltoluene	ND	ug/kg	64.4	19.6	1	12/24/20 08:15	12/25/20 00:25	99-87-6	
sec-Butylbenzene	ND	ug/kg	64.4	15.7	1	12/24/20 08:15	12/25/20 00:25	135-98-8	
tert-Butylbenzene	ND	ug/kg	64.4	20.2	1	12/24/20 08:15	12/25/20 00:25	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	64.4	13.9	1	12/24/20 08:15	12/25/20 00:25	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	322	184	1	12/24/20 08:15	12/25/20 00:25	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	76	%	56-140		1	12/24/20 08:15	12/25/20 00:25	2037-26-5	
4-Bromofluorobenzene (S)	74	%	52-137		1	12/24/20 08:15	12/25/20 00:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	78	%	50-150		1	12/24/20 08:15	12/25/20 00:25	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-13 B**      **Lab ID: 10542920014**      Collected: 12/17/20 09:20      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	5.2	mg/kg	3.5	1.0	20	12/28/20 08:06	12/31/20 19:14	7440-38-2	
Barium	187	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 19:14	7440-39-3	
Cadmium	ND	mg/kg	2.6	0.38	20	12/28/20 08:06	12/31/20 19:14	7440-43-9	D3
Chromium	44.8	mg/kg	7.9	2.4	20	12/28/20 08:06	12/31/20 19:14	7440-47-3	
Lead	11.5	mg/kg	2.6	0.71	20	12/28/20 08:06	12/31/20 03:52	7439-92-1	
Selenium	ND	mg/kg	2.6	0.71	20	12/28/20 08:06	12/31/20 19:14	7782-49-2	D3
Silver	ND	mg/kg	1.3	0.37	20	12/28/20 08:06	12/31/20 19:14	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.044	0.012	1	12/29/20 12:10	12/30/20 12:31	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	24.2	%	0.10	0.10	1		12/29/20 13:11		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 22:02	83-32-9	
Acenaphthylene	ND	ug/kg	3.0	0.90	1	12/18/20 16:56	12/23/20 22:02	208-96-8	
Anthracene	ND	ug/kg	1.4	0.42	1	12/18/20 16:56	12/23/20 22:02	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.8	0.54	1	12/18/20 16:56	12/23/20 22:02	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.5	0.74	1	12/18/20 16:56	12/23/20 22:02	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2.0	0.61	1	12/18/20 16:56	12/23/20 22:02	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	2.0	0.61	1	12/18/20 16:56	12/23/20 22:02	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.1	0.63	1	12/18/20 16:56	12/23/20 22:02	207-08-9	
Chrysene	ND	ug/kg	1.8	0.53	1	12/18/20 16:56	12/23/20 22:02	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.9	0.86	1	12/18/20 16:56	12/23/20 22:02	53-70-3	
Fluoranthene	ND	ug/kg	2.6	0.80	1	12/18/20 16:56	12/23/20 22:02	206-44-0	
Fluorene	ND	ug/kg	2.6	0.79	1	12/18/20 16:56	12/23/20 22:02	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.3	0.70	1	12/18/20 16:56	12/23/20 22:02	193-39-5	
Naphthalene	ND	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 22:02	91-20-3	L2
Phenanthrene	ND	ug/kg	3.1	0.93	1	12/18/20 16:56	12/23/20 22:02	85-01-8	
Pyrene	ND	ug/kg	2.8	0.85	1	12/18/20 16:56	12/23/20 22:02	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	63	%	30-138		1	12/18/20 16:56	12/23/20 22:02	321-60-8	
p-Terphenyl-d14 (S)	74	%	30-143		1	12/18/20 16:56	12/23/20 22:02	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	66.0	15.8	1	12/24/20 08:15	12/25/20 01:25	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	66.0	16.9	1	12/24/20 08:15	12/25/20 01:25	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	66.0	23.9	1	12/24/20 08:15	12/25/20 01:25	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	66.0	24.0	1	12/24/20 08:15	12/25/20 01:25	79-00-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-13 B**      **Lab ID: 10542920014**      Collected: 12/17/20 09:20      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	66.0	16.9	1	12/24/20 08:15	12/25/20 01:25	75-34-3	
1,1-Dichloroethene	ND	ug/kg	66.0	21.9	1	12/24/20 08:15	12/25/20 01:25	75-35-4	
1,1-Dichloropropene	ND	ug/kg	66.0	21.4	1	12/24/20 08:15	12/25/20 01:25	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	330	73.5	1	12/24/20 08:15	12/25/20 01:25	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	66.0	32.1	1	12/24/20 08:15	12/25/20 01:25	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	330	54.4	1	12/24/20 08:15	12/25/20 01:25	120-82-1	
1,2,4-Trimethylbenzene	<b>19000</b>	ug/kg	264	78.7	4	12/24/20 08:15	12/28/20 14:53	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	330	51.2	1	12/24/20 08:15	12/25/20 01:25	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	66.0	18.1	1	12/24/20 08:15	12/25/20 01:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	66.0	20.5	1	12/24/20 08:15	12/25/20 01:25	95-50-1	
1,2-Dichloroethane	ND	ug/kg	66.0	15.2	1	12/24/20 08:15	12/25/20 01:25	107-06-2	
1,2-Dichloropropane	ND	ug/kg	66.0	15.7	1	12/24/20 08:15	12/25/20 01:25	78-87-5	
1,3,5-Trimethylbenzene	<b>5940</b>	ug/kg	66.0	21.2	1	12/24/20 08:15	12/25/20 01:25	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	66.0	18.1	1	12/24/20 08:15	12/25/20 01:25	541-73-1	
1,3-Dichloropropane	ND	ug/kg	66.0	14.4	1	12/24/20 08:15	12/25/20 01:25	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	66.0	18.1	1	12/24/20 08:15	12/25/20 01:25	106-46-7	
2,2-Dichloropropane	ND	ug/kg	66.0	17.8	1	12/24/20 08:15	12/25/20 01:25	594-20-7	
2-Chlorotoluene	ND	ug/kg	66.0	21.4	1	12/24/20 08:15	12/25/20 01:25	95-49-8	
4-Chlorotoluene	ND	ug/kg	66.0	25.1	1	12/24/20 08:15	12/25/20 01:25	106-43-4	
Benzene	<b>1670</b>	ug/kg	26.4	15.7	1	12/24/20 08:15	12/25/20 01:25	71-43-2	
Bromobenzene	ND	ug/kg	66.0	25.7	1	12/24/20 08:15	12/25/20 01:25	108-86-1	
Bromochloromethane	ND	ug/kg	66.0	18.1	1	12/24/20 08:15	12/25/20 01:25	74-97-5	
Bromodichloromethane	ND	ug/kg	66.0	15.7	1	12/24/20 08:15	12/25/20 01:25	75-27-4	
Bromoform	ND	ug/kg	330	290	1	12/24/20 08:15	12/25/20 01:25	75-25-2	
Bromomethane	ND	ug/kg	330	92.5	1	12/24/20 08:15	12/25/20 01:25	74-83-9	
Carbon tetrachloride	ND	ug/kg	66.0	14.5	1	12/24/20 08:15	12/25/20 01:25	56-23-5	
Chlorobenzene	ND	ug/kg	66.0	7.9	1	12/24/20 08:15	12/25/20 01:25	108-90-7	
Chloroethane	ND	ug/kg	330	27.8	1	12/24/20 08:15	12/25/20 01:25	75-00-3	
Chloroform	ND	ug/kg	330	47.2	1	12/24/20 08:15	12/25/20 01:25	67-66-3	
Chloromethane	ND	ug/kg	66.0	25.1	1	12/24/20 08:15	12/25/20 01:25	74-87-3	
Dibromochloromethane	ND	ug/kg	330	226	1	12/24/20 08:15	12/25/20 01:25	124-48-1	
Dibromomethane	ND	ug/kg	66.0	19.5	1	12/24/20 08:15	12/25/20 01:25	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	66.0	28.4	1	12/24/20 08:15	12/25/20 01:25	75-71-8	L1
Diisopropyl ether	ND	ug/kg	66.0	16.4	1	12/24/20 08:15	12/25/20 01:25	108-20-3	
Ethylbenzene	<b>10900</b>	ug/kg	66.0	15.7	1	12/24/20 08:15	12/25/20 01:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	330	131	1	12/24/20 08:15	12/25/20 01:25	87-68-3	
Isopropylbenzene (Cumene)	<b>1640</b>	ug/kg	66.0	17.8	1	12/24/20 08:15	12/25/20 01:25	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	66.0	19.4	1	12/24/20 08:15	12/25/20 01:25	1634-04-4	
Methylene Chloride	ND	ug/kg	66.0	18.3	1	12/24/20 08:15	12/25/20 01:25	75-09-2	
Naphthalene	<b>2830</b>	ug/kg	330	20.6	1	12/24/20 08:15	12/25/20 01:25	91-20-3	
Styrene	ND	ug/kg	66.0	16.9	1	12/24/20 08:15	12/25/20 01:25	100-42-5	
Tetrachloroethene	ND	ug/kg	66.0	25.6	1	12/24/20 08:15	12/25/20 01:25	127-18-4	
Toluene	<b>1430</b>	ug/kg	66.0	16.6	1	12/24/20 08:15	12/25/20 01:25	108-88-3	
Trichloroethene	ND	ug/kg	66.0	24.7	1	12/24/20 08:15	12/25/20 01:25	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-13 B**      **Lab ID: 10542920014**      Collected: 12/17/20 09:20      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	66.0	19.1	1	12/24/20 08:15	12/25/20 01:25	75-69-4	
Vinyl chloride	ND	ug/kg	66.0	13.3	1	12/24/20 08:15	12/25/20 01:25	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	66.0	14.1	1	12/24/20 08:15	12/25/20 01:25	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	330	43.5	1	12/24/20 08:15	12/25/20 01:25	10061-01-5	
m&p-Xylene	<b>23000</b>	ug/kg	132	27.8	1	12/24/20 08:15	12/25/20 01:25	179601-23-1	
n-Butylbenzene	<b>2710</b>	ug/kg	66.0	30.2	1	12/24/20 08:15	12/25/20 01:25	104-51-8	
n-Propylbenzene	<b>3820</b>	ug/kg	66.0	15.8	1	12/24/20 08:15	12/25/20 01:25	103-65-1	
o-Xylene	<b>5110</b>	ug/kg	66.0	19.8	1	12/24/20 08:15	12/25/20 01:25	95-47-6	
p-Isopropyltoluene	<b>1010</b>	ug/kg	66.0	20.1	1	12/24/20 08:15	12/25/20 01:25	99-87-6	
sec-Butylbenzene	<b>879</b>	ug/kg	66.0	16.1	1	12/24/20 08:15	12/25/20 01:25	135-98-8	
tert-Butylbenzene	ND	ug/kg	66.0	20.7	1	12/24/20 08:15	12/25/20 01:25	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	66.0	14.3	1	12/24/20 08:15	12/25/20 01:25	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	330	189	1	12/24/20 08:15	12/25/20 01:25	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	97	%	56-140		1	12/24/20 08:15	12/25/20 01:25	2037-26-5	
4-Bromofluorobenzene (S)	114	%	52-137		1	12/24/20 08:15	12/25/20 01:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	91	%	50-150		1	12/24/20 08:15	12/25/20 01:25	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-14 A**      **Lab ID: 10542920015**      Collected: 12/17/20 10:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020    Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	ND	mg/kg	6.5	1.9	40	12/28/20 08:06	01/05/21 00:03	7440-38-2	D3
Barium	<b>218</b>	mg/kg	3.2	0.97	20	12/28/20 08:06	12/31/20 19:35	7440-39-3	
Cadmium	ND	mg/kg	4.9	0.72	40	12/28/20 08:06	01/05/21 00:03	7440-43-9	D3
Chromium	<b>50.5</b>	mg/kg	7.5	2.2	20	12/28/20 08:06	12/31/20 19:35	7440-47-3	
Lead	<b>10.2</b>	mg/kg	2.5	0.67	20	12/28/20 08:06	12/31/20 04:13	7439-92-1	
Selenium	ND	mg/kg	4.9	1.3	40	12/28/20 08:06	01/05/21 00:03	7782-49-2	D3
Silver	ND	mg/kg	2.5	0.70	40	12/28/20 08:06	01/05/21 00:03	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471    Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.044	0.013	1	12/29/20 12:10	12/30/20 12:34	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>21.7</b>	%	0.10	0.10	1		12/29/20 13:13		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 22:23	83-32-9	
Acenaphthylene	ND	ug/kg	2.9	0.87	1	12/18/20 16:56	12/23/20 22:23	208-96-8	
Anthracene	ND	ug/kg	1.3	0.40	1	12/18/20 16:56	12/23/20 22:23	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.7	0.52	1	12/18/20 16:56	12/23/20 22:23	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.4	0.72	1	12/18/20 16:56	12/23/20 22:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 22:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 22:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.0	0.61	1	12/18/20 16:56	12/23/20 22:23	207-08-9	
Chrysene	ND	ug/kg	1.7	0.51	1	12/18/20 16:56	12/23/20 22:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.8	0.84	1	12/18/20 16:56	12/23/20 22:23	53-70-3	
Fluoranthene	ND	ug/kg	2.6	0.77	1	12/18/20 16:56	12/23/20 22:23	206-44-0	
Fluorene	ND	ug/kg	2.5	0.77	1	12/18/20 16:56	12/23/20 22:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.3	0.68	1	12/18/20 16:56	12/23/20 22:23	193-39-5	
Naphthalene	ND	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 22:23	91-20-3	L2
Phenanthrene	ND	ug/kg	3.0	0.90	1	12/18/20 16:56	12/23/20 22:23	85-01-8	
Pyrene	ND	ug/kg	2.7	0.82	1	12/18/20 16:56	12/23/20 22:23	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	64	%	30-138		1	12/18/20 16:56	12/23/20 22:23	321-60-8	
p-Terphenyl-d14 (S)	73	%	30-143		1	12/18/20 16:56	12/23/20 22:23	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	63.9	15.3	1	12/24/20 08:15	12/25/20 00:45	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	63.9	16.3	1	12/24/20 08:15	12/25/20 00:45	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	63.9	23.1	1	12/24/20 08:15	12/25/20 00:45	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	63.9	23.2	1	12/24/20 08:15	12/25/20 00:45	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Sample: GP-14 A Lab ID: 10542920015 Collected: 12/17/20 10:25 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	63.9	16.3	1	12/24/20 08:15	12/25/20 00:45	75-34-3	
1,1-Dichloroethene	ND	ug/kg	63.9	21.2	1	12/24/20 08:15	12/25/20 00:45	75-35-4	
1,1-Dichloropropene	ND	ug/kg	63.9	20.7	1	12/24/20 08:15	12/25/20 00:45	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	319	71.1	1	12/24/20 08:15	12/25/20 00:45	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	63.9	31.0	1	12/24/20 08:15	12/25/20 00:45	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	319	52.6	1	12/24/20 08:15	12/25/20 00:45	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	63.9	19.0	1	12/24/20 08:15	12/25/20 00:45	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	319	49.6	1	12/24/20 08:15	12/25/20 00:45	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	63.9	17.5	1	12/24/20 08:15	12/25/20 00:45	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	63.9	19.8	1	12/24/20 08:15	12/25/20 00:45	95-50-1	
1,2-Dichloroethane	ND	ug/kg	63.9	14.7	1	12/24/20 08:15	12/25/20 00:45	107-06-2	
1,2-Dichloropropane	ND	ug/kg	63.9	15.2	1	12/24/20 08:15	12/25/20 00:45	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	63.9	20.6	1	12/24/20 08:15	12/25/20 00:45	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	63.9	17.5	1	12/24/20 08:15	12/25/20 00:45	541-73-1	
1,3-Dichloropropane	ND	ug/kg	63.9	13.9	1	12/24/20 08:15	12/25/20 00:45	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	63.9	17.5	1	12/24/20 08:15	12/25/20 00:45	106-46-7	
2,2-Dichloropropane	ND	ug/kg	63.9	17.2	1	12/24/20 08:15	12/25/20 00:45	594-20-7	
2-Chlorotoluene	ND	ug/kg	63.9	20.7	1	12/24/20 08:15	12/25/20 00:45	95-49-8	
4-Chlorotoluene	ND	ug/kg	63.9	24.3	1	12/24/20 08:15	12/25/20 00:45	106-43-4	
Benzene	ND	ug/kg	25.5	15.2	1	12/24/20 08:15	12/25/20 00:45	71-43-2	
Bromobenzene	ND	ug/kg	63.9	24.9	1	12/24/20 08:15	12/25/20 00:45	108-86-1	
Bromochloromethane	ND	ug/kg	63.9	17.5	1	12/24/20 08:15	12/25/20 00:45	74-97-5	
Bromodichloromethane	ND	ug/kg	63.9	15.2	1	12/24/20 08:15	12/25/20 00:45	75-27-4	
Bromoform	ND	ug/kg	319	281	1	12/24/20 08:15	12/25/20 00:45	75-25-2	
Bromomethane	ND	ug/kg	319	89.5	1	12/24/20 08:15	12/25/20 00:45	74-83-9	
Carbon tetrachloride	ND	ug/kg	63.9	14.1	1	12/24/20 08:15	12/25/20 00:45	56-23-5	
Chlorobenzene	ND	ug/kg	63.9	7.7	1	12/24/20 08:15	12/25/20 00:45	108-90-7	
Chloroethane	ND	ug/kg	319	27.0	1	12/24/20 08:15	12/25/20 00:45	75-00-3	
Chloroform	ND	ug/kg	319	45.7	1	12/24/20 08:15	12/25/20 00:45	67-66-3	
Chloromethane	ND	ug/kg	63.9	24.3	1	12/24/20 08:15	12/25/20 00:45	74-87-3	
Dibromochloromethane	ND	ug/kg	319	218	1	12/24/20 08:15	12/25/20 00:45	124-48-1	
Dibromomethane	ND	ug/kg	63.9	18.9	1	12/24/20 08:15	12/25/20 00:45	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	63.9	27.5	1	12/24/20 08:15	12/25/20 00:45	75-71-8	L1
Diisopropyl ether	ND	ug/kg	63.9	15.8	1	12/24/20 08:15	12/25/20 00:45	108-20-3	
Ethylbenzene	ND	ug/kg	63.9	15.2	1	12/24/20 08:15	12/25/20 00:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	319	127	1	12/24/20 08:15	12/25/20 00:45	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	63.9	17.2	1	12/24/20 08:15	12/25/20 00:45	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	63.9	18.8	1	12/24/20 08:15	12/25/20 00:45	1634-04-4	
Methylene Chloride	ND	ug/kg	63.9	17.8	1	12/24/20 08:15	12/25/20 00:45	75-09-2	
Naphthalene	ND	ug/kg	319	19.9	1	12/24/20 08:15	12/25/20 00:45	91-20-3	
Styrene	ND	ug/kg	63.9	16.3	1	12/24/20 08:15	12/25/20 00:45	100-42-5	
Tetrachloroethene	ND	ug/kg	63.9	24.8	1	12/24/20 08:15	12/25/20 00:45	127-18-4	
Toluene	ND	ug/kg	63.9	16.1	1	12/24/20 08:15	12/25/20 00:45	108-88-3	
Trichloroethene	ND	ug/kg	63.9	23.9	1	12/24/20 08:15	12/25/20 00:45	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-14 A**      **Lab ID: 10542920015**      Collected: 12/17/20 10:25      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	63.9	18.5	1	12/24/20 08:15	12/25/20 00:45	75-69-4	
Vinyl chloride	ND	ug/kg	63.9	12.9	1	12/24/20 08:15	12/25/20 00:45	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	63.9	13.7	1	12/24/20 08:15	12/25/20 00:45	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	319	42.2	1	12/24/20 08:15	12/25/20 00:45	10061-01-5	
m&p-Xylene	ND	ug/kg	128	27.0	1	12/24/20 08:15	12/25/20 00:45	179601-23-1	
n-Butylbenzene	ND	ug/kg	63.9	29.2	1	12/24/20 08:15	12/25/20 00:45	104-51-8	
n-Propylbenzene	ND	ug/kg	63.9	15.3	1	12/24/20 08:15	12/25/20 00:45	103-65-1	
o-Xylene	ND	ug/kg	63.9	19.2	1	12/24/20 08:15	12/25/20 00:45	95-47-6	
p-Isopropyltoluene	ND	ug/kg	63.9	19.4	1	12/24/20 08:15	12/25/20 00:45	99-87-6	
sec-Butylbenzene	ND	ug/kg	63.9	15.6	1	12/24/20 08:15	12/25/20 00:45	135-98-8	
tert-Butylbenzene	ND	ug/kg	63.9	20.1	1	12/24/20 08:15	12/25/20 00:45	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	63.9	13.8	1	12/24/20 08:15	12/25/20 00:45	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	319	183	1	12/24/20 08:15	12/25/20 00:45	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	87	%	56-140		1	12/24/20 08:15	12/25/20 00:45	2037-26-5	
4-Bromofluorobenzene (S)	89	%	52-137		1	12/24/20 08:15	12/25/20 00:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	92	%	50-150		1	12/24/20 08:15	12/25/20 00:45	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-14 B**      **Lab ID: 10542920016**      Collected: 12/17/20 11:15      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	3.9	mg/kg	3.1	0.93	20	12/28/20 08:06	12/31/20 19:42	7440-38-2	
Barium	147	mg/kg	3.1	0.92	20	12/28/20 08:06	12/31/20 19:42	7440-39-3	
Cadmium	ND	mg/kg	2.3	0.34	20	12/28/20 08:06	12/31/20 19:42	7440-43-9	D3
Chromium	30.4	mg/kg	7.1	2.1	20	12/28/20 08:06	12/31/20 19:42	7440-47-3	
Lead	6.9	mg/kg	2.3	0.64	20	12/28/20 08:06	12/31/20 04:20	7439-92-1	
Selenium	ND	mg/kg	2.3	0.64	20	12/28/20 08:06	12/31/20 19:42	7782-49-2	D3
Silver	ND	mg/kg	1.2	0.34	20	12/28/20 08:06	12/31/20 19:42	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.042	0.012	1	12/29/20 12:10	12/30/20 12:41	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	18.6	%	0.10	0.10	1		12/29/20 13:16		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	1.8	0.55	1	12/18/20 16:56	12/23/20 22:45	83-32-9	
Acenaphthylene	ND	ug/kg	2.8	0.84	1	12/18/20 16:56	12/23/20 22:45	208-96-8	
Anthracene	ND	ug/kg	1.3	0.39	1	12/18/20 16:56	12/23/20 22:45	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.7	0.50	1	12/18/20 16:56	12/23/20 22:45	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.3	0.69	1	12/18/20 16:56	12/23/20 22:45	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 22:45	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	1.9	0.57	1	12/18/20 16:56	12/23/20 22:45	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.0	0.59	1	12/18/20 16:56	12/23/20 22:45	207-08-9	
Chrysene	ND	ug/kg	1.6	0.49	1	12/18/20 16:56	12/23/20 22:45	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.7	0.80	1	12/18/20 16:56	12/23/20 22:45	53-70-3	
Fluoranthene	ND	ug/kg	2.5	0.74	1	12/18/20 16:56	12/23/20 22:45	206-44-0	
Fluorene	ND	ug/kg	2.5	0.74	1	12/18/20 16:56	12/23/20 22:45	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.2	0.66	1	12/18/20 16:56	12/23/20 22:45	193-39-5	
Naphthalene	ND	ug/kg	1.8	0.55	1	12/18/20 16:56	12/23/20 22:45	91-20-3	L2
Phenanthrene	ND	ug/kg	2.9	0.86	1	12/18/20 16:56	12/23/20 22:45	85-01-8	
Pyrene	ND	ug/kg	2.6	0.79	1	12/18/20 16:56	12/23/20 22:45	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	66	%	30-138		1	12/18/20 16:56	12/23/20 22:45	321-60-8	
p-Terphenyl-d14 (S)	74	%	30-143		1	12/18/20 16:56	12/23/20 22:45	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	61.4	14.7	1	12/24/20 08:15	12/25/20 01:05	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	61.4	15.7	1	12/24/20 08:15	12/25/20 01:05	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	61.4	22.2	1	12/24/20 08:15	12/25/20 01:05	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	61.4	22.4	1	12/24/20 08:15	12/25/20 01:05	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-14 B**      **Lab ID: 10542920016**      Collected: 12/17/20 11:15      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	61.4	15.7	1	12/24/20 08:15	12/25/20 01:05	75-34-3	
1,1-Dichloroethene	ND	ug/kg	61.4	20.4	1	12/24/20 08:15	12/25/20 01:05	75-35-4	
1,1-Dichloropropene	ND	ug/kg	61.4	19.9	1	12/24/20 08:15	12/25/20 01:05	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	307	68.4	1	12/24/20 08:15	12/25/20 01:05	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	61.4	29.8	1	12/24/20 08:15	12/25/20 01:05	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	307	50.6	1	12/24/20 08:15	12/25/20 01:05	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	61.4	18.3	1	12/24/20 08:15	12/25/20 01:05	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	307	47.6	1	12/24/20 08:15	12/25/20 01:05	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/25/20 01:05	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	61.4	19.0	1	12/24/20 08:15	12/25/20 01:05	95-50-1	
1,2-Dichloroethane	ND	ug/kg	61.4	14.1	1	12/24/20 08:15	12/25/20 01:05	107-06-2	
1,2-Dichloropropane	ND	ug/kg	61.4	14.6	1	12/24/20 08:15	12/25/20 01:05	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	61.4	19.8	1	12/24/20 08:15	12/25/20 01:05	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/25/20 01:05	541-73-1	
1,3-Dichloropropane	ND	ug/kg	61.4	13.4	1	12/24/20 08:15	12/25/20 01:05	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/25/20 01:05	106-46-7	
2,2-Dichloropropane	ND	ug/kg	61.4	16.6	1	12/24/20 08:15	12/25/20 01:05	594-20-7	
2-Chlorotoluene	ND	ug/kg	61.4	19.9	1	12/24/20 08:15	12/25/20 01:05	95-49-8	
4-Chlorotoluene	ND	ug/kg	61.4	23.3	1	12/24/20 08:15	12/25/20 01:05	106-43-4	
Benzene	ND	ug/kg	24.6	14.6	1	12/24/20 08:15	12/25/20 01:05	71-43-2	
Bromobenzene	ND	ug/kg	61.4	23.9	1	12/24/20 08:15	12/25/20 01:05	108-86-1	
Bromochloromethane	ND	ug/kg	61.4	16.8	1	12/24/20 08:15	12/25/20 01:05	74-97-5	
Bromodichloromethane	ND	ug/kg	61.4	14.6	1	12/24/20 08:15	12/25/20 01:05	75-27-4	
Bromoform	ND	ug/kg	307	270	1	12/24/20 08:15	12/25/20 01:05	75-25-2	
Bromomethane	ND	ug/kg	307	86.1	1	12/24/20 08:15	12/25/20 01:05	74-83-9	
Carbon tetrachloride	ND	ug/kg	61.4	13.5	1	12/24/20 08:15	12/25/20 01:05	56-23-5	
Chlorobenzene	ND	ug/kg	61.4	7.4	1	12/24/20 08:15	12/25/20 01:05	108-90-7	
Chloroethane	ND	ug/kg	307	25.9	1	12/24/20 08:15	12/25/20 01:05	75-00-3	
Chloroform	ND	ug/kg	307	44.0	1	12/24/20 08:15	12/25/20 01:05	67-66-3	
Chloromethane	ND	ug/kg	61.4	23.3	1	12/24/20 08:15	12/25/20 01:05	74-87-3	
Dibromochloromethane	ND	ug/kg	307	210	1	12/24/20 08:15	12/25/20 01:05	124-48-1	
Dibromomethane	ND	ug/kg	61.4	18.2	1	12/24/20 08:15	12/25/20 01:05	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	61.4	26.4	1	12/24/20 08:15	12/25/20 01:05	75-71-8	L1
Diisopropyl ether	ND	ug/kg	61.4	15.2	1	12/24/20 08:15	12/25/20 01:05	108-20-3	
Ethylbenzene	ND	ug/kg	61.4	14.6	1	12/24/20 08:15	12/25/20 01:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	307	122	1	12/24/20 08:15	12/25/20 01:05	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	61.4	16.6	1	12/24/20 08:15	12/25/20 01:05	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	61.4	18.1	1	12/24/20 08:15	12/25/20 01:05	1634-04-4	
Methylene Chloride	ND	ug/kg	61.4	17.1	1	12/24/20 08:15	12/25/20 01:05	75-09-2	
Naphthalene	ND	ug/kg	307	19.2	1	12/24/20 08:15	12/25/20 01:05	91-20-3	
Styrene	ND	ug/kg	61.4	15.7	1	12/24/20 08:15	12/25/20 01:05	100-42-5	
Tetrachloroethene	ND	ug/kg	61.4	23.8	1	12/24/20 08:15	12/25/20 01:05	127-18-4	
Toluene	ND	ug/kg	61.4	15.5	1	12/24/20 08:15	12/25/20 01:05	108-88-3	
Trichloroethene	ND	ug/kg	61.4	23.0	1	12/24/20 08:15	12/25/20 01:05	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-14 B**      **Lab ID: 10542920016**      Collected: 12/17/20 11:15      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay							
Trichlorofluoromethane	ND	ug/kg	61.4	17.8	1	12/24/20 08:15	12/25/20 01:05	75-69-4	
Vinyl chloride	ND	ug/kg	61.4	12.4	1	12/24/20 08:15	12/25/20 01:05	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	61.4	13.1	1	12/24/20 08:15	12/25/20 01:05	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	307	40.5	1	12/24/20 08:15	12/25/20 01:05	10061-01-5	
m&p-Xylene	ND	ug/kg	123	25.9	1	12/24/20 08:15	12/25/20 01:05	179601-23-1	
n-Butylbenzene	ND	ug/kg	61.4	28.1	1	12/24/20 08:15	12/25/20 01:05	104-51-8	
n-Propylbenzene	ND	ug/kg	61.4	14.7	1	12/24/20 08:15	12/25/20 01:05	103-65-1	
o-Xylene	ND	ug/kg	61.4	18.4	1	12/24/20 08:15	12/25/20 01:05	95-47-6	
p-Isopropyltoluene	ND	ug/kg	61.4	18.7	1	12/24/20 08:15	12/25/20 01:05	99-87-6	
sec-Butylbenzene	ND	ug/kg	61.4	15.0	1	12/24/20 08:15	12/25/20 01:05	135-98-8	
tert-Butylbenzene	ND	ug/kg	61.4	19.3	1	12/24/20 08:15	12/25/20 01:05	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	61.4	13.3	1	12/24/20 08:15	12/25/20 01:05	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	307	176	1	12/24/20 08:15	12/25/20 01:05	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	95	%	56-140		1	12/24/20 08:15	12/25/20 01:05	2037-26-5	
4-Bromofluorobenzene (S)	99	%	52-137		1	12/24/20 08:15	12/25/20 01:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	50-150		1	12/24/20 08:15	12/25/20 01:05	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-15 A**      **Lab ID: 10542920017**      Collected: 12/17/20 11:20      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	10.5	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 19:49	7440-38-2	
Barium	174	mg/kg	3.4	1.0	20	12/28/20 08:06	12/31/20 19:49	7440-39-3	
Cadmium	ND	mg/kg	2.6	0.38	20	12/28/20 08:06	12/31/20 19:49	7440-43-9	D3
Chromium	35.7	mg/kg	7.9	2.4	20	12/28/20 08:06	12/31/20 19:49	7440-47-3	
Lead	43.8	mg/kg	2.6	0.70	20	12/28/20 08:06	12/31/20 04:27	7439-92-1	
Selenium	2.6	mg/kg	2.6	0.71	20	12/28/20 08:06	12/31/20 19:49	7782-49-2	
Silver	ND	mg/kg	1.3	0.37	20	12/28/20 08:06	12/31/20 19:49	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.046	0.013	1	12/29/20 12:10	12/30/20 12:43	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	27.8	%	0.10	0.10	1		12/29/20 13:18		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	10.3	3.1	5	12/18/20 16:56	12/23/20 23:07	83-32-9	
Acenaphthylene	ND	ug/kg	15.7	4.7	5	12/18/20 16:56	12/23/20 23:07	208-96-8	
Anthracene	133	ug/kg	7.3	2.2	5	12/18/20 16:56	12/23/20 23:07	120-12-7	
Benzo(a)anthracene	422	ug/kg	9.5	2.8	5	12/18/20 16:56	12/23/20 23:07	56-55-3	
Benzo(a)pyrene	535	ug/kg	13.0	3.9	5	12/18/20 16:56	12/23/20 23:07	50-32-8	
Benzo(b)fluoranthene	445	ug/kg	10.7	3.2	5	12/18/20 16:56	12/23/20 23:07	205-99-2	lp
Benzo(g,h,i)perylene	1290	ug/kg	10.7	3.2	5	12/18/20 16:56	12/23/20 23:07	191-24-2	
Benzo(k)fluoranthene	100	ug/kg	11.1	3.3	5	12/18/20 16:56	12/23/20 23:07	207-08-9	lp
Chrysene	899	ug/kg	9.2	2.8	5	12/18/20 16:56	12/23/20 23:07	218-01-9	
Dibenz(a,h)anthracene	194	ug/kg	15.1	4.5	5	12/18/20 16:56	12/23/20 23:07	53-70-3	
Fluoranthene	422	ug/kg	13.9	4.2	5	12/18/20 16:56	12/23/20 23:07	206-44-0	
Fluorene	72.7	ug/kg	13.9	4.2	5	12/18/20 16:56	12/23/20 23:07	86-73-7	
Indeno(1,2,3-cd)pyrene	394	ug/kg	12.3	3.7	5	12/18/20 16:56	12/23/20 23:07	193-39-5	
Naphthalene	2040	ug/kg	10.4	3.1	5	12/18/20 16:56	12/23/20 23:07	91-20-3	L2
Phenanthrene	535	ug/kg	16.2	4.9	5	12/18/20 16:56	12/23/20 23:07	85-01-8	
Pyrene	1040	ug/kg	14.9	4.5	5	12/18/20 16:56	12/23/20 23:07	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	74	%	30-138		5	12/18/20 16:56	12/23/20 23:07	321-60-8	D3
p-Terphenyl-d14 (S)	85	%	30-143		5	12/18/20 16:56	12/23/20 23:07	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	360	86.3	4	12/24/20 08:15	12/25/20 02:05	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	360	92.1	4	12/24/20 08:15	12/25/20 02:05	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	360	130	4	12/24/20 08:15	12/25/20 02:05	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	360	131	4	12/24/20 08:15	12/25/20 02:05	79-00-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Sample: GP-15 A Lab ID: 10542920017 Collected: 12/17/20 11:20 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	360	92.1	4	12/24/20 08:15	12/25/20 02:05	75-34-3	
1,1-Dichloroethene	ND	ug/kg	360	119	4	12/24/20 08:15	12/25/20 02:05	75-35-4	
1,1-Dichloropropene	ND	ug/kg	360	117	4	12/24/20 08:15	12/25/20 02:05	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	1800	401	4	12/24/20 08:15	12/25/20 02:05	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	360	175	4	12/24/20 08:15	12/25/20 02:05	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	1800	296	4	12/24/20 08:15	12/25/20 02:05	120-82-1	
1,2,4-Trimethylbenzene	15400	ug/kg	360	107	4	12/24/20 08:15	12/25/20 02:05	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	1800	279	4	12/24/20 08:15	12/25/20 02:05	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	360	98.6	4	12/24/20 08:15	12/25/20 02:05	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	360	112	4	12/24/20 08:15	12/25/20 02:05	95-50-1	
1,2-Dichloroethane	483	ug/kg	360	82.7	4	12/24/20 08:15	12/25/20 02:05	107-06-2	
1,2-Dichloropropane	ND	ug/kg	360	85.6	4	12/24/20 08:15	12/25/20 02:05	78-87-5	
1,3,5-Trimethylbenzene	7300	ug/kg	360	116	4	12/24/20 08:15	12/25/20 02:05	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	360	98.6	4	12/24/20 08:15	12/25/20 02:05	541-73-1	
1,3-Dichloropropane	ND	ug/kg	360	78.4	4	12/24/20 08:15	12/25/20 02:05	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	360	98.6	4	12/24/20 08:15	12/25/20 02:05	106-46-7	
2,2-Dichloropropane	ND	ug/kg	360	97.1	4	12/24/20 08:15	12/25/20 02:05	594-20-7	
2-Chlorotoluene	ND	ug/kg	360	117	4	12/24/20 08:15	12/25/20 02:05	95-49-8	
4-Chlorotoluene	ND	ug/kg	360	137	4	12/24/20 08:15	12/25/20 02:05	106-43-4	
Benzene	33900	ug/kg	144	85.6	4	12/24/20 08:15	12/25/20 02:05	71-43-2	
Bromobenzene	ND	ug/kg	360	140	4	12/24/20 08:15	12/25/20 02:05	108-86-1	
Bromochloromethane	ND	ug/kg	360	98.6	4	12/24/20 08:15	12/25/20 02:05	74-97-5	
Bromodichloromethane	10900	ug/kg	360	85.6	4	12/24/20 08:15	12/25/20 02:05	75-27-4	
Bromoform	ND	ug/kg	1800	1580	4	12/24/20 08:15	12/25/20 02:05	75-25-2	
Bromomethane	ND	ug/kg	1800	504	4	12/24/20 08:15	12/25/20 02:05	74-83-9	
Carbon tetrachloride	ND	ug/kg	360	79.2	4	12/24/20 08:15	12/25/20 02:05	56-23-5	
Chlorobenzene	ND	ug/kg	360	43.1	4	12/24/20 08:15	12/25/20 02:05	108-90-7	
Chloroethane	ND	ug/kg	1800	152	4	12/24/20 08:15	12/25/20 02:05	75-00-3	
Chloroform	ND	ug/kg	1800	258	4	12/24/20 08:15	12/25/20 02:05	67-66-3	
Chloromethane	ND	ug/kg	360	137	4	12/24/20 08:15	12/25/20 02:05	74-87-3	
Dibromochloromethane	ND	ug/kg	1800	1230	4	12/24/20 08:15	12/25/20 02:05	124-48-1	
Dibromomethane	ND	ug/kg	360	106	4	12/24/20 08:15	12/25/20 02:05	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	360	155	4	12/24/20 08:15	12/25/20 02:05	75-71-8	L1
Diisopropyl ether	ND	ug/kg	360	89.2	4	12/24/20 08:15	12/25/20 02:05	108-20-3	
Ethylbenzene	10000	ug/kg	360	85.6	4	12/24/20 08:15	12/25/20 02:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	1800	715	4	12/24/20 08:15	12/25/20 02:05	87-68-3	
Isopropylbenzene (Cumene)	420	ug/kg	360	97.1	4	12/24/20 08:15	12/25/20 02:05	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	360	106	4	12/24/20 08:15	12/25/20 02:05	1634-04-4	
Methylene Chloride	ND	ug/kg	360	100	4	12/24/20 08:15	12/25/20 02:05	75-09-2	
Naphthalene	4150	ug/kg	1800	112	4	12/24/20 08:15	12/25/20 02:05	91-20-3	
Styrene	ND	ug/kg	360	92.1	4	12/24/20 08:15	12/25/20 02:05	100-42-5	
Tetrachloroethene	ND	ug/kg	360	140	4	12/24/20 08:15	12/25/20 02:05	127-18-4	
Toluene	15400	ug/kg	360	90.7	4	12/24/20 08:15	12/25/20 02:05	108-88-3	
Trichloroethene	ND	ug/kg	360	135	4	12/24/20 08:15	12/25/20 02:05	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-15 A**      **Lab ID: 10542920017**      Collected: 12/17/20 11:20      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	360	104	4	12/24/20 08:15	12/25/20 02:05	75-69-4	
Vinyl chloride	ND	ug/kg	360	72.7	4	12/24/20 08:15	12/25/20 02:05	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	360	77.0	4	12/24/20 08:15	12/25/20 02:05	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	1800	237	4	12/24/20 08:15	12/25/20 02:05	10061-01-5	
m&p-Xylene	<b>22100</b>	ug/kg	720	152	4	12/24/20 08:15	12/25/20 02:05	179601-23-1	
n-Butylbenzene	ND	ug/kg	360	165	4	12/24/20 08:15	12/25/20 02:05	104-51-8	
n-Propylbenzene	<b>1670</b>	ug/kg	360	86.3	4	12/24/20 08:15	12/25/20 02:05	103-65-1	
o-Xylene	<b>4870</b>	ug/kg	360	108	4	12/24/20 08:15	12/25/20 02:05	95-47-6	
p-Isopropyltoluene	<b>473</b>	ug/kg	360	109	4	12/24/20 08:15	12/25/20 02:05	99-87-6	
sec-Butylbenzene	ND	ug/kg	360	87.8	4	12/24/20 08:15	12/25/20 02:05	135-98-8	
tert-Butylbenzene	ND	ug/kg	360	113	4	12/24/20 08:15	12/25/20 02:05	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	360	77.7	4	12/24/20 08:15	12/25/20 02:05	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	1800	1030	4	12/24/20 08:15	12/25/20 02:05	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	94	%	56-140		4	12/24/20 08:15	12/25/20 02:05	2037-26-5	
4-Bromofluorobenzene (S)	130	%	52-137		4	12/24/20 08:15	12/25/20 02:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	124	%	50-150		4	12/24/20 08:15	12/25/20 02:05	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

**Sample: GP-15 B**      **Lab ID: 10542920018**      Collected: 12/17/20 11:35      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Green Bay									
Arsenic	5.2	mg/kg	3.2	0.97	20	12/28/20 08:06	12/31/20 19:55	7440-38-2	
Barium	248	mg/kg	3.2	0.96	20	12/28/20 08:06	12/31/20 19:55	7440-39-3	
Cadmium	ND	mg/kg	2.4	0.36	20	12/28/20 08:06	12/31/20 19:55	7440-43-9	D3
Chromium	47.5	mg/kg	7.4	2.2	20	12/28/20 08:06	12/31/20 19:55	7440-47-3	
Lead	11.1	mg/kg	2.4	0.66	20	12/28/20 08:06	12/31/20 04:33	7439-92-1	
Selenium	ND	mg/kg	2.4	0.67	20	12/28/20 08:06	12/31/20 19:55	7782-49-2	D3
Silver	ND	mg/kg	1.2	0.35	20	12/28/20 08:06	12/31/20 19:55	7440-22-4	D3
<b>7471 Mercury</b>									
Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Pace Analytical Services - Green Bay									
Mercury	ND	mg/kg	0.045	0.013	1	12/29/20 12:10	12/30/20 12:45	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	22.7	%	0.10	0.10	1		12/29/20 13:21		N2
<b>8270E MSSV PAH by SIM</b>									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3550C									
Pace Analytical Services - Minneapolis									
Acenaphthene	ND	ug/kg	1.9	0.58	1	12/18/20 16:56	12/23/20 23:29	83-32-9	
Acenaphthylene	ND	ug/kg	2.9	0.88	1	12/18/20 16:56	12/23/20 23:29	208-96-8	
Anthracene	ND	ug/kg	1.4	0.41	1	12/18/20 16:56	12/23/20 23:29	120-12-7	
Benzo(a)anthracene	ND	ug/kg	1.8	0.53	1	12/18/20 16:56	12/23/20 23:29	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2.4	0.73	1	12/18/20 16:56	12/23/20 23:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 23:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	2.0	0.60	1	12/18/20 16:56	12/23/20 23:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2.1	0.62	1	12/18/20 16:56	12/23/20 23:29	207-08-9	
Chrysene	ND	ug/kg	1.7	0.52	1	12/18/20 16:56	12/23/20 23:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2.8	0.85	1	12/18/20 16:56	12/23/20 23:29	53-70-3	
Fluoranthene	ND	ug/kg	2.6	0.78	1	12/18/20 16:56	12/23/20 23:29	206-44-0	
Fluorene	ND	ug/kg	2.6	0.78	1	12/18/20 16:56	12/23/20 23:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2.3	0.69	1	12/18/20 16:56	12/23/20 23:29	193-39-5	
Naphthalene	37.0	ug/kg	1.9	0.58	1	12/18/20 16:56	12/23/20 23:29	91-20-3	L2
Phenanthrene	ND	ug/kg	3.0	0.91	1	12/18/20 16:56	12/23/20 23:29	85-01-8	
Pyrene	ND	ug/kg	2.8	0.84	1	12/18/20 16:56	12/23/20 23:29	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	56	%	30-138		1	12/18/20 16:56	12/23/20 23:29	321-60-8	
p-Terphenyl-d14 (S)	74	%	30-143		1	12/18/20 16:56	12/23/20 23:29	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1,1,2-Tetrachloroethane	ND	ug/kg	64.7	15.5	1	12/24/20 08:15	12/25/20 01:45	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	64.7	16.6	1	12/24/20 08:15	12/25/20 01:45	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	64.7	23.4	1	12/24/20 08:15	12/25/20 01:45	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	64.7	23.5	1	12/24/20 08:15	12/25/20 01:45	79-00-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Sample: GP-15 B Lab ID: 10542920018 Collected: 12/17/20 11:35 Received: 12/18/20 14:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	ND	ug/kg	64.7	16.6	1	12/24/20 08:15	12/25/20 01:45	75-34-3	
1,1-Dichloroethene	ND	ug/kg	64.7	21.5	1	12/24/20 08:15	12/25/20 01:45	75-35-4	
1,1-Dichloropropene	ND	ug/kg	64.7	20.9	1	12/24/20 08:15	12/25/20 01:45	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	323	72.0	1	12/24/20 08:15	12/25/20 01:45	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	64.7	31.4	1	12/24/20 08:15	12/25/20 01:45	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	323	53.3	1	12/24/20 08:15	12/25/20 01:45	120-82-1	
1,2,4-Trimethylbenzene	4460	ug/kg	64.7	19.3	1	12/24/20 08:15	12/25/20 01:45	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	323	50.2	1	12/24/20 08:15	12/25/20 01:45	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	64.7	17.7	1	12/24/20 08:15	12/25/20 01:45	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	64.7	20.0	1	12/24/20 08:15	12/25/20 01:45	95-50-1	
1,2-Dichloroethane	ND	ug/kg	64.7	14.9	1	12/24/20 08:15	12/25/20 01:45	107-06-2	
1,2-Dichloropropane	ND	ug/kg	64.7	15.4	1	12/24/20 08:15	12/25/20 01:45	78-87-5	
1,3,5-Trimethylbenzene	1920	ug/kg	64.7	20.8	1	12/24/20 08:15	12/25/20 01:45	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	64.7	17.7	1	12/24/20 08:15	12/25/20 01:45	541-73-1	
1,3-Dichloropropane	ND	ug/kg	64.7	14.1	1	12/24/20 08:15	12/25/20 01:45	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	64.7	17.7	1	12/24/20 08:15	12/25/20 01:45	106-46-7	
2,2-Dichloropropane	ND	ug/kg	64.7	17.5	1	12/24/20 08:15	12/25/20 01:45	594-20-7	
2-Chlorotoluene	ND	ug/kg	64.7	20.9	1	12/24/20 08:15	12/25/20 01:45	95-49-8	
4-Chlorotoluene	ND	ug/kg	64.7	24.6	1	12/24/20 08:15	12/25/20 01:45	106-43-4	
Benzene	207	ug/kg	25.9	15.4	1	12/24/20 08:15	12/25/20 01:45	71-43-2	
Bromobenzene	ND	ug/kg	64.7	25.2	1	12/24/20 08:15	12/25/20 01:45	108-86-1	
Bromochloromethane	ND	ug/kg	64.7	17.7	1	12/24/20 08:15	12/25/20 01:45	74-97-5	
Bromodichloromethane	857	ug/kg	64.7	15.4	1	12/24/20 08:15	12/25/20 01:45	75-27-4	
Bromoform	ND	ug/kg	323	284	1	12/24/20 08:15	12/25/20 01:45	75-25-2	
Bromomethane	ND	ug/kg	323	90.7	1	12/24/20 08:15	12/25/20 01:45	74-83-9	
Carbon tetrachloride	ND	ug/kg	64.7	14.2	1	12/24/20 08:15	12/25/20 01:45	56-23-5	
Chlorobenzene	ND	ug/kg	64.7	7.7	1	12/24/20 08:15	12/25/20 01:45	108-90-7	
Chloroethane	ND	ug/kg	323	27.3	1	12/24/20 08:15	12/25/20 01:45	75-00-3	
Chloroform	ND	ug/kg	323	46.3	1	12/24/20 08:15	12/25/20 01:45	67-66-3	
Chloromethane	ND	ug/kg	64.7	24.6	1	12/24/20 08:15	12/25/20 01:45	74-87-3	
Dibromochloromethane	ND	ug/kg	323	221	1	12/24/20 08:15	12/25/20 01:45	124-48-1	
Dibromomethane	ND	ug/kg	64.7	19.1	1	12/24/20 08:15	12/25/20 01:45	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	64.7	27.8	1	12/24/20 08:15	12/25/20 01:45	75-71-8	L1
Diisopropyl ether	ND	ug/kg	64.7	16.0	1	12/24/20 08:15	12/25/20 01:45	108-20-3	
Ethylbenzene	1200	ug/kg	64.7	15.4	1	12/24/20 08:15	12/25/20 01:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	323	129	1	12/24/20 08:15	12/25/20 01:45	87-68-3	
Isopropylbenzene (Cumene)	226	ug/kg	64.7	17.5	1	12/24/20 08:15	12/25/20 01:45	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	64.7	19.0	1	12/24/20 08:15	12/25/20 01:45	1634-04-4	
Methylene Chloride	ND	ug/kg	64.7	18.0	1	12/24/20 08:15	12/25/20 01:45	75-09-2	
Naphthalene	942	ug/kg	323	20.2	1	12/24/20 08:15	12/25/20 01:45	91-20-3	
Styrene	ND	ug/kg	64.7	16.6	1	12/24/20 08:15	12/25/20 01:45	100-42-5	
Tetrachloroethene	ND	ug/kg	64.7	25.1	1	12/24/20 08:15	12/25/20 01:45	127-18-4	
Toluene	ND	ug/kg	64.7	16.3	1	12/24/20 08:15	12/25/20 01:45	108-88-3	
Trichloroethene	ND	ug/kg	64.7	24.2	1	12/24/20 08:15	12/25/20 01:45	79-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: GP-15 B**      **Lab ID: 10542920018**      Collected: 12/17/20 11:35      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Pace Analytical Services - Green Bay									
Trichlorofluoromethane	ND	ug/kg	64.7	18.8	1	12/24/20 08:15	12/25/20 01:45	75-69-4	
Vinyl chloride	ND	ug/kg	64.7	13.1	1	12/24/20 08:15	12/25/20 01:45	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	64.7	13.8	1	12/24/20 08:15	12/25/20 01:45	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	323	42.7	1	12/24/20 08:15	12/25/20 01:45	10061-01-5	
m&p-Xylene	<b>1010</b>	ug/kg	129	27.3	1	12/24/20 08:15	12/25/20 01:45	179601-23-1	
n-Butylbenzene	ND	ug/kg	64.7	29.6	1	12/24/20 08:15	12/25/20 01:45	104-51-8	
n-Propylbenzene	<b>770</b>	ug/kg	64.7	15.5	1	12/24/20 08:15	12/25/20 01:45	103-65-1	
o-Xylene	ND	ug/kg	64.7	19.4	1	12/24/20 08:15	12/25/20 01:45	95-47-6	
p-Isopropyltoluene	<b>101</b>	ug/kg	64.7	19.7	1	12/24/20 08:15	12/25/20 01:45	99-87-6	
sec-Butylbenzene	<b>117</b>	ug/kg	64.7	15.8	1	12/24/20 08:15	12/25/20 01:45	135-98-8	
tert-Butylbenzene	ND	ug/kg	64.7	20.3	1	12/24/20 08:15	12/25/20 01:45	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	64.7	14.0	1	12/24/20 08:15	12/25/20 01:45	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	323	185	1	12/24/20 08:15	12/25/20 01:45	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	94	%	56-140		1	12/24/20 08:15	12/25/20 01:45	2037-26-5	
4-Bromofluorobenzene (S)	98	%	52-137		1	12/24/20 08:15	12/25/20 01:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	94	%	50-150		1	12/24/20 08:15	12/25/20 01:45	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: Trip Blank**      **Lab ID: 10542920019**      Collected: 12/16/20 08:00      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "wet-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay							
1,1,1,2-Tetrachloroethane	ND	ug/kg	50.0	12.0	1	12/24/20 08:15	12/28/20 10:51	630-20-6	
1,1,1-Trichloroethane	ND	ug/kg	50.0	12.8	1	12/24/20 08:15	12/28/20 10:51	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	50.0	18.1	1	12/24/20 08:15	12/28/20 10:51	79-34-5	
1,1,2-Trichloroethane	ND	ug/kg	50.0	18.2	1	12/24/20 08:15	12/28/20 10:51	79-00-5	
1,1-Dichloroethane	ND	ug/kg	50.0	12.8	1	12/24/20 08:15	12/28/20 10:51	75-34-3	
1,1-Dichloroethene	ND	ug/kg	50.0	16.6	1	12/24/20 08:15	12/28/20 10:51	75-35-4	
1,1-Dichloropropene	ND	ug/kg	50.0	16.2	1	12/24/20 08:15	12/28/20 10:51	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/kg	250	55.7	1	12/24/20 08:15	12/28/20 10:51	87-61-6	
1,2,3-Trichloropropane	ND	ug/kg	50.0	24.3	1	12/24/20 08:15	12/28/20 10:51	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/kg	250	41.2	1	12/24/20 08:15	12/28/20 10:51	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/kg	50.0	14.9	1	12/24/20 08:15	12/28/20 10:51	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/kg	250	38.8	1	12/24/20 08:15	12/28/20 10:51	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/kg	50.0	13.7	1	12/24/20 08:15	12/28/20 10:51	106-93-4	
1,2-Dichlorobenzene	ND	ug/kg	50.0	15.5	1	12/24/20 08:15	12/28/20 10:51	95-50-1	
1,2-Dichloroethane	ND	ug/kg	50.0	11.5	1	12/24/20 08:15	12/28/20 10:51	107-06-2	
1,2-Dichloropropane	ND	ug/kg	50.0	11.9	1	12/24/20 08:15	12/28/20 10:51	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/kg	50.0	16.1	1	12/24/20 08:15	12/28/20 10:51	108-67-8	
1,3-Dichlorobenzene	ND	ug/kg	50.0	13.7	1	12/24/20 08:15	12/28/20 10:51	541-73-1	
1,3-Dichloropropane	ND	ug/kg	50.0	10.9	1	12/24/20 08:15	12/28/20 10:51	142-28-9	
1,4-Dichlorobenzene	ND	ug/kg	50.0	13.7	1	12/24/20 08:15	12/28/20 10:51	106-46-7	
2,2-Dichloropropane	ND	ug/kg	50.0	13.5	1	12/24/20 08:15	12/28/20 10:51	594-20-7	
2-Chlorotoluene	ND	ug/kg	50.0	16.2	1	12/24/20 08:15	12/28/20 10:51	95-49-8	
4-Chlorotoluene	ND	ug/kg	50.0	19.0	1	12/24/20 08:15	12/28/20 10:51	106-43-4	
Benzene	ND	ug/kg	20.0	11.9	1	12/24/20 08:15	12/28/20 10:51	71-43-2	
Bromobenzene	ND	ug/kg	50.0	19.5	1	12/24/20 08:15	12/28/20 10:51	108-86-1	
Bromochloromethane	ND	ug/kg	50.0	13.7	1	12/24/20 08:15	12/28/20 10:51	74-97-5	
Bromodichloromethane	ND	ug/kg	50.0	11.9	1	12/24/20 08:15	12/28/20 10:51	75-27-4	
Bromoform	ND	ug/kg	250	220	1	12/24/20 08:15	12/28/20 10:51	75-25-2	
Bromomethane	ND	ug/kg	250	70.1	1	12/24/20 08:15	12/28/20 10:51	74-83-9	
Carbon tetrachloride	ND	ug/kg	50.0	11.0	1	12/24/20 08:15	12/28/20 10:51	56-23-5	
Chlorobenzene	ND	ug/kg	50.0	6.0	1	12/24/20 08:15	12/28/20 10:51	108-90-7	
Chloroethane	ND	ug/kg	250	21.1	1	12/24/20 08:15	12/28/20 10:51	75-00-3	
Chloroform	ND	ug/kg	250	35.8	1	12/24/20 08:15	12/28/20 10:51	67-66-3	
Chloromethane	ND	ug/kg	50.0	19.0	1	12/24/20 08:15	12/28/20 10:51	74-87-3	
Dibromochloromethane	ND	ug/kg	250	171	1	12/24/20 08:15	12/28/20 10:51	124-48-1	
Dibromomethane	ND	ug/kg	50.0	14.8	1	12/24/20 08:15	12/28/20 10:51	74-95-3	
Dichlorodifluoromethane	ND	ug/kg	50.0	21.5	1	12/24/20 08:15	12/28/20 10:51	75-71-8	L1
Diisopropyl ether	ND	ug/kg	50.0	12.4	1	12/24/20 08:15	12/28/20 10:51	108-20-3	
Ethylbenzene	ND	ug/kg	50.0	11.9	1	12/24/20 08:15	12/28/20 10:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	250	99.4	1	12/24/20 08:15	12/28/20 10:51	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	50.0	13.5	1	12/24/20 08:15	12/28/20 10:51	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	50.0	14.7	1	12/24/20 08:15	12/28/20 10:51	1634-04-4	
Methylene Chloride	ND	ug/kg	50.0	13.9	1	12/24/20 08:15	12/28/20 10:51	75-09-2	
Naphthalene	ND	ug/kg	250	15.6	1	12/24/20 08:15	12/28/20 10:51	91-20-3	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: Trip Blank**      **Lab ID: 10542920019**      Collected: 12/16/20 08:00      Received: 12/18/20 14:13      Matrix: Solid

*Results reported on a "wet-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay							
Styrene	ND	ug/kg	50.0	12.8	1	12/24/20 08:15	12/28/20 10:51	100-42-5	
Tetrachloroethene	ND	ug/kg	50.0	19.4	1	12/24/20 08:15	12/28/20 10:51	127-18-4	
Toluene	ND	ug/kg	50.0	12.6	1	12/24/20 08:15	12/28/20 10:51	108-88-3	
Trichloroethene	ND	ug/kg	50.0	18.7	1	12/24/20 08:15	12/28/20 10:51	79-01-6	
Trichlorofluoromethane	ND	ug/kg	50.0	14.5	1	12/24/20 08:15	12/28/20 10:51	75-69-4	
Vinyl chloride	ND	ug/kg	50.0	10.1	1	12/24/20 08:15	12/28/20 10:51	75-01-4	
cis-1,2-Dichloroethene	ND	ug/kg	50.0	10.7	1	12/24/20 08:15	12/28/20 10:51	156-59-2	
cis-1,3-Dichloropropene	ND	ug/kg	250	33.0	1	12/24/20 08:15	12/28/20 10:51	10061-01-5	
m&p-Xylene	ND	ug/kg	100	21.1	1	12/24/20 08:15	12/28/20 10:51	179601-23-1	
n-Butylbenzene	ND	ug/kg	50.0	22.9	1	12/24/20 08:15	12/28/20 10:51	104-51-8	
n-Propylbenzene	ND	ug/kg	50.0	12.0	1	12/24/20 08:15	12/28/20 10:51	103-65-1	
o-Xylene	ND	ug/kg	50.0	15.0	1	12/24/20 08:15	12/28/20 10:51	95-47-6	
p-Isopropyltoluene	ND	ug/kg	50.0	15.2	1	12/24/20 08:15	12/28/20 10:51	99-87-6	
sec-Butylbenzene	ND	ug/kg	50.0	12.2	1	12/24/20 08:15	12/28/20 10:51	135-98-8	
tert-Butylbenzene	ND	ug/kg	50.0	15.7	1	12/24/20 08:15	12/28/20 10:51	98-06-6	
trans-1,2-Dichloroethene	ND	ug/kg	50.0	10.8	1	12/24/20 08:15	12/28/20 10:51	156-60-5	
trans-1,3-Dichloropropene	ND	ug/kg	250	143	1	12/24/20 08:15	12/28/20 10:51	10061-02-6	
<b>Surrogates</b>									
Toluene-d8 (S)	94	%	56-140		1	12/24/20 08:15	12/28/20 10:51	2037-26-5	
4-Bromofluorobenzene (S)	102	%	52-137		1	12/24/20 08:15	12/28/20 10:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	50-150		1	12/24/20 08:15	12/28/20 10:51	2199-69-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

**Sample: Equipment Rinse**      **Lab ID: 10542920020**      Collected: 12/17/20 08:15      Received: 12/18/20 14:13      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020    Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Arsenic	ND	ug/L	1.0	0.28	1	12/28/20 05:52	12/28/20 20:51	7440-38-2	
Barium	ND	ug/L	2.3	0.70	1	12/28/20 05:52	12/28/20 20:51	7440-39-3	
Cadmium	ND	ug/L	1.0	0.15	1	12/28/20 05:52	12/28/20 20:51	7440-43-9	
Chromium	ND	ug/L	3.4	1.0	1	12/28/20 05:52	12/28/20 20:51	7440-47-3	P4
Lead	ND	ug/L	1.0	0.24	1	12/28/20 05:52	12/28/20 20:51	7439-92-1	
Selenium	ND	ug/L	1.1	0.32	1	12/28/20 05:52	12/28/20 20:51	7782-49-2	
Silver	ND	ug/L	0.50	0.13	1	12/28/20 05:52	12/28/20 20:51	7440-22-4	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470    Preparation Method: EPA 7470									
Pace Analytical Services - Green Bay									
Mercury	ND	ug/L	0.20	0.066	1	12/29/20 10:20	12/30/20 09:35	7439-97-6	P4

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

QC Batch: 374813      Analysis Method: EPA 7470  
QC Batch Method: EPA 7470      Analysis Description: 7470 Mercury  
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 10542920020

METHOD BLANK: 2165699      Matrix: Water  
Associated Lab Samples: 10542920020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	12/30/20 08:53	

LABORATORY CONTROL SAMPLE: 2165700

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.2	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165701      2165702

Parameter	Units	40220203003		MS		MSD		% Rec		Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	% Rec	% Rec					
Mercury	ug/L	<0.000066 mg/L	5	5	5.2	5.1	104	102	85-115	2	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

QC Batch:	374612	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013

METHOD BLANK: 2165021 Matrix: Solid  
Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.035	12/30/20 10:50	

LABORATORY CONTROL SAMPLE: 2165022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.85	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165023 2165024

Parameter	Units	40220207001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	<0.010	0.853	0.853	0.89	0.90	105	105	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

QC Batch: 374613 Analysis Method: EPA 7471  
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 10542920014, 10542920015, 10542920016, 10542920017, 10542920018

METHOD BLANK: 2165025 Matrix: Solid  
Associated Lab Samples: 10542920014, 10542920015, 10542920016, 10542920017, 10542920018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.035	12/30/20 11:54	

LABORATORY CONTROL SAMPLE: 2165026

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.93	112	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165027 2165028

Parameter	Units	40220061001		MS		MSD		% Rec		Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec				
Mercury	mg/kg	<0.011	0.896	0.896	0.97	0.91	107	102	85-115	6	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



**QUALITY CONTROL DATA**

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

QC Batch: 374492 Analysis Method: EPA 6020  
 QC Batch Method: EPA 3050 Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Green Bay  
 Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018

METHOD BLANK: 2164386 Matrix: Solid  
 Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.13	12/31/20 16:51	
Barium	mg/kg	ND	0.13	12/31/20 16:51	
Cadmium	mg/kg	ND	0.10	12/31/20 16:51	
Chromium	mg/kg	ND	0.30	12/31/20 16:51	
Lead	mg/kg	ND	0.10	12/31/20 01:29	
Selenium	mg/kg	ND	0.10	12/31/20 16:51	
Silver	mg/kg	ND	0.050	12/31/20 16:51	

LABORATORY CONTROL SAMPLE: 2164387

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	49.5	99	80-120	
Barium	mg/kg	50	48.1	96	80-120	
Cadmium	mg/kg	50	49.7	99	80-120	
Chromium	mg/kg	50	47.5	95	80-120	
Lead	mg/kg	50	46.3	93	80-120	
Selenium	mg/kg	50	51.4	103	80-120	
Silver	mg/kg	25	24.5	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2164388 2164389

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10542920001 Result	Spike Conc.	Spike Conc.	Conc.								
Arsenic	mg/kg	5.0	68	67.7	67.7	67.7	66.4	92	91	75-125	2	20	
Barium	mg/kg	206	68	67.7	291	296	126	133	133	75-125	2	20 M0	
Cadmium	mg/kg	ND	68	67.7	68.0	68.4	99	100	100	75-125	1	20	
Chromium	mg/kg	46.9	68	67.7	116	118	102	104	104	75-125	1	20	
Lead	mg/kg	29.3	68	67.7	83.7	77.3	80	71	71	75-125	8	20 M0	
Selenium	mg/kg	2.7	68	67.7	62.2	61.3	88	86	86	75-125	2	20	
Silver	mg/kg	ND	34	33.9	33.5	33.2	98	97	97	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

QC Batch: 374678      Analysis Method: EPA 6020  
QC Batch Method: EPA 3010      Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 10542920020

METHOD BLANK: 2165373      Matrix: Water  
Associated Lab Samples: 10542920020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	1.0	12/28/20 19:50	
Barium	ug/L	ND	2.3	12/28/20 19:50	
Cadmium	ug/L	ND	1.0	12/28/20 19:50	
Chromium	ug/L	ND	3.4	12/28/20 19:50	
Lead	ug/L	ND	1.0	12/28/20 19:50	
Selenium	ug/L	ND	1.1	12/28/20 19:50	
Silver	ug/L	ND	0.50	12/28/20 19:50	

LABORATORY CONTROL SAMPLE: 2165374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	496	99	80-120	
Barium	ug/L	500	475	95	80-120	
Cadmium	ug/L	500	500	100	80-120	
Chromium	ug/L	500	471	94	80-120	
Lead	ug/L	500	453	91	80-120	
Selenium	ug/L	500	500	100	80-120	
Silver	ug/L	250	248	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165375      2165376

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40220331021	Result	Spike Conc.	Spike Conc.								
Arsenic	ug/L	0.0033	mg/L	500	500	489	490	97	97	75-125	0	20	
Barium	ug/L	0.095	mg/L	500	500	576	575	96	96	75-125	0	20	
Cadmium	ug/L	0.00034J	mg/L	500	500	484	491	97	98	75-125	1	20	
Chromium	ug/L	0.0059	mg/L	500	500	459	468	91	92	75-125	2	20	
Lead	ug/L	0.0024	mg/L	500	500	460	461	92	92	75-125	0	20	
Selenium	ug/L	0.00065J	mg/L	500	500	489	486	98	97	75-125	1	20	
Silver	ug/L	0.00016J	mg/L	250	250	233	234	93	94	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

---

QC Batch:	718061	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight / %M by ASTM D2974
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008

---

SAMPLE DUPLICATE: 3831764

Parameter	Units	10542867001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.7	26.9	8	30	N2

---

SAMPLE DUPLICATE: 3831765

Parameter	Units	10542888001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	28.4	27.7	3	30	N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

---

QC Batch:	718070	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight / %M by ASTM D2974
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018

---

SAMPLE DUPLICATE: 3831719

Parameter	Units	10543175001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	1.7	1.7	0	30	N2

---

SAMPLE DUPLICATE: 3831720

Parameter	Units	10542921001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.0	13.3	5	30	N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

---

QC Batch: 374639 Analysis Method: EPA 8260  
 QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List  
 Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018, 10542920019

---

METHOD BLANK: 2165202 Matrix: Solid

Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018, 10542920019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	50.0	12/24/20 17:22	
1,1,1-Trichloroethane	ug/kg	ND	50.0	12/24/20 17:22	
1,1,2,2-Tetrachloroethane	ug/kg	ND	50.0	12/24/20 17:22	
1,1,2-Trichloroethane	ug/kg	ND	50.0	12/24/20 17:22	
1,1-Dichloroethane	ug/kg	ND	50.0	12/24/20 17:22	
1,1-Dichloroethene	ug/kg	ND	50.0	12/24/20 17:22	
1,1-Dichloropropene	ug/kg	ND	50.0	12/24/20 17:22	
1,2,3-Trichlorobenzene	ug/kg	ND	250	12/24/20 17:22	
1,2,3-Trichloropropane	ug/kg	ND	50.0	12/24/20 17:22	
1,2,4-Trichlorobenzene	ug/kg	ND	250	12/24/20 17:22	
1,2,4-Trimethylbenzene	ug/kg	ND	50.0	12/24/20 17:22	
1,2-Dibromo-3-chloropropane	ug/kg	ND	250	12/24/20 17:22	
1,2-Dibromoethane (EDB)	ug/kg	ND	50.0	12/24/20 17:22	
1,2-Dichlorobenzene	ug/kg	ND	50.0	12/24/20 17:22	
1,2-Dichloroethane	ug/kg	ND	50.0	12/24/20 17:22	
1,2-Dichloropropane	ug/kg	ND	50.0	12/24/20 17:22	
1,3,5-Trimethylbenzene	ug/kg	ND	50.0	12/24/20 17:22	
1,3-Dichlorobenzene	ug/kg	ND	50.0	12/24/20 17:22	
1,3-Dichloropropane	ug/kg	ND	50.0	12/24/20 17:22	
1,4-Dichlorobenzene	ug/kg	ND	50.0	12/24/20 17:22	
2,2-Dichloropropane	ug/kg	ND	50.0	12/24/20 17:22	
2-Chlorotoluene	ug/kg	ND	50.0	12/24/20 17:22	
4-Chlorotoluene	ug/kg	ND	50.0	12/24/20 17:22	
Benzene	ug/kg	ND	20.0	12/24/20 17:22	
Bromobenzene	ug/kg	ND	50.0	12/24/20 17:22	
Bromochloromethane	ug/kg	ND	50.0	12/24/20 17:22	
Bromodichloromethane	ug/kg	ND	50.0	12/24/20 17:22	
Bromoform	ug/kg	ND	250	12/24/20 17:22	
Bromomethane	ug/kg	ND	250	12/24/20 17:22	
Carbon tetrachloride	ug/kg	ND	50.0	12/24/20 17:22	
Chlorobenzene	ug/kg	ND	50.0	12/24/20 17:22	
Chloroethane	ug/kg	ND	250	12/24/20 17:22	
Chloroform	ug/kg	ND	250	12/24/20 17:22	
Chloromethane	ug/kg	ND	50.0	12/24/20 17:22	
cis-1,2-Dichloroethene	ug/kg	ND	50.0	12/24/20 17:22	
cis-1,3-Dichloropropene	ug/kg	ND	250	12/24/20 17:22	
Dibromochloromethane	ug/kg	ND	250	12/24/20 17:22	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

METHOD BLANK: 2165202

Matrix: Solid

Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018, 10542920019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	50.0	12/24/20 17:22	
Dichlorodifluoromethane	ug/kg	ND	50.0	12/24/20 17:22	
Diisopropyl ether	ug/kg	ND	50.0	12/24/20 17:22	
Ethylbenzene	ug/kg	ND	50.0	12/24/20 17:22	
Hexachloro-1,3-butadiene	ug/kg	ND	250	12/24/20 17:22	
Isopropylbenzene (Cumene)	ug/kg	ND	50.0	12/24/20 17:22	
m&p-Xylene	ug/kg	ND	100	12/24/20 17:22	
Methyl-tert-butyl ether	ug/kg	ND	50.0	12/24/20 17:22	
Methylene Chloride	ug/kg	ND	50.0	12/24/20 17:22	
n-Butylbenzene	ug/kg	ND	50.0	12/24/20 17:22	
n-Propylbenzene	ug/kg	ND	50.0	12/24/20 17:22	
Naphthalene	ug/kg	ND	250	12/24/20 17:22	
o-Xylene	ug/kg	ND	50.0	12/24/20 17:22	
p-Isopropyltoluene	ug/kg	ND	50.0	12/24/20 17:22	
sec-Butylbenzene	ug/kg	ND	50.0	12/24/20 17:22	
Styrene	ug/kg	ND	50.0	12/24/20 17:22	
tert-Butylbenzene	ug/kg	ND	50.0	12/24/20 17:22	
Tetrachloroethene	ug/kg	ND	50.0	12/24/20 17:22	
Toluene	ug/kg	ND	50.0	12/24/20 17:22	
trans-1,2-Dichloroethene	ug/kg	ND	50.0	12/24/20 17:22	
trans-1,3-Dichloropropene	ug/kg	ND	250	12/24/20 17:22	
Trichloroethene	ug/kg	ND	50.0	12/24/20 17:22	
Trichlorofluoromethane	ug/kg	ND	50.0	12/24/20 17:22	
Vinyl chloride	ug/kg	ND	50.0	12/24/20 17:22	
1,2-Dichlorobenzene-d4 (S)	%	99	50-150	12/24/20 17:22	
4-Bromofluorobenzene (S)	%	94	52-137	12/24/20 17:22	
Toluene-d8 (S)	%	99	56-140	12/24/20 17:22	

LABORATORY CONTROL SAMPLE: 2165203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2560	102	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2600	104	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2710	109	70-130	
1,1-Dichloroethane	ug/kg	2500	2400	96	69-143	
1,1-Dichloroethene	ug/kg	2500	2320	93	73-118	
1,2,4-Trichlorobenzene	ug/kg	2500	2250	90	60-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2300	92	66-130	
1,2-Dibromoethane (EDB)	ug/kg	2500	2480	99	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2430	97	70-130	
1,2-Dichloroethane	ug/kg	2500	2820	113	70-130	
1,2-Dichloropropane	ug/kg	2500	2520	101	78-126	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

LABORATORY CONTROL SAMPLE: 2165203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichlorobenzene	ug/kg	2500	2440	98	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2210	88	70-130	
Benzene	ug/kg	2500	2430	97	70-130	
Bromodichloromethane	ug/kg	2500	2500	100	70-130	
Bromoform	ug/kg	2500	2110	84	67-130	
Bromomethane	ug/kg	2500	2090	84	45-134	
Carbon tetrachloride	ug/kg	2500	2490	100	70-130	
Chlorobenzene	ug/kg	2500	2540	102	70-130	
Chloroethane	ug/kg	2500	2470	99	58-143	
Chloroform	ug/kg	2500	2510	101	76-122	
Chloromethane	ug/kg	2500	2420	97	45-120	
cis-1,2-Dichloroethene	ug/kg	2500	2580	103	69-130	
cis-1,3-Dichloropropene	ug/kg	2500	2440	97	70-130	
Dibromochloromethane	ug/kg	2500	2490	99	70-130	
Dichlorodifluoromethane	ug/kg	2500	2600	104	26-99 L1	
Ethylbenzene	ug/kg	2500	2560	102	80-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2490	100	70-130	
m&p-Xylene	ug/kg	5000	4900	98	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2280	91	70-130	
Methylene Chloride	ug/kg	2500	2330	93	70-130	
o-Xylene	ug/kg	2500	2420	97	70-130	
Styrene	ug/kg	2500	2630	105	70-130	
Tetrachloroethene	ug/kg	2500	2420	97	70-130	
Toluene	ug/kg	2500	2390	96	80-120	
trans-1,2-Dichloroethene	ug/kg	2500	2370	95	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2210	88	70-130	
Trichloroethene	ug/kg	2500	2560	103	70-130	
Trichlorofluoromethane	ug/kg	2500	2520	101	70-128	
Vinyl chloride	ug/kg	2500	2530	101	53-110	
1,2-Dichlorobenzene-d4 (S)	%			101	50-150	
4-Bromofluorobenzene (S)	%			108	52-137	
Toluene-d8 (S)	%			102	56-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165204 2165205

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40220061007 Result	Spike Conc.	Spike Conc.	MSD Result								
1,1,1-Trichloroethane	ug/kg	<14.2	1380	1380	1370	1350	99	98	66-130	1	20		
1,1,2,2-Tetrachloroethane	ug/kg	<20.0	1380	1380	1380	1450	100	105	70-133	5	20		
1,1,2-Trichloroethane	ug/kg	<20.1	1380	1380	1550	1460	112	106	70-130	6	20		
1,1-Dichloroethane	ug/kg	<14.2	1380	1380	1390	1330	100	96	69-143	4	20		
1,1-Dichloroethene	ug/kg	<18.4	1380	1380	1370	1340	99	97	58-120	2	20		
1,2,4-Trichlorobenzene	ug/kg	<45.6	1380	1380	1520	1510	110	109	60-130	0	20		
1,2-Dibromo-3-chloropropane	ug/kg	<43.0	1380	1380	1260	1260	91	91	59-136	0	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165204 2165205												
Parameter	Units	40220061007		MS	MSD	MS		MSD		% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
1,2-Dibromoethane (EDB)	ug/kg	<15.2	1380	1380	1320	1390	96	101	70-130	5	20	
1,2-Dichlorobenzene	ug/kg	<17.2	1380	1380	1340	1380	97	99	70-130	3	20	
1,2-Dichloroethane	ug/kg	<12.7	1380	1380	1430	1400	104	101	70-136	3	20	
1,2-Dichloropropane	ug/kg	<13.2	1380	1380	1370	1360	99	98	78-128	0	20	
1,3-Dichlorobenzene	ug/kg	<15.2	1380	1380	1330	1380	96	100	70-130	3	20	
1,4-Dichlorobenzene	ug/kg	<15.2	1380	1380	1380	1380	100	100	70-130	0	20	
Benzene	ug/kg	<13.2	1380	1380	1300	1290	94	93	70-130	1	20	
Bromodichloromethane	ug/kg	<13.2	1380	1380	1320	1340	96	97	70-130	1	20	
Bromoform	ug/kg	<244	1380	1380	1190	1210	86	88	63-130	2	20	
Bromomethane	ug/kg	<77.6	1380	1380	1170	1210	84	88	33-146	4	20	
Carbon tetrachloride	ug/kg	<12.2	1380	1380	1380	1360	100	98	65-130	2	20	
Chlorobenzene	ug/kg	<6.6	1380	1380	1420	1440	102	104	70-130	1	20	
Chloroethane	ug/kg	<23.4	1380	1380	1360	1470	99	106	46-156	7	20	
Chloroform	ug/kg	<39.6	1380	1380	1350	1350	98	97	75-130	0	20	
Chloromethane	ug/kg	<21.0	1380	1380	1140	1010	82	73	20-139	12	20	
cis-1,2-Dichloroethene	ug/kg	<11.8	1380	1380	1400	1420	101	103	69-130	1	20	
cis-1,3-Dichloropropene	ug/kg	<36.5	1380	1380	1300	1310	94	95	70-130	1	20	
Dibromochloromethane	ug/kg	<189	1380	1380	1290	1380	93	100	70-130	7	20	
Dichlorodifluoromethane	ug/kg	<23.8	1380	1380	857	775	62	56	10-99	10	22	
Ethylbenzene	ug/kg	<13.2	1380	1380	1360	1410	98	102	80-120	4	20	
Isopropylbenzene (Cumene)	ug/kg	<14.9	1380	1380	1380	1420	100	103	70-130	3	20	
m&p-Xylene	ug/kg	<23.4	2770	2770	2730	2870	99	104	70-130	5	20	
Methyl-tert-butyl ether	ug/kg	<16.3	1380	1380	1340	1320	97	95	70-130	1	20	
Methylene Chloride	ug/kg	<15.4	1380	1380	1370	1370	99	99	70-136	0	20	
o-Xylene	ug/kg	<16.6	1380	1380	1330	1390	96	100	70-130	4	20	
Styrene	ug/kg	<14.2	1380	1380	1390	1420	100	103	70-130	2	20	
Tetrachloroethene	ug/kg	<21.5	1380	1380	1300	1440	94	104	68-130	11	20	
Toluene	ug/kg	<13.9	1380	1380	1300	1400	94	101	80-120	8	20	
trans-1,2-Dichloroethene	ug/kg	<12.0	1380	1380	1360	1340	98	97	70-130	2	20	
trans-1,3-Dichloropropene	ug/kg	<158	1380	1380	1170	1200	84	87	70-130	3	20	
Trichloroethene	ug/kg	<20.7	1380	1380	1410	1420	102	103	70-130	1	20	
Trichlorofluoromethane	ug/kg	<16.1	1380	1380	1330	1240	96	90	53-128	7	20	
Vinyl chloride	ug/kg	<11.2	1380	1380	1240	1150	90	83	32-118	8	20	
1,2-Dichlorobenzene-d4 (S)	%						107	106	50-150			
4-Bromofluorobenzene (S)	%						111	109	52-137			
Toluene-d8 (S)	%						107	111	56-140			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground  
Pace Project No.: 10542920

QC Batch: 716909 Analysis Method: EPA 8270E by SIM  
QC Batch Method: EPA 3550C Analysis Description: 8270E Solid PAH by SIM MSSV  
Laboratory: Pace Analytical Services - Minneapolis  
Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018

METHOD BLANK: 3826383 Matrix: Solid  
Associated Lab Samples: 10542920001, 10542920002, 10542920003, 10542920004, 10542920005, 10542920006, 10542920007, 10542920008, 10542920009, 10542920010, 10542920011, 10542920012, 10542920013, 10542920014, 10542920015, 10542920016, 10542920017, 10542920018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	1.5	12/23/20 14:44	
Acenaphthylene	ug/kg	ND	2.3	12/23/20 14:44	
Anthracene	ug/kg	ND	1.1	12/23/20 14:44	
Benzo(a)anthracene	ug/kg	ND	1.4	12/23/20 14:44	
Benzo(a)pyrene	ug/kg	ND	1.9	12/23/20 14:44	
Benzo(b)fluoranthene	ug/kg	ND	1.6	12/23/20 14:44	
Benzo(g,h,i)perylene	ug/kg	ND	1.5	12/23/20 14:44	
Benzo(k)fluoranthene	ug/kg	ND	1.6	12/23/20 14:44	
Chrysene	ug/kg	ND	1.3	12/23/20 14:44	
Dibenz(a,h)anthracene	ug/kg	ND	2.2	12/23/20 14:44	
Fluoranthene	ug/kg	ND	2.0	12/23/20 14:44	
Fluorene	ug/kg	ND	2.0	12/23/20 14:44	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1.8	12/23/20 14:44	
Naphthalene	ug/kg	ND	1.5	12/23/20 14:44	
Phenanthrene	ug/kg	ND	2.3	12/23/20 14:44	
Pyrene	ug/kg	ND	2.2	12/23/20 14:44	
2-Fluorobiphenyl (S)	%	63	30-138	12/23/20 14:44	
p-Terphenyl-d14 (S)	%	81	30-143	12/23/20 14:44	

LABORATORY CONTROL SAMPLE: 3826384

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	33.3	19.0	57	49-125	
Acenaphthylene	ug/kg	33.3	18.8	56	53-125	
Anthracene	ug/kg	33.3	27.1	81	59-125	
Benzo(a)anthracene	ug/kg	33.3	28.5	85	58-125	
Benzo(a)pyrene	ug/kg	33.3	27.5	83	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	28.6	86	61-125	
Benzo(g,h,i)perylene	ug/kg	33.3	27.5	82	64-125	
Benzo(k)fluoranthene	ug/kg	33.3	26.9	81	62-125	
Chrysene	ug/kg	33.3	29.8	89	65-125	
Dibenz(a,h)anthracene	ug/kg	33.3	28.5	85	63-125	
Fluoranthene	ug/kg	33.3	29.4	88	68-125	
Fluorene	ug/kg	33.3	23.8	71	54-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	28.6	86	63-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

LABORATORY CONTROL SAMPLE: 3826384

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	33.3	13.9	42	45-125	L2
Phenanthrene	ug/kg	33.3	28.9	87	63-125	
Pyrene	ug/kg	33.3	29.9	90	65-125	
2-Fluorobiphenyl (S)	%			51	30-138	
p-Terphenyl-d14 (S)	%			84	30-143	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3826385 3826386

Parameter	Units	MS 3826385		MSD 3826386		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10542920001 Result	Spike Conc.	Spike Conc.	MS Result						
Acenaphthene	ug/kg	13.6	44.8	45.3	36.4	40.7	51	60	11	30	
Acenaphthylene	ug/kg	ND	44.8	45.3	23.3	36.7	52	81	45	30	R1
Anthracene	ug/kg	48.7	44.8	45.3	77.3	68.3	64	43	12	30	
Benzo(a)anthracene	ug/kg	74.3	44.8	45.3	119	108	101	73	10	30	
Benzo(a)pyrene	ug/kg	74.5	44.8	45.3	104	106	66	70	2	30	
Benzo(b)fluoranthene	ug/kg	99.0	44.8	45.3	126	121	61	49	4	30	
Benzo(g,h,i)perylene	ug/kg	50.8	44.8	45.3	71.6	77.4	46	58	8	30	
Benzo(k)fluoranthene	ug/kg	36.5	44.8	45.3	72.5	75.3	80	86	4	30	
Chrysene	ug/kg	97.6	44.8	45.3	140	120	95	49	15	30	
Dibenz(a,h)anthracene	ug/kg	ND	44.8	45.3	39.0	40.3	87	89	3	30	
Fluoranthene	ug/kg	208	44.8	45.3	295	214	194	14	30	30	M1, R1
Fluorene	ug/kg	14.7	44.8	45.3	41.9	42.7	61	62	2	30	
Indeno(1,2,3-cd)pyrene	ug/kg	52.2	44.8	45.3	76.5	82.0	54	66	7	30	
Naphthalene	ug/kg	ND	44.8	45.3	25.0	34.4	56	76	32	30	R1
Phenanthrene	ug/kg	185	44.8	45.3	249	159	144	-58	45	30	M1, R1
Pyrene	ug/kg	170	44.8	45.3	238	193	152	51	21	30	M1
2-Fluorobiphenyl (S)	%						54	65		30-138	
p-Terphenyl-d14 (S)	%						77	78		30-143	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
lp	Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria specified in the test method. Sample results included are reported as individual isomers, but the lab and the client must recognize them as an isomeric pair.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P4	Sample field preservation does not meet EPA or method recommendations for this analysis.
R1	RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10542920001	GP-1	EPA 3050	374492	EPA 6020	374740
10542920002	GP-2	EPA 3050	374492	EPA 6020	374740
10542920003	GP-3	EPA 3050	374492	EPA 6020	374740
10542920004	GP-4	EPA 3050	374492	EPA 6020	374740
10542920005	GP-5	EPA 3050	374492	EPA 6020	374740
10542920006	GP-6	EPA 3050	374492	EPA 6020	374740
10542920007	GP-7	EPA 3050	374492	EPA 6020	374740
10542920008	GP-8	EPA 3050	374492	EPA 6020	374740
10542920009	GP-9	EPA 3050	374492	EPA 6020	374740
10542920010	GP-10	EPA 3050	374492	EPA 6020	374740
10542920011	GP-11	EPA 3050	374492	EPA 6020	374740
10542920012	GP-12	EPA 3050	374492	EPA 6020	374740
10542920013	GP-13 A	EPA 3050	374492	EPA 6020	374740
10542920014	GP-13 B	EPA 3050	374492	EPA 6020	374740
10542920015	GP-14 A	EPA 3050	374492	EPA 6020	374740
10542920016	GP-14 B	EPA 3050	374492	EPA 6020	374740
10542920017	GP-15 A	EPA 3050	374492	EPA 6020	374740
10542920018	GP-15 B	EPA 3050	374492	EPA 6020	374740
10542920020	Equipment Rinse	EPA 3010	374678	EPA 6020	374734
10542920020	Equipment Rinse	EPA 7470	374813	EPA 7470	374834
10542920001	GP-1	EPA 7471	374612	EPA 7471	374843
10542920002	GP-2	EPA 7471	374612	EPA 7471	374843
10542920003	GP-3	EPA 7471	374612	EPA 7471	374843
10542920004	GP-4	EPA 7471	374612	EPA 7471	374843
10542920005	GP-5	EPA 7471	374612	EPA 7471	374843
10542920006	GP-6	EPA 7471	374612	EPA 7471	374843
10542920007	GP-7	EPA 7471	374612	EPA 7471	374843
10542920008	GP-8	EPA 7471	374612	EPA 7471	374843
10542920009	GP-9	EPA 7471	374612	EPA 7471	374843
10542920010	GP-10	EPA 7471	374612	EPA 7471	374843
10542920011	GP-11	EPA 7471	374612	EPA 7471	374843
10542920012	GP-12	EPA 7471	374612	EPA 7471	374843
10542920013	GP-13 A	EPA 7471	374612	EPA 7471	374843
10542920014	GP-13 B	EPA 7471	374613	EPA 7471	374844
10542920015	GP-14 A	EPA 7471	374613	EPA 7471	374844
10542920016	GP-14 B	EPA 7471	374613	EPA 7471	374844
10542920017	GP-15 A	EPA 7471	374613	EPA 7471	374844
10542920018	GP-15 B	EPA 7471	374613	EPA 7471	374844
10542920001	GP-1	ASTM D2974	718061		
10542920002	GP-2	ASTM D2974	718061		
10542920003	GP-3	ASTM D2974	718061		
10542920004	GP-4	ASTM D2974	718061		
10542920005	GP-5	ASTM D2974	718061		
10542920006	GP-6	ASTM D2974	718061		
10542920007	GP-7	ASTM D2974	718061		
10542920008	GP-8	ASTM D2974	718061		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2012313 Superior-FedEx Ground

Pace Project No.: 10542920

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10542920009	GP-9	ASTM D2974	718070		
10542920010	GP-10	ASTM D2974	718070		
10542920011	GP-11	ASTM D2974	718070		
10542920012	GP-12	ASTM D2974	718070		
10542920013	GP-13 A	ASTM D2974	718070		
10542920014	GP-13 B	ASTM D2974	718070		
10542920015	GP-14 A	ASTM D2974	718070		
10542920016	GP-14 B	ASTM D2974	718070		
10542920017	GP-15 A	ASTM D2974	718070		
10542920018	GP-15 B	ASTM D2974	718070		
10542920001	GP-1	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920002	GP-2	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920003	GP-3	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920004	GP-4	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920005	GP-5	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920006	GP-6	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920007	GP-7	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920008	GP-8	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920009	GP-9	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920010	GP-10	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920011	GP-11	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920012	GP-12	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920013	GP-13 A	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920014	GP-13 B	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920015	GP-14 A	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920016	GP-14 B	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920017	GP-15 A	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920018	GP-15 B	EPA 3550C	716909	EPA 8270E by SIM	717213
10542920001	GP-1	EPA 5035/5030B	374639	EPA 8260	374641
10542920002	GP-2	EPA 5035/5030B	374639	EPA 8260	374641
10542920003	GP-3	EPA 5035/5030B	374639	EPA 8260	374641
10542920004	GP-4	EPA 5035/5030B	374639	EPA 8260	374641
10542920005	GP-5	EPA 5035/5030B	374639	EPA 8260	374641
10542920006	GP-6	EPA 5035/5030B	374639	EPA 8260	374641
10542920007	GP-7	EPA 5035/5030B	374639	EPA 8260	374641
10542920008	GP-8	EPA 5035/5030B	374639	EPA 8260	374641
10542920009	GP-9	EPA 5035/5030B	374639	EPA 8260	374641
10542920010	GP-10	EPA 5035/5030B	374639	EPA 8260	374641
10542920011	GP-11	EPA 5035/5030B	374639	EPA 8260	374641
10542920012	GP-12	EPA 5035/5030B	374639	EPA 8260	374641
10542920013	GP-13 A	EPA 5035/5030B	374639	EPA 8260	374641
10542920014	GP-13 B	EPA 5035/5030B	374639	EPA 8260	374641
10542920015	GP-14 A	EPA 5035/5030B	374639	EPA 8260	374641
10542920016	GP-14 B	EPA 5035/5030B	374639	EPA 8260	374641
10542920017	GP-15 A	EPA 5035/5030B	374639	EPA 8260	374641
10542920018	GP-15 B	EPA 5035/5030B	374639	EPA 8260	374641
10542920019	Trip Blank	EPA 5035/5030B	374639	EPA 8260	374641

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**Chain-of-Custody Analytical Request Document**

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Billing Information:

Company: **BBJ Group**  
 Address: **140 S. Dearborn St., Chicago**  
 Report To: **Anna Avila**  
 Copy To: **Anna Avila**

Email To: **Vkunz@bbjgroup.com**  
 Site Collection Info/Address: **2929 Halvor Lane**  
 State: **WI / Douglas Superior**  
 County/City: **WI / Douglas Superior**

Customer Project Name/Number: **Superior - FedEx Ground / 2012313**  
 Phone: **651-323-6135**  
 Email: **avila@bbjgroup.com**  
 Site/Facility ID #: \_\_\_\_\_

Purchase Order #: \_\_\_\_\_  
 Quote #: \_\_\_\_\_  
 Turnaround Date Required: **Standard**  
 Rush:  Same Day  Next Day  
 12 Day  3 Day  1 Day  15 Day  
 (Expedite Charges Apply)

Sample Disposal:  Dispose as appropriate  Return  
 Archive: \_\_\_\_\_  
 Hold: \_\_\_\_\_

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End	Res Cl	# of Ctns
			Date	Time			
GP-1	SL	Grab	12-16	14:55	12-16 14:55		5
GP-2	SL	Grab	12-16	15:44	12-16 15:44		5
GP-3	SL	Grab	12-16	15:55	12-16 13:56		5
GP-4	SL	Grab	12-16	14:05	12-16 14:05		5
GP-5	SL	Grab	12-16	13:58	12-16 13:58		5
GP-6	SL	Grab	12-16	14:09	12-16 14:09		5
GP-7	SL	Grab	12-16	15:40	12-16 15:40		5
GP-8	SL	Grab	12-16	12:25	12-16 12:25		5
GP-9	SL	Grab	12-16	10:45	12-16 10:45		5
GP-10	SL	Grab	12-16	11:15	12-16 11:15		5

Customer Remarks / Special Conditions / Possible Hazards: \_\_\_\_\_

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTL Log-in Number Here

Container Preservative Type \*\*

Lab Project Manager:

ALL SHADED AREAS are for LAB USE ONLY

Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Lab Profile/Line: \_\_\_\_\_

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signatures Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA

WO#: **10542920**

Analysis	Short Holds Present (<72 hours)	Y	N	N/A
VOC by 8260	X			
PAH by 8270 SIM	X			
Metals by 6020/7471	X			
Dry Weight	X			

Lab Tracking #: **2605763**

SHORTEX HOLDING PRESENT (<72 hours): Y N N/A

Temp Blank Received: Y N NA

Therm ID#: \_\_\_\_\_

Cooler 1 Temp Upon Receipt: \_\_\_\_\_

Cooler 1 Therm Corr. Factor: **4.9**

Cooler 1 Corrected Temp: **3.2**

Comments: \_\_\_\_\_

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: **1** of: **2**

Relinquished by/Company: (Signature) **Anna Avila** Date/Time: **12-18/14:13** Received by/Company: (Signature) **TV/Pae**

Relinquished by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_ Received by/Company: (Signature) \_\_\_\_\_

Relinquished by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_ Received by/Company: (Signature) \_\_\_\_\_

**ALL SHADED AREAS are for LAB USE ONLY**

**CHAIN-OF-CUSTODY Analytical Request Document**  
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields  
 Billing Information:

Company: **BBJ Group**  
 Address: **140 S. Dearborn St. Chicago**  
 Report To: **ANNA AVILA**  
 Copy To:

Customer/Project Name/Number: **Suplex 101 - FedEx Ground/2012313**  
 Phone: **651-326-0135**  
 Email: **anna.avila@bbjgroup.com**  
 Site/Facility ID #: **WI' Douglas/Superior**  
 State: **WI** County/City: **Douglas/Superior** Time Zone Collected: **PT** [ ] MT [ ] CT [ ] ET [ ]  
 Compliance Monitoring? [ ] Yes [X] No  
 DW PWS ID #: **Standard**  
 DW Location Code: **Standard**  
 Immediately Packed on Ice: [X] Yes [ ] No  
 Field Filtered (if applicable): [ ] Yes [X] No  
 Analysis: \_\_\_\_\_

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
GP-11	SL	Grab	12-16	11:25	12-16	11:25		5
GP-12	SL	Grab	12-16	11:25	12-16	11:25		5
GP-13 A	SL	Grab	12-17	8:40	12-17	8:40		5
GP-13 B	SL	Grab	12-17	9:20	12-17	9:20		5
GP-14 A	SL	Grab	12-17	10:25	12-17	10:25		5
GP-14 B	SL	Grab	12-17	11:15	12-17	11:15		5
GP-15 A	SL	Grab	12-17	11:20	12-17	11:20		5
GP-15 B	SL	Grab	12-17	11:35	12-17	11:35		5
Trip Blank K	OT	Grab	12-16	8:00	12-16	8:00		2
Equipment Rinse	OT	Grab	12-17	8:15	12-17	8:15		5

Customer Remarks / Special Conditions / Possible Hazards: \_\_\_\_\_  
 Type of ice used: Wet Blue Dry None  
 Packing Material Used: \_\_\_\_\_

Relinquished by/Company: (Signature) **Anna Avila**  
 Date/Time: **12-18/14:13**  
 Received by/Company: (Signature) **TN/Rea**  
 Date/Time: \_\_\_\_\_

Container Preservative Type \*\*  
**6**  
 Lab Project Manager: \_\_\_\_\_

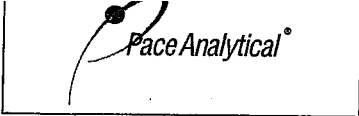
\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses	Y	N	NA
VOC by 8260	X		
PAH by 8270 SIM	X		
Metals by 6020/7471	X		
Dry Weight	X		

Lab Sample Temperature Info:  
 Temp Blank Received: Y N NA  
 Therm ID#: \_\_\_\_\_  
 Cooler 1 Temp Upon Receipt: \_\_\_\_\_  
 Cooler 1 Therm Corr. Factor: **4.4**  
 Cooler 1 Corrected Temp: **3.2**  
 Comments: \_\_\_\_\_

Lab Sample Temperature Info:  
 Temp Blank Received: Y N NA  
 Therm ID#: \_\_\_\_\_  
 Cooler 1 Temp Upon Receipt: \_\_\_\_\_  
 Cooler 1 Therm Corr. Factor: \_\_\_\_\_  
 Cooler 1 Corrected Temp: \_\_\_\_\_  
 Comments: \_\_\_\_\_

Trip Blank Received: Y N NA  
 HCL MeOH TSP Other  
 Non-Conformance(s): YES / NO  
 Page: **2** of: **2**



**Sample Condition Upon Receipt**    **Client Name:** BBJ Group    **Project #:** WO# : 10542920

**Courier:**  Fed Ex    UPS    USPS    Client  
 Pace    Speedee    Commercial

**Tracking Number:** \_\_\_\_\_    See Exceptions   
 ENV-FRM-MIN4-0142

**PM:** JDD    **Due Date:** 12/28/20  
**CLIENT:** BBJ Group

**Custody Seal on Cooler/Box Present?**  Yes  No    **Seals Intact?**  Yes  No    **Biological Tissue Frozen?**  Yes  No  N/A

**Packing Material:**  Bubble Wrap    Bubble Bags    None    Other: \_\_\_\_\_    **Temp Blank?**  Yes  No

**Thermometer:**  T1(0461)    T2(1336)    T3(0459)  
 T4(0254)    T5(0489)    **Type of Ice:**  Wet    Blue    None    Dry    Melted

**Did Samples Originate in West Virginia?**  Yes  No    **Were All Container Temps Taken?**  Yes  No  N/A

Temp should be above freezing to 6°C    **Cooler Temp Read w/temp blank:** 4.4, 3.2 °C    **Average Corrected Temp (no temp blank only):** \_\_\_\_\_ °C

**Correction Factor:** 0.1    **Cooler Temp Corrected w/temp blank:** 4.5, 3.3 °C     See Exceptions ENV-FRM-MIN4-0142  
 1 Container

**USDA Regulated Soil:** (  N/A, water sample/Other: \_\_\_\_\_ )    **Date/Initials of Person Examining Contents:** TKZ 12/18/20

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)?  Yes  No    Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

**If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.**

	COMMENTS:
Chain of Custody Present and Filled Out? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Relinquished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Sampler Name and/or Signature on COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Short Hold Time Analysis (<72 hr)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> HPC <input type="checkbox"/> Total Coliform/E coli <input type="checkbox"/> BOD/cBOD <input type="checkbox"/> Hex Chrome <input type="checkbox"/> Turbidity <input type="checkbox"/> Nitrate <input type="checkbox"/> Nitrite <input type="checkbox"/> Orthophos <input type="checkbox"/> Other
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Field Filtered Volume Received for Dissolved Tests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10. Is sediment visible in the dissolved container? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is sufficient information available to reconcile the samples to the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. If no, write ID/ Date/Time on Container Below: <input type="checkbox"/> See Exception ENV-FRM-MIN4-0142
Matrix: <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Oil <input type="checkbox"/> Other	
All containers needing acid/base preservation have been checked? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , <2pH, NaOH >9 Sulfide, NaOH >10 Cyanide) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input type="checkbox"/> NaOH <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Positive for Res. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Exception ENV-FRM-MIN4-0142
Extra labels present on soil VOA or WIDRO containers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Chlorine? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    pH Paper Lot#
Headspace in VOA Vials (greater than 6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Res. Chlorine    0-6 Roll    0-6 Strip    0-14 Strip
Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> See Exception ENV-FRM-MIN4-0140
Trip Blank Custody Seals Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14. Pace Trip Blank Lot # (if purchased): <u>092820-3 (2)</u>

**CLIENT NOTIFICATION/RESOLUTION**    **Field Data Required?**  Yes  No

Person Contacted: \_\_\_\_\_    Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

**Project Manager Review:** \_\_\_\_\_    **Date:** 12/21/20

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: TKZ (1)



**RR980 MAINTENANCE PLAN**

**COVER or BARRIER MAINTENANCE PLAN**  
(to be included in Form 4400-202, as Attachment D)

August 10, 2021

Property Located at: 2929 Halvor Lane

DNR BRRTS/Activity #: 07-16-583046

Parcel Number: 06-806-00739-06

#### Introduction

This document is the Maintenance Plan for an engineered soil berm and asphalt cover that will be installed at the above-referenced property in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the future installation of the soil berm and asphalt cover which addresses or occupies the area over the contaminated soil.

#### **D.1. Descriptions:**

##### Description of Contamination

Based on the results of the soil investigation, the lone exceedance of the DC RCL for benzene and the several exceedances of select VOCs, PAHs and metals of the GW RCL document existing contamination at the Subject Property caused by the historical Former Terminal at the Subject Property. Soil contaminated by benzene and select petroleum related contaminants (i.e. PAHs) are located at a depth of approximately 1-4 feet on the eastern portion of the property. Groundwater contaminated by VOCs, PAHs, and metals associated with the historical Former Terminal is located at a depth of approximately 10 feet below ground surface. The extent of the soil and groundwater contamination is shown in Antea Groups Monitoring Well Abandonment Work Plan dated March 12, 2021.

##### Description of the [Cover/Barrier] to be Maintained

The asphalt barrier consists of approximately three inches of aggregate asphalt material for paved surfaces. The soil berm consists of a 30 MIL PVC geomembrane liner covering excess soils in a soil berm topped by a minimum of eight inches of clean topsoil seeded with a type 10 or 70 seed for vegetation. The vegetation will be mowed on a regular basis by the property owner. The barriers are located as shown on the **attached construction work plans on page C103 and C109.**

##### Cover/Building/Slab/Barrier Purpose

The asphalt barrier and soil berm with a 30 MIL PVC geomembrane liner covering the contaminated soils serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. The cover/barriers also acts as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code. Based on the current use of the property, commercial use, the barrier should function as intended unless disturbed.

##### Annual Inspection

The berm overlying the contaminated soil and as depicted in will be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause [additional infiltration into] [or exposure to] underlying soils. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed [[and] where infiltration from the surface will not be effectively minimized] will be documented.

A log of the inspections and any repairs will be maintained by the property owner and is included as D.4, Form 4400-305, Continuing Obligations Inspection and Maintenance Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed and where infiltration from the surface will not be effectively minimized. Once repairs are completed, they will be documented in the inspection log. A copy of the maintenance plan and inspection log will be kept at the site; or, if there is no acceptable place (for example, no building is present) to keep it at the site, at the address of the property owner and available for submittal or inspection by Wisconsin Department of Natural Resources (DNR) representatives upon their request.

A copy of the inspection log must be submitted electronically to the DNR after every inspection, at least annually.

#### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling or larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment (PPE). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the berm overlying the contaminated soil are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the DNR or its successor.

The property owner will be sure to mow the vegetation on the soil berm on a regular basis.

The property owner, in order to maintain the integrity of the grass covered berm, will maintain a copy of this Maintenance Plan at the site; or, if there is no acceptable place to keep it at the site (for example, no building is present), at the address of the property owner and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

#### Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover/Barrier

The following activities are prohibited on any portion of the property where [pavement, a building foundation, soil cover, engineered cap or other barrier] is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure; 7) the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar

residential exposure settings.

If removal, replacement or other changes to a cover, or a building which is acting as a cover, are considered, the property owner will contact DNR at least 45 days before taking such an action, to determine whether further action may be necessary to protect human health, safety, or welfare or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

#### Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of DNR.

#### Contact Information

*(Form 4400-202, Attachment D, Part 1.) Contact Information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.)*

August 2021

Site Owner and Operator: FedEx  
2929 Halvor Lane

Property Owner: Cory Hart  
HCI Limited Partnership  
3121 Mercedes Drive  
Monroe, LA 71291

Consultant: BBJ Group, LLC  
140 S Dearborn St, Suite 1520  
Chicago, IL 60603  
312-219-7787

DNR: John Hunt  
223 E Steinfest Road  
Antigo, WI 54409  
715-701-9383

**D.2 Location Map(s)**

*Include a location map which shows:*

- (1) the feature that requires maintenance;*
- (2) the location of the feature(s) that require(s) maintenance: on and off the source property;*
- (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site;*
- (4) the extent and type of residual contamination; and*
- (5) all property boundaries.*

**D.3 Photographs of Cover/Barrier**

The berm has not been installed yet, and will be completed August/September 2021. Photographs will be submitted with the updated Maintenance Plan at that time.

**D.4 Continuing Obligations Inspection and Maintenance Log**

Use DNR Fillable Form [Form 4400-305](#)

## Monitoring Well Maintenance Plan Template

D.1. Descriptions and Contact Information: (Form 4400-202, Attachment D, Part 1.)

See attached Monitoring Well Abandonment Work Plan from the Antea Group dated March 12, 2021. This monitoring well abandonment work plan details Antea Group's request to have existing monitoring, extraction, and recovery wells MW-3, MW-23, EW-9, EW-10, and RW-6 be abandoned. Antea Group is requesting that the monitoring and recovery wells be abandoned without replacement at the property. This work plan is pending approval of WI DNR.

Contact Information:

May 2021

Consultant:                   Antea Group  
5910 Rice Creek Parkway, Suite 100  
St. Paul, MN 55126  
651-697-5117

DNR:                           John Hunt  
223 E Steinfest Road  
Antigo, WI 54409  
715-701-9383

D.2. Location Map:

See attached Work Plan for well locations.

D.3. Photograph of Monitoring Well:

Well photographs can be provided as required.

D.4. Continuing Obligations Inspection and Maintenance Log

Antea Group will be tasked with inspecting and maintaining their Monitoring Wells.

ANTEA WELL ABANDONMENT WORK PLAN REQUEST

March 12, 2021

Mr. John Hunt  
Wisconsin Dept. of Natural Resources  
223 E Steinfest Road  
Antigo, WI 54409

**Subject: Well Abandonment Work Plan**  
**Attachment to Request to Manage Materials Form 4400-315**  
FedEx Ground Package System  
2929 Halvor Lane  
Superior, Wisconsin

Dear Mr. Hunt:

FedEx Ground Package System (FedEx) at 2929 Halvor Lane in Superior, Wisconsin has proposed an expansion of the existing facility to include additional semi-truck and auto parking spaces. A preliminary design for the facility expansion is included in the attached **Figure 1** and includes expansion of the existing facility to the east (to Maryland Avenue), and expansion to the north (to Lake City Towing). Development is scheduled to begin in early summer 2021, and a work plan and request to manage material for the site during development, including contaminated soil, will be submitted as Form 4400-315 by BBJ Group. This Well Abandonment Work Plan serves as an attachment to Form 4400-315 and includes a request to abandon existing monitoring and recovery wells installed by Antea Group on behalf of BP Products North America Inc. (BP). The abandonment of the monitoring and recovery wells is required to be completed before soil handling and redevelopment takes place.

In order to accommodate the proposed expansion plans and redevelopment for the FedEx facility, BBJ Group has requested that existing monitoring and recovery wells MW-3, MW-23, and RW-6 be abandoned. These wells have been used to delineate the extent of the releases associated with the Former Amoco Terminal (BRRTS #02-16-000331) and are located to the east of the existing FedEx building (**Figure 2**). Well MW-3 is upgradient of defined light non-aqueous liquid (LNAPL) identified at the Terminal, and wells MW-23 and RW-06 are located in identified LNAPL area of concern 5 (AOC 5). The history and conditions of these wells are detailed in the contents of this memorandum. Due to the extensive investigation, delineation and stability of the extent of LNAPL, dissolved-phase benzene, and direct contact soil contamination, these wells are proposed to be abandoned without replacement.

### **EXTENT OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL)**

The LNAPL identified in wells MW-23 and RW-06 originated from releases that occurred during the operation of the Terminal. Product type and composition have been identified through historical product “fingerprinting”; otherwise known as chromatographic analysis. The Delta Site Investigation and Interim Response Actions Report dated June 17, 1999 presents the LNAPL fingerprinting results and interpretations for all product samples collected at the Terminal. The extent of LNAPL within these wells, as defined as AOC 5, has been determined by investigation with UVF/LIF (Ultraviolet Fluorescence/Laser-Induced Fluorescence) borings, through soil and hand



auger borings, and an extensive history of monitoring for the presence of LNAPL in the network of monitoring and recovery wells.

### LNAPL EXTENT

AOC 5 as shown in **Figure 2** includes two active wells (RW-6 and MW-23) and one abandoned well (MW-2). Monitor well MW-2 was abandoned in September 2007. Recovery well RW-6 is constructed of 6-inch-diameter casing and screen and is screened from 20.2 to 45.2 feet bgs. The well was installed in May 1990 and has been gauged 148 times since installation. Monitor well MW-23 is constructed of 2-inch-diameter PVC casing and screen and is screened from 9.2 to 24.2 feet bgs. It was installed in June 1989 and has been gauged 138 times since installation. The thicknesses of LNAPL in wells RW-6 and MW-23 is influenced by groundwater elevation variations and precipitation. As the groundwater elevation increases, the water table pushes the water table up against the clay/sand interface and causes LNAPL to accumulate at higher thicknesses. Through the extensive gauging history of the wells as shown in **Table 1**, LNAPL thicknesses are predictable and stable, varying only due to the change in water table.

The extent of LNAPL within AOC 5 has been defined based on LIF and UVF borings, soil logs for wells, and laboratory analysis of soil samples for petroleum constituents. As shown in **Figure 2**, the LNAPL extent is defined by the minimal or absence of LIF response at CPT/LIF (Cone Penetrometer/Laser-Induced Fluorescence) borings LIF-36 to the north, LIF-38 to the east, LIF-42 to the west, and T-28 to the south. Hydraulically downgradient of AOC 5, LNAPL within AOC 4 to the north is defined based on LNAPL fingerprinting and analysis, and is bounded by the minimal or absence of LIF response at CPT/LIF borings LIF-36 to the south, LIF-37 to the west, and LIF-47 to the east (**Figure 2**), as well as a lack of LNAPL present in EW-3 to the east, EW-9 to the west, or EW-10 to the southwest since installation. The lack of measurable LNAPL in extraction well EW-3, the minimal LIF response at CPT/LIF boring LIF-47, and the distinctly different product type at monitor well MW-24 are key factors for constraining AOC 4 to the former Terminal property. Since groundwater flow has consistently been gauged to the north-northwest, LNAPL within AOCs 4 and 5 is further delineated through gauging at EW-09 and MW-10. Measurable LNAPL has not been observed in EW-09 over the 9 years of gauging data, and measurable LNAPL has only been observed once in MW-10 (0.01 feet in 3/13/1996) over the 32 years of gauging data (**Table 1**).

### LNAPL IMMOBILITY AND PLUME STABILITY

The potential LNAPL velocities within AOC 5 were analyzed at monitor well MW-23. Based on the LNAPL thickness, a potential LNAPL velocity at monitor well MW-23 was calculated as  $5.64 * 10^{-8}$  cm/second, or 0.06 feet/year (using the maximum LNAPL saturation) and  $2.30 * 10^{-8}$  cm/second, or 0.02 feet/year (using the average LNAPL saturation through the smear zone). ASTM standard E2531-06 suggests that an LNAPL plume is stable when the potential velocity is less than 1 foot per year. Based on the calculated values for monitoring well MW-23, which is located at the center of AOC 5, the LNAPL plume is not expanding or migrating.

### LNAPL TRANSMISSIVITIES

An additional indicator of LNAPL stability within AOC 5 and throughout the Terminal has been shown through LNAPL transmissivity testing. A manual skimmer test was performed at monitor well MW-23 in August 2011 in AOC 5. The LNAPL transmissivity was determined to be 0.37 ft<sup>2</sup>/day. Research published by the ITRC (*Evaluating LNAPL Remedial Technologies for Achieving Project Goals*; 2009, p.14) suggests that physical recovery (hydraulic or pneumatic pumping) is capable of removing LNAPL and reducing transmissivity to a practical limit of between 0.1 and 0.8 ft<sup>2</sup>/day. Since the calculated transmissivity value in MW-23 has already been reduced to this range, additional LNAPL recovery would be minimal through physical recovery.

## LNAPL VISCOSITIES AND CHEMICAL SIGNATURES

Samples of LNAPL from monitoring well MW-23 and recovery well RW-6 have been collected and analyzed numerous times through the investigation history of the Terminal, with the first LNAPL samples collected from both wells in 1995. An additional LNAPL sample was collected from recovery well RW-6 on April 23, 2004, and sampling analysis further supported that the LNAPL was an older vintage, characterized within the gasoline, naphtha, diesel fuel, and No. 2 fuel oil ranges.

LNAPL samples were again collected for geochemical property characterization at RW-6 on July 16, 2019. The LNAPL sample was used to evaluate the changes in LNAPL mass based on the changes in LNAPL chemical concentrations and ratios, and a technical memorandum evaluating those changes was submitted as a technical memo titled *Evidence for and Quantification of LNAPL Mass Depletion*, Antea Group, October 30, 2019.

Since the initial volume or mass of LNAPL at the Site is not available, the use of diagnostic ratios for estimation of petroleum mass depletion were calculated. These diagnostic ratios included “Evaporation”, “Waterwashing”, and “Biodegradation”. These ratios were then compared to a standard petroleum diagnostic ratio for 87 Octane Gasoline to evaluate changes in LNAPL composition over time at the Site.

For the Terminal property specifically, the diagnostic ratios developed for LNAPL samples collected from monitor wells throughout the site indicated significant reductions in contaminant concentrations as a result of Evaporation and Waterwashing. A comparison of the LNAPL samples collected from RW-6 in 2004 and 2019 indicates that Waterwashing has reduced the benzene mass by 80% in 2004 and further to 91% in 2019 (**Table 5**). This analysis supports the conclusion that limited benzene contaminant mass remains in the residual LNAPL in AOC 5, as the mass has been depleted through several processes: predominantly Waterwashing and Evaporation.

## DISSOLVED-PHASE CONTAMINATION

### EXTENT OF DISSOLVED-PHASE CONTAMINATION

The extent of dissolved-phase hydrocarbons in groundwater at the Terminal is monitored with a network of monitoring wells with shallow well screens bisecting the unconfined water table and deeper monitoring wells (piezometers) with wells screens submerged below the water table. Benzene is the primary contaminant of concern in the dissolved phase, and since the benzene mass in a majority of the Terminal LNAPL wells shows significant depletion through waterwashing and degradation (**Evidence for and Quantification of LNAPL Mass Depletion, Antea Group**, October 30, 2019), dissolved-phase benzene concentrations that exceed NR 140 ES are limited to monitoring wells within or adjacent to the LNAPL AOCs. Non-LNAPL wells downgradient of AOCs 4 and 5 include EW-10, EW-09, and MW-10 (Figure 2). Upgradient wells from AOC 5 include MW-3 and MW-35.

Benzene concentrations in upgradient and downgradient wells from AOCs 4 and 5 have decreasing or stable trends as shown in the hydrographs in **Appendix A**. Upgradient well MW-35 has not had any exceedances of the NR 140 ES since the well was initially sampled in 1991 (**Table 2**). The percent reduction from the historical high benzene concentrations to the most recently sampled benzene concentration (October 2016) for the upgradient and downgradient monitoring wells is presented below:

Well	Number of Well Sampling Events	Number of Sampling Events exceeding NR 140 ES	October 2016 Benzene Concentration (µg/L)	Historical High Benzene Concentration (µg/L)	Date of Historical High Benzene Concentration	% Reduction From Historical High Benzene Concentration
MW-3	20	8	7.6	230	October 2003	96.69%
EW-10	7	6	1.4	3,970	October 2011	99.96%
MW-10	30	22	3.1	400	April 2004	99.23%
EW-9	7	7	28.1	374	October 2011	92.49%

Wells adjacent to AOCs 4 and 5 (MW-10, EW-10, and MW-35), show that dissolved-phase benzene is not migrating laterally to the east and west of the defined plume boundaries. Migration follows groundwater flow through the unconfined layer to the northwest and is delineated by a comprehensive network of multi-level vertical delineation wells north of Winter Street and the rail corridor. Well MW-3 exhibits low level benzene impact and is no longer required as an upgradient delineation well due to the consistent sampling results and downgradient delineation of dissolved-phase impact at the Terminal.

## SOIL CONTAMINATION

### EXTENT OF SOIL CONTAMINATION

Soil considered a potential direct contact risk (0-4 feet bgs) within the area of MW-3, MW-23, and RW-06 was addressed and removed through five rounds of delineation from 2013 to 2014. Work included the delineation of two soil excavation limits at soil boring SB-24 (southern portion of former Parcel B, **Figure 4**), and at soil borings SB-23, SB-39, and SB-40 (northern portion of former Parcel B, **Figure 5**). A total of 5,271 tons of impacted soil were removed from these two excavation areas. Individual excavation area results for South B and North B are summarized below:

- **South B (former Parcel B, north of Halvor Lane)**

The South B area included excavation surrounding soil borings SB-24, SB-25 and SB-32, which were defined as containing exceedances to industrial direct contact standards (**Table 3**). The excavation area was delineated on June 18 and July 28, 2014 through additional soil borings until soil samples did not exceed industrial direct contact standards (**Table 3**). Excavation was completed to a depth of 4 feet bgs on November 7-14, 2014, and a total of 2,076.71 tons of soil was removed. The area was backfilled with clean soil on November 18, 2014.

- **North B (former Parcel B, north of Halvor Lane)**

The North B area included excavation surrounding soil borings SB-22, SB-23, SB-39, SB-40 and SB-48, which were defined as containing exceedances to industrial direct contact standards (**Table 3**). The excavation area was delineated on June 17, July 28 and August 21, 2014 through additional soil borings until soil samples did not exceed industrial direct contact standards (**Table 3**). Excavation was completed to a depth of 4 ft bgs on November 14-21, 2014, and a total of 3,194.29 tons of soil was removed. The area was backfilled with clean soil on December 3, 2014.

Additional soil samples within and around AOCs 4 and 5 were collected during soil boring and delineation work as shown in **Figure 3**, and additional direct contact soil exceedances were not observed. Soil samples collected within and around AOC 5 (SB-21, SB-46, SB-47, and SB-44) did not contain any exceedances of the Industrial Direct Contact RCLs (Residual Contaminant Levels).

## SUMMARY AND CONCLUSIONS

To accommodate redevelopment and expansion of the FedEx facility at 2929 Halvor Lane to the east and northeast of the existing facility, Antea Group proposes abandonment of monitoring wells MW-3, MW-23, and RW-6. The area will be redeveloped into additional truck and auto parking spaces, allowing for utilization of the Brownfield site with no additional risk to human health or the environment. Based on the below conclusions, Antea Group recommends that the wells be abandoned without replacement:

- The LNAPL extent of AOC 5, which includes monitoring and recovery wells RW-6 and MW-23, has been fully delineated through the advancement of CPT/LIF soil borings, soil logs or wells, and analysis of soil samples for petroleum constituents.
- The LNAPL within AOC 5 is stable as defined through the calculation of LNAPL velocity and transmissivity at monitoring well MW-23, located within the center of AOC 5.
- The residual LNAPL mass contains limited residual benzene contaminant mass, and LNAPL samples from RW-06 collected in 2004 and 2019 indicate that the benzene mass has been depleted through evaporation and Waterwashing. Calculations indicate that 91% of the benzene within RW-6 has been removed through Waterwashing.
- Groundwater samples collected from monitoring wells adjacent and downgradient of AOCs 4 and 5 indicate that the dissolved-phase benzene concentrations are stable or decreasing. Recent dissolved-phase benzene concentrations within wells that have historically had NR 140 ES exceedances for benzene have been reduced 92-99% from the historical high concentrations.
- MW-3 is no longer required as an upgradient delineator well due to the consistent sampling results and downgradient delineation of dissolved-phase groundwater impact at the Terminal.
- The potential for direct contact exceedances within soil was investigated through the advancement of numerous soil borings and collection of soil samples during 2013 and 2014. Two areas with shallow soil impact were excavated within former Parcel B to the south of MW-23, and a total of 5,270 tons of soil within the direct contact interval was removed and backfilled with clean soil. Additional soil borings collected within and around AOC 5 did not contain exceedances of the Industrial Direct Contact RCLs.

Antea Group requests the review and response to this work plan, along with the soil handling plan submitted for the FedEx facility (Form 4400-315 and fee, submitted under separate cover) to include a written response indicating the Wisconsin Department of Natural Resources approval for abandonment of monitoring and recovery wells MW-3, MW-23, and RW-06 without replacement. Redevelopment and expansion of the FedEx facility is anticipated to begin in June 2021.

John Hunt  
Wisconsin Department of Natural Resources  
March 12, 2021



Questions regarding this memorandum can be directed to Layne Kortbein at the phone number and email listed below.

Sincerely,

A handwritten signature in black ink that reads "Layne Kortbein".

---

Layne Kortbein  
Project Professional  
+1 651 697 5117  
[Layne.Kortbein@anteagroup.us](mailto:Layne.Kortbein@anteagroup.us)  
Antea Group

## ATTACHMENTS

### FIGURES

- Figure 1 – Preliminary FedEx Expansion Plans
- Figure 2 – Terminal LNAPL Extent Map
- Figure 3 – Comprehensive Site Investigation Map
- Figure 4 – Excavation Map Surrounding SB-24
- Figure 5 – Excavation Map Surrounding SB-23, SB-39, and SB-40

### TABLES

- Table 1 – Groundwater and LNAPL Gauging Data
- Table 2 – Groundwater Analytical Results
- Table 3 – Shallow Soil Analytical Results
- Table 4 – Terminal LNAPL Degradation Ratios

### APPENDIX

- Appendix A – Dissolved-Phase Benzene Hydrographs



**Figure 1**  
**SITE PLAN**  
 SCALE: 1"=40'-0"

**SITE LAYOUT SUMMARY**

ITEM	EXISTING	REQ'D.	PROV.
ACREAGE			
TOTAL	5.87	9.91	9.91
PARKING (SPACES)			
AUTOMOBILE TOTAL	140	223	223
STANDARD	135	216	216
HANDICAP	5	7	7
TRAILER TOTAL	16	55	60
28' TRAILER	14	14	22
LONG TRAILER	2	39	36
LONG TRAILER EQUIVALENT SPACE	0	2	2
TRACTOR	0	6	6
DOLLY STORAGE	0	6	6
VAN	5	84	84

- LEGEND**
- NEW ASPHALT PAVEMENT TYPE I
  - NEW ASPHALT PAVEMENT TYPE II
  - NEW ASPHALT PAVEMENT TYPE I (W/ SEALCOAT)
  - NEW CONCRETE PAD
  - NEW FENCE
  - REMOVE FENCE
  - EXISTING FENCE
  - REMOVED
  - NEW STRIPE
  - EXISTING STRIPE

- DESIGN DETAILS**
1. ASPHALT PAVEMENT TYPE I USED IN TRAILER/TRACTOR/VAN AREAS REFER FXG SPECS AND STD. DETAIL 02510-001
  2. ASPHALT PAVEMENT TYPE II USED IN AUTO PARKING LOT ONLY REFER FXG SPECS AND STD. DETAIL 02510-001
  3. CONCRETE PAVEMENT REFER FXG SPECS AND STD DETAIL 02510-007
  4. CONCRETE CURB AT REAR OF TRACTOR AND DOLLY PARKING REFER FXG SPECS AND STD. DETAIL 02522-002
  5. TRAILER PARKING BACK-IN REFER FXG STD. DETAIL 02002-006
  6. TRAILER PARKING BACK-TO-BACK LONGS REFER FXG STD. DETAIL 02002-008
  7. TRACTOR PARKING TO HAVE SEALCOAT REFER FXG SPECS.
  8. CHAIN LINK FENCE REFER FXG SPECS AND STD. DETAIL 02830-006
  9. BLOCK HEATER RECEPTACLES (IF SHOWN ON DRAWING) REFER FXG STD DETAIL 16601-001

- GENERAL NOTES**
1. VERIFY DISTANCE REQUIRED FOR LOCAL SETBACKS, STORM WATER MANAGEMENT REQUIREMENTS AND TOPOGRAPHICAL ADJUSTMENTS.

**DISCLAIMER:**  
 THIS SURVEY IS NOT 100% ACCURATE AND WAS DERIVED FROM ESTIMATED DATA. A FIELD SURVEY IS REQUIRED FOR ACCURACY.  
 AERIAL IMAGERY CONTAINED HEREIN HAS BEEN GENERATED BY BING MAPS. IMAGERY SHOULD BE FIELD VERIFIED FOR ACCURACY.

JOB # 06.02.2020  
 DATE 06.02.2020  
 DRAWN BY: KEN  
 CHECKED BY:

**FOR INFORMATION PURPOSES ONLY**  
 NOT FOR CONSTRUCTION

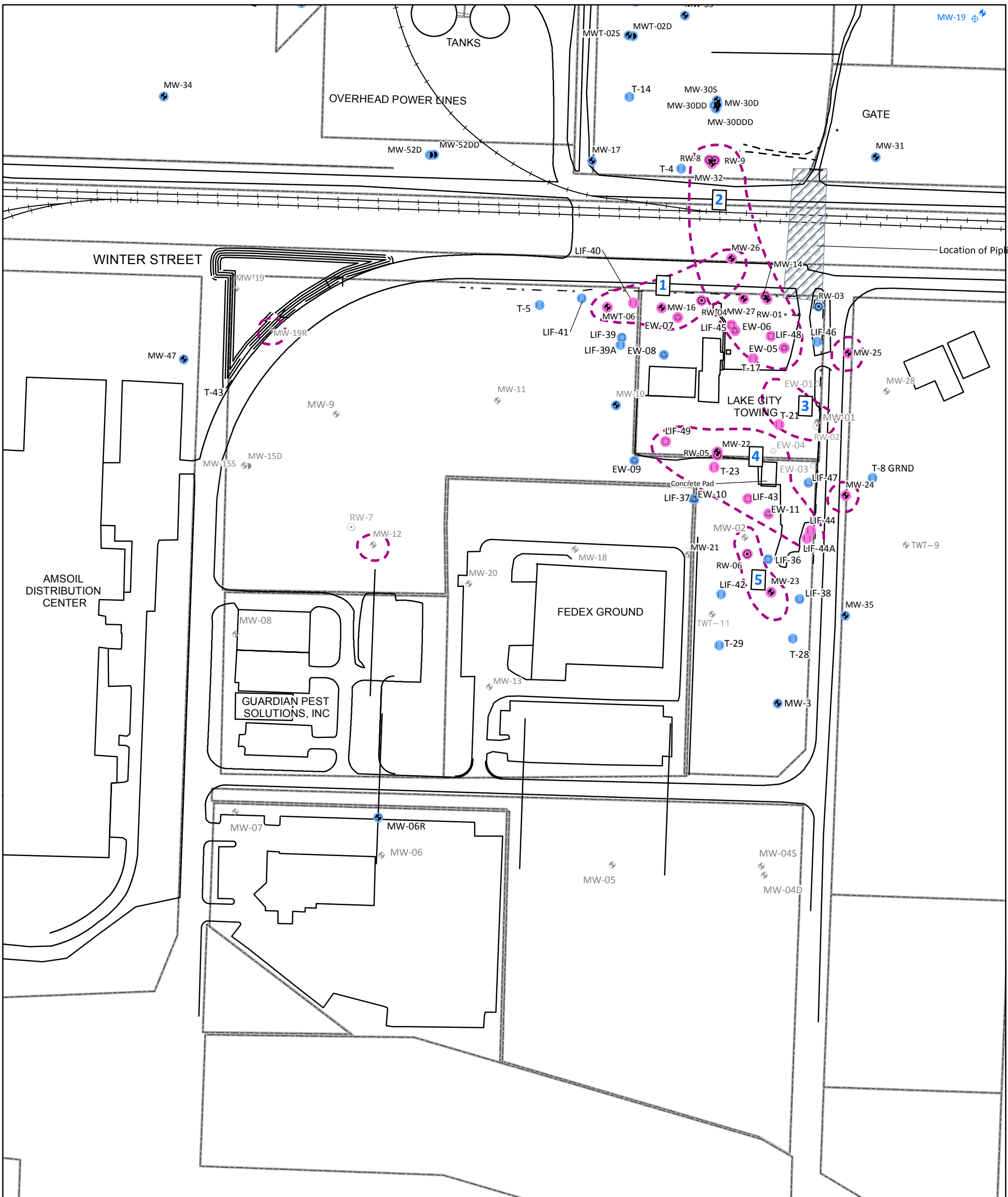
FISCHER

DULUTH, MN  
 SITE LAYOUT

SDI.01C

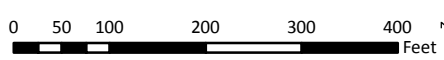
SHEET NO. FILE NO. DULUTH, SDI.01c.dwg

HERE



**Legend**

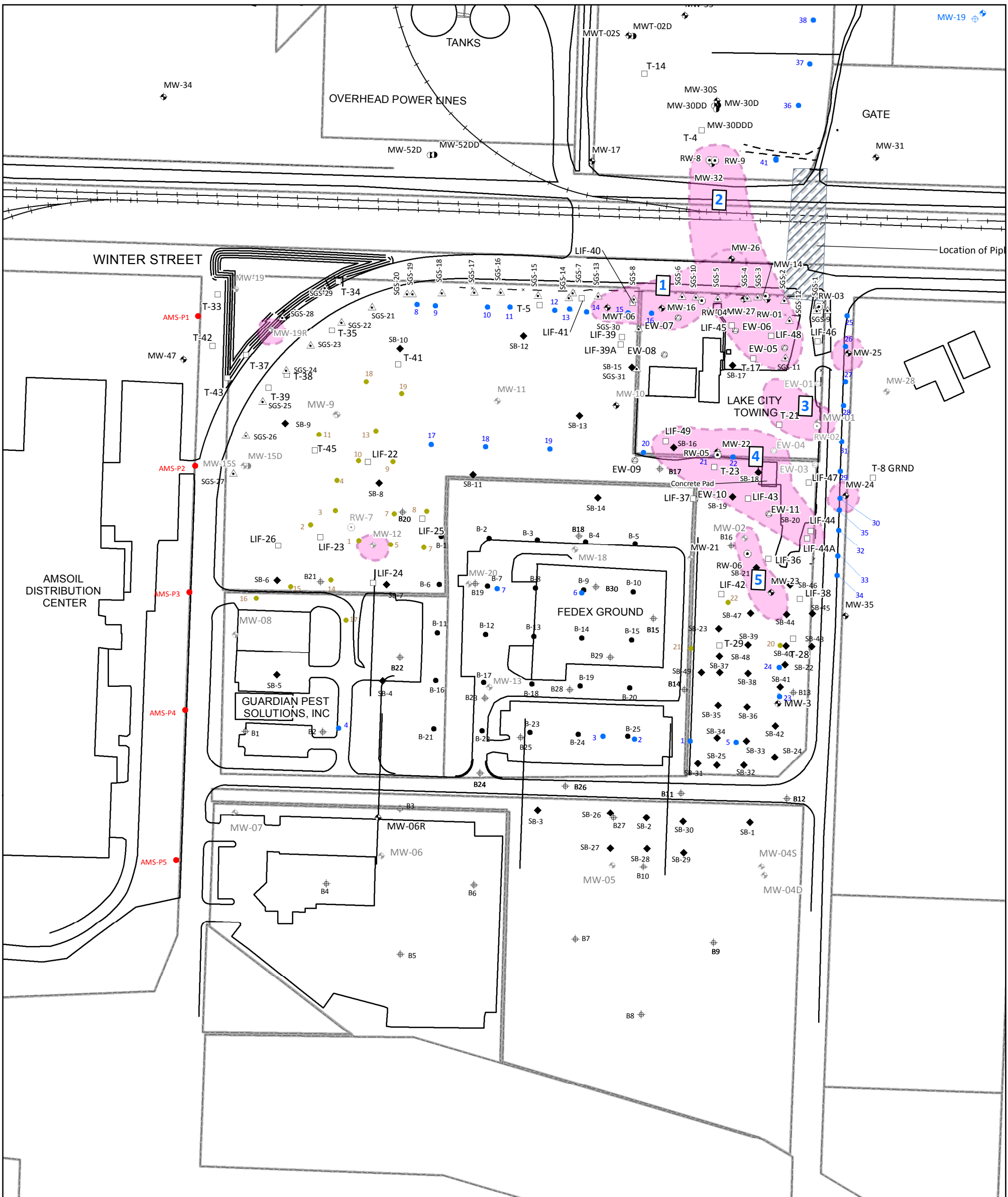
- ◆ Monitoring Well Location
- ◆ Abandoned Monitoring Well Location
- Deep Monitoring Well Location
- Abandoned Deep Monitoring Well Location
- ⊙ Recovery Well Location
- ⊙ Abandoned Recovery Well Location
- ⊕ Extraction Well
- ⊕ Abandoned Extraction Well Location
- CPT-LIF Boring Location
- ◆ ABC Rail Monitoring Well
- ◆ ABC Rail Piezometer
- Points with LNAPL
- No LNAPL
- LNAPL Extent
- - - Gravel Access Road
- x - Fence
- ▨ Location of Pipelines Abandoned in Place
- + - Railroad
- ▭ Property Boundary



**FIGURE 2**  
LNAPL EXTENT MAP  
TERMINAL DETAIL  
FORMER AMOCO TERMINAL  
SUPERIOR, WISCONSIN

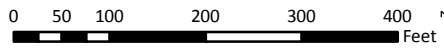
PROJECT NO. WISUP191	PREPARED BY SAA/MB	REF SCALE 1:2,400
DATE 3/3/2021	REVIEWED BY JZ	MAP SCALE 1 INCH = 200 FEET





**Legend**

- ◆ Monitoring Well Location
- ◆ Abandoned Monitoring Well Location
- Deep Monitoring Well Location
- Abandoned Deep Monitoring Well Location
- ⊙ Recovery Well Location
- ⊙ Abandoned Recovery Well Location
- ⊕ Extraction Well
- ⊕ Abandoned Extraction Well Location
- CPT-LIF Boring Location
- ◆ ABC Rail Monitoring Well
- ⊕ ABC Rail Piezometer
- ◆ Soil Boring Location (Vinje Industrial Park Area) (2003 Soil Borings- TPT Geotech Soil Report 2004)
- Hand Auger Boring (1990)
- Soil Borings (December 1994)
- Amsoil Temporary Well (2004 Data)
- ◆ Hand Auger Sampling Location
- △ SGS Sampling Location
- Soil Sampling Location
- LNAPL Extent
- - - Gravel Access Road
- × - - Fence
- ▨ Location of Pipelines Abandoned in Place
- +— Railroad
- Property Boundary

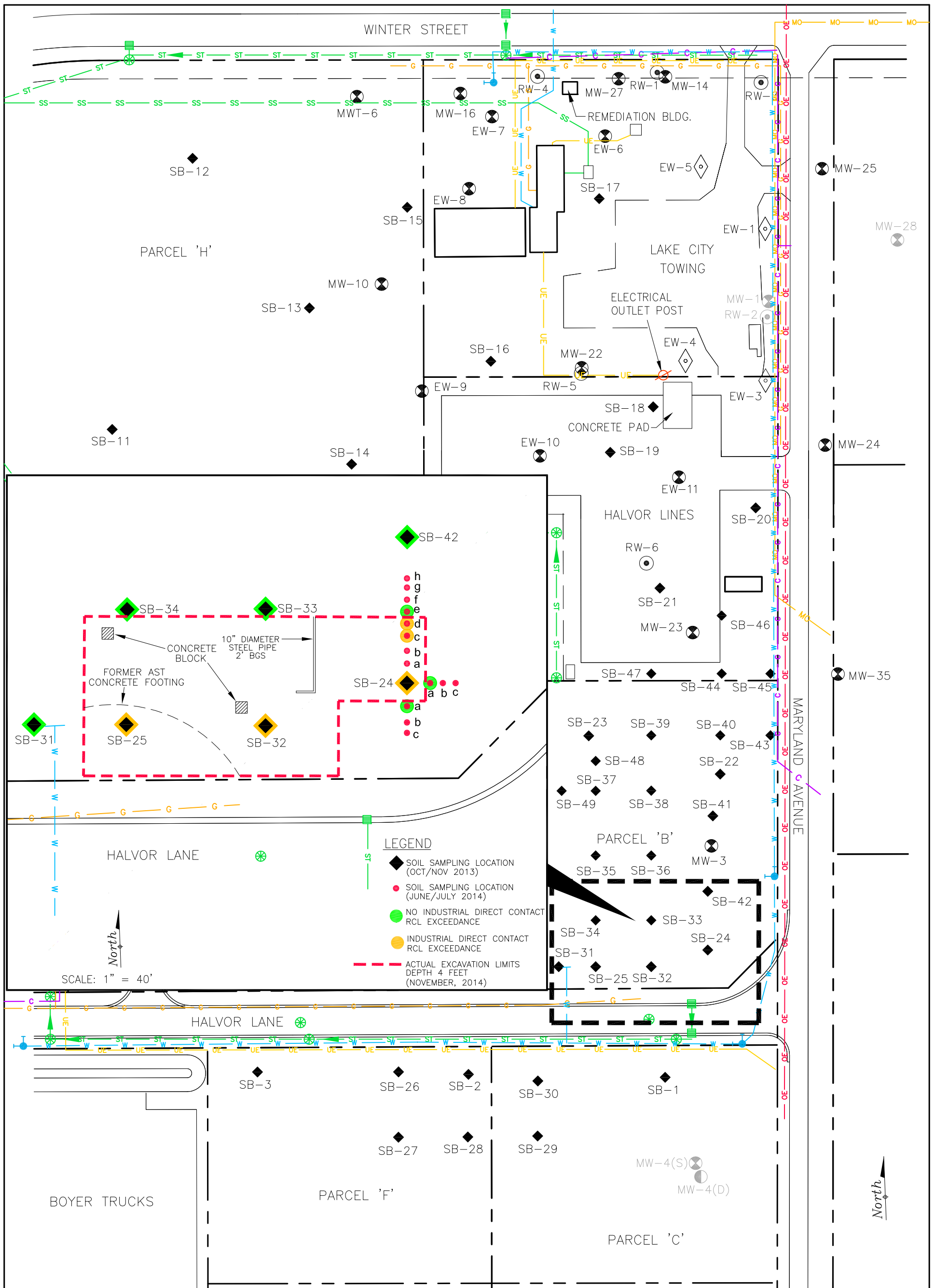


**FIGURE 3**  
SITE MAP  
TERMINAL DETAIL  
FORMER AMOCO TERMINAL  
SUPERIOR, WISCONSIN

PROJECT NO. WISUP191	PREPARED BY SAA/MB	REF SCALE 1:2,400
DATE 3/3/2021	REVIEWED BY JZ	MAP SCALE 1 INCH = 200 FEET



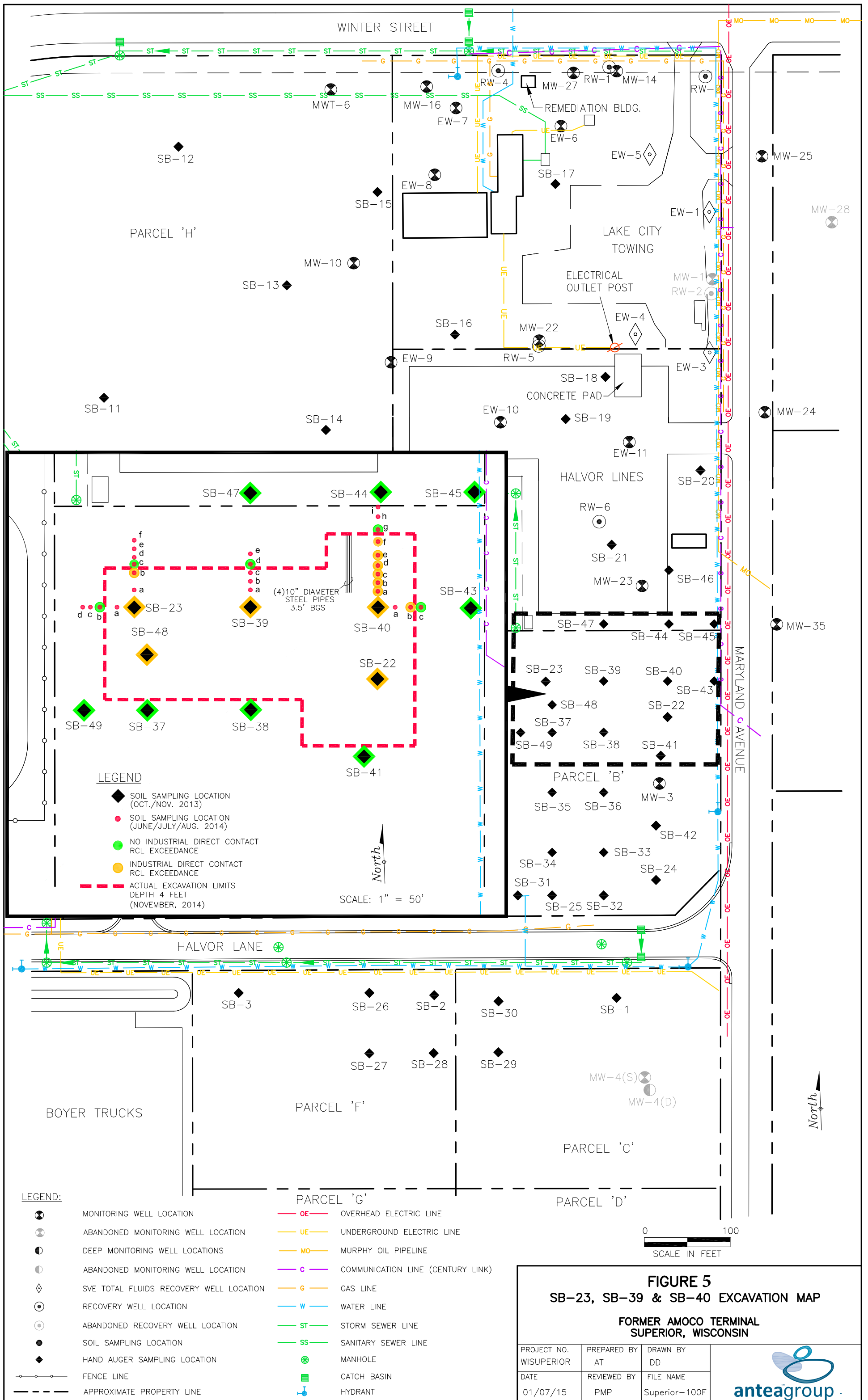




**FIGURE 4**  
**SB-24 EXCAVATION MAP**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

PROJECT NO. WISUPERIOR	PREPARED BY AT	DRAWN BY DD
DATE 01/07/15	REVIEWED BY PMP	FILE NAME Superior-100F





**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	03/23/88	633.90	636.17	618.60	609.60	NP	0.00	18.15	15.88	618.02	No	
MW-03	09/08/88	633.90	636.17	618.60	609.60	NP	0.00	17.89	15.62	618.28	No	
MW-03	09/20/88	633.90	636.17	618.60	609.60	NP	0.00	17.38	15.11	618.79	Yes	
MW-03	04/27/89	633.90	636.17	618.60	609.60	NP	0.00	16.37	14.10	619.80	Yes	
MW-03	05/18/89	633.90	636.17	618.60	609.60	NP	0.00	15.80	13.53	620.37	Yes	
MW-03	06/30/89	633.90	636.17	618.60	609.60	NP	0.00	16.33	14.06	619.84	Yes	
MW-03	07/12/89	633.90	636.17	618.60	609.60	NP	0.00	17.07	14.80	619.10	Yes	
MW-03	07/26/89	633.90	636.17	618.60	609.60	NP	0.00	17.38	15.11	618.79	Yes	
MW-03	07/27/89	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	09/03/89	633.90	636.17	618.60	609.60	NP	0.00	17.76	15.49	618.41	No	
MW-03	11/16/89	633.90	636.17	618.60	609.60	NP	0.00	17.72	15.45	618.45	No	
MW-03	11/28/89	633.90	636.17	618.60	609.60	NP	0.00	18.15	15.88	618.02	No	
MW-03	06/01/90	633.90	636.17	618.60	609.60	NP	0.00	13.42	11.15	622.75	Yes	
MW-03	06/19/90	633.90	636.17	618.60	609.60	NP	0.00	16.35	14.08	619.82	Yes	
MW-03	06/27/90	633.90	636.17	618.60	609.60	NP	0.00	17.23	14.96	618.94	Yes	
MW-03	07/05/90	633.90	636.17	618.60	609.60	NP	0.00	17.81	15.54	618.36	No	
MW-03	07/13/90	633.90	636.17	618.60	609.60	NP	0.00	18.11	15.84	618.06	No	
MW-03	07/17/90	633.90	636.17	618.60	609.60	NP	0.00	17.72	15.45	618.45	No	
MW-03	07/25/90	633.90	636.17	618.60	609.60	NP	0.00	18.26	15.99	617.91	No	
MW-03	08/09/90	633.90	636.17	618.60	609.60	NP	0.00	18.14	15.87	618.03	No	
MW-03	08/14/90	633.90	636.17	618.60	609.60	NP	0.00	18.23	15.96	617.94	No	
MW-03	08/27/90	633.90	636.17	618.60	609.60	NP	0.00	17.51	15.24	618.66	Yes	
MW-03	09/06/90	633.90	636.17	618.60	609.60	NP	0.00	17.02	14.75	619.15	Yes	
MW-03	01/04/91	633.90	636.17	618.60	609.60	NP	0.00	17.51	15.24	618.66	Yes	
MW-03	01/30/91	633.90	636.17	618.60	609.60	NP	0.00	17.96	15.69	618.21	No	
MW-03	04/24/91	633.90	636.17	618.60	609.60	NP	0.00	15.96	13.69	620.21	Yes	
MW-03	07/09/91	633.90	636.17	618.60	609.60	NP	0.00	13.77	11.50	622.40	Yes	
MW-03	10/08/91	633.90	636.17	618.60	609.60	NP	0.00	13.44	11.17	622.73	Yes	
MW-03	01/07/92	633.90	636.17	618.60	609.60	NP	0.00	13.42	11.15	622.75	Yes	
MW-03	10/14/92	633.90	636.17	618.60	609.60	NP	0.00	7.53	5.26	628.64	Yes	
MW-03	01/29/94	633.90	636.17	618.60	609.60	NP	0.00	15.95	13.68	620.22	Yes	
MW-03	04/27/94	633.90	636.17	618.60	609.60	NP	0.00	12.84	10.57	623.33	Yes	
MW-03	07/21/94	633.90	636.17	618.60	609.60	NP	0.00	13.99	11.72	622.18	Yes	
MW-03	10/25/94	633.90	636.17	618.60	609.60	NP	0.00	6.76	4.49	629.41	Yes	
MW-03	10/27/94	633.90	636.17	618.60	609.60	NP	0.00	6.68	4.41	629.49	Yes	
MW-03	11/02/94	633.90	636.17	618.60	609.60	17.50	0.70	18.20	15.39	618.51	No	
MW-03	02/01/95	633.90	636.17	618.60	609.60	NP	0.00	15.45	13.18	620.72	Yes	
MW-03	04/04/95	633.90	636.17	618.60	609.60	NP	0.00	16.94	14.67	619.23	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	07/12/95	633.90	636.17	618.60	609.60	NP	0.00	15.41	13.14	620.76	Yes	
MW-03	11/13/95	633.90	636.17	618.60	609.60	13.45	0.01	13.46	11.18	622.72	Yes	
MW-03	03/13/96	633.90	636.17	618.60	609.60	16.64	0.01	16.65	14.37	619.53	Yes	
MW-03	10/08/96	633.90	636.17	618.60	609.60	NP	0.00	13.32	11.05	622.85	Yes	
MW-03	04/29/97	633.90	636.17	618.60	609.60	NP	0.00	10.22	7.95	625.95	Yes	
MW-03	11/03/98	633.90	636.17	618.60	609.60	NP	0.00	16.55	14.28	619.62	Yes	
MW-03	03/02/99	633.90	636.17	618.60	609.60	NP	0.00	16.94	14.67	619.23	Yes	
MW-03	04/26/00	633.90	636.17	618.60	609.60	NP	0.00	6.72	4.45	629.45	Yes	
MW-03	08/18/00	633.90	636.17	618.60	609.60	NP	0.00	16.31	14.04	619.86	Yes	
MW-03	03/20/02	633.90	636.17	618.60	609.60	NP	0.00	18.14	15.87	618.03	No	
MW-03	05/15/02	633.90	636.17	618.60	609.60	NP	0.00	6.84	4.57	629.33	Yes	very silty
MW-03	08/20/02	633.90	636.17	618.60	609.60	NP	0.00	6.59	4.32	629.58	Yes	
MW-03	11/05/02	633.90	636.17	618.60	609.60	NP	0.00	6.52	4.25	629.65	Yes	
MW-03	12/23/02	633.90	636.17	618.60	609.60	NP	0.00	17.07	14.80	619.10	Yes	
MW-03	01/28/03	633.90	636.17	618.60	609.60	NP	0.00	17.75	15.48	618.42	No	
MW-03	02/19/03	633.90	636.17	618.60	609.60	NP	0.00	18.02	15.75	618.15	No	
MW-03	04/17/03	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	06/10/03	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	10/20/03	633.90	636.17	618.60	609.60	NP	0.00	17.98	15.71	618.19	No	
MW-03	12/03/03	633.90	636.17	618.60	609.60	NP	0.00	18.30	16.03	617.87	No	
MW-03	04/19/04	634.51	635.97	618.60	609.60	NP	0.00	17.79	16.33	618.18	No	
MW-03	07/28/04	634.51	635.97	618.60	609.60	NP	0.00	16.80	15.34	619.17	Yes	
MW-03	11/16/04	634.51	635.97	618.60	609.60	NP	0.00	15.69	14.23	620.28	Yes	
MW-03	04/18/05	634.51	635.97	618.60	609.60	NP	0.00	15.78	14.32	620.19	Yes	
MW-03	10/11/05	634.51	635.97	618.60	609.60	NP	0.00	15.30	13.84	620.67	Yes	
MW-03	05/23/06	634.51	635.97	618.60	609.60	NP	0.00	12.72	11.26	623.25	Yes	
MW-03	10/16/06	634.51	635.97	618.60	609.60	NP	0.00	16.78	15.32	619.19	Yes	
MW-03	04/23/07	634.51	635.97	618.60	609.60	NP	0.00	10.32	8.86	625.65	Yes	
MW-03	09/25/07	634.51	636.63	618.60	609.60	NP	0.00	13.97	11.85	622.66	Yes	
MW-03	05/01/08	634.51	636.63	618.60	609.60	NP	0.00	12.15	10.03	624.48	Yes	
MW-03	10/20/08	634.51	636.63	618.60	609.60	NP	0.00	6.93	4.81	629.70	Yes	
MW-03	04/18/09	634.51	636.63	618.60	609.60	NP	0.00	8.48	6.36	628.15	Yes	
MW-03	10/11/09	634.51	636.63	618.60	609.60	NP	0.00	16.87	14.75	619.76	Yes	
MW-03	04/28/10	634.51	636.63	618.60	609.60	NP	0.00	15.46	13.34	621.17	Yes	
MW-03	10/25/10	634.51	636.63	618.60	609.60	NP	0.00	7.57	5.45	629.06	Yes	
MW-03	04/25/11	634.51	636.63	618.60	609.60	NP	0.00	7.42	5.30	629.21	Yes	
MW-03	10/10/11	634.51	636.63	618.60	609.60	NP	0.00	16.11	13.99	620.52	Yes	
MW-03	01/04/12	634.51	636.63	618.60	609.60	NP	0.00	17.37	15.25	619.26	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	04/16/12	634.51	636.63	618.60	609.60	NP	0.00	15.80	13.68	620.83	Yes	
MW-03	06/26/12	634.51	636.63	618.60	609.60	NP	0.00	7.02	4.90	629.61	Yes	
MW-03	09/30/12	634.51	636.63	618.60	609.60	NP	0.00	17.49	15.37	619.14	Yes	
MW-03	12/17/12	634.51	636.63	618.60	609.60	NP	0.00	17.83	15.71	618.80	Yes	
MW-03	03/25/13	634.51	636.63	618.60	609.60	NP	0.00	19.01	16.89	617.62	No	
MW-03	05/05/13	634.51	636.63	618.60	609.60	NP	0.00	9.33	7.21	627.30	Yes	
MW-03	10/01/13	634.51	636.63	618.60	609.60	NP	0.00	17.44	15.32	619.19	Yes	
MW-03	05/21/14	634.51	636.63	618.60	609.60	NP	0.00	5.87	3.75	630.76	Yes	
MW-03	10/30/14	634.51	636.63	618.60	609.60	NP	0.00	8.74	6.62	627.89	Yes	
MW-03	05/06/15	634.51	636.63	618.60	609.60	NP	0.00	15.09	12.97	621.54	Yes	
MW-03	10/06/15	634.51	636.63	618.60	609.60	NP	0.00	8.09	5.97	628.54	Yes	
MW-03	05/23/16	634.51	636.63	618.60	609.60	NP	0.00	6.92	4.80	629.71	Yes	
MW-03	10/03/16	634.51	636.63	618.60	609.60	NP	0.00	6.70	4.58	629.93	Yes	
MW-03	06/29/17	634.51	636.63	618.60	609.60	NP	0.00	7.73	5.61	628.90	Yes	
MW-03	05/26/20	634.51	636.63	618.60	609.60	NP	0.00	7.34	5.22	629.29	Yes	
MW-10	03/23/88	631.40	633.77	615.90	606.90	NP	0.00	18.01	15.64	615.76	No	
MW-10	09/08/88	631.40	633.77	615.90	606.90	NP	0.00	18.38	16.01	615.39	No	
MW-10	09/20/88	631.40	633.77	615.90	606.90	NP	0.00	18.60	16.23	615.17	No	
MW-10	04/27/89	631.40	633.77	615.90	606.90	NP	0.00	18.37	16.00	615.40	No	
MW-10	05/18/89	631.40	633.77	615.90	606.90	NP	0.00	18.10	15.73	615.67	No	
MW-10	06/30/89	631.40	633.77	615.90	606.90	NP	0.00	17.55	15.18	616.22	Yes	
MW-10	07/12/89	631.40	633.77	615.90	606.90	NP	0.00	17.66	15.29	616.11	Yes	
MW-10	07/26/89	631.40	633.77	615.90	606.90	NP	0.00	17.61	15.24	616.16	Yes	
MW-10	07/27/89	631.40	633.77	615.90	606.90	NP	0.00	17.68	15.31	616.09	Yes	
MW-10	09/03/89	631.40	633.77	615.90	606.90	NP	0.00	17.73	15.36	616.04	Yes	
MW-10	11/16/89	631.40	633.77	615.90	606.90	NP	0.00	17.94	15.57	615.83	No	
MW-10	11/28/89	631.40	633.77	615.90	606.90	NP	0.00	18.20	15.83	615.57	No	
MW-10	06/01/90	631.40	633.77	615.90	606.90	NP	0.00	18.34	15.97	615.43	No	
MW-10	06/19/90	631.40	633.77	615.90	606.90	NP	0.00	18.14	15.77	615.63	No	
MW-10	06/27/90	631.40	633.77	615.90	606.90	NP	0.00	18.28	15.91	615.49	No	
MW-10	07/05/90	631.40	633.77	615.90	606.90	NP	0.00	18.50	16.13	615.27	No	
MW-10	07/13/90	631.40	633.77	615.90	606.90	NP	0.00	18.40	16.03	615.37	No	
MW-10	07/17/90	631.40	633.77	615.90	606.90	NP	0.00	18.23	15.86	615.54	No	
MW-10	07/25/90	631.40	633.77	615.90	606.90	NP	0.00	18.36	15.99	615.41	No	
MW-10	08/09/90	631.40	633.77	615.90	606.90	NP	0.00	18.28	15.91	615.49	No	
MW-10	08/14/90	631.40	633.77	615.90	606.90	NP	0.00	18.39	16.02	615.38	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-10	08/27/90	631.40	633.77	615.90	606.90	NP	0.00	18.09	15.72	615.68	No	
MW-10	09/06/90	631.40	633.77	615.90	606.90	NP	0.00	18.02	15.65	615.75	No	
MW-10	01/04/91	631.40	633.77	615.90	606.90	NP	0.00	17.44	15.07	616.33	Yes	
MW-10	01/30/91	631.40	633.77	615.90	606.90	NP	0.00	17.57	15.20	616.20	Yes	
MW-10	04/24/91	631.40	633.77	615.90	606.90	NP	0.00	18.19	15.82	615.58	No	
MW-10	07/09/91	631.40	633.77	615.90	606.90	NP	0.00	16.16	13.79	617.61	Yes	
MW-10	10/08/91	631.40	633.77	615.90	606.90	NP	0.00	14.89	12.52	618.88	Yes	
MW-10	01/07/92	631.40	633.77	615.90	606.90	NP	0.00	14.88	12.51	618.89	Yes	
MW-10	10/14/92	631.40	633.77	615.90	606.90	NP	0.00	14.87	12.50	618.90	Yes	
MW-10	01/29/94	631.40	633.77	615.90	606.90	NP	0.00	16.01	13.64	617.76	Yes	
MW-10	04/27/94	631.40	633.77	615.90	606.90	NP	0.00	16.13	13.76	617.64	Yes	
MW-10	07/21/94	631.40	633.77	615.90	606.90	NP	0.00	14.78	12.41	618.99	Yes	
MW-10	10/25/94	631.40	633.77	615.90	606.90	NP	0.00	15.25	12.88	618.52	Yes	
MW-10	10/27/94	631.40	633.77	615.90	606.90	NP	0.00	14.70	12.33	619.07	Yes	
MW-10	11/02/94	631.40	633.77	615.90	606.90	NP	0.00	17.20	14.83	616.57	Yes	
MW-10	02/01/95	631.40	633.77	615.90	606.90	NP	0.00	16.96	14.59	616.81	Yes	
MW-10	04/04/95	631.40	633.77	615.90	606.90	NP	0.00	17.12	14.75	616.65	Yes	
MW-10	07/12/95	631.40	633.77	615.90	606.90	NP	0.00	16.15	13.78	617.62	Yes	
MW-10	11/13/95	631.40	633.77	615.90	606.90	NP	0.00	14.88	12.51	618.89	Yes	
MW-10	03/13/96	631.40	633.77	615.90	606.90	16.67	0.01	16.68	14.30	617.10	Yes	
MW-10	10/08/96	631.40	633.77	615.90	606.90	NP	0.00	14.02	11.65	619.75	Yes	
MW-10	04/29/97	631.40	633.77	615.90	606.90	NP	0.00	13.30	10.93	620.47	Yes	
MW-10	11/03/98	631.40	633.77	615.90	606.90	NP	0.00	17.01	14.64	616.76	Yes	
MW-10	03/02/99	631.40	633.77	615.90	606.90	NP	0.00	17.01	14.64	616.76	Yes	
MW-10	04/26/00	631.40	633.77	615.90	606.90	NP	0.00	16.18	13.81	617.59	Yes	
MW-10	08/18/00	631.40	633.77	615.90	606.90	NP	0.00	16.62	14.25	617.15	Yes	
MW-10	10/10/00	631.40	633.77	615.90	606.90	NP	0.00	16.80	14.43	616.97	Yes	
MW-10	09/30/02	631.40	633.77	615.90	606.90	NP	0.00	17.09	14.72	616.68	Yes	
MW-10	11/05/02	631.40	633.77	615.90	606.90	NP	0.00	16.34	13.97	617.43	Yes	
MW-10	06/10/03	631.40	633.77	615.90	606.90	NP	0.00	17.85	15.48	615.92	Yes	
MW-10	10/20/03	631.40	633.77	615.90	606.90	NP	0.00	17.97	15.60	615.80	No	
MW-10	12/03/03	631.40	633.77	615.90	606.90	NP	0.00	18.31	15.94	615.46	No	
MW-10	04/19/04	634.75	633.83	615.90	606.90	NP	0.00	18.39	19.31	615.44	No	
MW-10	07/28/04	634.75	633.83	615.90	606.90	NP	0.00	17.74	18.66	616.09	Yes	
MW-10	11/16/04	634.75	633.83	615.90	606.90	NP	0.00	17.17	18.09	616.66	Yes	
MW-10	04/18/05	634.75	633.83	615.90	606.90	NP	0.00	17.39	18.31	616.44	Yes	
MW-10	10/11/05	634.75	633.83	615.90	606.90	NP	0.00	16.62	17.54	617.21	Yes	
MW-10	05/23/06	634.75	633.83	615.90	606.90	NP	0.00	15.91	16.83	617.92	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-10	10/16/06	634.75	633.83	615.90	606.90	NP	0.00	16.81	17.73	617.02	Yes	
MW-10	04/23/07	634.75	633.83	615.90	606.90	NP	0.00	17.69	18.61	616.14	Yes	
MW-10	09/25/07	634.75	635.95	615.90	606.90	NP	0.00	19.56	18.36	616.39	Yes	
MW-10	05/01/08	634.75	635.95	615.90	606.90	NP	0.00	18.35	17.15	617.60	Yes	
MW-10	10/20/08	634.75	635.95	615.90	606.90	NP	0.00	17.26	16.06	618.69	Yes	
MW-10	04/18/09	634.75	635.95	615.90	606.90	NP	0.00	18.33	17.13	617.62	Yes	
MW-10	10/11/09	634.75	635.95	615.90	606.90	NP	0.00	18.79	17.59	617.16	Yes	
MW-10	04/28/10	634.75	635.95	615.90	606.90	NP	0.00	18.91	17.71	617.04	Yes	
MW-10	10/25/10	634.75	635.95	615.90	606.90	NP	0.00	16.70	15.50	619.25	Yes	
MW-10	04/25/11	634.75	635.95	615.90	606.90	NP	0.00	17.92	16.72	618.03	Yes	
MW-10	10/10/11	634.75	635.95	615.90	606.90	NP	0.00	17.48	16.28	618.47	Yes	
MW-10	01/04/12	634.75	635.95	615.90	606.90	NP	0.00	18.78	17.58	617.17	Yes	
MW-10	04/16/12	634.75	635.95	615.90	606.90	NP	0.00	19.57	18.37	616.38	Yes	
MW-10	06/26/12	634.75	635.95	615.90	606.90	NP	0.00	17.18	15.98	618.77	Yes	
MW-10	09/30/12	634.75	635.95	615.90	606.90	NP	0.00	18.61	17.41	617.34	Yes	
MW-10	12/17/12	634.75	635.95	615.90	606.90	NP	0.00	19.21	18.01	616.74	Yes	
MW-10	03/25/13	634.75	635.95	615.90	606.90	NP	0.00	19.97	18.77	615.98	Yes	
MW-10	05/05/13	634.75	635.95	615.90	606.90	NP	0.00	19.76	18.56	616.19	Yes	
MW-10	10/03/13	634.75	635.95	615.90	606.90	NP	0.00	19.31	18.11	616.64	Yes	
MW-10	05/21/14	634.75	635.95	615.90	606.90	NP	0.00	17.85	16.65	618.10	Yes	
MW-10	10/31/14	634.75	635.95	615.90	606.90	NP	0.00	17.43	16.23	618.52	Yes	
MW-10	05/05/15	634.75	635.95	615.90	606.90	NP	0.00	19.14	17.94	616.81	Yes	
MW-10	10/05/15	634.75	635.95	615.90	606.90	NP	0.00	17.08	15.88	618.87	Yes	
MW-10	05/23/16	634.75	635.95	615.90	606.90	NP	0.00	15.15	13.95	620.80	Yes	
MW-10	10/03/16	634.75	635.95	615.90	606.90	NP	0.00	16.22	15.02	619.73	Yes	
MW-10	06/29/17	634.75	635.95	615.90	606.90	NP	0.00	15.75	14.55	620.20	Yes	
MW-10	05/26/20	634.75	635.95	615.90	606.90	NP	0.00	15.05	13.85	620.90	Yes	
MW-23	06/30/89	633.90	636.81	624.70	609.70	17.07	3.20	20.27	14.88	619.02	No	
MW-23	07/12/89	633.90	636.81	624.70	609.70	15.08	2.50	17.58	12.73	621.17	No	
MW-23	07/26/89	633.90	636.81	624.70	609.70	17.81	2.73	20.54	15.52	618.38	No	
MW-23	07/27/89	633.90	636.81	624.70	609.70	17.83	2.77	20.60	15.55	618.35	No	
MW-23	09/03/89	633.90	636.81	624.70	609.70	17.95	3.72	21.67	15.88	618.02	No	
MW-23	11/16/89	633.90	636.81	624.70	609.70	17.20	5.15	22.35	15.45	618.45	No	
MW-23	11/29/89	633.90	636.81	624.70	609.70	17.55	3.98	21.53	15.54	618.36	No	
MW-23	12/01/89	633.90	636.81	624.70	609.70	18.20	2.27	20.47	15.80	618.10	No	
MW-23	12/02/89	633.90	636.81	624.70	609.70	18.41	1.41	19.82	15.82	618.08	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	05/04/90	633.90	636.81	624.70	609.70	18.03	<b>4.26</b>	22.29	16.08	617.82	No	
MW-23	06/01/90	633.90	636.81	624.70	609.70	17.35	<b>3.65</b>	21.00	15.26	618.64	No	
MW-23	06/19/90	633.90	636.81	624.70	609.70	17.49	<b>3.37</b>	20.86	15.34	618.56	No	
MW-23	06/27/90	633.90	636.81	624.70	609.70	17.78	<b>3.28</b>	21.06	15.61	618.29	No	
MW-23	07/05/90	633.90	636.81	624.70	609.70	18.10	<b>3.43</b>	21.53	15.96	617.94	No	
MW-23	07/13/90	633.90	636.81	624.70	609.70	18.02	<b>3.65</b>	21.67	15.93	617.97	No	
MW-23	07/17/90	633.90	636.81	624.70	609.70	17.78	<b>3.57</b>	21.35	15.68	618.22	No	
MW-23	07/25/90	633.90	636.81	624.70	609.70	18.10	<b>3.79</b>	21.89	16.05	617.85	No	
MW-23	08/09/90	633.90	636.81	624.70	609.70	20.68	<b>2.65</b>	23.33	18.37	615.53	No	
MW-23	08/27/90	633.90	636.81	624.70	609.70	18.29	<b>3.71</b>	22.00	16.22	617.68	No	
MW-23	09/06/90	633.90	636.81	624.70	609.70	17.75	<b>3.07</b>	20.82	15.53	618.37	No	
MW-23	01/04/91	633.90	636.81	624.70	609.70	17.84	<b>2.56</b>	20.40	15.51	618.39	No	
MW-23	01/30/91	633.90	636.81	624.70	609.70	18.05	<b>3.18</b>	21.23	15.86	618.04	No	
MW-23	04/24/91	633.90	636.81	624.70	609.70	17.18	<b>3.78</b>	20.96	15.12	618.78	No	
MW-23	06/06/91	633.90	636.81	624.70	609.70	15.11	<b>4.67</b>	19.78	13.25	620.65	No	
MW-23	07/09/91	633.90	636.81	624.70	609.70	13.76	<b>5.93</b>	19.69	12.19	621.71	No	
MW-23	08/06/91	633.90	636.81	624.70	609.70	12.87	<b>7.10</b>	19.97	11.56	622.34	No	
MW-23	09/04/91	633.90	636.81	624.70	609.70	13.93	<b>6.02</b>	19.95	12.38	621.52	No	
MW-23	10/08/91	633.90	636.81	624.70	609.70	13.10	<b>6.60</b>	19.70	11.68	622.22	No	
MW-23	11/08/91	633.90	636.81	624.70	609.70	14.32	<b>5.15</b>	19.47	12.57	621.33	No	
MW-23	12/03/91	633.90	636.81	624.70	609.70	10.40	<b>10.15</b>	20.55	9.78	624.12	No	
MW-23	01/07/92	633.90	636.81	624.70	609.70	13.27	<b>7.60</b>	20.87	12.08	621.82	No	
MW-23	02/04/92	633.90	636.81	624.70	609.70	15.40	<b>4.54</b>	19.94	13.52	620.38	No	
MW-23	03/03/92	633.90	636.81	624.70	609.70	15.45	<b>5.75</b>	21.20	13.84	620.06	No	
MW-23	09/24/92	633.90	636.81	624.70	609.70	13.02	<b>6.61</b>	19.63	11.60	622.30	No	
MW-23	10/14/92	633.90	636.81	624.70	609.70	14.23	<b>5.64</b>	19.87	12.59	621.31	No	
MW-23	06/25/93	633.90	636.81	624.70	609.70	9.77	<b>9.74</b>	19.51	9.06	624.84	Yes	
MW-23	10/28/93	633.90	636.81	624.70	609.70	15.31	<b>4.55</b>	19.86	13.43	620.47	No	
MW-23	01/29/94	633.90	636.81	624.70	609.70	16.32	<b>3.70</b>	20.02	14.25	619.65	No	
MW-23	04/27/94	633.90	636.81	624.70	609.70	13.99	<b>6.34</b>	20.33	12.51	621.39	No	
MW-23	07/21/94	633.90	636.81	624.70	609.70	13.72	<b>5.86</b>	19.58	12.13	621.77	No	
MW-23	10/25/94	633.90	636.81	624.70	609.70	13.84	<b>6.49</b>	20.33	12.40	621.50	No	
MW-23	02/01/95	633.90	636.81	624.70	609.70	17.28	<b>2.53</b>	19.81	14.94	618.96	No	
MW-23	04/04/95	633.90	636.81	624.70	609.70	17.60	<b>2.65</b>	20.25	15.29	618.61	No	
MW-23	11/13/95	633.90	636.81	624.70	609.70	13.05	<b>6.90</b>	19.95	11.70	622.20	No	
MW-23	10/08/96	633.90	636.81	624.70	609.70	12.78	<b>6.47</b>	19.25	11.33	622.57	No	
MW-23	04/29/97	633.90	636.81	624.70	609.70	10.25	<b>9.20</b>	19.45	9.42	624.48	No	
MW-23	06/10/97	633.90	636.81	624.70	609.70	13.45	<b>5.40</b>	18.85	11.76	622.14	No	FP bailed 5/22/97



**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	11/03/98	633.90	636.81	624.70	609.70	16.05	<b>5.16</b>	21.21	14.31	619.59	No	
MW-23	03/02/99	633.90	636.81	624.70	609.70	16.91	<b>4.04</b>	20.95	14.91	618.99	No	
MW-23	10/07/99	633.90	636.81	624.70	609.70	12.44	<b>5.61</b>	18.05	10.80	623.10	No	
MW-23	11/09/99	633.90	636.81	624.70	609.70	11.95	<b>6.75</b>	18.70	10.56	623.34	No	bailed 3 gal. FP
MW-23	12/21/99	633.90	636.81	624.70	609.70	14.55	<b>4.45</b>	19.00	12.65	621.25	No	bailed 8 gal. FP
MW-23	01/27/00	633.90	636.81	624.70	609.70	17.32	<b>1.58</b>	18.90	14.77	619.13	No	bailed 0.4 gal. FP
MW-23	02/24/00	633.90	636.81	624.70	609.70	17.64	<b>1.32</b>	18.96	15.03	618.87	No	bailed 0.25 gal. FP
MW-23	03/31/00	633.90	636.81	624.70	609.70	15.70	<b>4.07</b>	19.77	13.71	620.19	No	bailed 2 gal. FP
MW-23	04/20/00	633.90	636.81	624.70	609.70	13.18	<b>7.37</b>	20.55	11.93	621.97	No	bailed 6 gal. FP
MW-23	04/26/00	633.90	636.81	624.70	609.70	15.82	<b>3.18</b>	19.00	13.63	620.27	No	bailed 2 gal. FP
MW-23	05/31/00	633.90	636.81	624.70	609.70	16.20	<b>2.58</b>	18.78	13.87	620.03	No	bailed 3 gal. FP
MW-23	06/29/00	633.90	636.81	624.70	609.70	15.15	<b>3.60</b>	18.75	13.05	620.85	No	bailed 1 gal. FP
MW-23	07/26/00	633.90	636.81	624.70	609.70	16.02	<b>2.84</b>	18.86	13.75	620.15	No	bailed 1 gal. FP
MW-23	08/18/00	633.90	636.81	624.70	609.70	16.55	<b>2.50</b>	19.05	14.20	619.70	No	bailed 1 gal. FP
MW-23	09/27/00	633.90	636.81	624.70	609.70	17.41	<b>2.12</b>	19.53	14.98	618.92	No	bailed 1.25 gal. FP
MW-23	10/11/00	633.90	636.81	624.70	609.70	17.60	<b>1.75</b>	19.35	15.09	618.81	No	bailed .25 gal. FP
MW-23	11/17/00	633.90	636.81	624.70	609.70	14.98	<b>5.33</b>	20.31	13.27	620.63	No	bailed 4.25 gal. FP
MW-23	12/12/00	633.90	636.81	624.70	609.70	15.11	<b>4.98</b>	20.09	13.32	620.58	No	bailed 2.5 gal. FP
MW-23	01/18/01	633.90	636.81	624.70	609.70	15.51	<b>4.92</b>	20.43	13.71	620.19	No	bailed 2.75 gal. FP
MW-23	04/24/01	633.90	636.81	624.70	609.70	16.16	<b>3.46</b>	19.62	14.03	619.87	No	product abated using vactruck
MW-23	05/23/01	633.90	636.81	624.70	609.70	13.73	<b>5.82</b>	19.55	12.13	621.77	No	no product bailed
MW-23	06/19/01	633.90	636.81	624.70	609.70	14.77	<b>4.47</b>	19.24	12.87	621.03	No	
MW-23	07/26/01	633.90	636.81	624.70	609.70	16.99	<b>2.36</b>	19.35	14.61	619.29	No	
MW-23	08/31/01	633.90	636.81	624.70	609.70	16.99	<b>2.69</b>	19.68	14.69	619.21	No	
MW-23	09/26/01	633.90	636.81	624.70	609.70	17.59	<b>2.01</b>	19.60	15.13	618.77	No	
MW-23	10/24/01	633.90	636.81	624.70	609.70	17.16	<b>2.70</b>	19.86	14.86	619.04	No	
MW-23	12/20/01	633.90	636.81	624.70	609.70	17.90	<b>2.43</b>	20.33	15.54	618.36	No	
MW-23	01/22/02	633.90	636.81	624.70	609.70	17.89	<b>2.01</b>	19.90	15.43	618.47	No	
MW-23	02/26/02	633.90	636.81	624.70	609.70	18.32	<b>2.89</b>	21.21	16.06	617.84	No	
MW-23	03/20/02	633.90	636.81	624.70	609.70	18.45	<b>3.10</b>	21.55	16.24	617.66	No	
MW-23	04/24/02	633.90	636.81	624.70	609.70	17.33	<b>2.73</b>	20.06	15.04	618.86	No	
MW-23	05/15/02	633.90	636.81	624.70	609.70	16.47	<b>2.99</b>	19.46	14.24	619.66	No	
MW-23	06/27/02	633.90	636.81	624.70	609.70	16.97	<b>2.52</b>	19.49	14.63	619.27	No	
MW-23	07/25/02	633.90	636.81	624.70	609.70	17.23	<b>1.94</b>	19.17	14.76	619.14	No	
MW-23	08/20/02	633.90	636.81	624.70	609.70	17.44	<b>1.95</b>	19.39	14.97	618.93	No	
MW-23	09/30/02	633.90	636.81	624.70	609.70	16.65	<b>2.05</b>	18.70	14.20	619.70	No	
MW-23	11/05/02	633.90	636.81	624.70	609.70	15.29	<b>4.37</b>	19.66	13.37	620.53	No	
MW-23	12/23/02	633.90	636.81	624.70	609.70	17.69	<b>1.78</b>	19.47	15.18	618.72	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	01/28/03	633.90	636.81	624.70	609.70	18.18	1.94	20.12	15.71	618.19	No	
MW-23	02/19/03	633.90	636.81	624.70	609.70	18.31	2.64	20.95	16.00	617.90	No	
MW-23	04/17/03	633.90	636.81	624.70	609.70	18.63	3.61	22.24	16.54	617.36	No	
MW-23	05/15/03	633.90	636.81	624.70	609.70	18.42	3.58	22.00	16.32	617.58	No	
MW-23	06/10/03	633.90	636.81	624.70	609.70	18.10	2.32	20.42	15.71	618.19	No	
MW-23	10/23/03	633.90	636.81	624.70	609.70	18.46	3.32	21.78	16.30	617.60	No	
MW-23	12/03/03	633.90	636.81	624.70	609.70	18.58	3.58	22.16	16.48	617.42	No	
MW-23	04/19/04	635.07	636.91	624.70	609.70	18.89	3.75	22.64	17.90	617.17	No	
MW-23	07/28/04	635.07	636.91	624.70	609.70	17.95	2.15	20.10	16.60	618.47	No	
MW-23	11/15/04	635.07	636.91	624.70	609.70	16.31	3.23	19.54	15.20	619.87	No	
MW-23	04/18/05	635.07	636.91	624.70	609.70	16.59	3.89	20.48	15.63	619.44	No	
MW-23	09/09/05	635.07	636.91	624.70	609.70	17.85	1.40	19.25	16.33	618.74	No	
MW-23	10/11/05	635.07	636.91	624.70	609.70	16.07	4.22	20.29	15.18	619.89	No	
MW-23	05/23/06	635.07	636.91	624.70	609.70	15.63	2.66	18.29	14.39	620.68	No	
MW-23	10/16/06	635.07	636.91	624.70	609.70	17.59	1.53	19.12	16.10	618.97	No	
MW-23	04/23/07	635.07	636.91	624.70	609.70	18.25	3.31	21.56	17.16	617.91	No	
MW-23	09/25/07	635.07	636.91	624.70	609.70	17.93	3.27	21.20	16.83	618.24	No	
MW-23	05/01/08	635.07	636.91	624.70	609.70	15.32	3.84	19.16	14.35	620.72	No	
MW-23	10/20/08	635.07	636.91	624.70	609.70	12.98	6.13	19.11	12.52	622.55	No	
MW-23	04/18/09	635.07	636.91	624.70	609.70	15.02	4.13	19.15	14.11	620.96	No	
MW-23	10/11/09	635.07	636.91	624.70	609.70	17.82	0.52	18.34	16.10	618.97	No	
MW-23	04/28/10	635.07	636.91	624.70	609.70	17.22	1.04	18.26	15.61	619.46	No	
MW-23	10/25/10	635.07	636.91	624.70	609.70	14.84	2.69	17.53	13.61	621.46	No	
MW-23	04/25/11	635.07	636.91	624.70	609.70	15.62	2.62	18.24	14.37	620.70	No	
MW-23	08/03/11	635.07	636.91	624.70	609.70	14.29	3.38	17.67	13.21	621.86	No	
MW-23	10/10/11	635.07	636.91	624.70	609.70	16.41	1.13	17.54	14.83	620.24	No	
MW-23	01/04/12	635.07	636.91	624.70	609.70	17.95	0.51	18.46	16.23	618.84	No	
MW-23	04/05/12	635.07	636.91	624.70	609.70	18.21	2.08	20.29	16.84	618.23	No	Spill Buddy Before Reading
MW-23	04/05/12	635.07	636.91	624.70	609.70	19.55	0.05	19.60	17.72	617.35	No	Spill Buddy After Reading
MW-23	04/16/12	635.07	636.91	624.70	609.70	17.88	1.73	19.61	16.43	618.64	No	
MW-23	06/26/12	635.07	636.91	624.70	609.70	14.11	3.82	17.93	13.13	621.94	No	
MW-23	07/11/12	635.07	636.91	624.70	609.70	13.95	3.90	17.85	12.99	622.08	No	Spill Buddy Before Reading
MW-23	07/11/12	635.07	636.91	624.70	609.70	17.00	0.23	17.23	15.21	619.86	No	Spill Buddy After Reading
MW-23	08/09/12	635.07	636.91	624.70	609.70	16.72	0.98	17.70	15.10	619.97	No	Spill Buddy Before Reading
MW-23	08/09/12	635.07	636.91	624.70	609.70	17.40	0.15	17.55	15.59	619.48	No	Spill Buddy After Reading
MW-23	09/29/12	635.07	636.91	624.70	609.70	17.95	0.50	18.45	16.22	618.85	No	Spill buddy not working
MW-23	09/30/12	635.07	636.91	624.70	609.70	17.88	0.50	18.38	16.15	618.92	No	
MW-23	11/17/12	635.07	636.91	624.70	609.70	18.18	1.35	19.53	16.64	618.43	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	03/25/13	635.07	636.91	624.70	609.70	18.68	<b>3.09</b>	21.77	17.54	617.53	No	
MW-23	05/05/13	635.07	636.91	624.70	609.70	18.23	<b>2.33</b>	20.56	16.92	618.15	No	
MW-23	10/03/13	635.07	636.91	624.70	609.70	18.13	<b>1.48</b>	19.61	16.62	618.45	No	
MW-23	05/22/14	635.07	636.91	624.70	609.70	14.01	<b>2.18</b>	16.19	12.66	622.41	No	
MW-23	10/31/14	635.07	636.91	624.70	609.70	15.17	<b>3.74</b>	18.91	14.17	620.90	No	
MW-23	05/06/15	635.07	636.91	624.70	609.70	17.86	<b>1.04</b>	18.90	16.25	618.82	No	
MW-23	10/05/15	635.07	636.91	624.70	609.70	13.50	<b>5.10</b>	18.60	12.81	622.26	No	
MW-23	05/23/16	635.07	636.91	624.70	609.70	11.52	<b>6.40</b>	17.92	11.13	623.94	No	
MW-23	10/03/16	635.07	636.91	624.70	609.70	13.55	<b>4.30</b>	17.85	12.68	622.39	No	
MW-23	06/14/17	635.07	636.91	624.70	609.70	11.45	<b>6.51</b>	17.96	11.08	623.99	No	
MW-23	06/21/17	635.07	636.91	624.70	609.70	12.22	<b>5.72</b>	17.94	11.67	623.40	No	
MW-23	06/22/17	635.07	636.91	624.70	609.70	12.10	<b>5.80</b>	17.90	11.57	623.50	No	
MW-23	06/23/17	635.07	636.91	624.70	609.70	13.06	<b>2.19</b>	15.25	11.71	623.36	No	
MW-23	10/26/17	635.07	636.91	624.70	609.70	9.42	<b>8.29</b>	17.71	9.45	625.62	Yes	
MW-23	05/26/20	635.07	636.91	624.70	609.70	11.41	<b>8.18</b>	19.59	11.42	623.65	No	
MW-35	08/06/91	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.96	14.58	622.62	Yes	
MW-35	10/08/91	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.85	14.47	622.73	Yes	
MW-35	01/07/92	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.28	14.90	622.30	Yes	
MW-35	10/14/92	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.59	15.21	621.99	Yes	
MW-35	06/25/93	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	14.39	12.01	625.19	Yes	
MW-35	10/28/93	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	18.09	15.71	621.49	Yes	
MW-35	01/29/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	19.41	17.03	620.17	Yes	
MW-35	04/27/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.43	15.05	622.15	Yes	
MW-35	07/21/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.35	14.97	622.23	Yes	
MW-35	10/25/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.35	14.97	622.23	Yes	
MW-35	10/28/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.93	14.55	622.65	Yes	
MW-35	02/01/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	19.91	17.53	619.67	Yes	
MW-35	04/04/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	20.35	17.97	619.23	Yes	
MW-35	07/12/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	18.88	16.50	620.70	Yes	
MW-35	11/13/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.05	14.67	622.53	Yes	
MW-35	03/13/96	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	20.22	17.84	619.36	Yes	
MW-35	04/22/96	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.12	14.74	622.46	Yes	
MW-35	10/08/96	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.83	14.45	622.75	Yes	
MW-35	04/29/97	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	13.95	11.57	625.63	Yes	
MW-35	11/03/98	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	19.91	17.53	619.67	Yes	
MW-35	03/02/99	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	21.59	19.21	617.99	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-35	04/26/00	637.20	639.58	619.08	609.08	NP	0.00	18.59	16.21	620.99	Yes	
MW-35	10/10/00	637.20	639.58	619.08	609.08	NP	0.00	21.90	19.52	617.68	No	
MW-35	10/23/01	637.20	639.58	619.08	609.08	NP	0.00	20.22	17.84	619.36	Yes	
MW-35	01/22/02	637.20	641.16	619.08	609.08	NP	0.00	22.09	18.13	619.07	No	
MW-35	02/26/02	637.20	641.16	619.08	609.08	NP	0.00	22.85	18.89	618.31	No	
MW-35	03/20/02	637.20	641.16	619.08	609.08	NP	0.00	23.07	19.11	618.09	No	
MW-35	04/23/02	637.20	641.16	619.08	609.08	NP	0.00	21.59	17.63	619.57	Yes	
MW-35	05/15/02	637.20	639.58	619.08	609.08	NP	0.00	18.47	16.09	621.11	Yes	
MW-35	08/20/02	637.20	639.58	619.08	609.08	NP	0.00	19.30	16.92	620.28	Yes	
MW-35	09/30/02	637.20	639.58	619.08	609.08	NP	0.00	18.78	16.40	620.80	Yes	
MW-35	11/05/02	637.20	639.58	619.08	609.08	NP	0.00	19.82	17.44	619.76	Yes	
MW-35	12/23/02	637.20	639.58	619.08	609.08	NP	0.00	21.83	19.45	617.75	No	
MW-35	01/28/03	637.20	639.58	619.08	609.08	NP	0.00	22.56	20.18	617.02	No	
MW-35	02/19/03	637.20	639.58	619.08	609.08	NP	0.00	23.12	20.74	616.46	No	
MW-35	04/17/03	637.20	639.58	619.08	609.08	NP	0.00	21.72	19.34	617.86	No	
MW-35	06/10/03	637.20	641.16	619.08	609.08	NP	0.00	22.07	18.11	619.09	Yes	
MW-35	10/20/03	637.20	641.16	619.08	609.08	NP	0.00	21.27	17.31	619.89	Yes	
MW-35	12/03/03	637.20	641.16	619.08	609.08	NP	0.00	23.21	19.25	617.95	No	
MW-35	04/19/04	637.55	639.74	619.08	609.08	NP	0.00	23.41	21.22	616.33	No	
MW-35	07/28/04	637.55	639.74	619.08	609.08	NP	0.00	20.06	17.87	619.68	Yes	
MW-35	11/16/04	637.55	639.74	619.08	609.08	NP	0.00	20.68	18.49	619.06	No	
MW-35	04/18/05	637.55	639.74	619.08	609.08	NP	0.00	21.63	19.44	618.11	No	
MW-35	10/11/05	637.55	639.74	619.08	609.08	NP	0.00	19.12	16.93	620.62	Yes	
MW-35	05/23/06	637.55	639.74	619.08	609.08	NP	0.00	17.97	15.78	621.77	Yes	
MW-35	10/16/06	637.55	639.74	619.08	609.08	NP	0.00	19.97	17.78	619.77	Yes	
MW-35	04/23/07	637.55	639.74	619.08	609.08	NP	0.00	21.26	19.07	618.48	No	
MW-35	09/25/07	637.55	639.74	619.08	609.08	NP	0.00	20.70	18.51	619.04	No	
MW-35	05/01/08	637.55	639.74	619.08	609.08	NP	0.00	18.73	16.54	621.01	Yes	
MW-35	10/20/08	637.55	639.74	619.08	609.08	NP	0.00	17.16	14.97	622.58	Yes	
MW-35	04/18/09	637.55	639.74	619.08	609.08	NP	0.00	19.34	17.15	620.40	Yes	
MW-35	10/11/09	637.55	639.74	619.08	609.08	NP	0.00	20.20	18.01	619.54	Yes	
MW-35	04/28/10	637.55	639.74	619.08	609.08	NP	0.00	20.26	18.07	619.48	Yes	
MW-35	10/25/10	637.55	639.74	619.08	609.08	NP	0.00	18.24	16.05	621.50	Yes	
MW-35	04/25/11	637.55	639.74	619.08	609.08	NP	0.00	19.61	17.42	620.13	Yes	
MW-35	10/10/11	637.55	639.74	619.08	609.08	NP	0.00	19.75	17.56	619.99	Yes	
MW-35	01/04/12	637.55	639.74	619.08	609.08	NP	0.00	21.18	18.99	618.56	No	
MW-35	04/16/12	637.55	639.74	619.08	609.08	NP	0.00	21.24	19.05	618.50	No	
MW-35	06/26/12	637.55	639.74	619.08	609.08	NP	0.00	17.50	15.31	622.24	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-35	09/30/12	637.55	639.74	619.08	609.08	NP	0.00	21.04	18.85	618.70	No	
MW-35	12/17/12	637.55	639.74	619.08	609.08	NP	0.00	21.53	19.34	618.21	No	
MW-35	03/25/13	637.55	639.74	619.08	609.08	NP	0.00	22.92	20.73	616.82	No	
MW-35	05/05/13	637.55	639.74	619.08	609.08	NP	0.00	21.67	19.48	618.07	No	
MW-35	10/01/13	637.55	639.74	619.08	609.08	NP	0.00	21.10	18.91	618.64	No	
MW-35	05/20/14	637.55	639.74	619.08	609.08	NP	0.00	18.50	16.31	621.24	Yes	
MW-35	10/29/14	637.55	639.74	619.08	609.08	NP	0.00	19.17	16.98	620.57	Yes	
MW-35	05/06/15	637.55	639.74	619.08	609.08	NP	0.00	21.75	19.56	617.99	No	
MW-35	10/06/15	637.55	639.74	619.08	609.08	NP	0.00	18.80	16.61	620.94	Yes	
MW-35	05/23/16	637.55	639.74	619.08	609.08	NP	0.00	16.94	14.75	622.80	Yes	
MW-35	10/03/16	637.55	639.74	619.08	609.08	NP	0.00	18.34	16.15	621.40	Yes	
MW-35	06/29/17	637.55	639.74	619.08	609.08	NP	0.00	17.96	15.77	621.78	Yes	
MW-35	05/26/20	637.55	639.74	619.08	609.08	NP	0.00	17.58	15.39	622.16	Yes	
RW-06	06/01/90	635.20	637.96	615.00	590.00	20.50	4.70	25.20	18.80	616.33	Yes	
RW-06	01/30/91	635.20	637.96	615.00	590.00	20.47	6.14	26.61	19.10	616.02	Yes	
RW-06	04/24/91	635.20	637.96	615.00	590.00	22.22	3.22	25.44	20.19	614.97	No	
RW-06	06/06/91	635.20	637.96	615.00	590.00	20.51	2.75	23.26	18.37	616.79	Yes	
RW-06	07/09/91	635.20	637.96	615.00	590.00	19.32	3.60	22.92	17.37	617.78	Yes	
RW-06	08/06/91	635.20	637.96	615.00	590.00	18.64	3.40	22.04	16.65	618.50	Yes	
RW-06	09/04/91	635.20	637.96	615.00	590.00	18.66	3.28	21.94	16.64	618.51	Yes	
RW-06	10/08/91	635.20	637.96	615.00	590.00	19.73	1.75	21.48	17.37	617.81	Yes	
RW-06	11/08/91	635.20	637.96	615.00	590.00	20.02	1.95	21.97	17.70	617.47	Yes	
RW-06	12/03/91	635.20	637.96	615.00	590.00	16.40	4.19	20.59	14.59	620.55	Yes	
RW-06	01/07/92	635.20	637.96	615.00	590.00	18.41	2.06	20.47	16.12	619.06	Yes	
RW-06	02/04/92	635.20	637.96	615.00	590.00	19.80	2.05	21.85	17.50	617.67	Yes	
RW-06	03/03/92	635.20	637.96	615.00	590.00	19.67	2.45	22.12	17.46	617.70	Yes	
RW-06	09/24/92	635.20	637.96	615.00	590.00	17.32	3.23	20.55	15.29	619.87	Yes	
RW-06	06/25/93	635.20	637.96	615.00	590.00	15.67	2.58	18.25	13.49	621.67	Yes	
RW-06	07/21/93	635.20	637.96	615.00	590.00	16.52	1.82	18.34	14.17	621.00	Yes	
RW-06	08/17/93	635.20	637.96	615.00	590.00	18.14	2.11	20.25	15.86	619.31	Yes	
RW-06	09/09/93	635.20	637.96	615.00	590.00	19.02	2.11	21.13	16.74	618.43	Yes	
RW-06	10/28/93	635.20	637.96	615.00	590.00	19.53	1.68	21.21	17.15	618.03	Yes	
RW-06	11/24/93	635.20	637.96	615.00	590.00	19.87	1.48	21.35	17.44	617.73	Yes	
RW-06	12/17/93	635.20	637.96	615.00	590.00	19.92	1.10	21.02	17.41	617.78	Yes	
RW-06	01/29/94	635.20	637.96	615.00	590.00	19.83	1.72	21.55	17.46	617.72	Yes	
RW-06	02/25/94	635.20	637.96	615.00	590.00	20.06	2.07	22.13	17.77	617.40	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	03/24/94	635.20	637.96	615.00	590.00	20.16	1.92	22.08	17.83	617.34	Yes	
RW-06	04/27/94	635.20	637.96	615.00	590.00	19.57	2.00	21.57	17.26	617.91	Yes	
RW-06	05/26/94	635.20	637.96	615.00	590.00	18.64	1.36	20.00	16.19	618.99	Yes	
RW-06	06/29/94	635.20	637.96	615.00	590.00	18.04	0.97	19.01	15.50	619.69	Yes	
RW-06	07/21/94	635.20	637.96	615.00	590.00	18.96	1.35	20.31	16.50	618.68	Yes	
RW-06	08/30/94	635.20	637.96	615.00	590.00	19.57	1.15	20.72	17.07	618.11	Yes	
RW-06	10/25/94	635.20	637.96	615.00	590.00	18.45	1.53	19.98	16.04	619.14	Yes	
RW-06	11/02/94	635.20	637.96	615.00	590.00	18.35	1.65	20.00	15.96	619.21	Yes	
RW-06	02/01/95	635.20	637.96	615.00	590.00	20.10	0.48	20.58	17.45	617.74	Yes	
RW-06	04/04/95	635.20	637.96	615.00	590.00	20.44	2.16	22.60	18.17	617.00	Yes	
RW-06	07/12/95	635.20	637.96	615.00	590.00	19.73	0.02	19.75	16.97	618.23	Yes	
RW-06	11/13/95	635.20	637.96	615.00	590.00	18.54	0.02	18.56	15.78	619.42	Yes	
RW-06	03/13/96	635.20	637.96	615.00	590.00	19.85	2.30	22.15	17.61	617.56	Yes	
RW-06	05/28/96	635.20	637.96	615.00	590.00	18.45	0.03	18.48	15.70	619.50	Yes	
RW-06	10/08/96	635.20	637.96	615.00	590.00	17.60	0.02	17.62	14.84	620.36	Yes	
RW-06	04/29/97	635.20	637.96	615.00	590.00	NP	0.00	16.62	13.86	621.34	Yes	
RW-06	06/10/97	635.20	637.96	615.00	590.00	NP	0.00	18.00	15.24	619.96	Yes	
RW-06	03/02/99	635.20	637.96	615.00	590.00	20.38	2.16	22.54	18.11	617.06	Yes	
RW-06	10/07/99	635.20	637.96	615.00	590.00	17.16	1.33	18.49	14.70	620.48	Yes	
RW-06	11/09/99	635.20	637.96	615.00	590.00	18.23	1.69	19.92	15.85	619.32	Yes	bailed 2 gal. FP
RW-06	12/21/99	635.20	637.96	615.00	590.00	18.76	0.12	18.88	16.03	619.17	Yes	
RW-06	01/27/00	635.20	637.96	615.00	590.00	19.95	0.12	20.07	17.22	617.98	Yes	
RW-06	02/24/00	635.20	637.96	615.00	590.00	19.87	1.65	21.52	17.48	617.69	Yes	bailed 2 gal. FP
RW-06	03/31/00	635.20	637.96	615.00	590.00	19.71	2.22	21.93	17.45	617.72	Yes	installed pump from MW-2
RW-06	04/20/00	635.20	637.96	615.00	590.00	18.92	2.96	21.88	16.83	618.33	Yes	bailed 4 gal. FP
RW-06	04/26/00	635.20	637.96	615.00	590.00	19.50	1.47	20.97	17.07	618.11	Yes	
RW-06	05/31/00	635.20	637.96	615.00	590.00	19.65	1.38	21.03	17.20	617.98	Yes	installed skimmer
RW-06	06/20/00	635.20	637.96	615.00	590.00	19.66	0.02	19.68	16.90	618.30	Yes	Skimmer operating
RW-06	07/26/00	635.20	637.96	615.00	590.00	19.86	0.02	19.88	17.10	618.10	Yes	Skimmer operating
RW-06	08/18/00	635.20	637.96	615.00	590.00	19.26	2.14	21.40	16.98	618.19	Yes	bailed 1 gal. FP-installed skimmer
RW-06	09/27/00	635.20	637.96	615.00	590.00	20.42	1.29	21.71	17.95	617.23	Yes	skimmer down-bailed 1.25 gal. FP
RW-06	10/11/00	635.20	637.96	615.00	590.00	20.11	1.88	21.99	17.77	617.40	Yes	skimmer down-bailed 3.75 gal. FP
RW-06	11/17/00	635.20	637.96	615.00	590.00	19.69	2.83	22.52	17.57	617.59	Yes	skimmer down-bailed 6 gal. FP
RW-06	12/12/00	635.20	637.96	615.00	590.00	19.94	1.59	21.53	17.54	617.64	Yes	skimmer down-bailed 3 gal. FP
RW-06	01/18/01	635.20	637.96	615.00	590.00	20.23	1.75	21.98	17.87	617.31	Yes	skimmer down-bailed 4 gal. FP
RW-06	04/24/01	635.20	637.96	615.00	590.00	20.21	3.01	23.22	18.13	617.03	Yes	product abated using vactruck
RW-06	05/23/01	635.20	637.96	615.00	590.00	19.22	1.30	20.52	16.75	618.43	Yes	skimmer down/no product bailed
RW-06	06/19/01	635.20	637.96	615.00	590.00	19.45	0.72	20.17	16.85	618.34	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	07/26/01	635.20	637.96	615.00	590.00	20.22	<b>0.99</b>	21.21	17.68	617.50	Yes	
RW-06	08/31/01	635.20	637.96	615.00	590.00	20.41	<b>0.01</b>	20.42	17.65	617.55	Yes	
RW-06	09/26/01	635.20	637.96	615.00	590.00	20.41	<b>0.24</b>	20.65	17.70	617.49	Yes	
RW-06	10/24/01	635.20	637.96	615.00	590.00	20.00	<b>1.45</b>	21.45	17.57	617.61	Yes	
RW-06	12/20/01	635.20	637.96	615.00	590.00	20.58	<b>1.84</b>	22.42	18.24	616.94	Yes	
RW-06	01/22/02	635.20	637.96	615.00	590.00	20.53	<b>1.88</b>	22.41	18.19	616.98	Yes	
RW-06	02/26/02	635.20	637.96	615.00	590.00	21.22	<b>0.89</b>	22.11	18.66	616.53	Yes	
RW-06	03/20/02	635.20	637.96	615.00	590.00	21.60	<b>0.14</b>	21.74	18.87	616.33	Yes	
RW-06	04/24/02	635.20	637.96	615.00	590.00	20.32	<b>2.54</b>	22.86	18.13	617.03	Yes	
RW-06	05/15/02	635.20	637.96	615.00	590.00	20.04	<b>2.29</b>	22.33	17.80	617.37	Yes	
RW-06	06/27/02	635.20	637.96	615.00	590.00	20.44	<b>1.53</b>	21.97	18.03	617.15	Yes	
RW-06	07/25/02	635.20	637.96	615.00	590.00	20.57	<b>0.04</b>	20.61	17.82	617.38	Yes	
RW-06	08/20/02	635.20	637.96	615.00	590.00	20.73	<b>0.15</b>	20.88	18.00	617.19	Yes	
RW-06	09/30/02	635.20	637.96	615.00	590.00	NP	<b>0.00</b>	20.03	17.27	617.93	Yes	
RW-06	11/05/02	635.20	637.96	615.00	590.00	19.89	<b>0.02</b>	19.91	17.13	618.07	Yes	
RW-06	12/23/02	635.20	637.96	615.00	590.00	20.74	<b>0.02</b>	20.76	17.98	617.22	Yes	
RW-06	01/28/03	635.20	637.96	615.00	590.00	21.11	<b>0.11</b>	21.22	18.37	616.82	Yes	
RW-06	02/19/03	635.20	637.96	615.00	590.00	21.24	<b>0.31</b>	21.55	18.55	616.65	Yes	
RW-06	03/13/03	635.20	637.96	615.00	590.00	21.27	<b>1.38</b>	22.65	18.82	616.36	Yes	
RW-06	04/17/03	635.20	637.96	615.00	590.00	21.20	<b>2.52</b>	23.72	19.01	616.16	Yes	
RW-06	04/25/03	635.20	637.96	615.00	590.00	21.42	<b>2.64</b>	24.06	19.26	615.91	Yes	
RW-06	05/15/03	635.20	637.96	615.00	590.00	21.44	<b>2.97</b>	24.41	19.35	615.81	Yes	
RW-06	06/10/03	635.20	637.96	615.00	590.00	21.19	<b>2.06</b>	23.25	18.90	616.28	Yes	
RW-06	07/31/03	635.20	637.96	615.00	590.00	20.90	<b>1.95</b>	22.85	18.58	616.59	Yes	
RW-06	10/23/03	635.20	637.96	615.00	590.00	21.14	<b>1.67</b>	22.81	18.76	616.42	Yes	
RW-06	12/03/03	635.20	637.96	615.00	590.00	21.36	<b>2.92</b>	24.28	19.26	615.90	Yes	
RW-06	04/19/04	636.09	638.10	615.00	590.00	21.94	<b>2.35</b>	24.29	20.46	615.60	Yes	
RW-06	07/28/04	636.09	638.10	615.00	590.00	21.02	<b>2.10</b>	23.12	19.48	616.58	Yes	
RW-06	11/15/04	636.09	638.10	615.00	590.00	20.14	<b>1.80</b>	21.94	18.54	617.53	Yes	
RW-06	04/18/05	636.09	638.10	615.00	590.00	20.25	<b>2.67</b>	22.92	18.84	617.21	Yes	
RW-06	10/11/05	636.09	638.10	615.00	590.00	20.00	<b>1.85</b>	21.85	18.41	617.66	Yes	
RW-06	05/23/06	636.09	638.10	615.00	590.00	19.30	<b>1.39</b>	20.69	17.60	618.47	Yes	
RW-06	10/16/06	636.09	638.10	615.00	590.00	20.23	<b>2.15</b>	22.38	18.71	617.35	Yes	
RW-06	04/23/07	636.09	638.10	615.00	590.00	21.03	<b>2.85</b>	23.88	19.66	616.39	Yes	
RW-06	09/25/07	636.09	638.10	615.00	590.00	20.98	<b>2.72</b>	23.70	19.58	616.47	Yes	
RW-06	05/01/08	636.09	638.10	615.00	590.00	19.70	<b>2.13</b>	21.83	18.17	617.89	Yes	
RW-06	10/20/08	636.09	638.10	615.00	590.00	18.36	<b>1.26</b>	19.62	16.63	619.44	Yes	
RW-06	04/18/09	636.09	638.10	615.00	590.00	19.43	<b>1.43</b>	20.86	17.74	618.33	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	04/28/10	636.09	638.10	615.00	590.00	19.99	1.80	21.79	18.39	617.68	Yes	
RW-06	10/25/10	636.09	638.10	615.00	590.00	17.95	1.11	19.06	16.19	619.88	Yes	
RW-06	04/25/11	636.09	638.10	615.00	590.00	19.24	0.99	20.23	17.45	618.62	Yes	
RW-06	09/14/11	636.09	638.10	615.00	590.00	18.48	0.97	19.45	16.69	619.39	Yes	
RW-06	09/23/11	636.09	638.10	615.00	590.00	18.69	0.95	19.64	16.89	619.18	Yes	
RW-06	09/29/11	636.09	638.10	615.00	590.00	18.55	0.98	19.53	16.76	619.31	Yes	
RW-06	10/07/11	636.09	638.10	615.00	590.00	18.68	0.97	19.65	16.89	619.19	Yes	
RW-06	10/11/11	636.09	638.10	615.00	590.00	19.03	0.96	19.99	17.24	618.84	Yes	
RW-06	10/21/11	636.09	638.10	615.00	590.00	19.14	0.98	20.12	17.35	618.72	Yes	
RW-06	10/27/11	636.09	638.10	615.00	590.00	19.24	0.98	20.22	17.45	618.62	Yes	
RW-06	11/04/11	636.09	638.10	615.00	590.00	19.49	0.96	20.45	17.70	618.38	Yes	
RW-06	11/09/11	636.09	638.10	615.00	590.00	19.38	0.92	20.30	17.58	618.50	Yes	
RW-06	11/18/11	636.09	638.10	615.00	590.00	19.46	0.96	20.42	17.67	618.41	Yes	
RW-06	11/22/11	636.09	638.10	615.00	590.00	19.62	0.99	20.61	17.83	618.24	Yes	
RW-06	12/01/11	636.09	638.10	615.00	590.00	20.09	0.98	21.07	18.30	617.77	Yes	
RW-06	01/04/12	636.09	638.10	615.00	590.00	20.01	1.82	21.83	18.41	617.65	Yes	
RW-06	02/16/12	636.09	638.10	615.00	590.00	20.46	2.32	22.78	18.97	617.08	Yes	
RW-06	03/13/12	636.09	638.10	615.00	590.00	21.74	1.44	23.18	20.06	616.01	Yes	
RW-06	04/05/12	636.09	638.10	615.00	590.00	20.73	2.48	23.21	19.28	616.78	Yes	Spill Buddy Before Reading
RW-06	04/05/12	636.09	638.10	615.00	590.00	21.76	1.19	22.95	20.02	616.05	Yes	Spill Buddy After Reading
RW-06	04/16/12	636.09	638.10	615.00	590.00	20.70	2.18	22.88	19.18	616.88	Yes	
RW-06	05/18/12	636.09	638.10	615.00	590.00	20.75	4.48	25.23	19.75	616.28	Yes	
RW-06	06/26/12	636.09	638.10	615.00	590.00	18.55	1.10	19.65	16.79	619.29	Yes	
RW-06	07/11/12	636.09	638.10	615.00	590.00	18.79	1.13	19.92	17.04	619.04	Yes	
RW-06	07/11/12	636.09	638.10	615.00	590.00	19.75	0.02	19.77	17.74	618.35	Yes	Spill Buddy Before Reading
RW-06	07/24/12	636.09	638.10	615.00	590.00	19.29	0.02	19.31	17.28	618.81	Yes	Spill Buddy After Reading
RW-06	08/09/12	636.09	638.10	615.00	590.00	19.51	0.03	19.54	17.51	618.58	Yes	
RW-06	08/17/12	636.09	638.10	615.00	590.00	19.68	0.03	19.71	17.68	618.41	Yes	
RW-06	09/17/12	636.09	638.10	615.00	590.00	20.07	0.02	20.09	18.06	618.03	Yes	
RW-06	09/30/12	636.09	638.10	615.00	590.00	20.30	0.04	20.34	18.30	617.79	Yes	
RW-06	11/21/12	636.09	638.10	615.00	590.00	20.20	1.99	22.19	18.64	617.42	Yes	
RW-06	12/17/12	636.09	638.10	615.00	590.00	20.45	2.09	22.54	18.91	617.15	Yes	
RW-06	03/25/13	636.09	638.10	615.00	590.00	21.08	2.90	23.98	19.73	616.32	Yes	
RW-06	05/05/13	636.09	638.10	615.00	590.00	20.83	2.74	23.57	19.44	616.61	Yes	
RW-06	05/16/13	636.09	638.10	615.00	590.00	20.90	2.33	23.23	19.42	616.64	Yes	Spill Buddy Before Reading
RW-06	05/16/13	636.09	638.10	615.00	590.00	22.92	0.05	22.97	20.92	615.17	Yes	Spill Buddy After Reading
RW-06	10/03/13	636.09	638.10	615.00	590.00	20.60	1.58	22.18	18.95	617.12	Yes	
RW-06	05/22/14	636.09	638.10	615.00	590.00	19.29	1.64	20.93	17.65	618.42	Yes	



**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	10/31/14	636.09	638.10	615.00	590.00	18.71	<b>1.58</b>	20.29	17.06	619.01	Yes	
RW-06	05/06/15	636.09	638.10	615.00	590.00	20.21	<b>2.01</b>	22.22	18.65	617.41	Yes	
RW-06	10/05/15	636.09	638.10	615.00	590.00	18.38	<b>1.50</b>	19.88	16.71	619.36	Yes	
RW-06	10/03/16	636.09	638.10	615.00	590.00	17.35	<b>1.35</b>	18.70	15.64	620.43	Yes	
RW-06	06/14/17	636.09	638.10	615.00	590.00	16.40	<b>1.26</b>	17.66	14.67	621.40	Yes	
RW-06	06/21/17	636.09	638.10	615.00	590.00	16.81	<b>1.25</b>	18.06	15.08	620.99	Yes	
RW-06	06/22/17	636.09	638.10	615.00	590.00	16.77	<b>0.64</b>	17.41	14.90	621.18	Yes	
RW-06	06/23/17	636.09	638.10	615.00	590.00	16.85	<b>0.66</b>	17.51	14.99	621.09	Yes	
RW-06	10/26/17	636.09	638.10	615.00	590.00	14.85	<b>0.64</b>	15.49	12.98	623.10	Yes	
RW-06	07/16/19	636.09	638.10	615.00	590.00	17.25	<b>1.39</b>	18.64	15.55	620.52	Yes	
RW-06	05/26/20	636.09	638.10	615.00	590.00	16.27	<b>0.52</b>	16.79	14.38	621.71	Yes	
EW-09	07/25/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.38	16.24	618.96	No	
EW-09	08/18/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	17.96	15.82	619.38	No	
EW-09	08/25/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.33	16.19	619.01	No	
EW-09	09/01/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.45	16.31	618.89	No	
EW-09	09/08/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.90	16.76	618.44	No	
EW-09	09/14/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.24	17.10	618.10	No	
EW-09	09/23/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.47	17.33	617.87	No	
EW-09	09/29/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.46	17.32	617.88	No	
EW-09	10/07/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.62	17.48	617.72	No	
EW-09	10/11/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.74	17.60	617.60	No	
EW-09	10/21/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.89	17.75	617.45	No	
EW-09	10/27/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.14	18.00	617.20	No	
EW-09	11/04/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.39	18.25	616.95	No	
EW-09	11/09/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.35	18.21	616.99	No	
EW-09	11/18/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.56	18.42	616.78	No	
EW-09	11/22/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.28	18.14	617.06	No	
EW-09	12/01/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.66	18.52	616.68	No	
EW-09	01/04/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	21.37	19.23	615.97	No	
EW-09	02/16/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	21.92	19.78	615.42	No	
EW-09	03/13/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	22.20	20.06	615.14	No	
EW-09	04/16/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	22.05	19.91	615.29	No	
EW-09	05/18/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	21.08	18.94	616.26	No	
EW-09	06/26/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.32	17.18	618.02	No	
EW-09	07/24/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.89	17.75	617.45	No	
EW-09	08/19/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.29	18.15	617.05	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-09	09/17/12	635.20	637.34	620.20	600.20	NP	0.00	20.78	18.64	616.56	No	
EW-09	09/30/12	635.20	637.34	620.20	600.20	NP	0.00	21.03	18.89	616.31	No	
EW-09	11/21/12	635.20	637.34	620.20	600.20	NP	0.00	21.38	19.24	615.96	No	
EW-09	12/17/12	635.20	637.34	620.20	600.20	NP	0.00	21.71	19.57	615.63	No	
EW-09	03/25/13	635.20	637.34	620.20	600.20	NP	0.00	22.57	20.43	614.77	No	
EW-09	05/05/13	635.20	637.34	620.20	600.20	NP	0.00	22.15	20.01	615.19	No	
EW-09	10/03/13	635.20	637.34	620.20	600.20	NP	0.00	21.58	19.44	615.76	No	
EW-09	05/21/14	635.20	637.34	620.20	600.20	NP	0.00	20.01	17.87	617.33	No	
EW-09	10/31/14	635.20	637.34	620.20	600.20	NP	0.00	19.57	17.43	617.77	No	
EW-09	05/05/15	635.20	637.34	620.20	600.20	NP	0.00	21.31	19.17	616.03	No	
EW-09	10/05/15	635.20	637.34	620.20	600.20	NP	0.00	19.23	17.09	618.11	No	
EW-09	05/23/16	635.20	637.34	620.20	600.20	NP	0.00	16.90	14.76	620.44	Yes	
EW-09	10/03/16	635.20	637.34	620.20	600.20	NP	0.00	17.90	15.76	619.44	No	
EW-09	06/29/17	635.20	637.34	620.20	600.20	NP	0.00	17.46	15.32	619.88	No	
EW-09	05/26/20	635.20	637.34	620.20	600.20	NP	0.00	16.60	14.46	620.74	Yes	
EW-10	07/25/11	635.90	637.83	620.90	600.90	NP	0.00	18.21	16.28	619.62	No	
EW-10	08/18/11	635.90	637.83	620.90	600.90	NP	0.00	17.74	15.81	620.09	No	
EW-10	08/25/11	635.90	637.83	620.90	600.90	NP	0.00	18.07	16.14	619.76	No	
EW-10	09/01/11	635.90	637.83	620.90	600.90	NP	0.00	18.03	16.10	619.80	No	
EW-10	09/08/11	635.90	637.83	620.90	600.90	NP	0.00	18.54	16.61	619.29	No	
EW-10	09/14/11	635.90	637.83	620.90	600.90	NP	0.00	18.93	17.00	618.90	No	
EW-10	09/23/11	635.90	637.83	620.90	600.90	NP	0.00	19.16	17.23	618.67	No	
EW-10	09/29/11	635.90	637.83	620.90	600.90	NP	0.00	19.10	17.17	618.73	No	
EW-10	10/07/11	635.90	637.83	620.90	600.90	NP	0.00	19.24	17.31	618.59	No	
EW-10	10/11/11	635.90	637.83	620.90	600.90	NP	0.00	19.38	17.45	618.45	No	
EW-10	10/21/11	635.90	637.83	620.90	600.90	NP	0.00	19.69	17.76	618.14	No	
EW-10	10/27/11	635.90	637.83	620.90	600.90	NP	0.00	19.83	17.90	618.00	No	
EW-10	11/04/11	635.90	637.83	620.90	600.90	NP	0.00	20.05	18.12	617.78	No	
EW-10	11/09/11	635.90	637.83	620.90	600.90	NP	0.00	19.95	18.02	617.88	No	
EW-10	11/18/11	635.90	637.83	620.90	600.90	NP	0.00	20.12	18.19	617.71	No	
EW-10	11/22/11	635.90	637.83	620.90	600.90	NP	0.00	20.20	18.27	617.63	No	
EW-10	12/01/11	635.90	637.83	620.90	600.90	NP	0.00	20.66	18.73	617.17	No	
EW-10	01/04/12	635.90	637.83	620.90	600.90	NP	0.00	20.85	18.92	616.98	No	
EW-10	02/16/12	635.90	637.83	620.90	600.90	NP	0.00	21.40	19.47	616.43	No	
EW-10	03/13/12	635.90	637.83	620.90	600.90	NP	0.00	21.65	19.72	616.18	No	
EW-10	04/16/12	635.90	637.83	620.90	600.90	NP	0.00	21.59	19.66	616.24	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-10	05/18/12	635.90	637.83	620.90	600.90	NP	0.00	20.68	18.75	617.15	No	
EW-10	06/26/12	635.90	637.83	620.90	600.90	NP	0.00	19.19	17.26	618.64	No	
EW-10	07/24/12	635.90	637.83	620.90	600.90	NP	0.00	19.54	17.61	618.29	No	
EW-10	08/19/12	635.90	637.83	620.90	600.90	NP	0.00	19.93	18.00	617.90	No	
EW-10	09/17/12	635.90	637.83	620.90	600.90	NP	0.00	20.33	18.40	617.50	No	
EW-10	09/30/12	635.90	637.83	620.90	600.90	NP	0.00	20.55	18.62	617.28	No	
EW-10	11/21/12	635.90	637.83	620.90	600.90	NP	0.00	20.96	19.03	616.87	No	
EW-10	12/17/12	635.90	637.83	620.90	600.90	NP	0.00	21.19	19.26	616.64	No	
EW-10	03/25/13	635.90	637.83	620.90	600.90	NP	0.00	21.97	20.04	615.86	No	
EW-10	05/05/13	635.90	637.83	620.90	600.90	NP	0.00	21.72	19.79	616.11	No	
EW-10	10/13/13	635.90	637.83	620.90	600.90	NP	0.00	21.17	19.24	616.66	No	
EW-10	05/21/14	635.90	637.83	620.90	600.90	NP	0.00	19.97	18.04	617.86	No	
EW-10	10/31/14	635.90	637.83	620.90	600.90	NP	0.00	19.30	17.37	618.53	No	
EW-10	05/05/15	635.90	637.83	620.90	600.90	NP	0.00	21.05	19.12	616.78	No	
EW-10	10/05/15	635.90	637.83	620.90	600.90	NP	0.00	18.98	17.05	618.85	No	
EW-10	05/23/16	635.90	637.83	620.90	600.90	NP	0.00	16.60	14.67	621.23	Yes	
EW-10	10/03/16	635.90	637.83	620.90	600.90	NP	0.00	17.65	15.72	620.18	No	
EW-10	06/29/17	635.90	637.83	620.90	600.90	NP	0.00	17.31	15.38	620.52	No	
EW-10	05/26/20	635.90	637.83	620.90	600.90	NP	0.00	16.25	14.32	621.58	Yes	
EW-11	07/25/11	637.20	639.14	622.20	602.20	18.65	1.84	20.49	17.13	620.07	No	
EW-11	08/18/11	637.20	639.14	622.20	602.20	17.94	3.58	21.52	16.81	620.39	No	
EW-11	08/25/11	637.20	639.14	622.20	602.20	18.28	4.01	22.29	17.25	619.95	No	
EW-11	09/01/11	637.20	639.14	622.20	602.20	18.15	4.05	22.20	17.12	620.08	No	
EW-11	09/08/11	637.20	639.14	622.20	602.20	18.69	4.08	22.77	17.67	619.53	No	
EW-11	09/14/11	637.20	639.14	622.20	602.20	19.10	4.30	23.40	18.13	619.07	No	
EW-11	09/23/11	637.20	639.14	622.20	602.20	19.20	4.66	23.86	18.31	618.89	No	
EW-11	09/29/11	637.20	639.14	622.20	602.20	18.99	5.13	24.12	18.21	618.99	No	
EW-11	10/07/11	637.20	639.14	622.20	602.20	19.15	5.07	24.22	18.36	618.84	No	
EW-11	10/11/11	637.20	639.14	622.20	602.20	19.21	5.16	24.37	18.44	618.76	No	
EW-11	10/21/11	637.20	639.14	622.20	602.20	19.62	4.13	23.75	18.61	618.59	No	
EW-11	10/27/11	637.20	639.14	622.20	602.20	19.70	4.78	24.48	18.84	618.36	No	
EW-11	11/04/11	637.20	639.14	622.20	602.20	19.87	5.03	24.90	19.07	618.13	No	
EW-11	11/09/11	637.20	639.14	622.20	602.20	19.68	5.31	24.99	18.94	618.26	No	
EW-11	11/10/11	637.20	639.14	622.20	602.20	19.80	5.49	25.29	19.10	618.10	No	Before EFR
EW-11	11/10/11	637.20	639.14	622.20	602.20	21.71	0.11	21.82	19.79	617.41	No	After EFR
EW-11	11/13/11	637.20	639.14	622.20	602.20	19.99	2.76	22.75	18.67	618.53	No	EFR Check
EW-11	11/18/11	637.20	639.14	622.20	602.20	20.23	3.07	23.30	18.98	618.22	No	
EW-11	11/22/11	637.20	639.14	622.20	602.20	20.38	3.32	23.70	19.19	618.01	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-11	12/01/11	637.20	639.14	622.20	602.20	20.71	<b>3.88</b>	24.59	19.65	617.55	No	
EW-11	01/04/12	637.20	639.14	622.20	602.20	20.67	<b>4.96</b>	25.63	19.85	617.35	No	
EW-11	02/16/12	637.20	639.14	622.20	602.20	21.31	<b>4.87</b>	26.18	20.47	616.73	No	
EW-11	03/13/12	637.20	639.14	622.20	602.20	21.68	<b>4.34</b>	26.02	20.72	616.48	No	
EW-11	04/12/12	637.20	639.14	622.20	602.20	21.61	<b>4.06</b>	25.67	20.59	616.61	No	Spill Buddy Before Reading
EW-11	04/12/12	637.20	639.14	622.20	602.20	22.65	<b>0.17</b>	22.82	20.75	616.45	No	Spill Buddy After Reading
EW-11	04/16/12	637.20	639.14	622.20	602.20	22.03	<b>2.56</b>	24.59	20.67	616.53	No	
EW-11	03/13/12	637.20	639.14	622.20	602.20	21.68	<b>4.34</b>	26.02	20.72	616.48	No	
EW-11	04/12/12	637.20	639.14	622.20	602.20	21.61	<b>4.06</b>	25.67	20.59	616.61	No	Spill Buddy Before Reading
EW-11	04/12/12	637.20	639.14	622.20	602.20	22.65	<b>0.17</b>	22.82	20.75	616.45	No	Spill Buddy After Reading
EW-11	04/16/12	637.20	639.14	622.20	602.20	22.03	<b>2.56</b>	24.59	20.67	616.53	No	
EW-11	05/18/12	637.20	639.14	622.20	602.20	19.93	<b>1.75</b>	21.68	18.39	618.81	No	
EW-11	06/26/12	637.20	639.14	622.20	602.20	19.44	<b>3.31</b>	22.75	18.25	618.95	No	
EW-11	06/27/12	637.20	639.14	622.20	602.20	19.44	<b>3.31</b>	22.75	18.25	618.95	No	Installed Portable system 1
EW-11	11/21/12	637.20	639.14	622.20	602.20	21.42	<b>2.40</b>	23.82	20.02	617.18	No	
EW-11	12/17/12	637.20	639.14	622.20	602.20	21.56	<b>3.29</b>	24.85	20.36	616.84	No	
EW-11	03/25/13	637.20	639.14	622.20	602.20	22.38	<b>3.40</b>	25.78	21.21	615.99	No	
EW-11	05/05/13	637.20	639.14	622.20	602.20	22.07	<b>3.37</b>	25.44	20.89	616.31	No	
EW-11	05/16/13	637.20	639.14	622.20	602.20	21.98	<b>3.60</b>	25.58	20.85	616.35	No	Spill Buddy Before Reading
EW-11	05/16/13	637.20	639.14	622.20	602.20	22.92	<b>0.05</b>	22.97	20.99	616.21	No	Spill Buddy After Reading
EW-11	10/03/13	637.20	639.14	622.20	602.20	21.28	<b>4.69</b>	25.97	20.40	616.80	No	
EW-11	05/22/14	637.20	639.14	622.20	602.20	19.96	<b>5.07</b>	25.03	19.17	618.03	No	
EW-11	10/31/14	637.20	639.14	622.20	602.20	19.25	<b>5.11</b>	24.36	18.46	618.74	No	
EW-11	05/06/15	637.20	639.14	622.20	602.20	21.02	<b>4.70</b>	25.72	20.14	617.06	No	
EW-11	10/05/15	637.20	639.14	622.20	602.20	19.29	<b>3.63</b>	22.92	18.17	619.03	No	
EW-11	05/23/16	637.20	639.14	622.20	602.20	16.07	<b>7.92</b>	23.99	15.92	621.28	No	
EW-11	10/03/16	637.20	639.14	622.20	602.20	17.65	<b>5.78</b>	23.43	17.02	620.18	No	
EW-11	06/14/17	637.20	639.14	622.20	602.20	16.42	<b>7.04</b>	23.46	16.07	621.13	No	
EW-11	06/21/17	637.20	639.14	622.20	602.20	16.93	<b>6.39</b>	23.32	16.43	620.77	No	
EW-11	06/22/17	637.20	639.14	622.20	602.20	17.66	<b>1.78</b>	19.44	16.12	621.08	No	
EW-11	06/23/17	637.20	639.14	622.20	602.20	17.78	<b>1.90</b>	19.68	16.27	620.93	No	
EW-11	10/26/17	637.20	639.14	622.20	602.20	14.43	<b>8.41</b>	22.84	14.39	622.81	Yes	
EW-11	07/25/19	637.20	639.14	622.20	602.20	18.34	<b>4.61</b>	22.95	17.44	619.76	No	
EW-11	05/26/20	637.20	639.14	622.20	602.20	15.54	<b>9.99</b>	25.53	15.86	621.34	No	

**Notes:**  
NM = Not Measured  
NP = No Product  
BTOC = Below Top of Casing  
AMSL = Above Mean Sea Level  
\* Corrections for free product made using: TOC elevation-[depth to ground water-(product thickness \* product density)]  
Average Product Density = 0.77 g/cm3 based on average of 4 NE terminal wells (Table 8) - MW-32, RW-2, RW-4 and RW-6

**Table 2**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters							
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Specific Conductance	Conductivity	pH	Alkalinity (ppm CaCO3)	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µs/cm	µmhos/cm	pH units		ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
Sample Date																					
MW-3	3/23/1988		30	30	20	50	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-3	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	3.50	141	NM	NM	NM	NM	0.07	
MW-3	10/21/2003		230	17	23	42	22.2	<4.0	NA	NA	490	NA	NA	3.70	-107	NM	NM	NM	NM	NM	
MW-3	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.24	009	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.90	067	NM	NM	NM	NM	0.10	NM	NM	NM	NM	
MW-3	4/19/2005		1.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA	1.1	-010	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	4.74	-089	NM	NM	NM	753	7.42	NM	1.0	NM	NM	
MW-3	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	3.6	-052	NM	NM	NM	840	7.40	NM	1.0	NM	NM	
MW-3	10/22/2006		4.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	6.1	-227	NM	NM	NM	6.87	NM	7.0	NM	NM	NM	
MW-3	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.04	-169.8	NM	NM	NM	6.97	NM	3.0	NM	NM	NM	
MW-3	9/29/2007		3.9	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.28	-059.1	NM	NM	NM	7.05	NM	5.0	NM	NM	NM	
MW-3	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	2.94	249.4	NM	NM	NM	6.32	NM	1.0	NM	NM	NM	
MW-3	10/25/2008		1.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA	2.25	101.4	NM	NM	NM	6.80	NM	2.0	NM	NM	NM	
MW-3	10/14/2009		2.9	<2.0	<2.0	<6.0	<2.0	<2.0	NA	4.51	163.0	NM	NM	NM	7.34	NM	NM	NM	NM	NM	
MW-3	10/17/2011		18.2	1.2	<1.0	<3.0	<1.0	<1.0	NA	0.89	-201.0	7.91	NM	NM	969	7.85	NM	NM	NM	NM	
MW-3	10/3/2012		29.9	2.2	<1.0	<3.0	<1.0	<1.0	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/2/2013		11.3	1.1	<0.34	<1.0	NA	<0.37	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/30/2014		7.8	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/6/2015		9.8	2.2	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/5/2016		7.6	0.68J	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-10	3/23/1988		230	<1.0	90	40	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	9/21/1988		80	11	3.0	15	NA	NA	NA	NA	NA	NA	600	NM	NM	NM	NM	NM	NM	NM	
MW-10	4/27/1989		260	42	18	45	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	8/29/1990		235	27	69	63	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	1/31/1991		69	7.0	15	17	NA	30	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-10	7/10/1991		26	13	31	22	NA	30	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM	NM	
MW-10	1/8/1992		3.0	<1.0	17	11	NA	30	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/14/1992		11	7.0	21	10	NA	<20	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	3/3/1999		110	7.9	35	25	NA	<4.0	NA	NA	1000	350	NA	3.32	NM	7.5	NM	NM	NM	NM	
MW-10	8/17/1999		5.3	4.1	6	3	NA	<4.0	NA	NA	330	<100	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	8/18/2000		48	12	49	43	36	<0.8	18	NA	1400	1000	NA	2.40	-096	NM	NM	NM	NM	10+	
MW-10	10/10/2000		140	31	120	130	103	<1.6	76	NA	2800	860	NA	2.10	106	NM	NM	NM	NM	10.00	
MW-10	10/21/2003		72	11	79	50	27	<4.0	NA	NA	910	NA	NA	1.10	-120	NM	NM	NM	NM	NM	
MW-10	4/20/2004		400	46	210	150	149	21	NA	NA	2900	NA	NA	2.40	056	NM	NM	NM	NM	NM	
MW-10	11/18/2004		90.6	3.0	61.6	31.0	41.5	<1.0	21.9	NA	1100	830	NA	1.10	-134	NM	NM	NM	NM	4.00	
MW-10	4/19/2005		7.6	<1.0	2.9	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.2	-040	NM	NM	NM	NM	NM	
MW-10	10/12/2005		4.3	<1.0	0.61 J	<3.0	<1.0	<1.0	1.5	NA	NA	NA	NA	1.85	-090	NM	NM	996	7.66	NM	
MW-10	10/12/2005	D	10	0.91 J	1.2	<3.0	<1.0	<1.0	1.4	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	5/23/2006		6.7	<1.0	3.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.9	-087	NM	NM	1015	7.60	NM	
MW-10	5/23/2006	D	6.6	<1.0	3.6	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/22/2006		12.1	0.73 J	8.5	3.2	1.3	<1.0	1.2	NA	NA	NA	<1000	6.80	-98.2	NM	NM	NM	7.07	NM	
MW-10	10/22/2006	D	12.2	0.76 J	8.9	3.0	1.5	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	4/29/2007		24.1	<1.0	8.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.14	-94.2	NM	NM	NM	7.18	NM	
MW-10	4/29/2007	D	24.4	<1.0	8.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/1/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	0.25	-23.6	NM	NM	NM	7.16	NM	
MW-10	5/10/2008		<1.0	<1.0	5.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.95	-32.4	NM	NM	NM	6.52	NM	
MW-10	5/10/2008	D	<1.0	<1.0	4.7	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/28/2008		4.0	<1.0	4.2	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.86	0.86	NM	NM	NM	6.97	NM	
MW-10	10/14/2009		4.3	<1.0	1.9	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	1.54	-39	NM	NM	NM	7.21	NM	
MW-10	10/27/2010		1.1	1.6	1.8	3.0	1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/17/2011		6.4	<1.0	1.7	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	2.67	-187	8.47	NM	895	7.99	NM	
MW-10	10/3/2012		9.3	<1.0	1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/3/2012	D	9.0	<1.0	1.1	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	5/21/2014		<1.0	<1.0	5.0	<3.0	1.7	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	5/21/2014	D	<1.0	<1.0	5.1	<3.0	<2.8	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	



**Table 2**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Specific Conductance	Conductivity	pH	Alkalinity (ppm CaCO3)	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µs/cm	µmhos/cm	pH units		ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
EW-10	7/28/2011		<b>3430</b>	<20.0	<20.0	<60.0	<20.0	<20.0	<80.0	2.28	-143	8.93	NM	1190	7.73	NM	NM	NM	NM	NM	NM
EW-10	10/19/2011		<b>3970</b>	<1.0	2.6	<3.0	<1.0	<1.0	<4.0	0.32	-162	8.45	NM	1130	7.99	NM	NM	NM	NM	NM	NM
EW-10	4/18/2012		<b>1510</b>	<1.0	1.0	<3.0	<1.0	<1.0	NA	1.06	91.4	7.6	NM	1437	7.17	NM	NM	NM	NM	NM	NM
EW-10	5/7/2013		<b>18.3</b>	<1.0	6.0	44.4	48.9	<1.0	4.9	0.93	167.1	8.2	NM	1225	7	NM	NM	NM	NM	NM	NM
EW-10	5/7/2013	D	<b>16.0</b>	<1.0	4.4	34.0	38.7	<1.0	<4.0	0.93	167.1	8.2	NM	1225	7	NM	NM	NM	NM	NM	NM
EW-10	5/21/2014		<b>18.6</b>	<1.0	<1.0	<3.0	<2.0	1.3	<4.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-10	5/4/2015		<b>7.2</b>	<0.39	<0.39	<1.2	<0.84	2.0	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-10	10/5/2016		1.4	<0.39	<0.39	<1.2	<0.84	2.6	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-11	<b>07/25/2011 to present - The well was not sampled due to the presence of free product.</b>																				

**Notes:**

- µg/L ..... = micrograms per liter (equivalent to parts per billion)
- D ..... = Duplicate sample
- 1,2-DCA ..... = 1,2-Dichloroethane
- DRO ..... = Diesel Range Organics
- GRO ..... = Gasoline Range Organics
- FP ..... = The well was not sampled due to the presence of free product
- THC ..... = Total hydrocarbons or total petroleum hydrocarbons as gasoline
- MTBE ..... = Methyl Tertiary Butyl Ether
- NA ..... = Not Analyzed for indicated parameter
- NM ..... = Not Measured
- NR 140 ES ..... = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard
- NS ..... = Not Sampled on indicated date
- TMBs ..... = Trimethylbenzenes
- "BOLD TYPE"** ..... = The indicated concentration exceeds the NR 140 ES
- J ..... = Laboratory flag. Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.





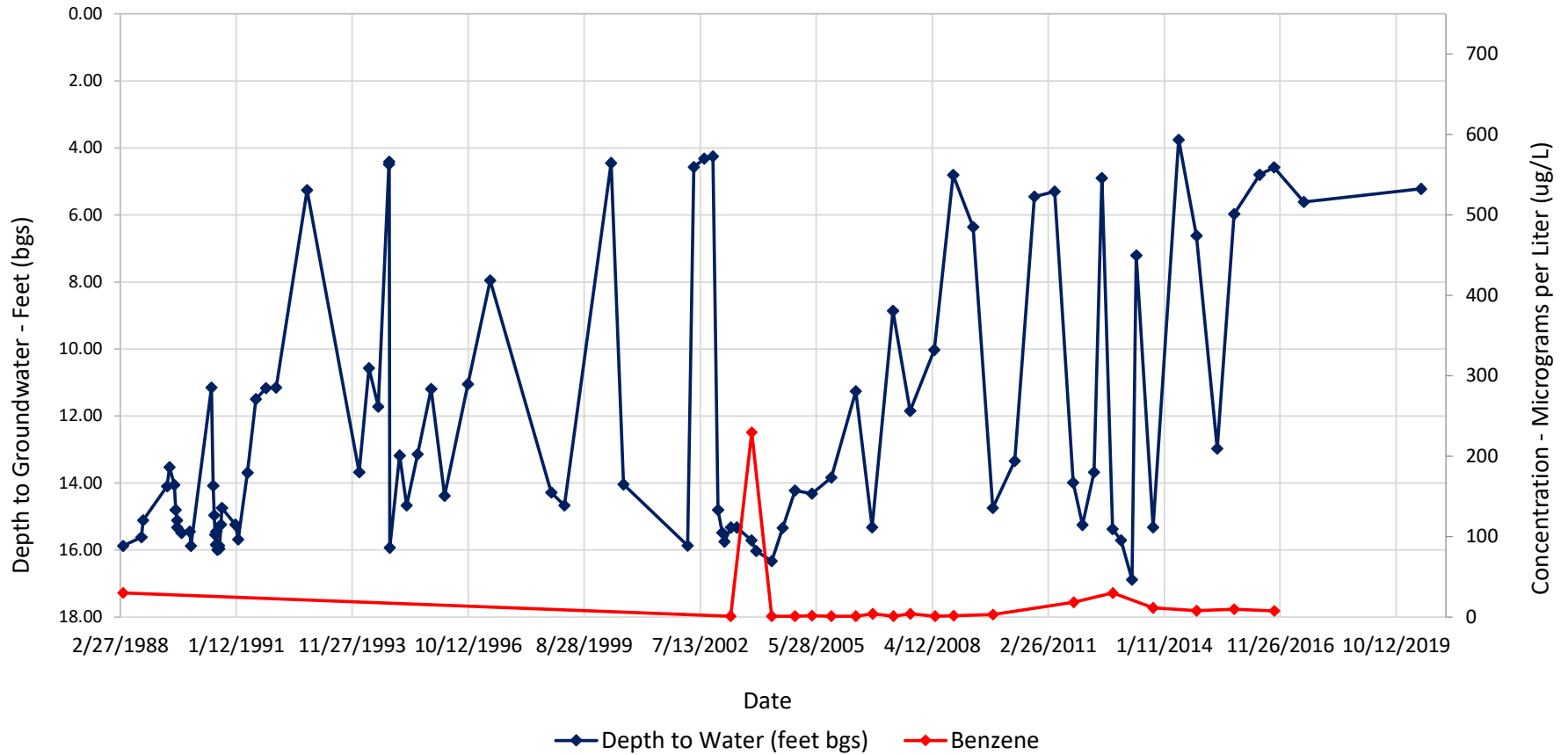
**Table 4:** Hydrocarbon Ratios Related to Degradation and Mass Reduction  
 LNAPL Samples Collected From Terminal Wells RW -5 and RW-6 (AOCs 4 & 5)  
 Former Amoco Terminal 00406 (Superior, WI)

			AOC 4	AOC 5	AOC 5
Lab	87 Octane	Std (G/D/W)	RW-5	RW-6	RW-6
Date of analysis		Torkelson	Pace Energy	Torkelson	Pace Energy
		TGI # 04115	7/26/2019	4/30/2004	7/26/2019
Evaporation					
n-Pentane/n-Heptane	2.1	2.28	0.01	0.65	0.60
Waterwashing					
Benzene/Cyclohexane	4.3	4.16	0.94	0.87	0.39
Toluene/Methylcyclohexane	10.8	6.09	0.20	0.82	0.73
Biodegradation					
3-Methylhexane/n-Heptane	1.6	1.15	0.39	0.40	0.36
Methylcyclohexane/n-Heptane	0.6	0.71	0.38	0.89	0.79

	87 Octane	Std (G/D/W)	RW-5	RW-6	RW-6
% Reduction in Mass Compared		Torkelson	Pace Energy	Torkelson	Pace Energy
87 Octane Ratios		TGI # 04115	7/26/2019	4/30/2004	7/26/2019
Evaporation					
n-Pentane/n-Heptane	2.1		99.29	69.05	71.30
Waterwashing					
Benzene/Cyclohexane	4.3		78.11	79.77	90.98
Toluene/Methylcyclohexane	10.8		98.19	92.41	93.21
Biodegradation					
3-Methylhexane/n-Heptane	1.6		75.90	75.00	77.77
Methylcyclohexane/n-Heptane	0.6		37.25	-48.33	-31.77

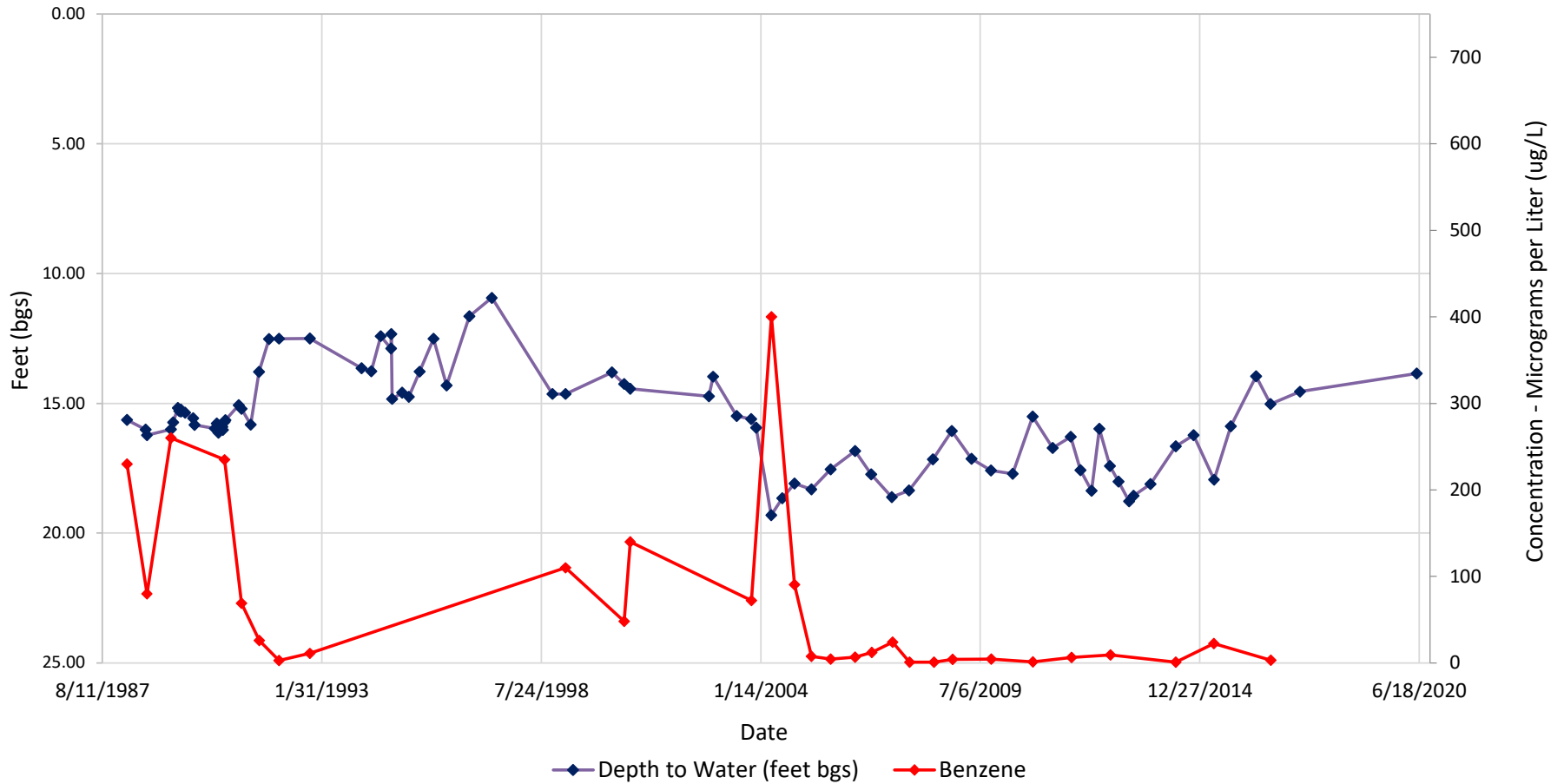
# Appendix A

## MW-3 Benzene/Groundwater Hydrograph Former Amoco Terminal Superior, Wisconsin



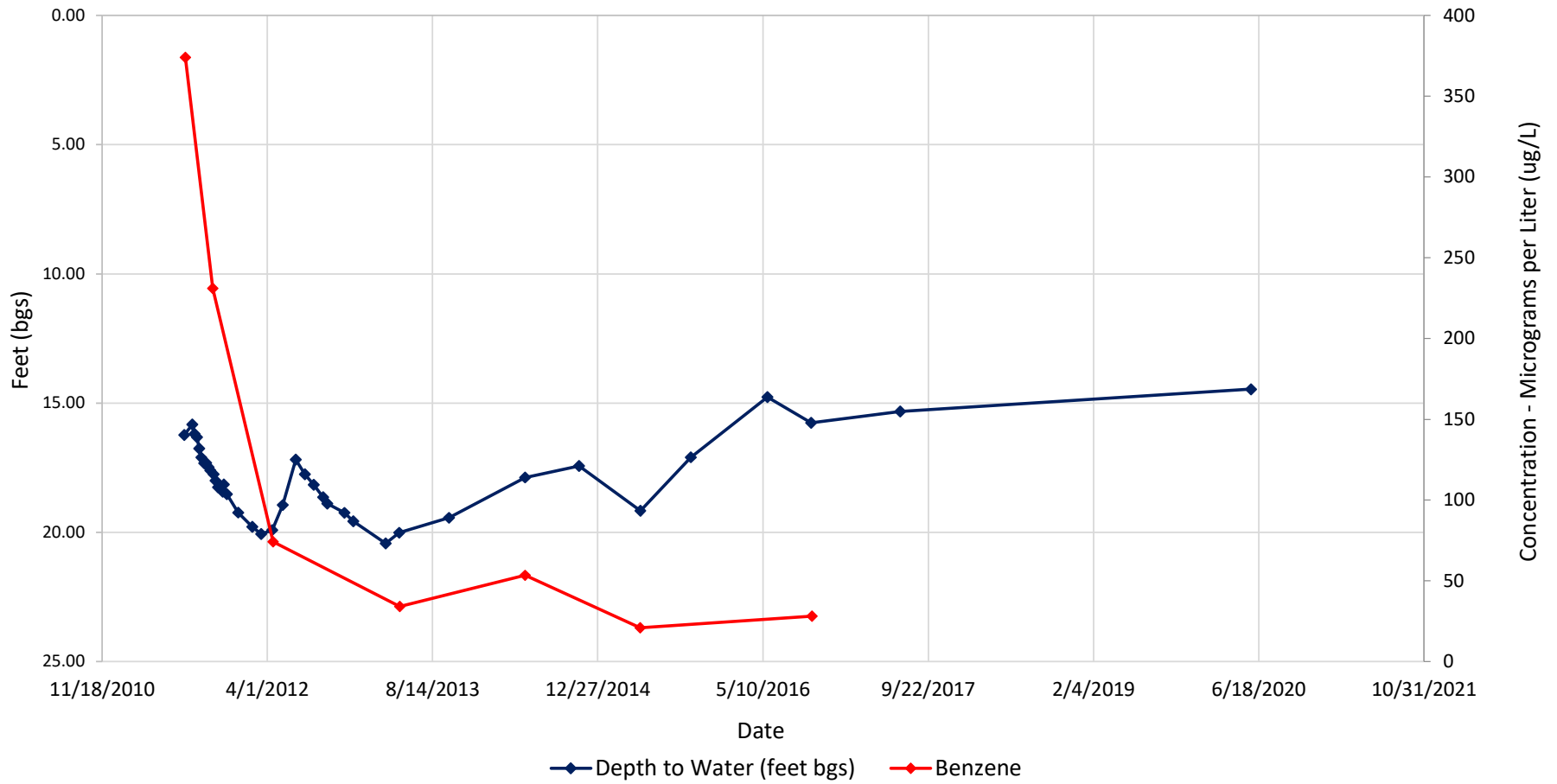
# Appendix A

## MW-10 Benzene/Groundwater Hydrograph Former Amoco Terminal Superior, Wisconsin



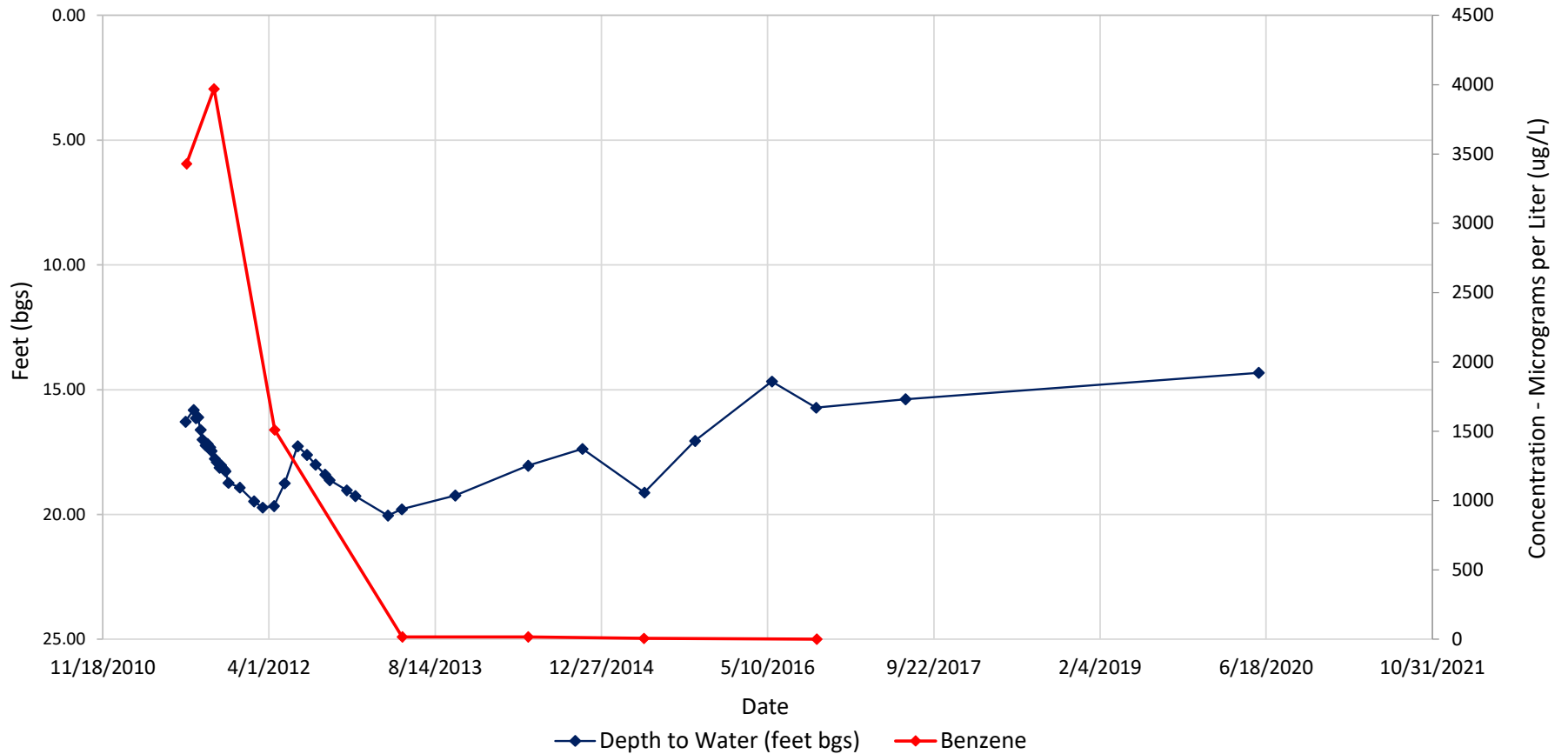
# Appendix A

## EW-9 Benzene/Groundwater Hydrograph Former Amoco Terminal Superior, Wisconsin



# Appendix A

## EW-10 Benzene/Groundwater Hydrograph Former Amoco Terminal Superior, Wisconsin



ANTEA ABANDONMENT AND TRANSMISSIVITY MEMO

June 14, 2021

Mr. John Hunt  
Wisconsin Dept. of Natural Resources  
223 E Steinfest Road  
Antigo, WI 54409

**Subject: Addendum to: Well Abandonment Work Plan  
Attachment to Request to Manage Materials Form 4400-315**  
FedEx Ground Package System  
2929 Halvor Lane  
Superior, Wisconsin

BRRTS No. 07-16-583046 (FedEx Facility)  
BRRTS No. 02-16-000331 (Amoco Oil Terminal)

Dear Mr. Hunt:

In the Well Abandonment Work Plan submitted to the Wisconsin Department of Natural Resources (WDNR) on March 12, 2021, Antea Group proposed for the abandonment of three existing monitoring and recovery wells installed by Antea Group on behalf of BP Products North America Inc. (BP). The Well Abandonment Work Plan serves as an attachment to Form 4400-315, submitted by BBJ Group on May 24, 2021. After additional discussion with BBJ Group on the Materials Management Plan, two additional monitoring wells are proposed to be added to the list of wells to be abandoned. In addition to the original request to abandon existing monitoring and recovery wells MW-3, MW-23, and RW-06, Antea Group proposes the addition of EW-09 and EW-10 to the well abandonment proposal to accommodate the expansion of the adjacent property FedEx facility. The history and conditions of these wells, including EW-09 and EW-10, were detailed in the contents of the Well Abandonment Work Plan. Based on the summary and conclusions presented in the Well Abandonment Work Plan, Antea Group recommends that all wells be abandoned without replacement.

Additional evaluation has also been completed on wells MW-23 and RW-6 since the Well Abandonment Work Plan has been submitted and includes an analysis on the LNAPL thicknesses and recoverability in the wells. Regular well gauging and LNAPL bailing has been completed on the wells since April 29, 2021, and the results are presented in greater detail below. The results of the LNAPL recovery events indicate that the apparent LNAPL thickness gauged within the wells is not indicative of LNAPL recoverability, and mass recovery technology such as a pumping or skimming system would not be effective.

### **LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) RECOVERY**

Between April 29, 2021 and June 8, 2021, LNAPL gauging and recovery events were completed at wells MW-23 and RW-06 to assist in the determination of whether additional recovery could be conducted on the wells using mass recovery systems. A total of six gauging and recovery events were completed. The wells were gauged prior to LNAPL removal, and LNAPL was removed with bailers to the maximum extent practicable.

John Hunt  
Wisconsin Department of Natural Resources  
June 14, 2021



Graphs of the depth to water and depth to LNAPL gauged in MW-23 and RW-06 before LNAPL recovery was performed and the total estimated volume of LNAPL recovered via bailer are included as **Appendix A**. Both of the wells yielded the most product during the first baildown event, and recovery quickly decreased until a recovery of 0.1 gallons was observed during the third baildown event. Recovery was consistent and limited to 0.2-0.1 gallons for all remaining recovery events.

Recovery of the LNAPL through mass removal technologies such as a skimming system would not be a feasible at these wells. LNAPL skimming is limited to the recovery of mobile LNAPL where LNAPL saturations are sufficient to produce LNAPL transmissivities greater than the recoverability threshold of 0.8 ft<sup>2</sup>/day (ITRC, 2009). The LNAPL transmissivity at monitoring well MW-23 was previously reported as 0.37 ft<sup>2</sup>/day (Antea Group, March 12, 2021) which is below the ITRC threshold value. Based on these observed field conditions and the conclusions presented in the Well Abandonment Work Plan, wells MW-23 and RW-06 are proposed to be abandoned without replacement. Additional LNAPL recovery on the wells is not feasible, and the existing LNAPL is immobile with limited residual dissolved phase benzene contaminant mass as documented by downgradient groundwater sampling over the past 33 years (analytical and gauging tables and benzene concentrations trends are included in the Well Abandonment Work Plan).

Questions regarding this memorandum can be directed to Layne Kortbein at the phone number and email listed below.

Sincerely,

A handwritten signature in black ink that reads "Layne Kortbein".

---

Layne Kortbein  
Project Professional  
+1 651 697 5117  
[Layne.Kortbein@anteagroup.us](mailto:Layne.Kortbein@anteagroup.us)  
Antea Group

## ATTACHMENTS

### APPENDIX

Appendix A – LNAPL Gauging and Recovery

### REFERENCES

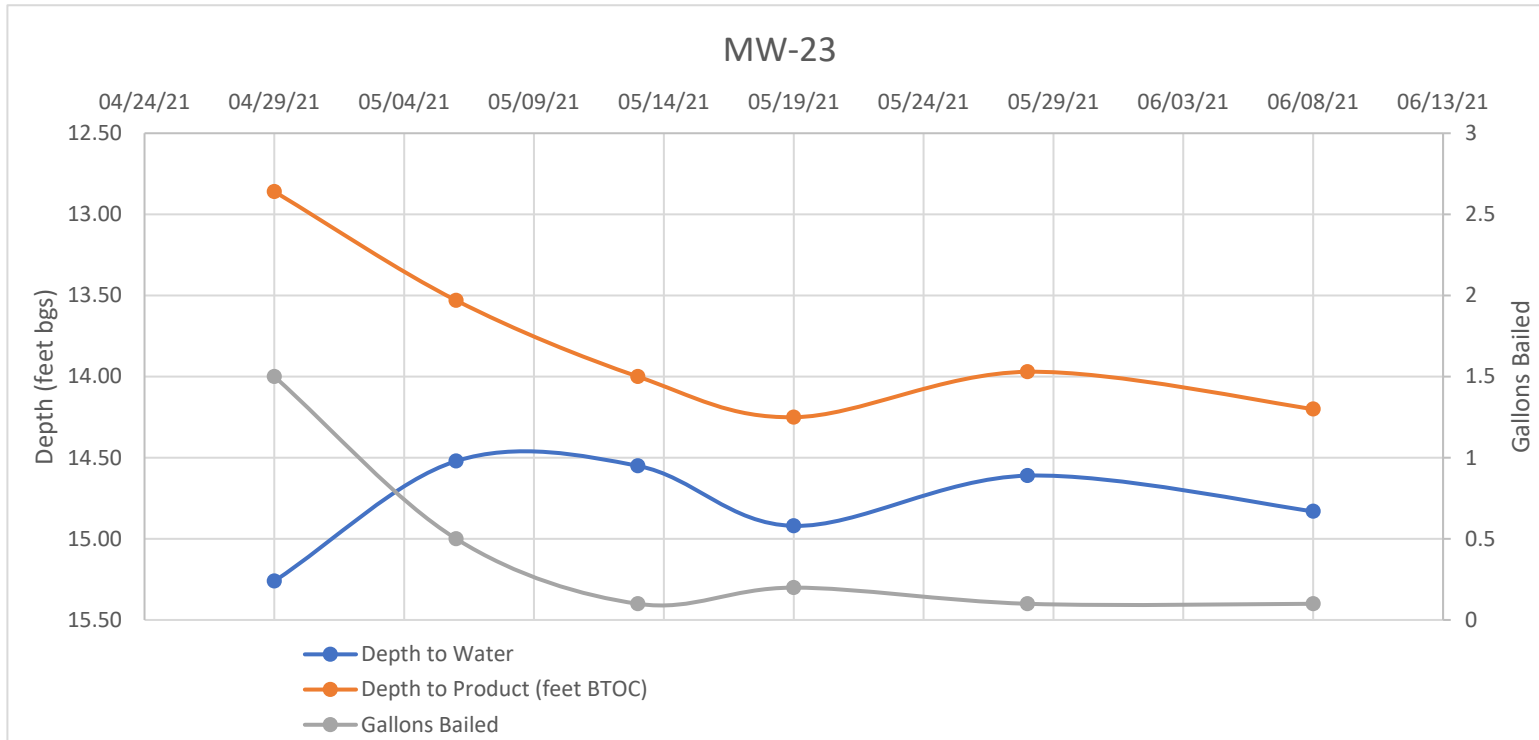
Antea Group, (March 12, 2021). *Well Abandonment Work Plan*.

The Interstate Technology & Regulatory Council. (2009, December). Evaluating LNAPL Remedial Technologies for Achieving Project Goals.

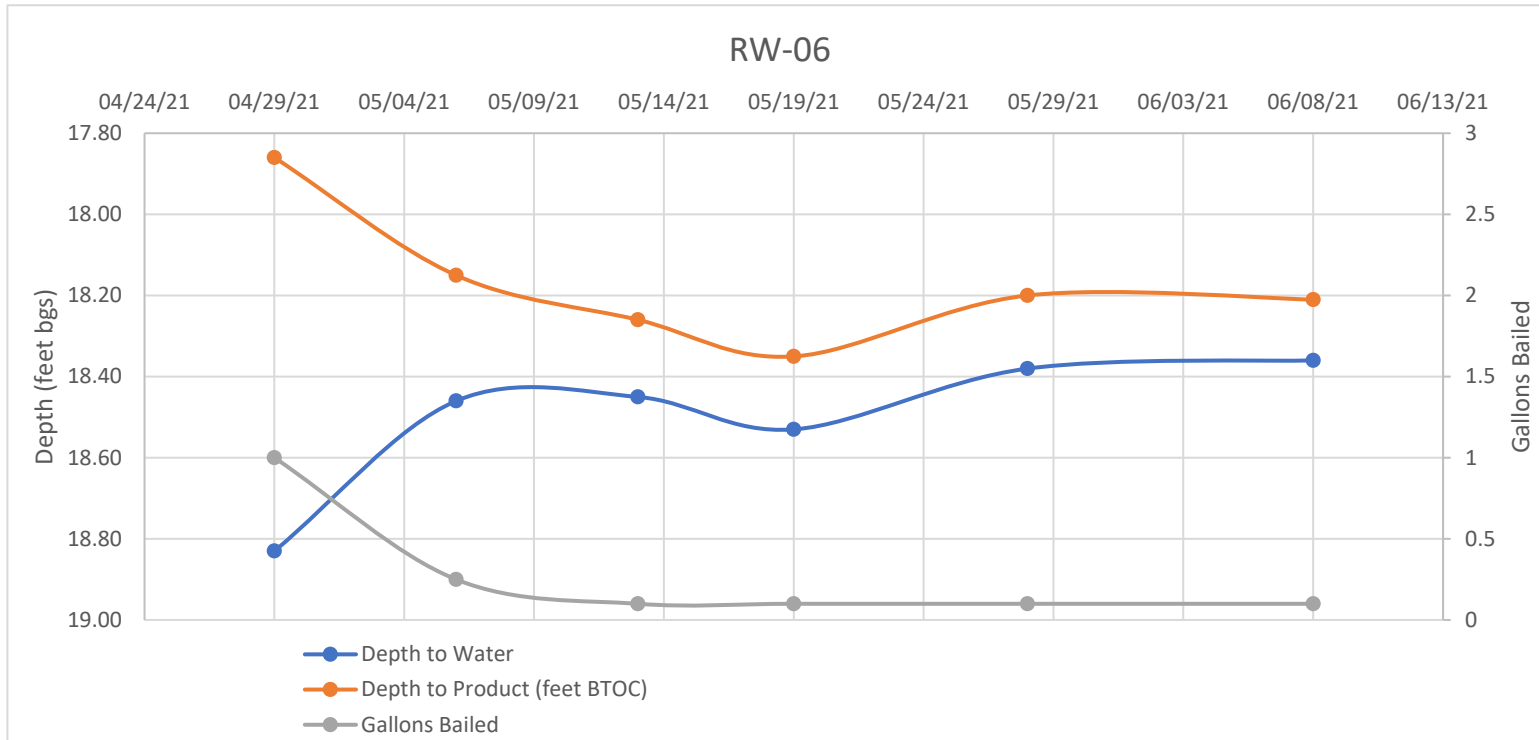




# Appendix A - LNAPL Recovery



Appendix A - LNAPL Recovery



## INSPECTION LOG

**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name \_\_\_\_\_ BRRTS No. \_\_\_\_\_

Inspections are required to be conducted (see closure approval letter):  
 annually  
 semi-annually  
 other – specify \_\_\_\_\_

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input checked="" type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

BRRTS No. \_\_\_\_\_ Activity (Site) Name \_\_\_\_\_

{Click to Add/Edit Image} Date added:

Title:

{Click to Add/Edit Image} Date added:

Title:

**COVER or BARRIER MAINTENANCE PLAN**  
*(to be included in Form 4400-202, as Attachment D)*

August 10, 2021

Property Located at: 2929 Halvor Lane

DNR BRRTS/Activity #: 07-16-583046

Parcel Number: 06-806-00739-06

#### Introduction

This document is the Maintenance Plan for an engineered soil berm and asphalt cover that will be installed at the above-referenced property in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the future installation of the soil berm and asphalt cover which addresses or occupies the area over the contaminated soil.

#### **D.1. Descriptions:**

##### Description of Contamination

Based on the results of the soil investigation, the lone exceedance of the DC RCL for benzene and the several exceedances of select VOCs, PAHs and metals of the GW RCL document existing contamination at the Subject Property caused by the historical Former Terminal at the Subject Property. Soil contaminated by benzene and select petroleum related contaminants (i.e. PAHs) are located at a depth of approximately 1-4 feet on the eastern portion of the property. Groundwater contaminated by VOCs, PAHs, and metals associated with the historical Former Terminal is located at a depth of approximately 10 feet below ground surface. The extent of the soil and groundwater contamination is shown in Antea Groups Monitoring Well Abandonment Work Plan dated March 12, 2021.

##### Description of the [Cover/Barrier] to be Maintained

The asphalt barrier consists of approximately three inches of aggregate asphalt material for paved surfaces. The soil berm consists of a 30 MIL PVC geomembrane liner covering excess soils in a soil berm topped by a minimum of eight inches of clean topsoil seeded with a type 10 or 70 seed for vegetation. The vegetation will be mowed on a regular basis by the property owner. The barriers are located as shown on the **attached construction work plans on page C103 and C109.**

##### Cover/Building/Slab/Barrier Purpose

The asphalt barrier and soil berm with a 30 MIL PVC geomembrane liner covering the contaminated soils serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. The cover/barriers also acts as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code. Based on the current use of the property, commercial use, the barrier should function as intended unless disturbed.

##### Annual Inspection

The berm overlying the contaminated soil and as depicted in will be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause [additional infiltration into] [or exposure to] underlying soils. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed [[and] where infiltration from the surface will not be effectively minimized] will be documented.

A log of the inspections and any repairs will be maintained by the property owner and is included as D.4, Form 4400-305, Continuing Obligations Inspection and Maintenance Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed and where infiltration from the surface will not be effectively minimized. Once repairs are completed, they will be documented in the inspection log. A copy of the maintenance plan and inspection log will be kept at the site; or, if there is no acceptable place (for example, no building is present) to keep it at the site, at the address of the property owner and available for submittal or inspection by Wisconsin Department of Natural Resources (DNR) representatives upon their request.

A copy of the inspection log must be submitted electronically to the DNR after every inspection, at least annually.

#### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling or larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment (PPE). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the berm overlying the contaminated soil are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the DNR or its successor.

The property owner will be sure to mow the vegetation on the soil berm on a regular basis.

The property owner, in order to maintain the integrity of the grass covered berm, will maintain a copy of this Maintenance Plan at the site; or, if there is no acceptable place to keep it at the site (for example, no building is present), at the address of the property owner and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

#### Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover/Barrier

The following activities are prohibited on any portion of the property where [pavement, a building foundation, soil cover, engineered cap or other barrier] is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure; 7) the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar

residential exposure settings.

If removal, replacement or other changes to a cover, or a building which is acting as a cover, are considered, the property owner will contact DNR at least 45 days before taking such an action, to determine whether further action may be necessary to protect human health, safety, or welfare or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

#### Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of DNR.

#### Contact Information

*(Form 4400-202, Attachment D, Part 1.) Contact Information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.)*

August 2021

Site Owner and Operator:	FedEx 2929 Halvor Lane
Property Owner:	Cory Hart HCI Limited Partnership 3121 Mercedes Drive Monroe, LA 71291
Consultant:	BBJ Group, LLC 140 S Dearborn St, Suite 1520 Chicago, IL 60603 312-219-7787
DNR:	John Hunt 223 E Steinfest Road Antigo, WI 54409 715-701-9383



**D.2 Location Map(s)**

*Include a location map which shows:*

- (1) the feature that requires maintenance;*
- (2) the location of the feature(s) that require(s) maintenance: on and off the source property;*
- (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site;*
- (4) the extent and type of residual contamination; and*
- (5) all property boundaries.*

**D.3 Photographs of Cover/Barrier**

The berm has not been installed yet, and will be completed August/September 2021. Photographs will be submitted with the updated Maintenance Plan at that time.

**D.4 Continuing Obligations Inspection and Maintenance Log**

Use DNR Fillable Form [Form 4400-305](#)

## Monitoring Well Maintenance Plan Template

### D.1. Descriptions and Contact Information: (Form 4400-202, Attachment D, Part 1.)

See attached Monitoring Well Abandonment Work Plan from the Antea Group dated March 12, 2021. This monitoring well abandonment work plan details Antea Group's request to have existing monitoring, extraction, and recovery wells MW-3, MW-23, EW-9, EW-10, and RW-6 be abandoned. Antea Group is requesting that the monitoring and recovery wells be abandoned without replacement at the property. This work plan is pending approval of WI DNR.

#### Contact Information:

May 2021

Consultant:               Antea Group  
5910 Rice Creek Parkway, Suite 100  
St. Paul, MN 55126  
651-697-5117

DNR:                       John Hunt  
223 E Steinfest Road  
Antigo, WI 54409  
715-701-9383

### D.2. Location Map:

See attached Work Plan for well locations.

### D.3. Photograph of Monitoring Well:

Well photographs can be provided as required.

### D.4. Continuing Obligations Inspection and Maintenance Log

Antea Group will be tasked with inspecting and maintaining their Monitoring Wells.

CONSTRUCTION FIGURES

CONSTRUCTION PLANS FOR:

**FEDEX SITE IMPROVEMENTS**  
 CITY OF SUPERIOR, WISCONSIN  
 CONSTRUCTION PLANS FOR SITE GRADING, PARKING  
 LOT LAYOUT & STORMWATER CONTROLS.

**SPECIFICATION REFERENCE**

- 1.) THE WISCONSIN DNR SITE EROSION & SEDIMENT CONTROL STANDARDS SHALL APPLY.
- 2.) THE AUGUST 2020 CONSTRUCTION CODE OF THE CITY OF SUPERIOR, WISCONSIN SHALL APPLY.
- 3.) THE 2021 STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION SHALL APPLY.

**LEGEND**

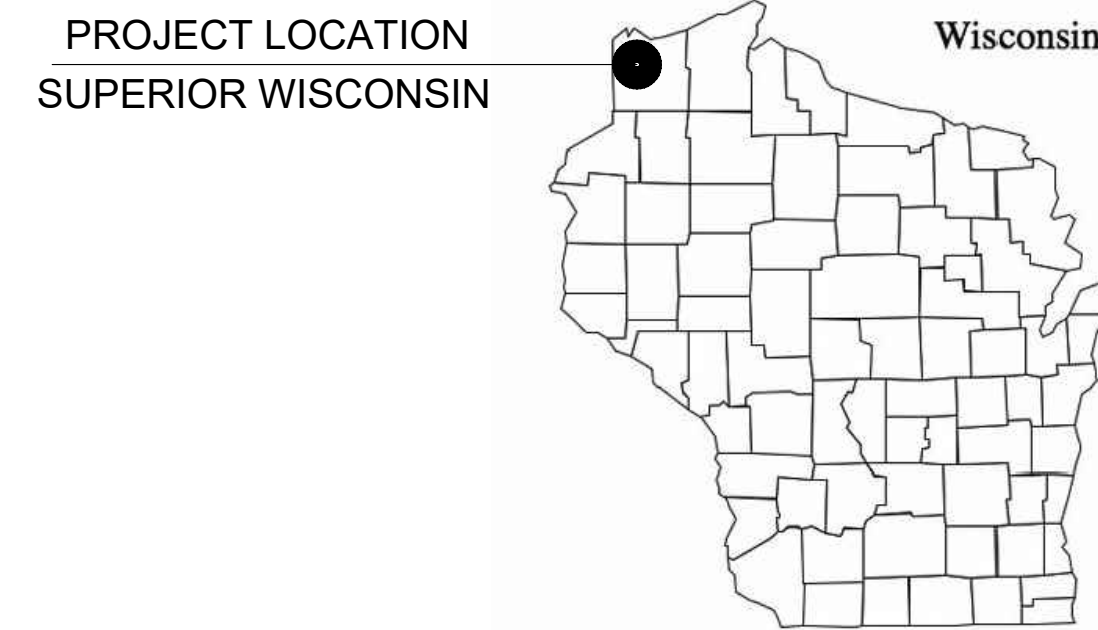
**EXISTING**

- PROPERTY LINE (SEE SEPARATE BOUNDARY SURVEY)
- UTILITY EASEMENT
- RIGHT OF WAY LINE
- X-X-X-X- CHAINLINK FENCE
- G-G-G-G- UNDERGROUND GAS
- UF-UF-UF- UNDERGROUND TELEPHONE
- ⊕ SANITARY SEWER W/ CLEANOUT, MH
- ⊕ STORM SEWER W/ MH, END SECTION, CB
- ⊕ UNDERGROUND ELECTRIC W/ L POLE
- ⊕ OVER HEAD ROUND ELECTRIC W/ P POLE
- PARKING STRIPE
- CONTOUR - MAJOR
- CONTOUR - MINOR
- CONCRETE
- CURB AND GUTTER
- BITUMINOUS
- ⊕ ELECTRIC PLUG
- ⊕ WATER HYDRANT, VALVE
- ⊕ SIGN
- ⊕ MONITORING WELL
- ⊕ GUARDPOST

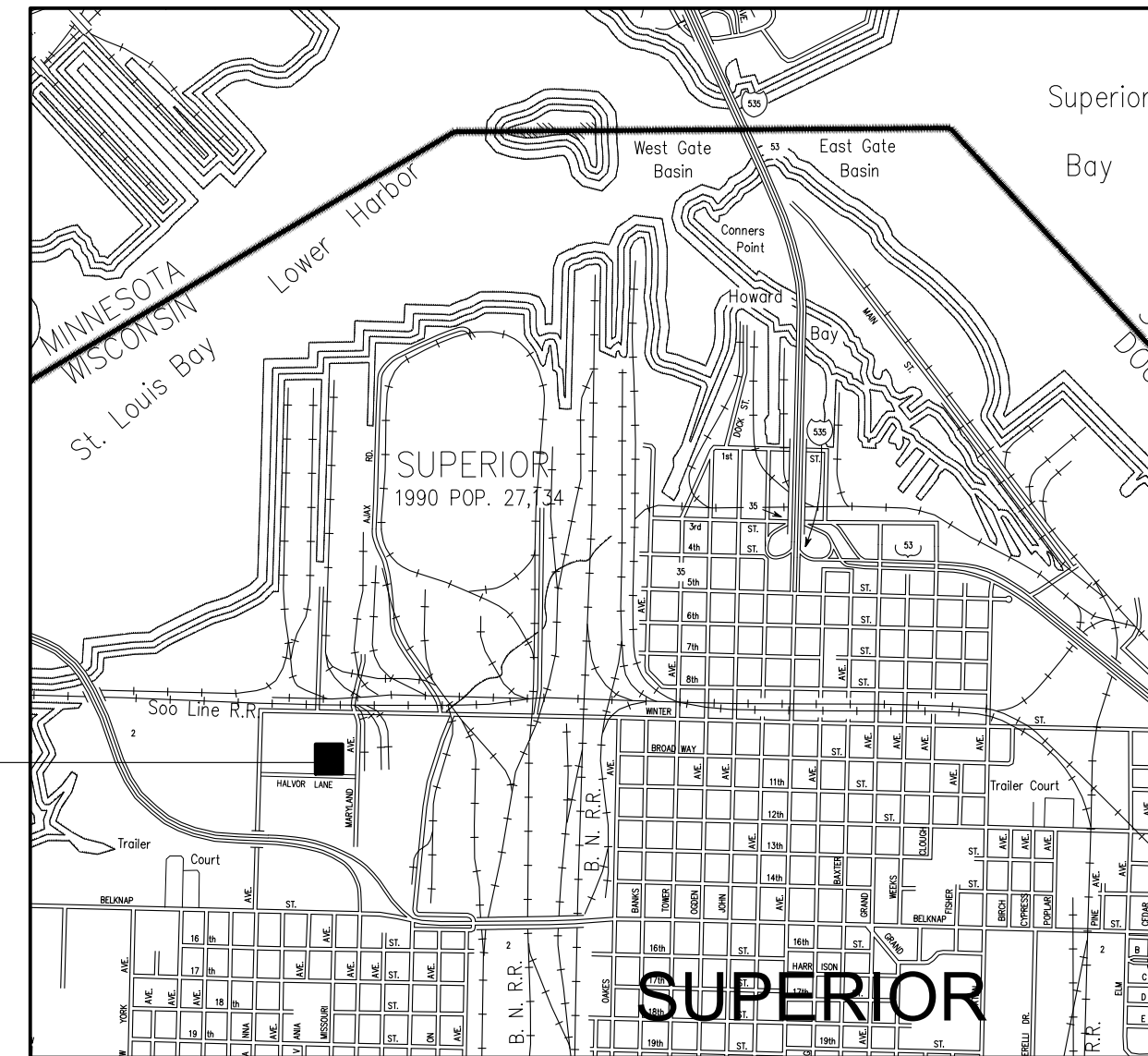
**PROPOSED**

- PROPOSED CONTOUR - MAJOR (5')
- PROPOSED CONTOUR - MINOR (1')
- PROPOSED BUILDING
- BITUMINOUS PAVEMENT

**VICINITY MAP**

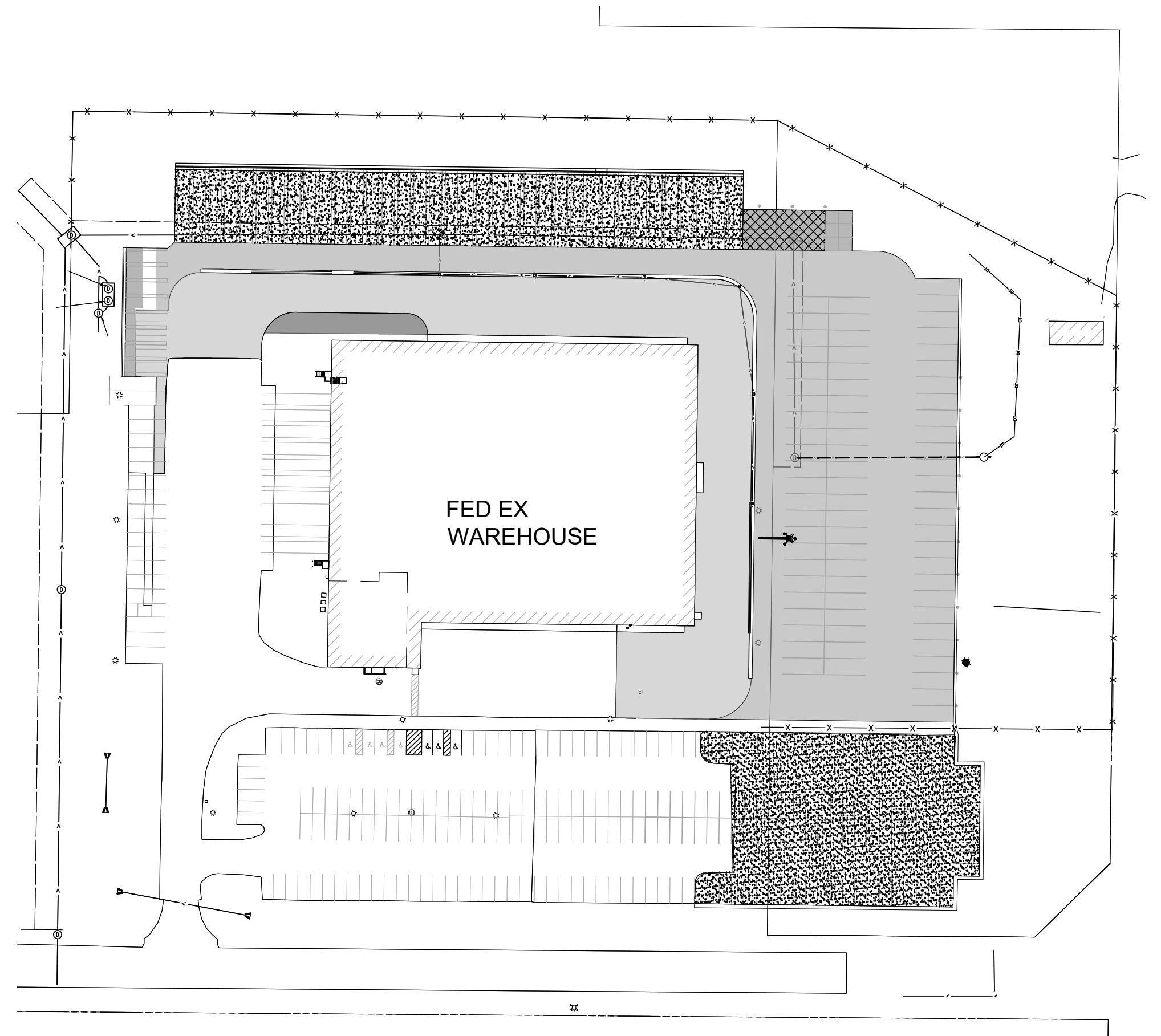


**LOCATION MAP**



**PROJECT SITE**

**SITE MAP**



**EXISTING UTILITY LOCATIONS**

THE CONTRACTOR SHALL VERIFY ALL EXISTING UNDERGROUND UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. ALL INPLACE UTILITIES MAY NOT BE SHOWN ON THIS PLAN & THOSE THAT ARE SHOWN, MAY NOT BE SHOWN IN THE EXACT LOCATIONS.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL "D". THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

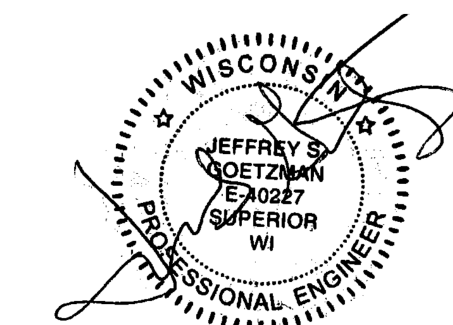


WISCONSIN'S ONE CALL CENTER  
 811  
 (800) 242.8511  
 EMERGENCY ONLY:  
 (262)432.7910  
 (877)500.9592  
<http://www.diggershotline.com>

**PROJECT LOCATION:**  
 DOUGLAS COUNTY  
 CITY OF SUPERIOR  
 SECTION 16, T 49 N, R 14 W  
 SE1/4

CONTRACTOR TO NOTIFY 911  
 PERSONNEL PRIOR TO ALL  
 ROAD CLOSURES

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN



JEFFREY S. GOETZMAN  
 07/19/2021 LIC. NO. 40227 DATE

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
C 100	TITLE SHEET
C 101	EXISTING CONDITIONS AND REMOVALS
C 102	LAYOUT PLAN
C 103	GRADING PLAN
C 104	GRADING DETAILS
C 105	PROFILES
C 106	CROSS SECTIONS
C 107	EROSION CONTROL
C 108	SWPPP
C 109	DETAILS
C 110	DETAILS

THIS PLAN SET CONTAINS 11 SHEETS

PLOT DATE: Jul 20, 2021 - 12:40pm  
 FILENAME: K:\g-m\JDC\Properties\18052000\04\_Production\01\_CAD\02\_Sheets\C101\_Title.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

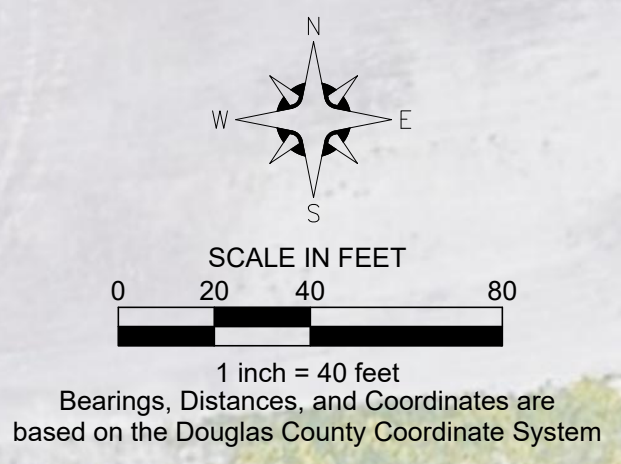
DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.  SIGNATURE: <i>Jeffrey S. Goetzman</i> DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	


 11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

**FedEx PARKING LOT EXPANSION**

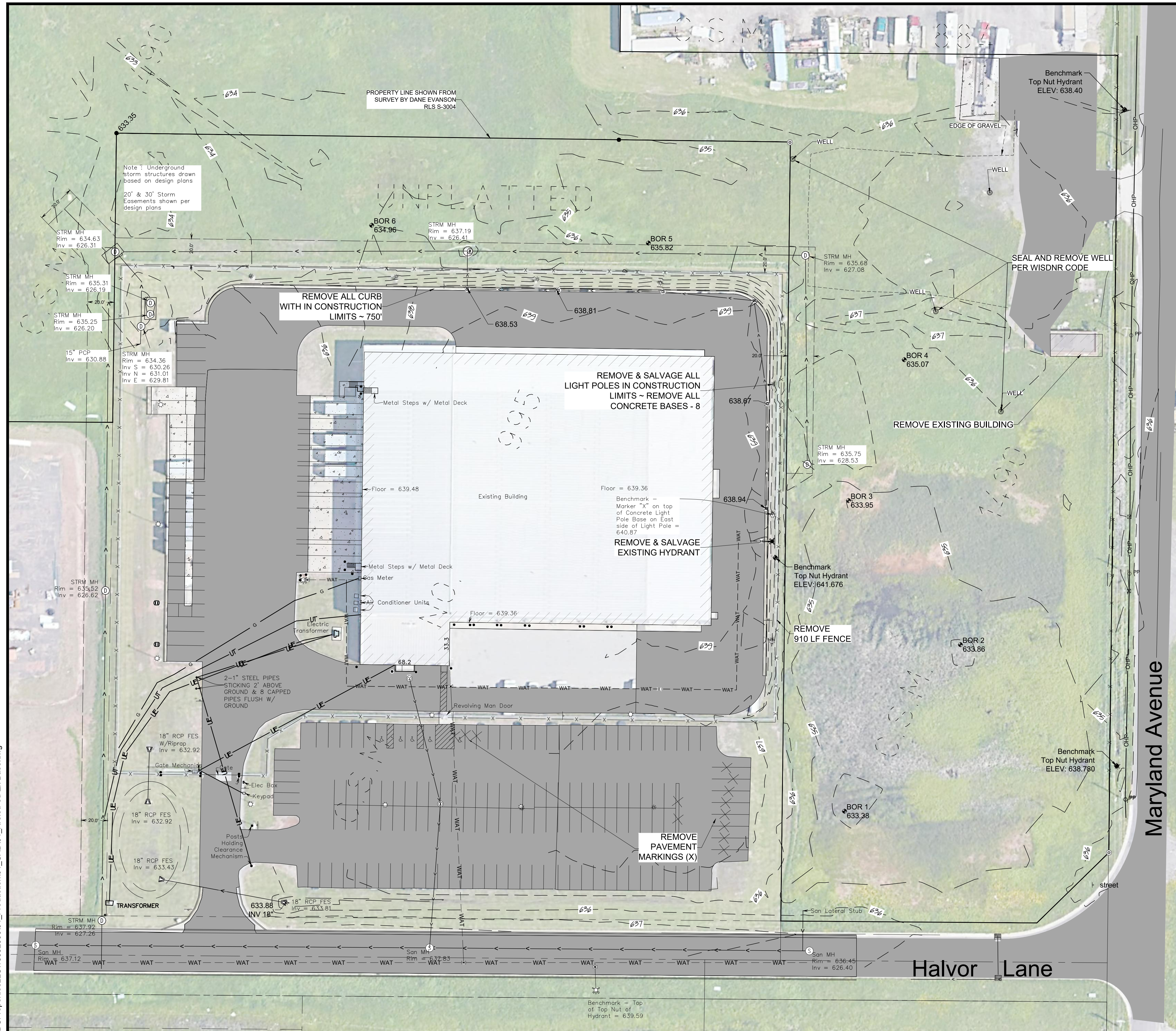
**TITLE SHEET**

PROJ. NO.	18052.000
DRAWING NO.	C100



**LEGEND**

---	PROPERTY LINE (SEE SEPARATE BOUNDARY SURVEY)
---	UTILITY EASEMENT
---	RIGHT OF WAY LINE
X X X X X X X X	CHAINLINK FENCE
---	UNDERGROUND GAS
---	UNDERGROUND TELEPHONE
---	SANITARY SEWER W/ CLEANOUT, MH
---	STORM SEWER W/ MH, END SECTION, CB
---	UNDERGROUND ELECTRIC W/ L POLE
---	OVER HEAD ROUND ELECTRIC W/ P POLE
---	PARKING STRIPE
---	CONTOUR - MAJOR
---	CONTOUR - MINOR
---	CONCRETE
---	CURB AND GUTTER
---	BITUMINOUS
⊕	ELECTRIC PLUG
⊕	WATER HYDRANT, VALVE
⊕	SIGN
⊕	MONITORING WELL
●	GUARDPOST



Maryland Avenue

Halvor Lane

PLOT DATE: Jul 20, 2021 - 12:40pm  
 FILENAME: K:\g-n\JDC\Properties\LCV1805200004\_Production\01\_CAD\01\_Xrefs\Fed Ex Base.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
DRAWN	JK	
CHECKED	JG	
SIGNATURE: <i>Jeffrey S. Goetzman</i>		DATE: 07/19/2021
NAME: Jeffrey S. Goetzman		LIC. NO.: 40227

11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

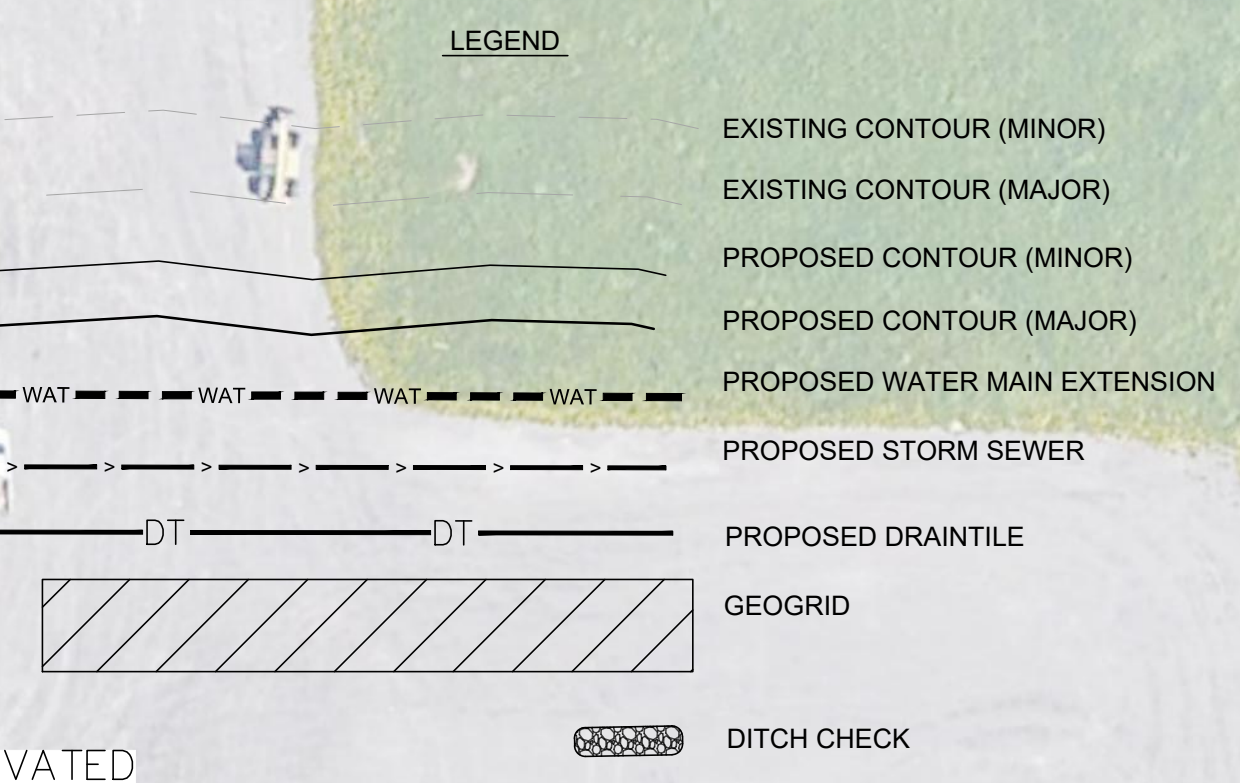
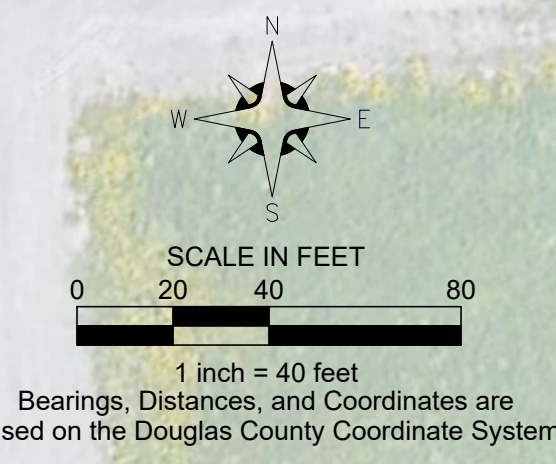
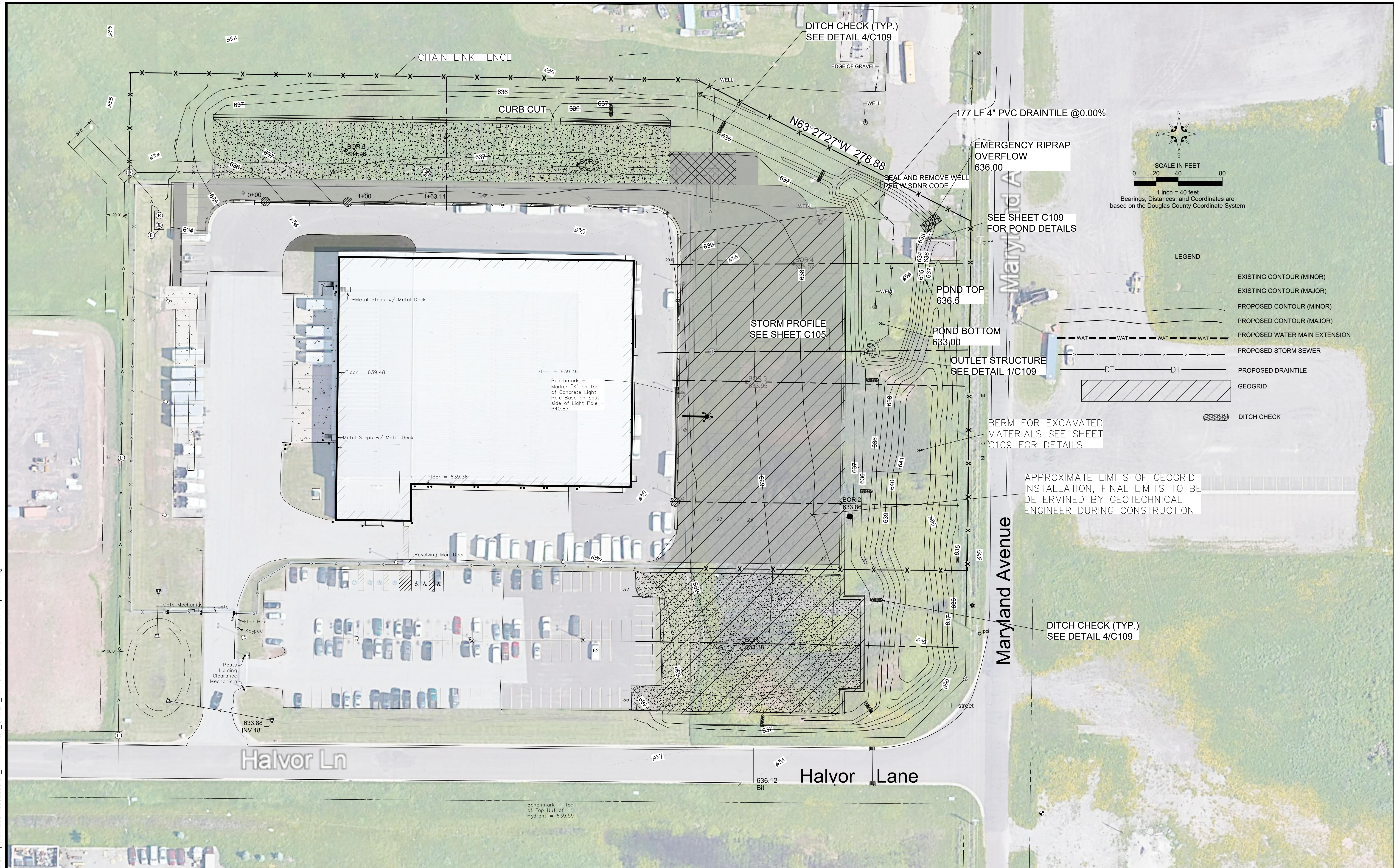
## FedEx PARKING LOT EXPANSION

## EXISTING CONDITIONS - REMOVALS

PROJ. NO.	18052.000
DRAWING NO.	C101



PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\LLC\18052000\04\_Production\01\_CAD\01\_Xreis\Fed Ex Pro Base-redevelopment.dwg



NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/7/2021	JG	STONE WEEPER DETAILS ADDED

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.  SIGNATURE:  DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

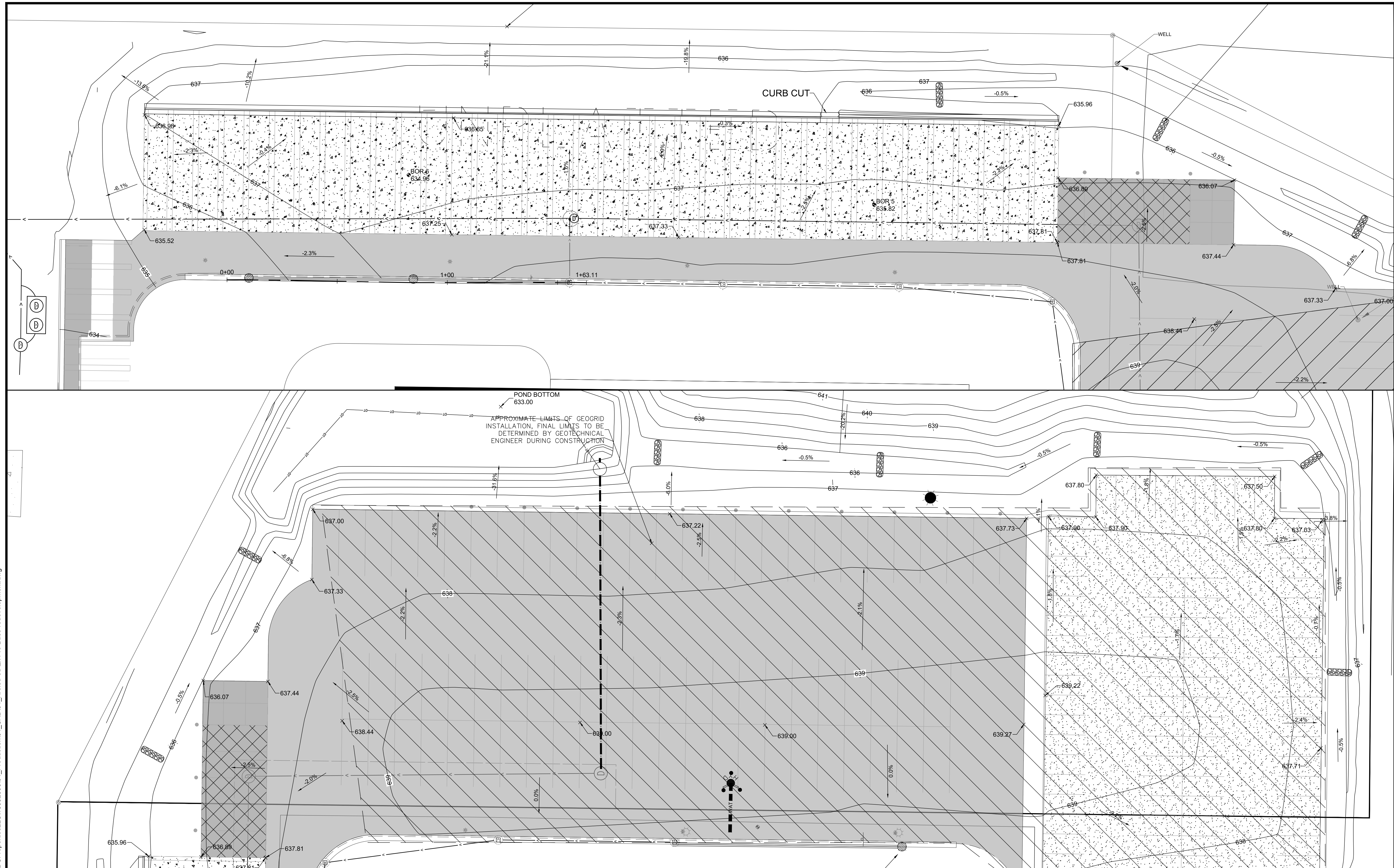
11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

## FedEx PARKING LOT EXPANSION

## GRADING PLAN

PROJ. NO.	18052.000
DRAWING NO.	C103

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\18052000\04\_Production\01\_CAD\01\_Xrais\Fed Ex Pro Base-redevelopment.dwg



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN. SIGNATURE: <i>[Signature]</i> DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

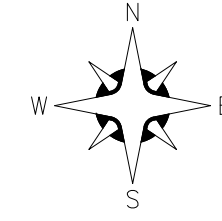


## FedEx PARKING LOT EXPANSION

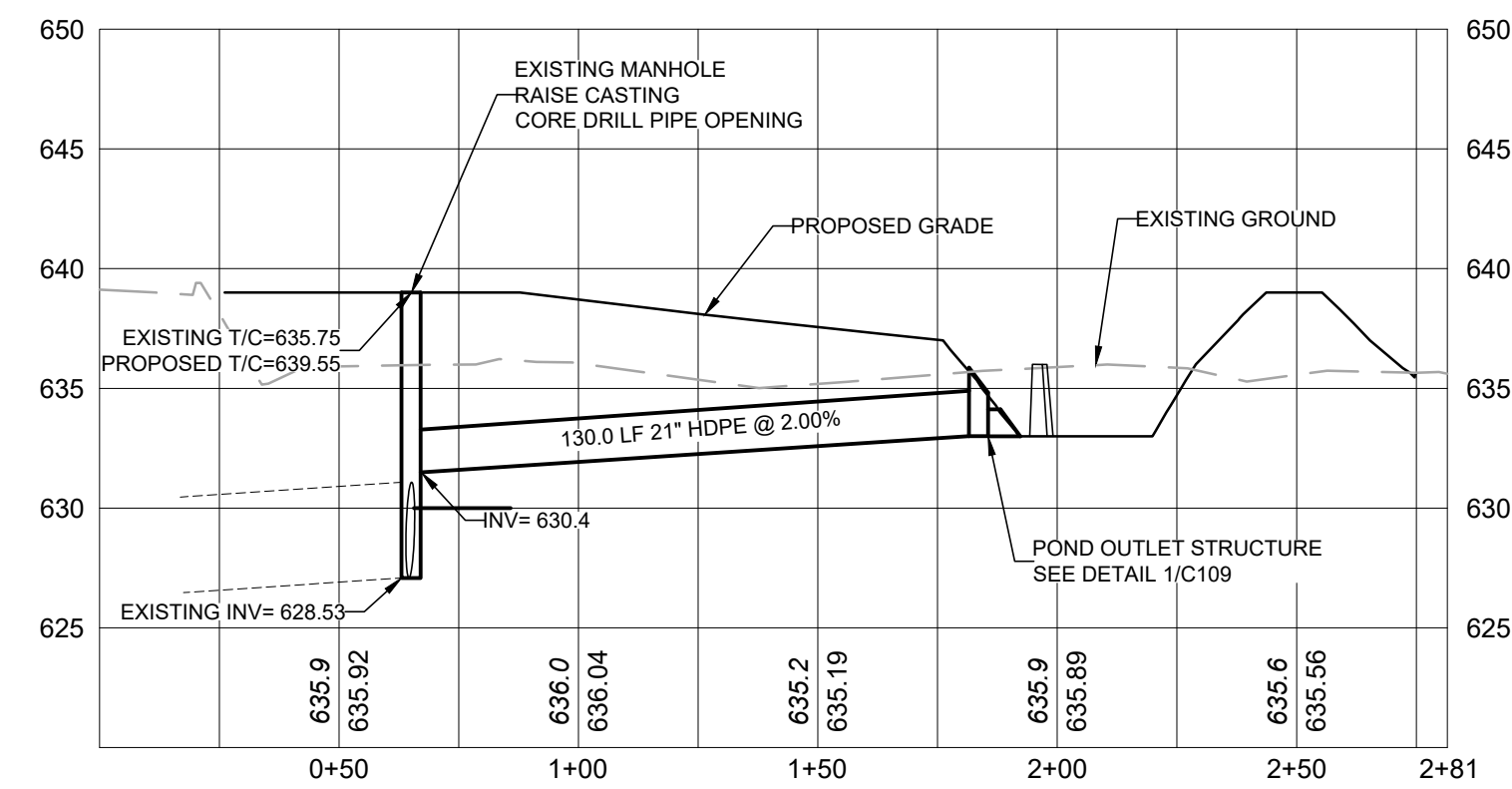
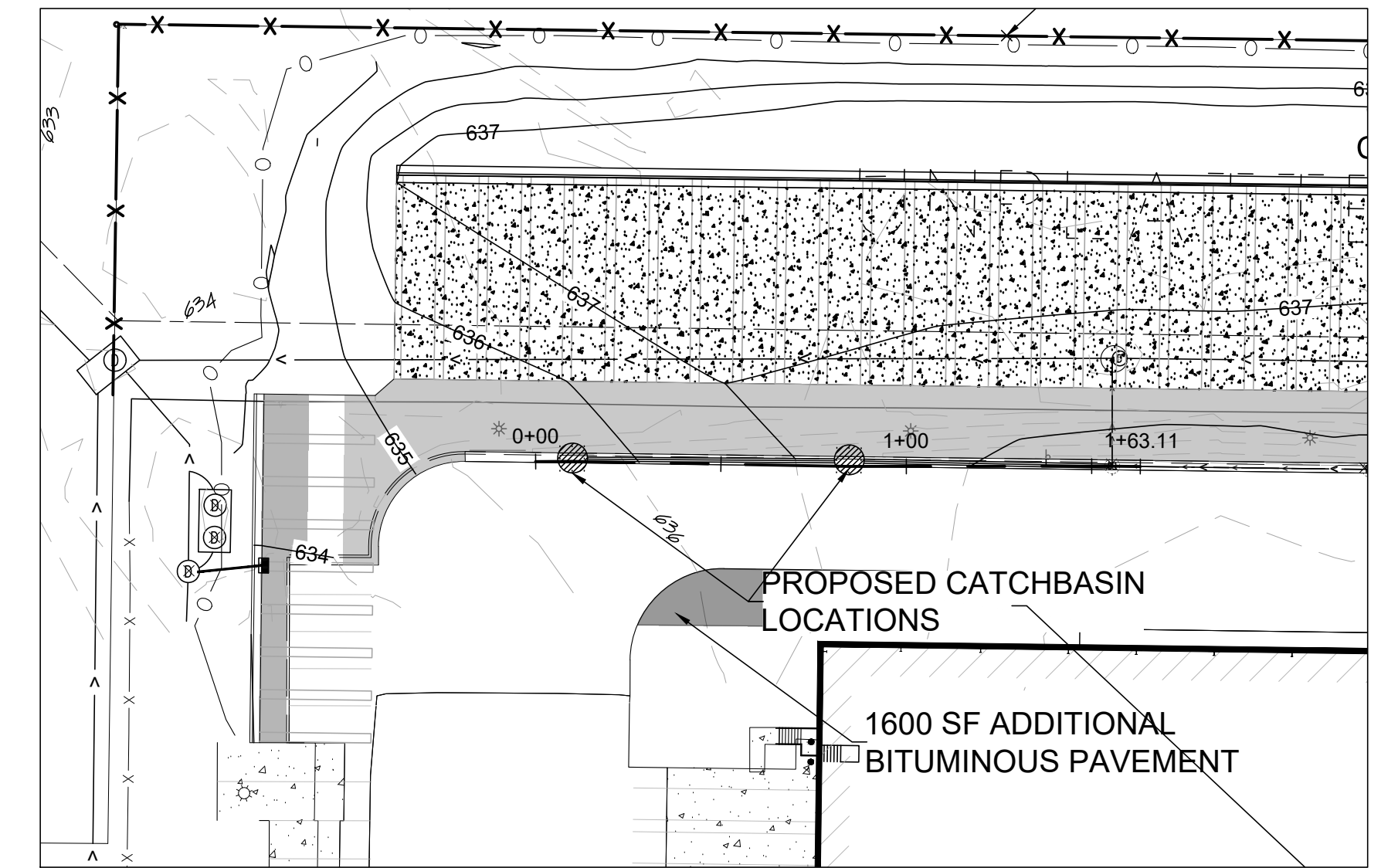
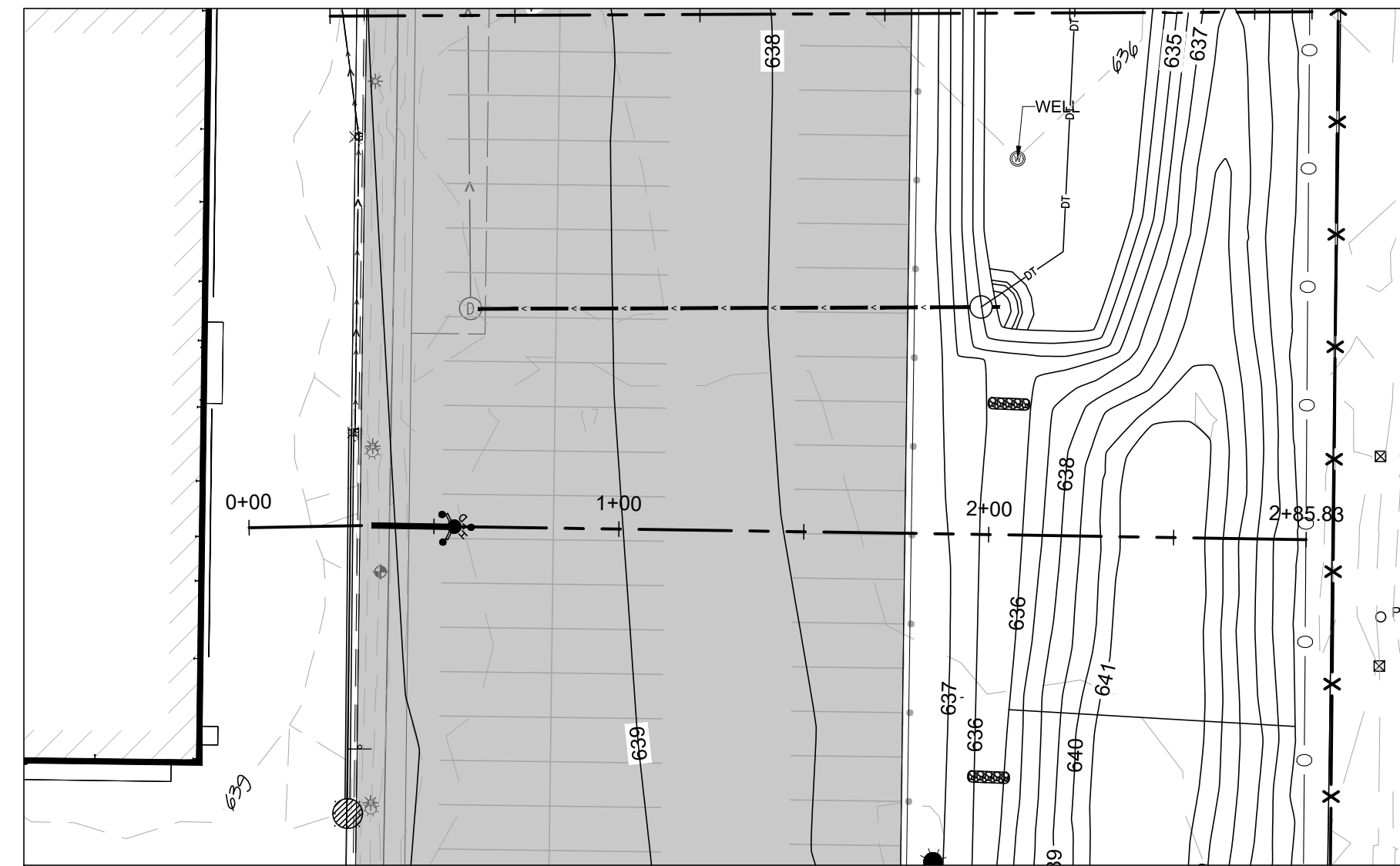
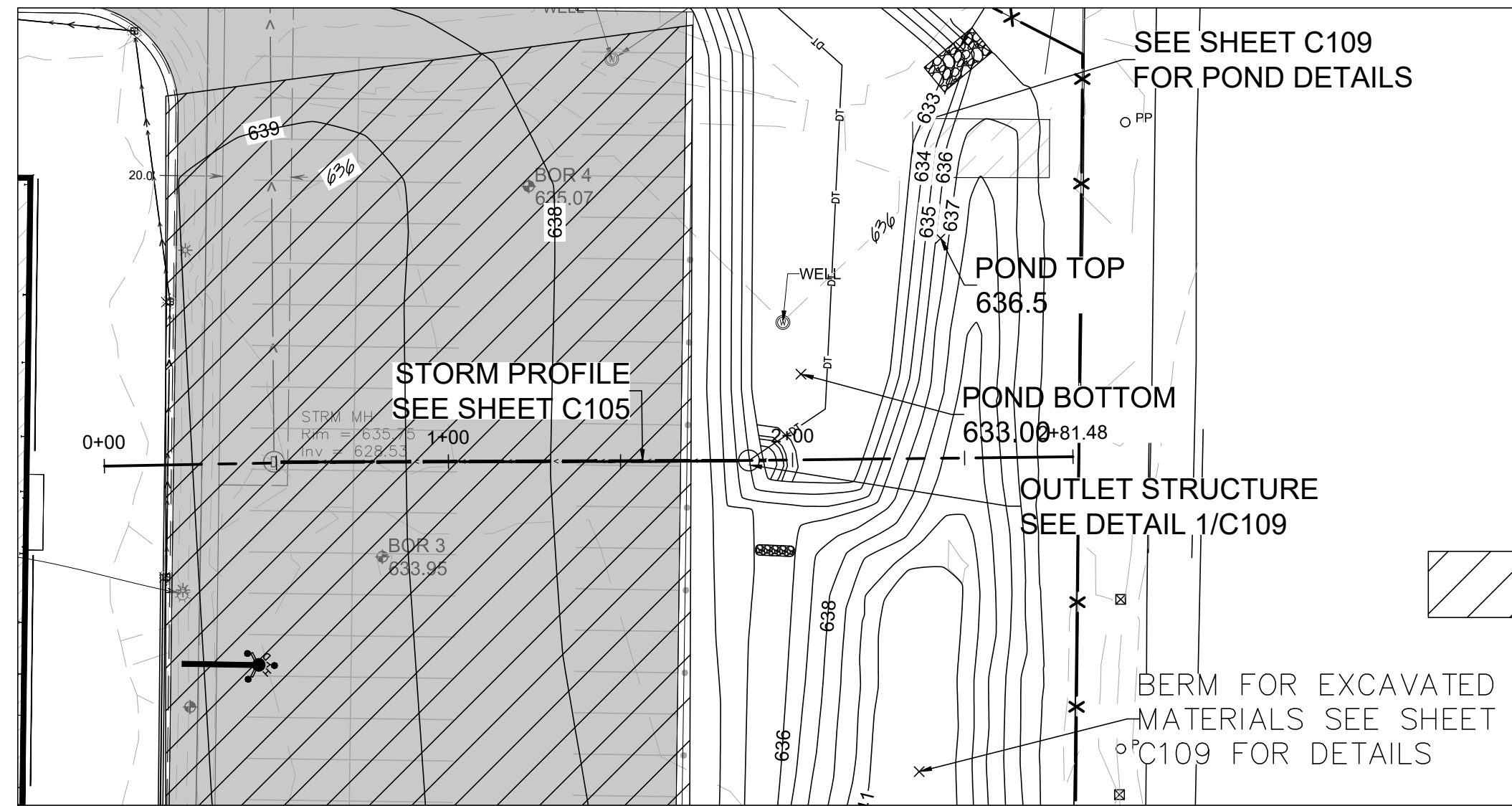
## GRADING DETAILS

PROJ. NO.	18052.000
DRAWING NO.	C104

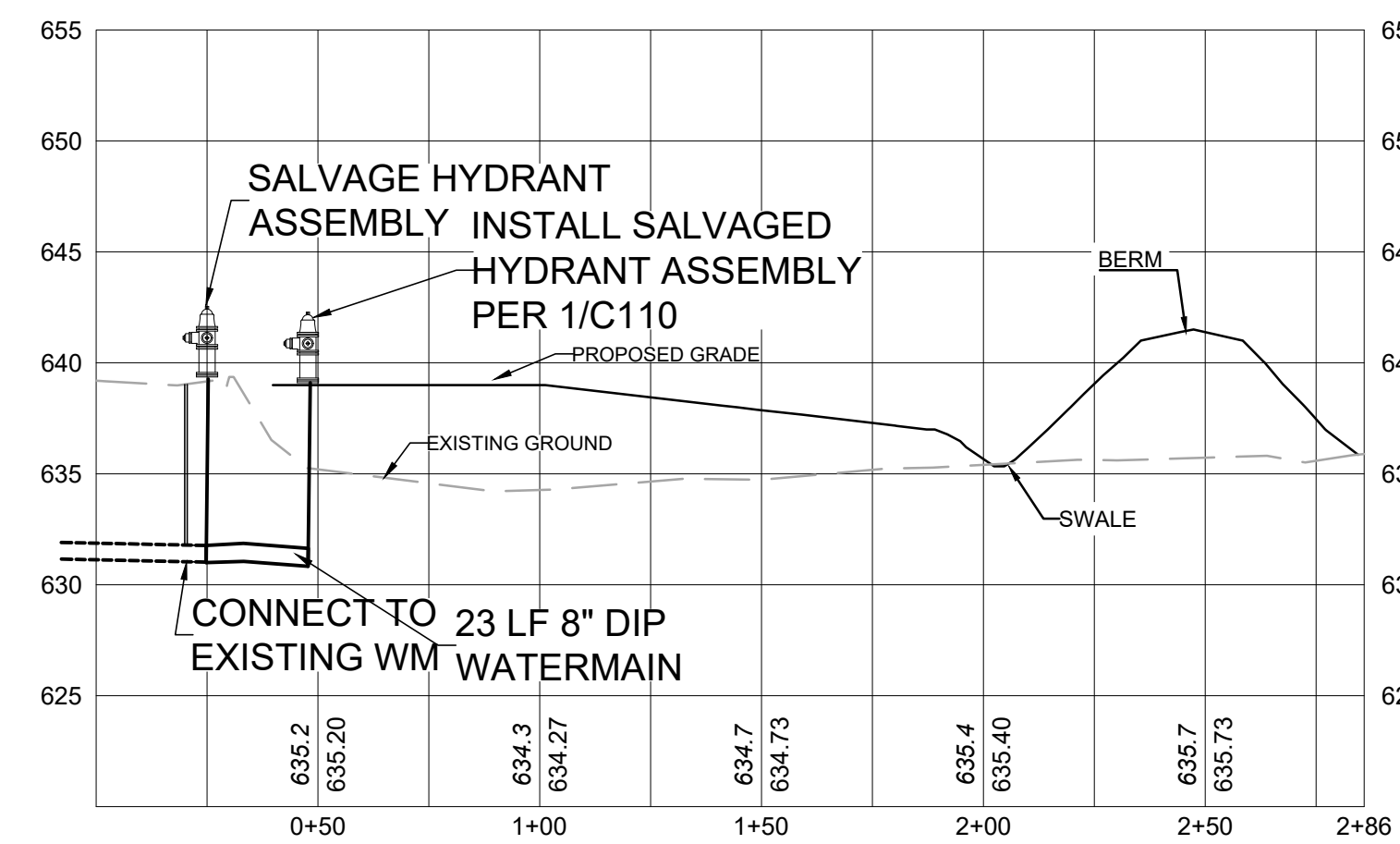




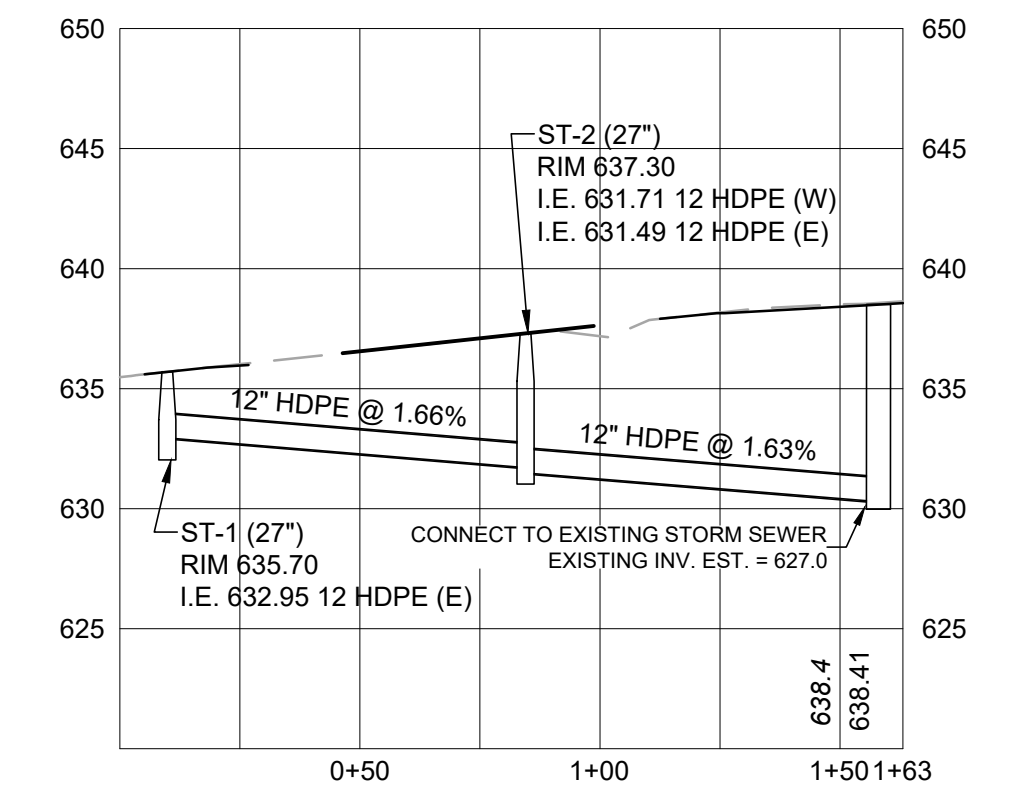
SCALE IN FEET  
 0 20 40 80  
 1 inch = 40 feet  
 Bearings, Distances, and Coordinates are based on the Douglas County Coordinate System



1 STORM WATER PIPING  
C105



2 HYDRANT RELOCATION  
C105



3 STORM WATER PIPING  
C105

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\18052000\04\_Production\01\_CAD\01\_Xrais\Fed Ex Pro Base-redevelopment.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/7/2021	JG	PROFILE 2 UPDATED WITH STONE WEEPER DETAILS

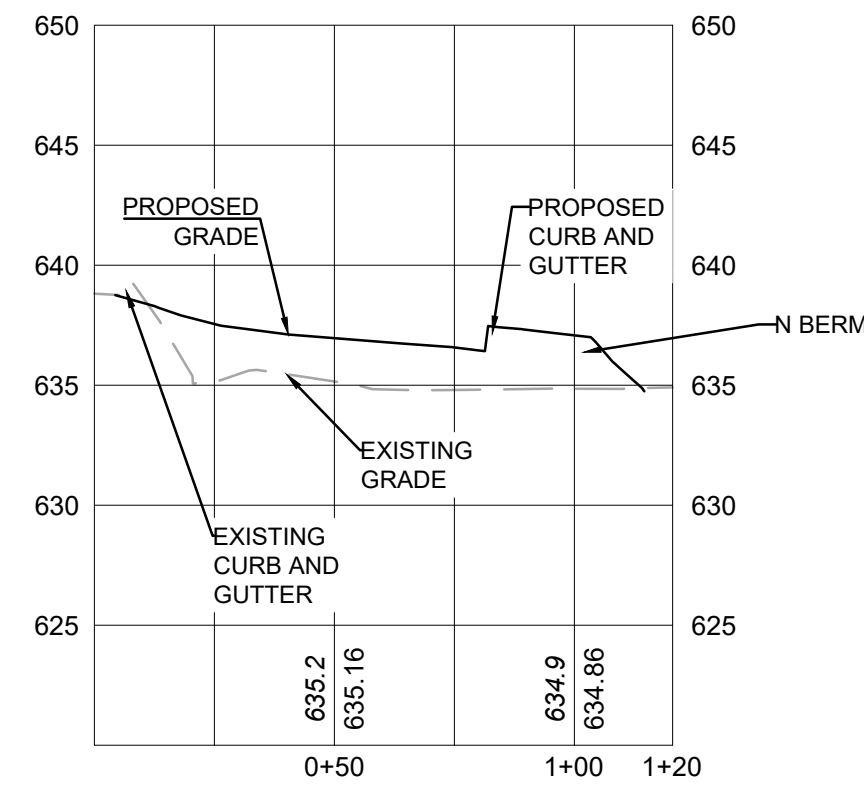
DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
DRAWN	JK, TM	
CHECKED	JG	
DATE	07/19/2021	

11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

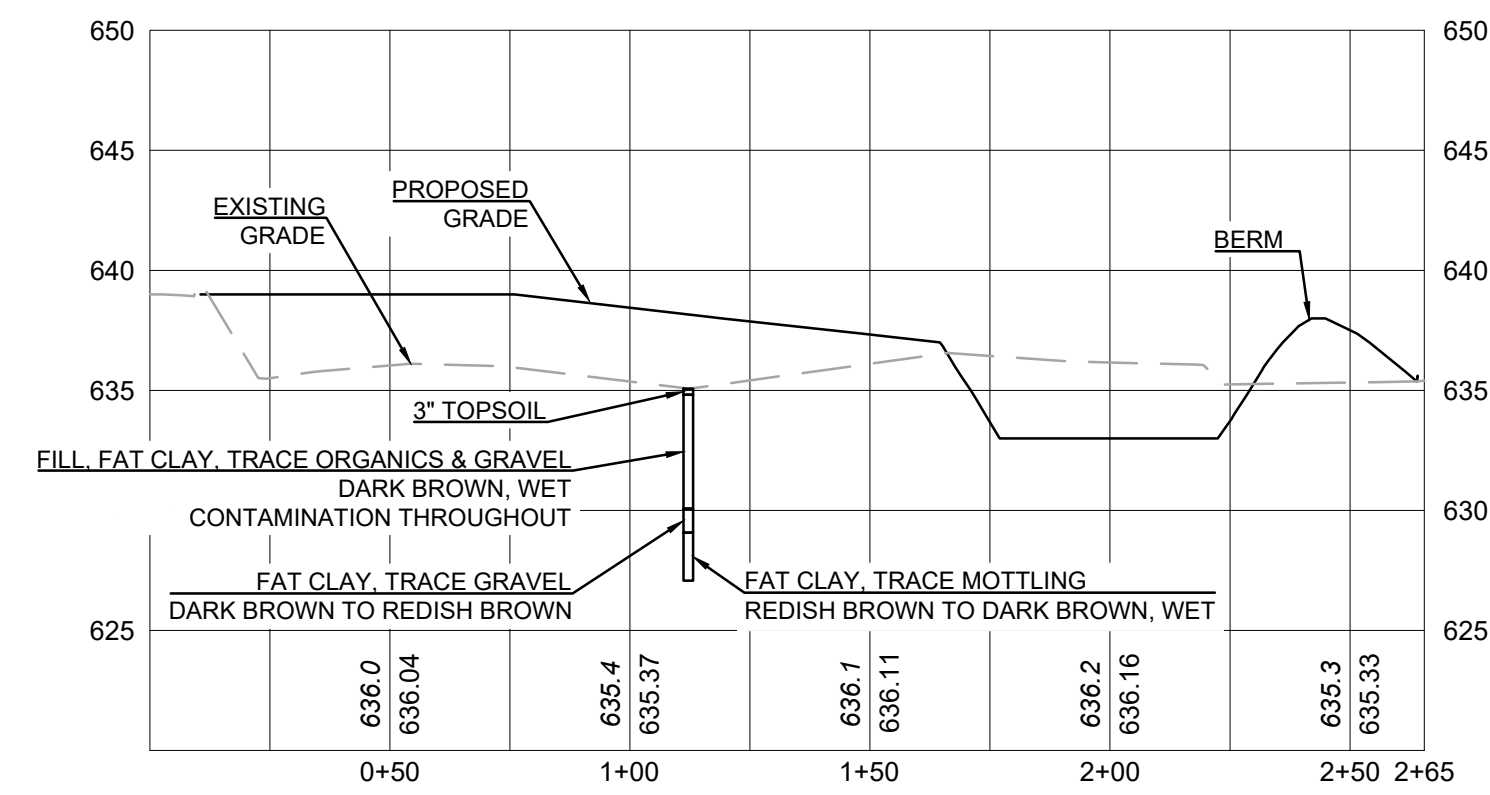
# FedEx PARKING LOT EXPANSION

# PROFILES

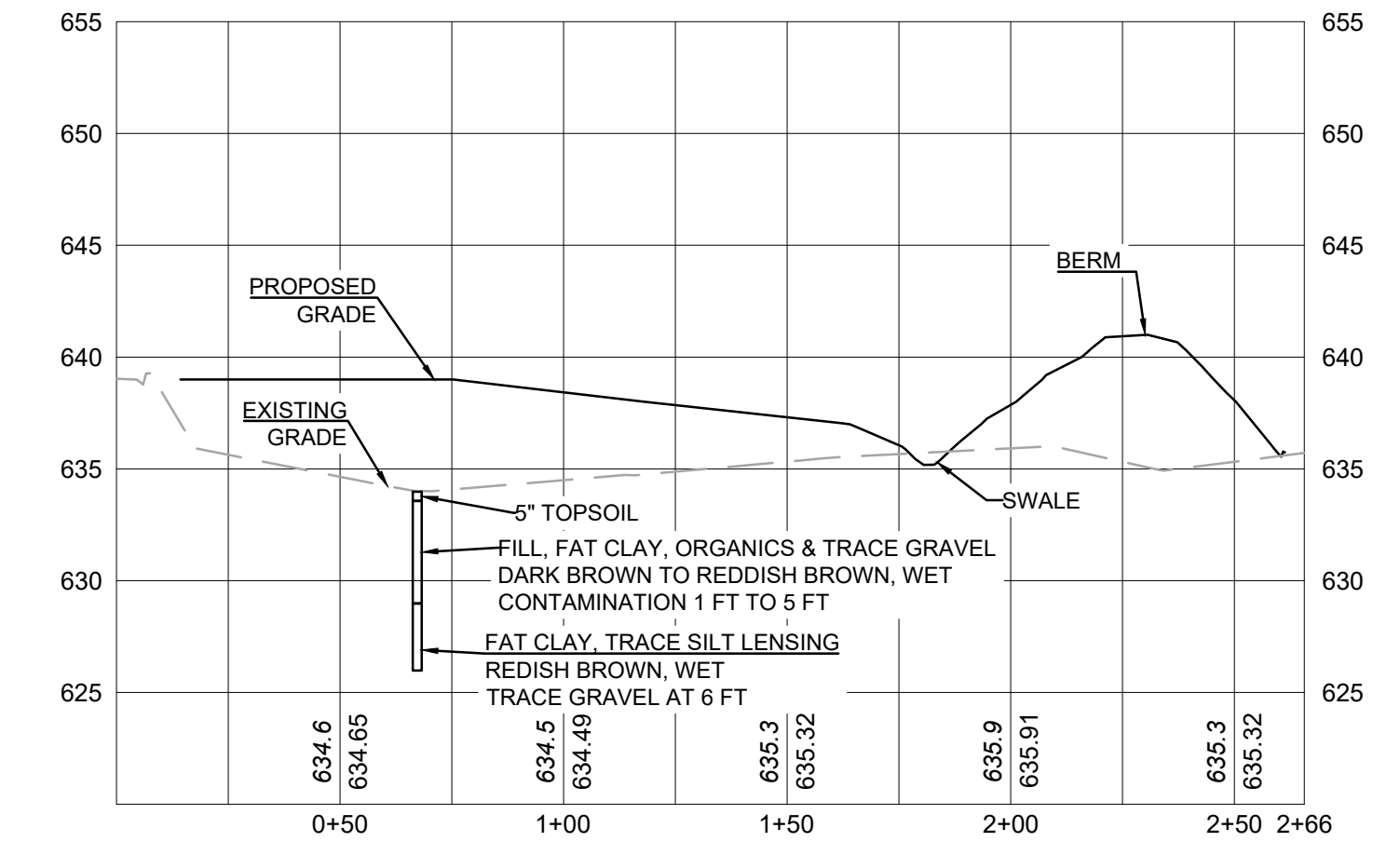
PROJ. NO.	18052.000
DRAWING NO.	C105



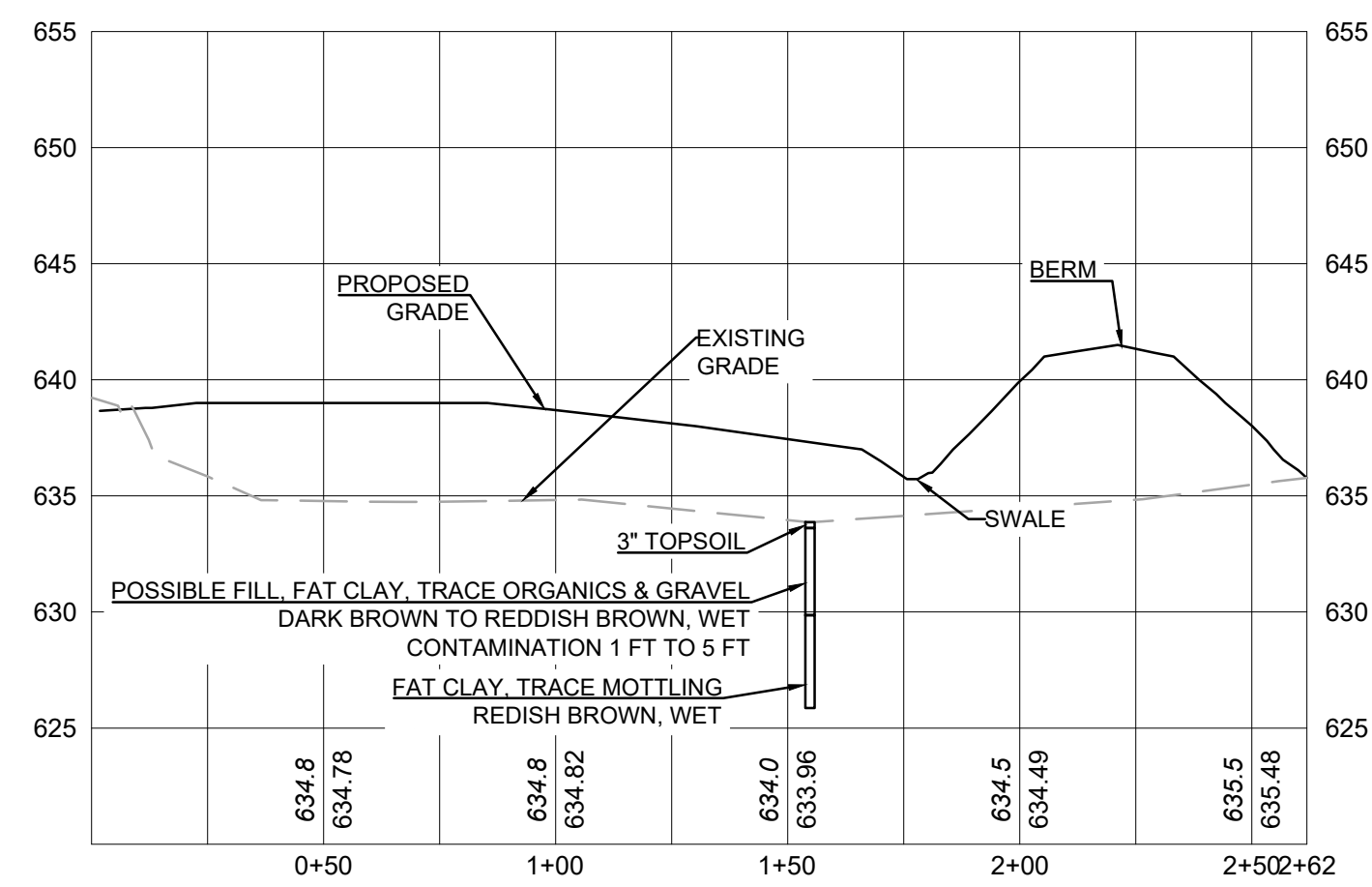
1 CONCRETE SECTION  
C106



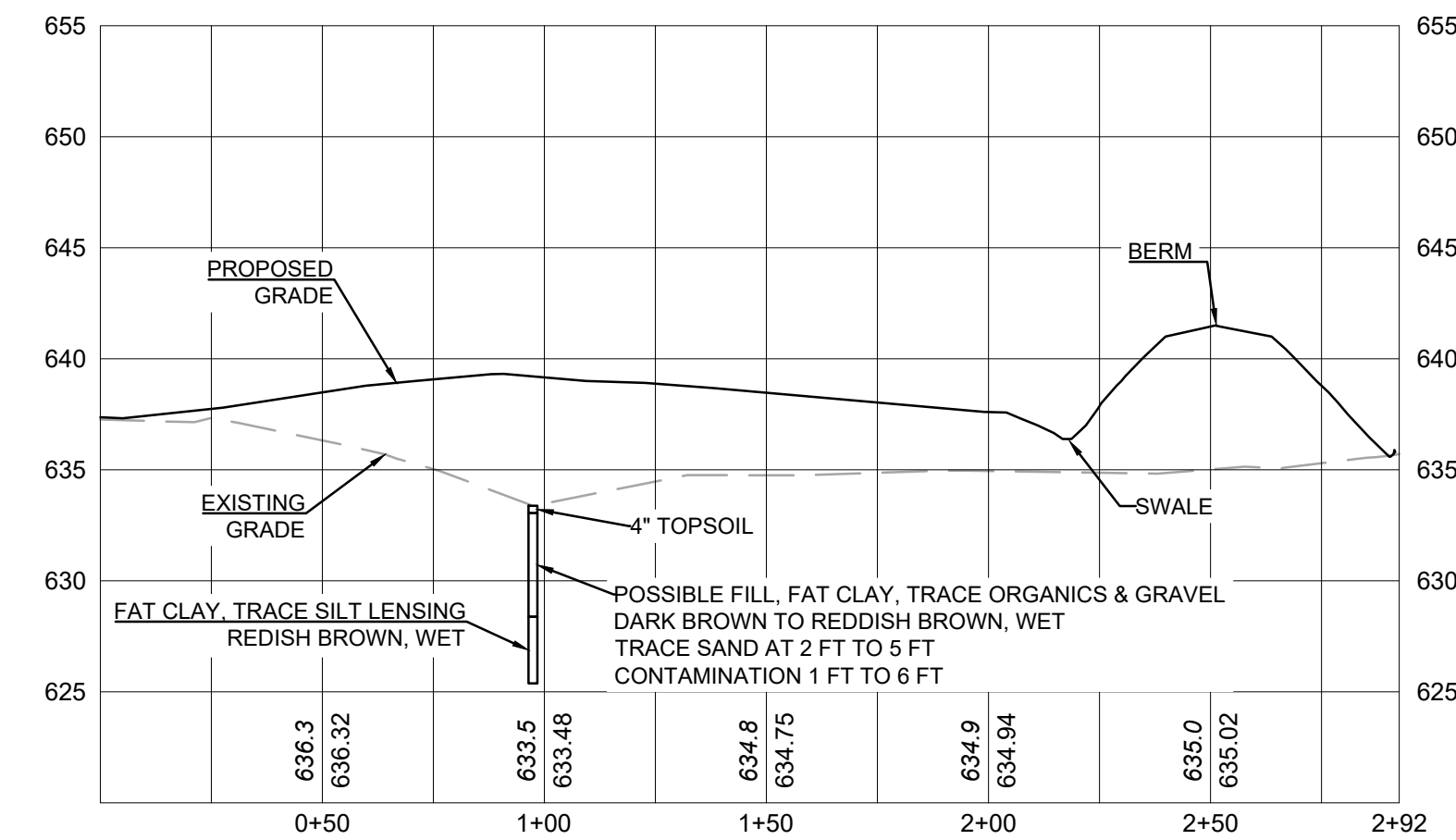
2 SOIL BORING 4  
C106



3 SOIL BORING 3  
C106




4 SOIL BORING 2  
C106



5 SOIL BORING 1  
C106

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\LC18052000\04\_Production\01\_CAD\01\_Xreis\Fed Ex Pro Base-redevelopment.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

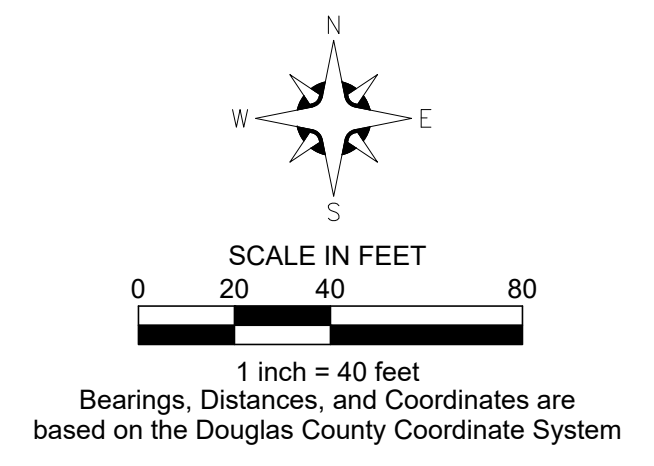
DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.  SIGNATURE:  DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	


 11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

## FedEx PARKING LOT EXPANSION

## CROSS SECTIONS

PROJ. NO.	18052.000
DRAWING NO.	C106



**LEGEND**

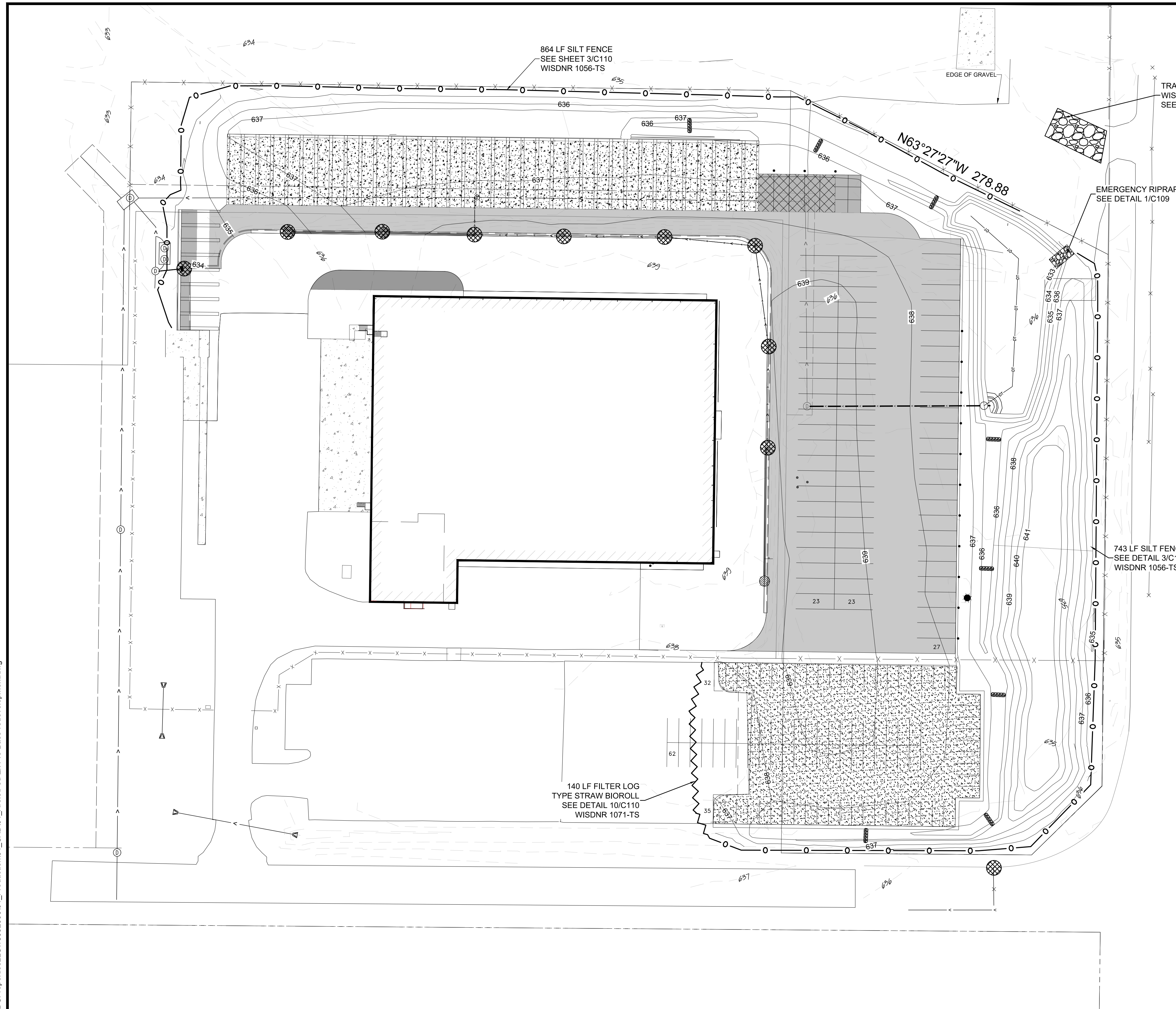
	SILT FENCE WISDNR 1056-TS
	INLET PROTECTION WISDNR 1060-TS TYPE C
	FILTER LOG TYPE STRAW BIOROLL

**NOTES**

- ALL DISTURBED AREAS SHALL BE RESTORED WITH 6" TOPSOIL AND TYPE 10 OR 70 SEED.
- CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL DEVICES, INCLUDING INSTALLATION, MAINTENANCE, AND REMOVAL.
- ALL STORM SEWER CONNECTIONS TO CITY OF SUPERIOR OWNED STRUCTURES SHALL BE TO CITY OF SUPERIOR ENVIRONMENTAL SERVICES DIVISION STANDARDS.
- CONTRACTOR TO PROVIDE TEMPORARY SOIL STABILIZATION AS DESCRIBED IN THE WISDNR TECHNICAL STANDARDS AND THE PLANS SEE TABLE A: WISCONSIN DNR TECHNICAL STANDARDS.
- NO BMPs REMOVED BEFORE PERMIT IS CLOSED OUT.

TABLE A: WISCONSIN DNR TECHNICAL STANDARDS

1052	NON-CHANNEL EROSION MAT
1053	CHANNEL EROSION MAT
1056	SILT FENCE
1057	TRACKOUT CONTROL PRACTICES
1060	STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES
1061	DE-WATERING PRACTICES FOR SEDIMENT CONTROL
1067	GRADING PRACTICES FOR EROSION CONTROL - TEMPORARY
1071	INTERIM MANUFACTURED PERIMETER CONTROL & SLOPE INTERRUPTION



PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-n\JDC\Properties\LC1805200004\_Production\01\_CAD\01\_Xrefs\Fed Ex Pro Base-redevelopment.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/17/2021	JG	INLET PROTECTION AND EMERGENCY OVERFLOW DETAILS ADDED

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN. SIGNATURE:  DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

**FedEx PARKING LOT EXPANSION**

<b>EROSION CONTROL</b>	PROJ. NO. 18052.000
	DRAWING NO. <b>C107</b>

# STORM WATER POLLUTION PREVENTION PLAN

## PROJECT DESCRIPTION

THIS PROJECT INCLUDES GRADING SUBSURFACE PREPERATION AND PAVING OF PARKING LOTS AT THE FEDEX WAREHOUSE. THE SITE DEVELOPMENT WILL INCLUDE 2 BITUMINOUS PAVED PARKING LOTS, POND, INSTALLATION STORMWATER PIPE, MOVING A HYDRANT AND FENCING.

SWPPP IMPLEMENTATION CONTACTS			
AGENCY	PERMIT		PHONE/ EMAIL
PROJECT MANAGER	N/A	CLAY VANICE	913.461.5528 cvanice@jonesdevco.com
CONTRACTOR'S EROSION CONTROL SUPERVISOR	N/A	T.B.D.	PHONE EMAIL
CITY OF SUPERIOR	N/A	MICHAEL KRICK	XXX.XXX.XXXX krickm@ci.superior.wi.us
PROJECT ENGINEER	N/A	JEFF GOETZMAN, PE	218.491.7385 jeff.goetzman@tdka.com
WISCONSIN DNR	WPES	MATTHEW JACOBSON	715.928.0485 matthew.jacobson@wisconsin.gov

## TIMING OF BMP INSTALLATION:

THE CITY OF SUPERIOR AND THE WISCONSIN STATE DEPARTMENT OF NATURAL RESOURCES ARE THE AGENCIES RESPONSIBLE FOR PERMITTING THE PROPOSED SITE DISTURBANCES AND PROPOSED STORMWATER CONTROLS. A PERMIT IS REQUIRED FROM BOTH AGENCIES PRIOR TO CONSTRUCTION RELATED ACTIVITIES, INCLUDING THE INSTALLATION OF EROSION CONTROL MEASURES SHALL BEGIN.

- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION/RESTORATION AS DISPLAYED ON THE APPROVED PLAN, AND SHALL MEET THE WPDES PERMIT PART 2.4 CONSTRUCTION SITE POLLUTION CONTROL REQUIREMENTS.
- ONCE BMPS AND EROSION CONTROL DEVICES HAVE BEEN INSTALLED, A PRE-CONSTRUCTION INSPECTION WITH THE CITY OF SUPERIOR ESD IS REQUIRED. UPON APPROVAL, CONSTRUCTION ACTIVITIES MAY BEGIN.
- UNTIL THE SITE HAS ACHIEVED FINAL STABILIZATION, THE CONTRACTOR MUST PERFORM AND RECORD STORMWATER CONSTRUCTION INSPECTIONS. STORMWATER INSPECTIONS MUST BE RECORDED BY A COMPETENT (CERTIFIED/TRAINED) INDIVIDUAL AND SUBMITTED TO THE CITY OF SUPERIOR ESD. AT A MINIMUM, STORMWATER INSPECTIONS MUST BE COMPLETED WITHIN 7 DAYS OF THE LAST INSPECTION. STORMWATER INSPECTIONS ARE ALSO REQUIRED WITHIN 24 HOURS OF ANY RAIN EVENT THAT IS  $\geq 0.5"$ . RECORDS AND UPDATED STORMWATER PLAN MUST BE MAINTAINED ONSITE AND PERIODICALLY SUBMITTED TO THE CITY OF SUPERIOR ESD. THE CONTRACTOR SHALL TAKE RECORD PHOTOS OF PRE AND POST CONSTRUCTION SITE CONDITIONS AND INCLUDE WITH THE STORMWATER INSPECTION REPORTS. ANY CHANGES MADE TO THE APPROVED STORMWATER MANAGEMENT PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY OF SUPERIOR ESD PRIOR TO BEING IMPLEMENTED. ALL APPROVED CHANGES MUST BE PROVIDED TO THE WISCONSIN DNR.
- CITY OF SUPERIOR SHALL BE CALLED WHEN SITE REACHES 70% GOOD VEGETATIVE COVER TO SET UP FINAL INSPECTION; (E/S CONTROL SHALL STILL BE IN PLACE UNTIL AFTER N.O.T. IS ISSUED)
- ONCE N.O.T. INSPECTION IS PASSED THE E/S CONTROL BMPS WILL BE REMOVED AND CONTRACTOR SHALL PROVIDE OWNER WITH INFORMATION TO SUBMIT WISDNR N.O.T. FOR CONSTRUCTION STORMWATER PERMIT. ONCE N.O.T. HAS BEEN ACCEPTED, THEREFORE TERMINATING THE SWM PERMIT COVERAGE; NO MORE WORK SHALL OCCUR AFTER THIS POINT. ALL BMPS MUST REMAIN IN PLACE UNTIL N.O.T IS ISSUED.
- ALL DISTURBED AREAS SHALL REACH FINAL STABILIZATION PRIOR TO THE END OF THE 2021 CONSTRUCTION SEASON.
- PERMANENT AND TEMPORARY SEDIMENT TRAPS AND BASINS (IF APPLICABLE) WILL BE CONSTRUCTED BEFORE ANY SITE DISTURBANCES ARE PERMITTED.
- DITCHES/ WET SWALES SHALL BE EXCAVATED TO GRADING GRADE AND PROTECTED WITH BALE CHECKS AND SILT FENCE UNTIL ROAD AND UTILITY CONSTRUCTION HAS BEEN STABILIZED. FINAL DITCH GRADES AND FILTER MEDIUM SHALL BE PLACED PRIOR TO TURF ESTABLISHMENT.
- TOPSOIL, SEED, EROSION CONTROL BLANKET AND NECESSARY ADDITIONAL TEMPORARY EROSION CONTROL BMPS (IF APPLICABLE) SHALL BE PLACED WITHIN 7 DAYS OF COMPLETION OF ANY EMBANKMENT (WisDNR 1059).
- PLACEMENT OF RIPRAP SHALL BE COMPLETED WITHIN 24 HOURS OF CULVERT PLACEMENT, AND DONE IN ONE CONTINUOUS OPERATION.
- DISTURBED AREAS IN WHICH CONSTRUCTION ACTIVITIES HAVE CEASED OR WILL BE SUSPENDED FOR 7 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT BMPS FOR EROSION.

## CALCULATIONS

TOTAL DISTURBED AREA = 5.07 ACRES  
 POST CONSTRUCTION IMPERVIOUS AREA = 7.14 ACRES  
 EXISTING IMPERVIOUS AREA = 4.67 ACRES  
 IMPERVIOUS NET = 2.47 ACRES  
 (INCREASE)

## CONTACTS

THE SWPPP ENGINEER IS:  
 JEFF GOETZMAN, P.E.  
 TKDA - 11 EAST SUPERIOR STREET  
 DULUTH, MN 55811  
 218.724.8578  
 jeff.goetzman@tkda.com

## CONSTRUCTION NOTES

CONSTRUCTION SHALL BE GOVERNED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSTRUCTION SITE EROSION & SEDIMENT CONTROL STANDARDS AND THE CITY OF SUPERIOR STORMWATER MANAGEMENT STANDARDS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL BMPS FOR THE DURATION OF THE PROJECT.

THE CONTRACTOR SHALL KEEP THE INSPECTION AND MAINTENANCE LOGS IN ACCORDANCE WITH THIS SWPPP, ALL PERMITS, ALL INSPECTION AND MAINTENANCE RECORDS AND DESIGN CALCULATIONS. THE CONTRACTOR SHALL MAINTAIN A RESPONSIBLY SIZED STOCKPILE OF EROSION CONTROL DEVICES.

- The current State of Wisconsin Department of Natural Resources and City of Superior Stormwater Management requirements shall apply. Contractor will be permittee for the WPDES stormwater construction permit for this project - Contractors signature on permit is required. Submit Initial Erosion Control (EC) schedule at or before PreCon. Submit EC schedule alterations/adjustments weekly thereafter for Engineers approval.
- The Contractor is responsible for EC Quality Control on this project. Contractor shall phase/sequence the project to minimize exposure to erosion. Contractor shall place or otherwise construct erosion control and sediment containment devices to minimize the runoff, tracking and sediment loss from disturbed areas of the project site.
- Sediment and erosion control devices shall be functional before site is disturbed. See "Timing of BMP Installation on sheet C107 for further details.
- Total disturbed area is 5.07 acres, beginning impervious area is 4.67 acres, and post construction impervious area will be 7.14 acres.
- Receiving water is St Louis River.
- Disturbed slopes not actively worked shall be protected from soil erosion with temporary or permanent cover within permit requirements but in no case greater than 7 days of being worked. Use erosion control blanket with soil staples, or engineer approved equal (WisDNR 1052).
- At minimum, the following controls will be implemented at the construction site:
  - Trackout controls
  - Sediment control logs shall be used in conjunction with other erosion BMPs.
  - Rock ditch checks, or approved equal, are to be used to reduce ditch velocities and reduce erosion (WisDNR 1062).
  - Storm inlets and outlet area shall be protected with rip rap.
  - Stone Tracking Pad shall be constructed at site entrance to control sediment tracking (WisDNR - 1057).
  - Storm inlets shall be continuously protected by Type D-M or D-HR bag device, rock bag combination as necessary (WisDNR 1060).
  - Permanent vegetation shall be seeded/planted and protected immediately after topsoil is re-spread.
  - Control all site waste, debris, material storage, concrete washout, to prevent impacts to any drainage way.
  - All exposed soil areas with a slope of 3:1 or steeper, that have a continuous positive slope to a special water must have temporary erosion protection or permanent cover within 3 days after the area is no longer actively being worked. All other slopes that have a continuous positive slope to a special water must have temporary erosion protection or permanent cover within 7 days after the area is no longer actively being worked.
- All slopes and ditches shall be stabilized prior to opening new culverts into existing drainage ways.
- If any stockpile is to remain in place for more than 3 days, sediment and erosion control devices shall be used.
- Water pumped or otherwise discharged from the site during construction dewatering shall be pumped through a non-woven fabric dewatering bag (WisDNR 1061).
- Site dust generation must be controlled by application of water by spray trucks or similarly effective means of dust control (WisDNR 1068).
- The contractor shall take all possible precautions to prevent appreciable soil tracking onto roadways. Where sediment has been tracked-out from the site onto the surface of off-site streets, other paved areas, and sidewalks, the deposited sediment must be removed by the end of the same work day in which the trackout occurs or by the end of the next work day if track-out occurs on a non-work day. The tracked sediment must be removed by dry sweeping, wet sweeping, shoveling, vacuuming, or by using other similarly effective means of sediment removal. Hosing or sweeping tracked out sediment into any stormwater conveyance, storm drain inlet, or surface water is prohibited (WisDNR 1057).
- Stabilized construction entrance(s) shall be removed and area restored after grading is complete. This may only occur once all traffic ceases on site. Including but not limited to machinery such as loaders, excavators, skid steers, and/or vehicle traffic.
- Until the site has achieved final stabilization, the contractor must perform and record stormwater construction inspections. Stormwater inspections must be recorded on the attached template by a competent (certified/trained) individual and submitted to the City of Superior ESD. At a minimum, stormwater inspections must be completed within 7 days of the last inspection and are required within 24 hours of any rain event that is  $\geq 0.5"$ . Records and an updated stormwater plan must be maintained onsite and periodically submitted to the City of Superior ESD. The City of Superior ESD prefers inspections to be completed consistently on the same day of the week to ease the review process. The contractor shall take record photos of pre and post construction site conditions and include with the stormwater inspection reports.

## CONSTRUCTION PRACTICES TO MINIMIZE STORM WATER CONTAMINATION

TO PREVENT STORM WATER CONTAMINATION FROM OCCURRING, THE FOLLOWING BMPS WILL BE IMPLEMENTED:

- All rough graded slopes shall be track walked at the end of the day to create horizontal ridges and decrease the length of uninterrupted flow. Slopes shall be left in a state ready for application of blankets, mulch, or other protective covers (WisDNR 1067).
- A stabilized construction entrance/exit will be constructed to reduce vehicle tracking of sediments off the project right of way (WisDNR 1057).
- All non-hazardous waste materials will be collected and stored in a securely lidded metal dumpster or other approved containment method at the end of each day. Any alternative to a metal dumpster must be submitted in writing for approval by the project engineer. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as necessary to function as intended for debris collection. No construction materials will be buried on-site. The contractor's erosion control supervisor will instruct all personnel regarding the correct procedure for disposal.
- A licensed sanitary waste management contractor will collect all sanitary waste from the portable units at a rate necessary to maintain design function.
- All vehicles on site will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage.
- Fertilizers will be stored in a covered shed and partially used bags will be transferred to a sealable bin to reduce chance of spillage.
- Petroleum products will be stored in tightly sealed containers, which are clearly labeled.
- Spill kits will be included with all fueling sources and maintenance activities. Secondary containment measures will be installed and maintained by the contractor.
- Any asphalt substances used on site will be applied in accordance with manufacturers recommendations.
- All paint containers and curing compounds will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm water system but will be properly disposed of according to manufacturer's instructions.
- Materials and equipment necessary for spill clean up will be kept in an enclosed trailer or shed on site. Equipment will include, but not limited to, brooms, mops, dust pans, rags, gloves, absorbent (kitty litter). Oil absorbent brooms and diapers, and buckets.
- All spills will be contained and cleaned up immediately upon discovery. Any and All spills ( $\geq 5$  gal) will be reported immediately to the Wisconsin DNR Spill Response Coordinator at 1.800.943.0003.
- Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site. Each concrete truck shall have a cleanout kit onboard and return wash water to the plant or other approved disposal site. Discharging concrete wash water onsite is prohibited.
- Form release oil used for concrete work must be applied over a pallet containing absorbent to collect excess liquid. The absorbent material will be replaced and properly disposed of when saturated.
- Discharges from basin dewatering operations that are turbid or sediment laden shall be discharged to temporary sediment basin or filter bag in accordance with WisDNR 1061 prior to discharge to a water of the state.
- Clogged or compromised filters must be replaced. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, deposited sediment shall be removed by the end of the same work day on which it is found or by the end of the following work day if removal by the same work day is not feasible.
- Accumulated sediment shall be removed where the depth of sediment has reached half of the working height of the sediment retaining device. Sediment shall be removed by the end of the work day on which it is found or by the end of the following work day if removal by the same work day is not feasible.

PLOT DATE: Jul 20, 2021 - 12:41pm  
 FILENAME: K:\g-m\JDC\Properties\LCV1805200004\_Production\01\_CAD\02\_Sheets\SWPPP.dwg

---	---	---	---
---	---	---	---
---	---	---	---
---	---	---	---
2	7/17/2021	JG	EDITED NOTES
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
DRAWN	JK, TM	
CHECKED	JG	SIGNATURE: _____ DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227

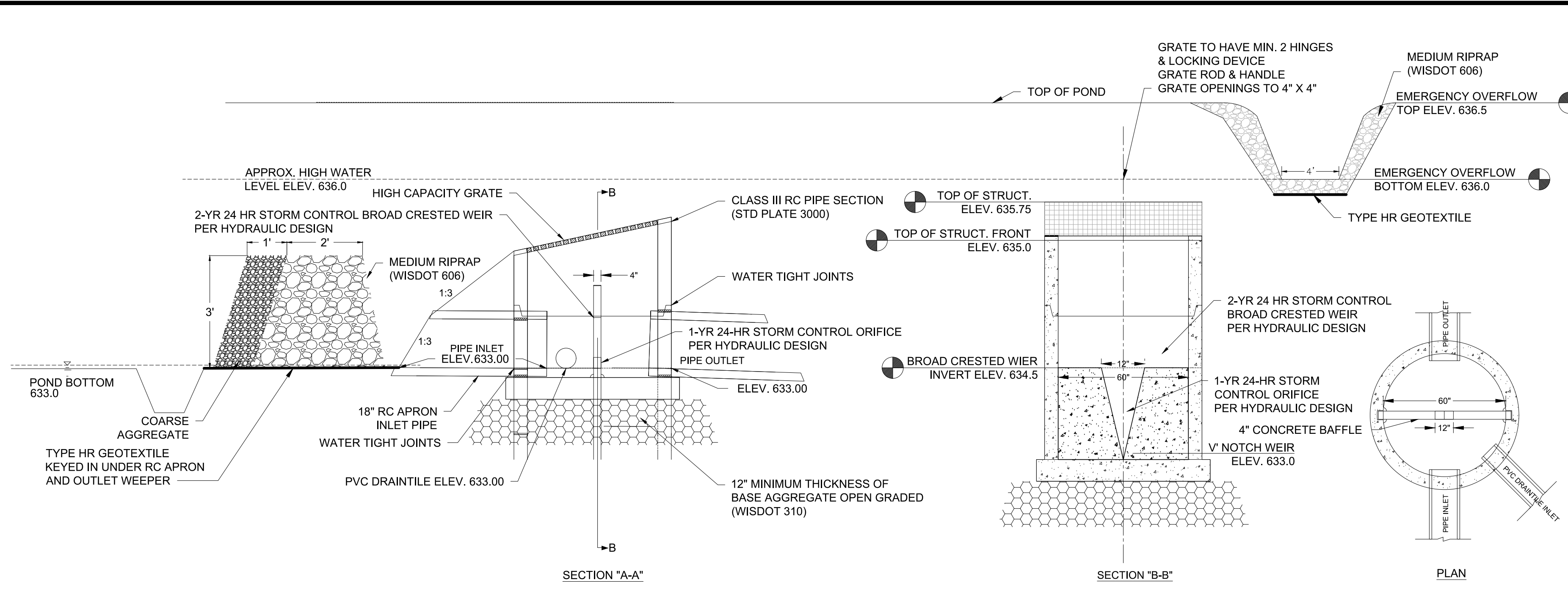


11 E. Superior Street, Suite 420  
 Duluth, MN 55802  
 218.724.8578  
 tkda.com

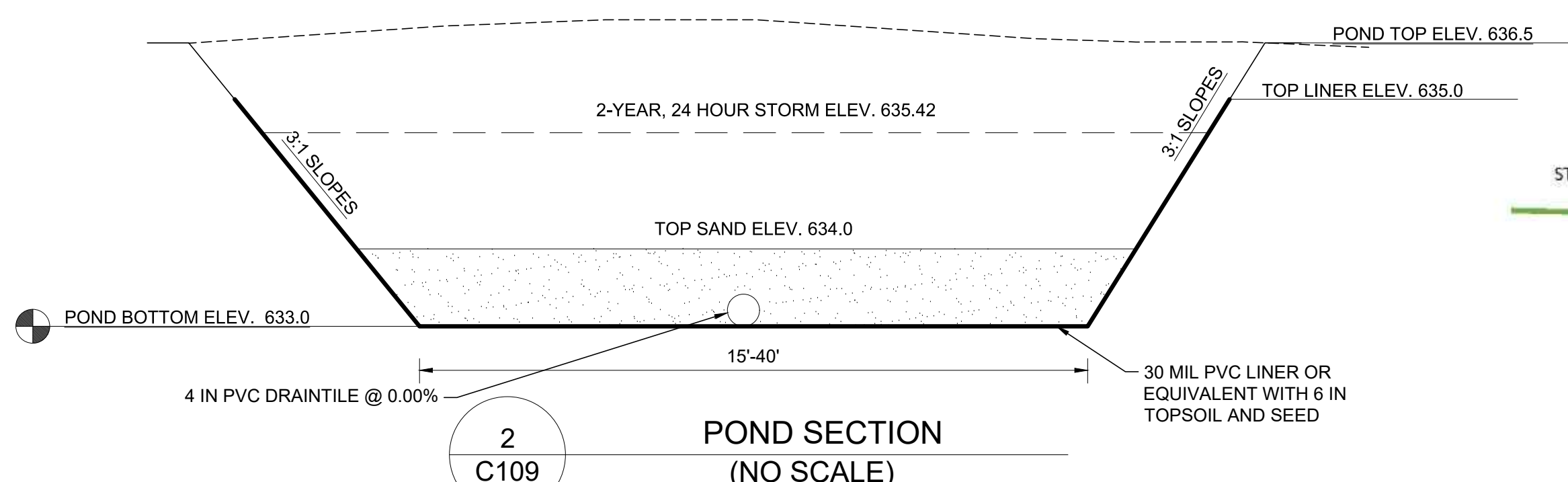
**FedEx PARKING LOT  
 EXPANSION**

**SWPPP**

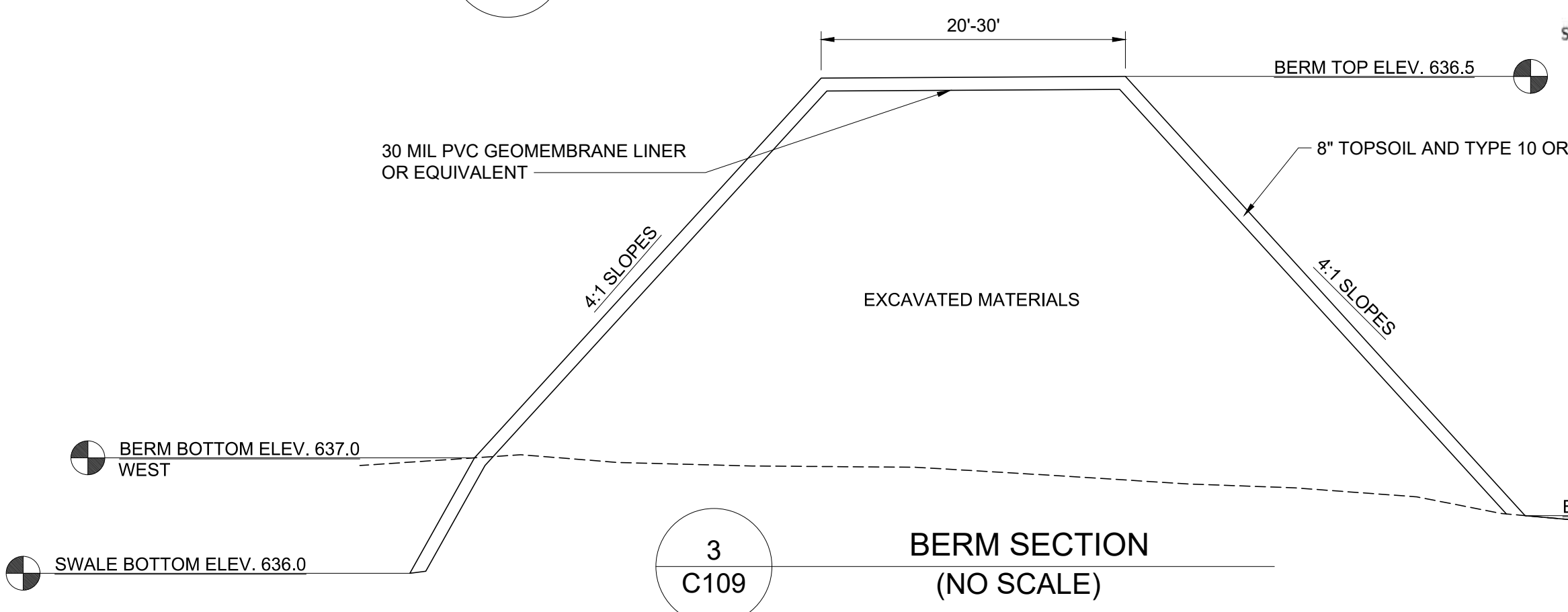
PROJ. NO. 18052.000
DRAWING NO. <b>C108</b>



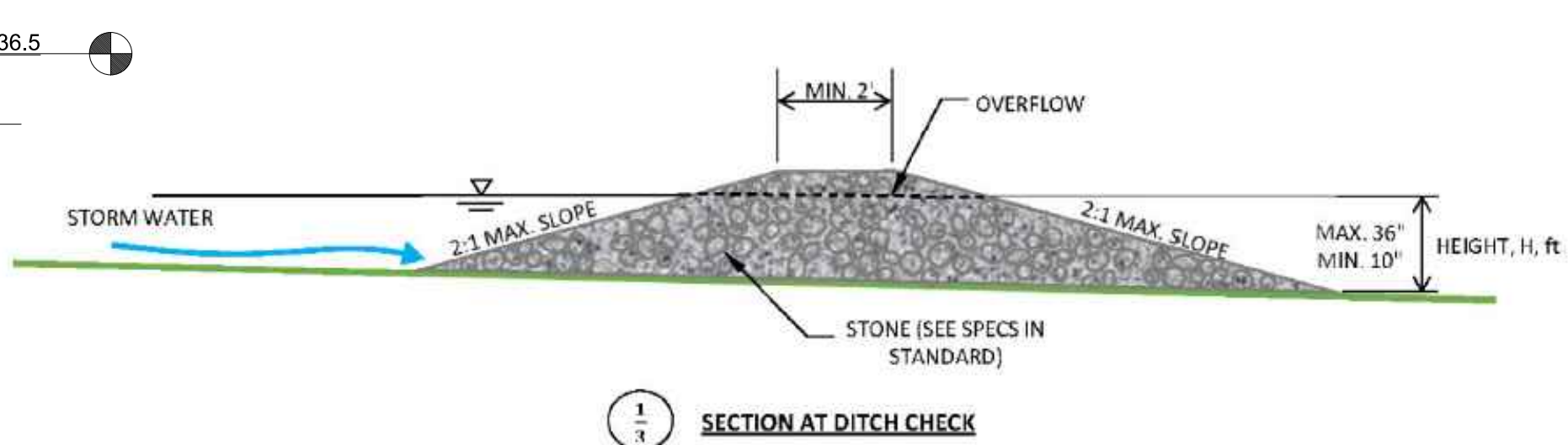
1 POND OUTLET STRUCTURE (NO SCALE) C109



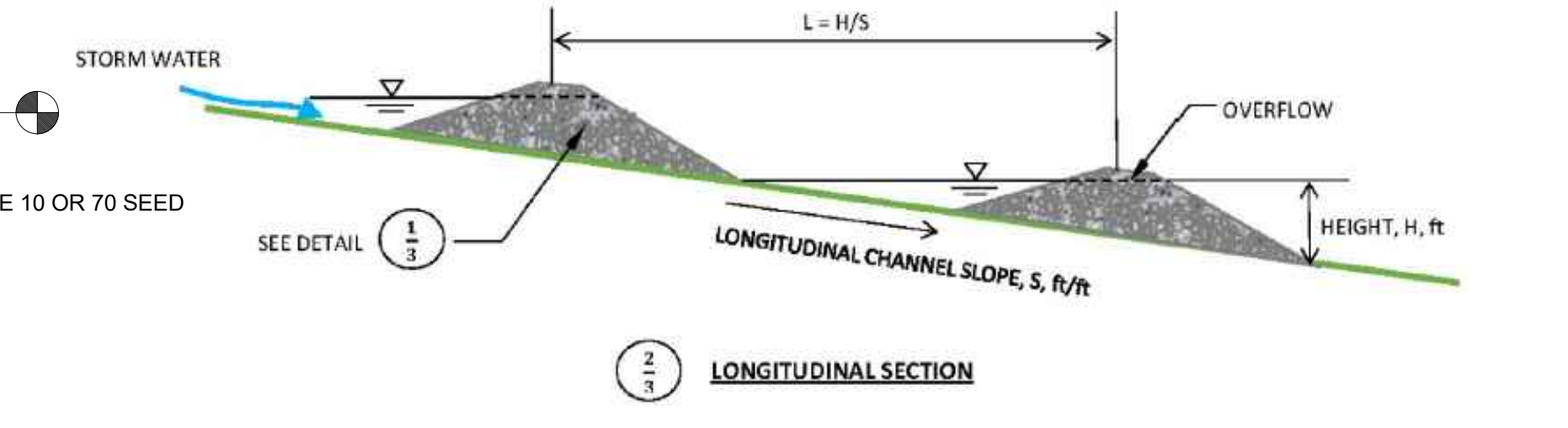
2 POND SECTION (NO SCALE) C109



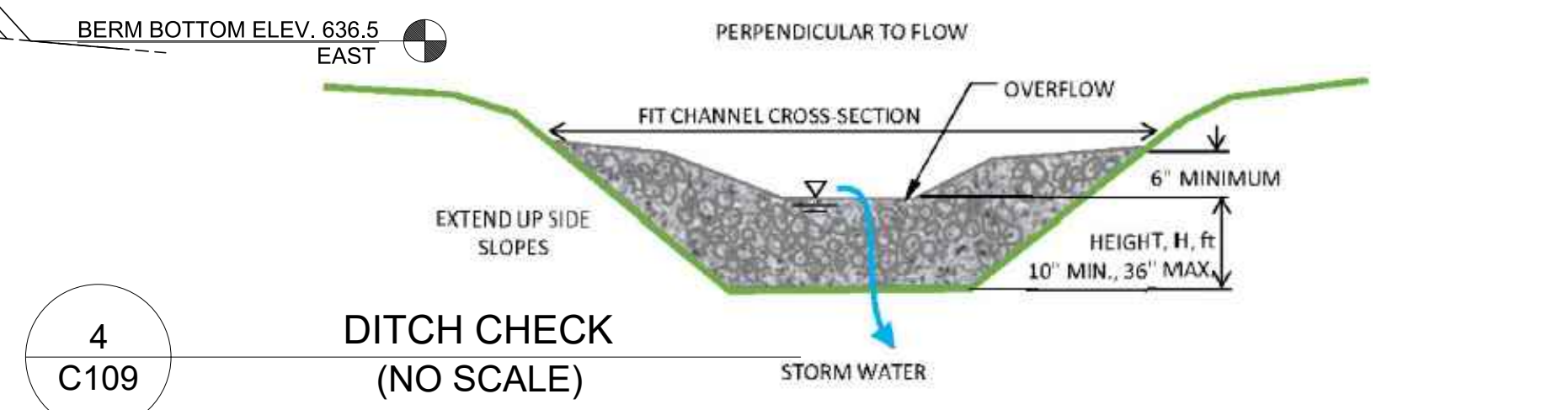
3 BERM SECTION (NO SCALE) C109



4 SECTION AT DITCH CHECK (NO SCALE) C109



5 LONGITUDINAL SECTION (NO SCALE) C109



6 DITCH CHECK (NO SCALE) C109

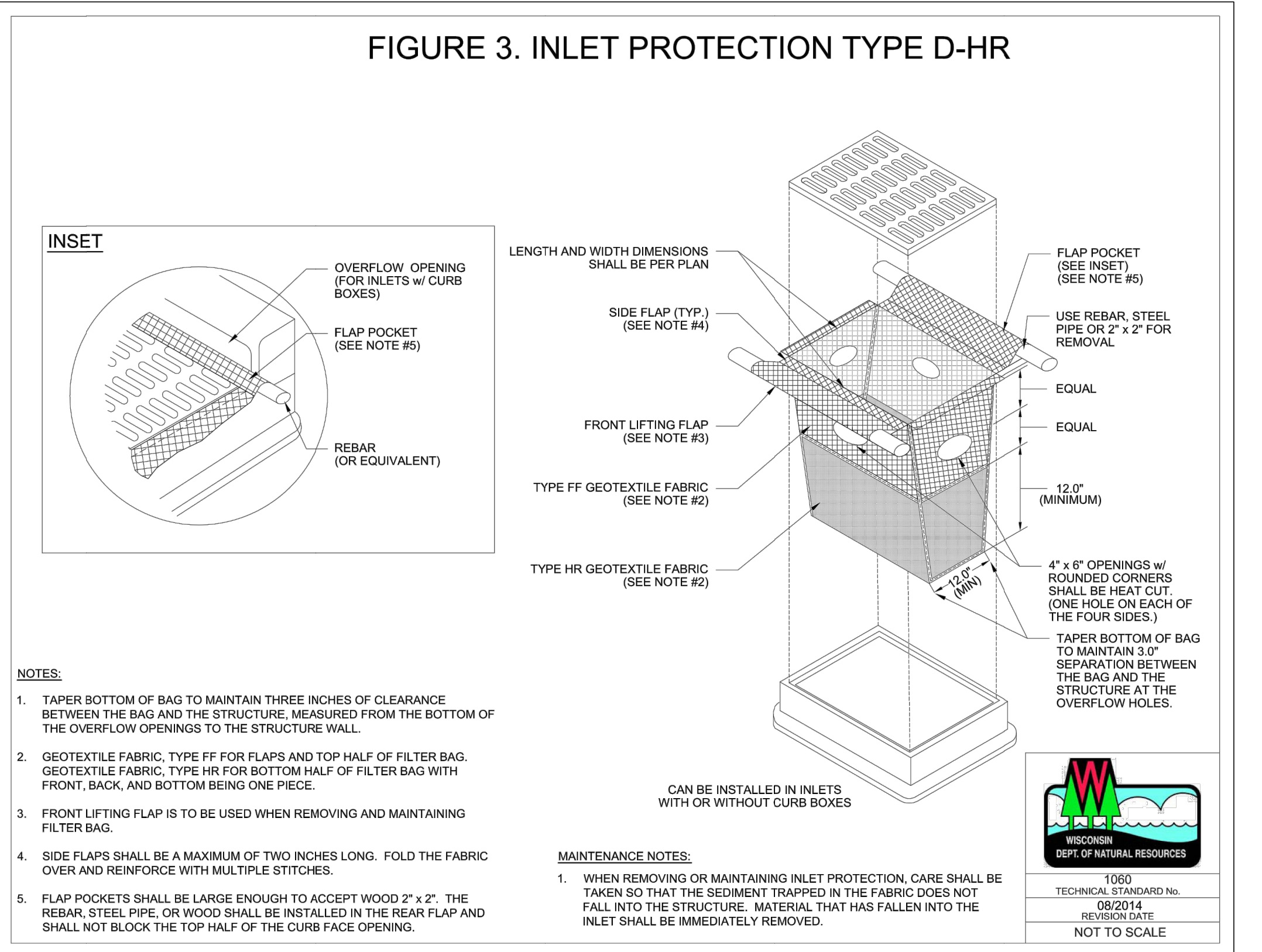
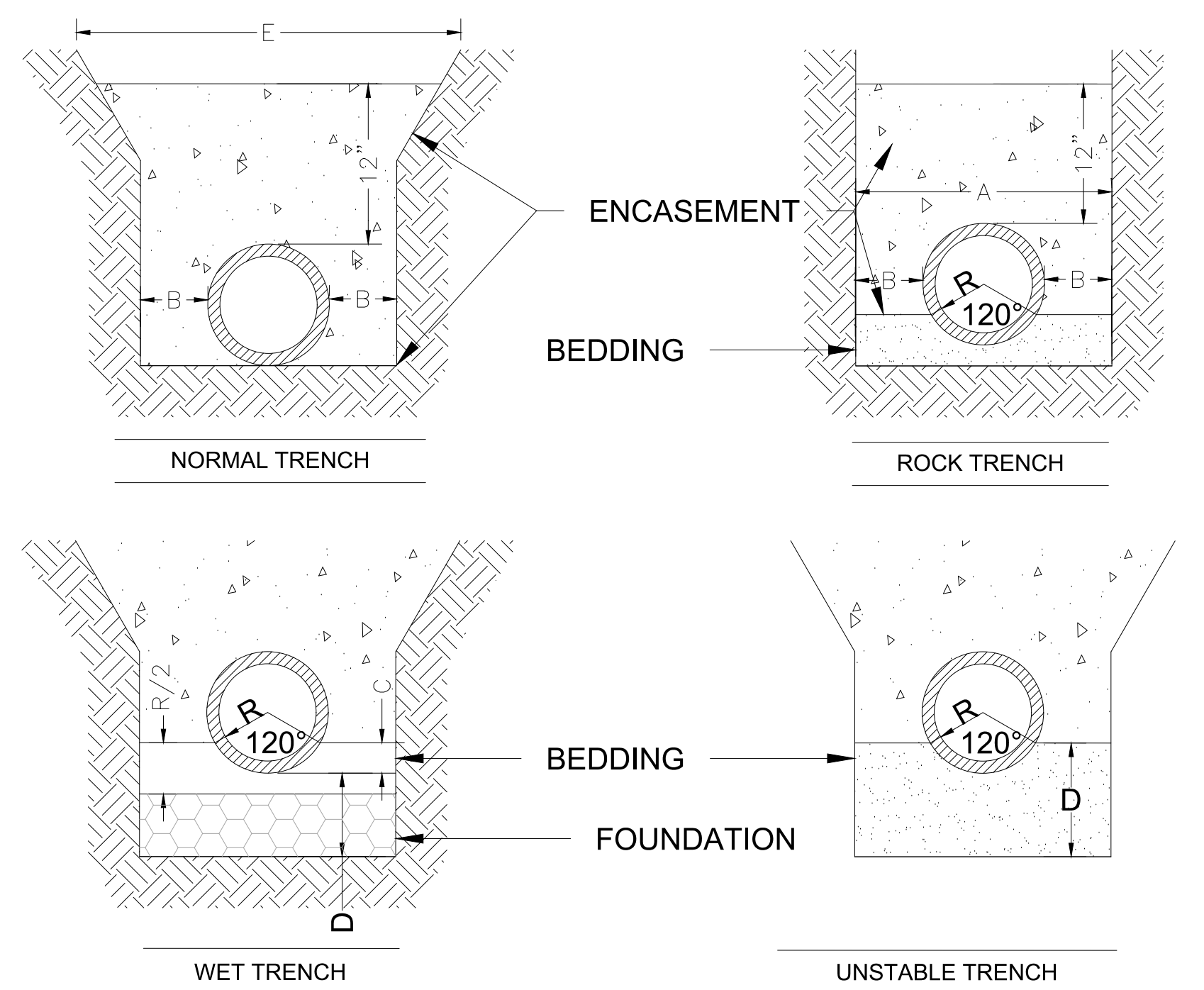


FIGURE 3. INLET PROTECTION TYPE D-HR

- NOTES:
- TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.
  - GEOTEXTILE FABRIC, TYPE FF FOR FLAPS AND TOP HALF OF FILTER BAG. GEOTEXTILE FABRIC, TYPE HR FOR BOTTOM HALF OF FILTER BAG WITH FRONT, BACK, AND BOTTOM BEING ONE PIECE.
  - FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING AND MAINTAINING FILTER BAG.
  - SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.
  - FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" x 2". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

- MAINTENANCE NOTES:
- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.



5 PIPE BEDDING (NO SCALE) C109

- NOTES:
- DIMENSIONS:
    - A. MAXIMUM WIDTH - O.D. PIPE + 24"
    - B. MINIMUM - 6"
    - C. 3" BELOW BARREL
    - D. DETERMINED BY ENGINEER
    - E. MAXIMUM PAY WIDTH (SURFACE RESTORATION) O.D. PIPE + 36"
  - ENCASUREMENT ZONE SHALL NOT CONTAIN STONE OVER 2 INCH CINDER, REFUSE, LUMBER, FROZEN EARTH, OR OTHER OBJECTIONABLE MATERIAL.
  - BEDDING MATERIAL MAY BE SAND OR GRAVEL CONTAINING NO STONES LARGER THAN 2 INCH SIZE.
  - FOUNDATION SHALL BE UNIFORM 1 INCH TO 1 1/2 INCH WASHED OR CRUSHED STONE.

PLOT DATE: Jul 20, 2021 - 12:42pm  
FILENAME: K:\g-m\JDC\Properties\LCV1805200004\_Production\01\_CAD\02\_Sheets\C109\_Details.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS
2	7/7/2021	JG	DETAIL ADDED, UPDATED DETAIL 1 & 2

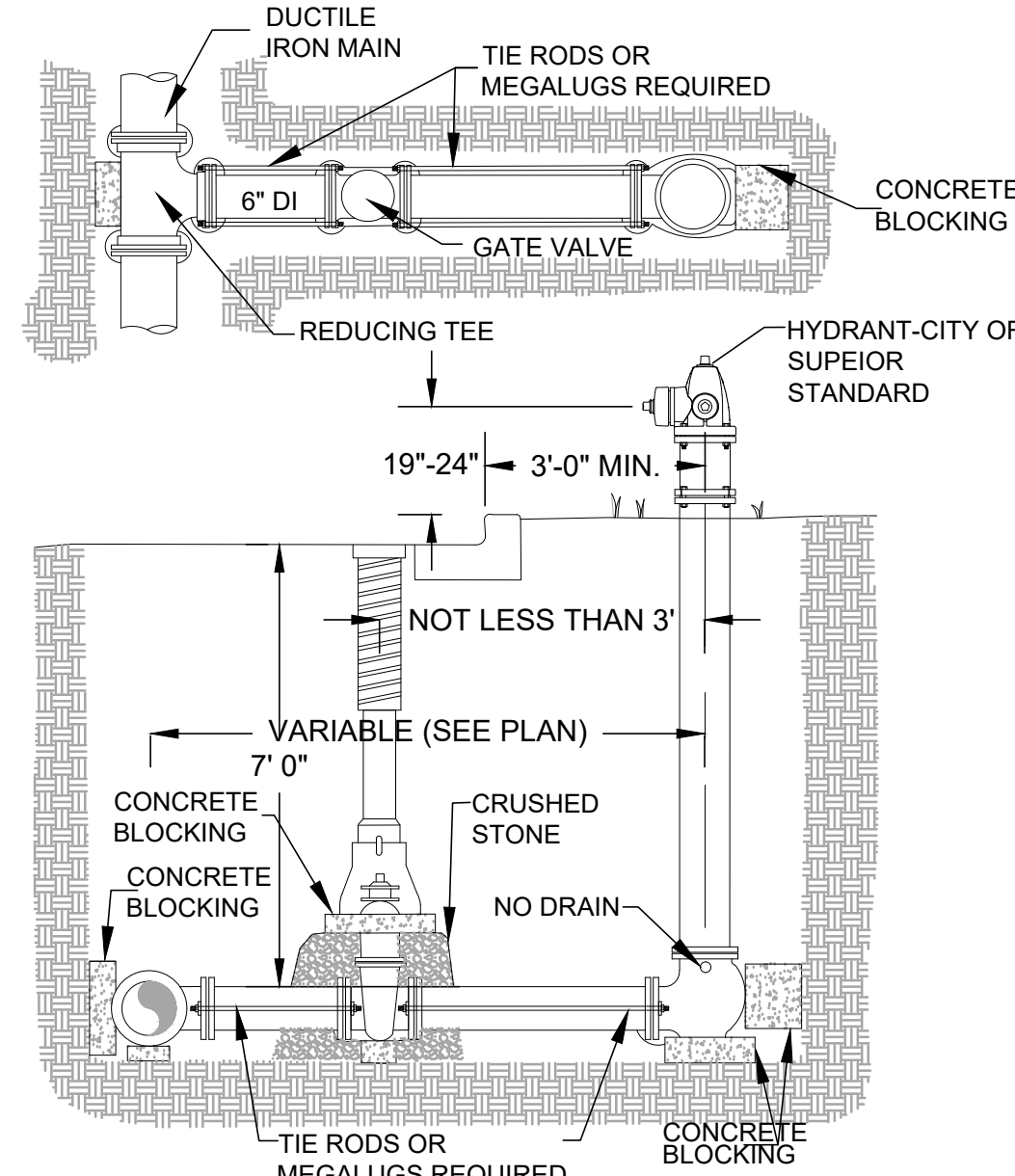
DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
DRAWN	JK, TM	
CHECKED	JG	
DATE	07/19/2021	

11 E. Superior Street, Suite 420  
Duluth, MN 55802  
218.724.8578  
tkda.com

FedEx PARKING LOT EXPANSION

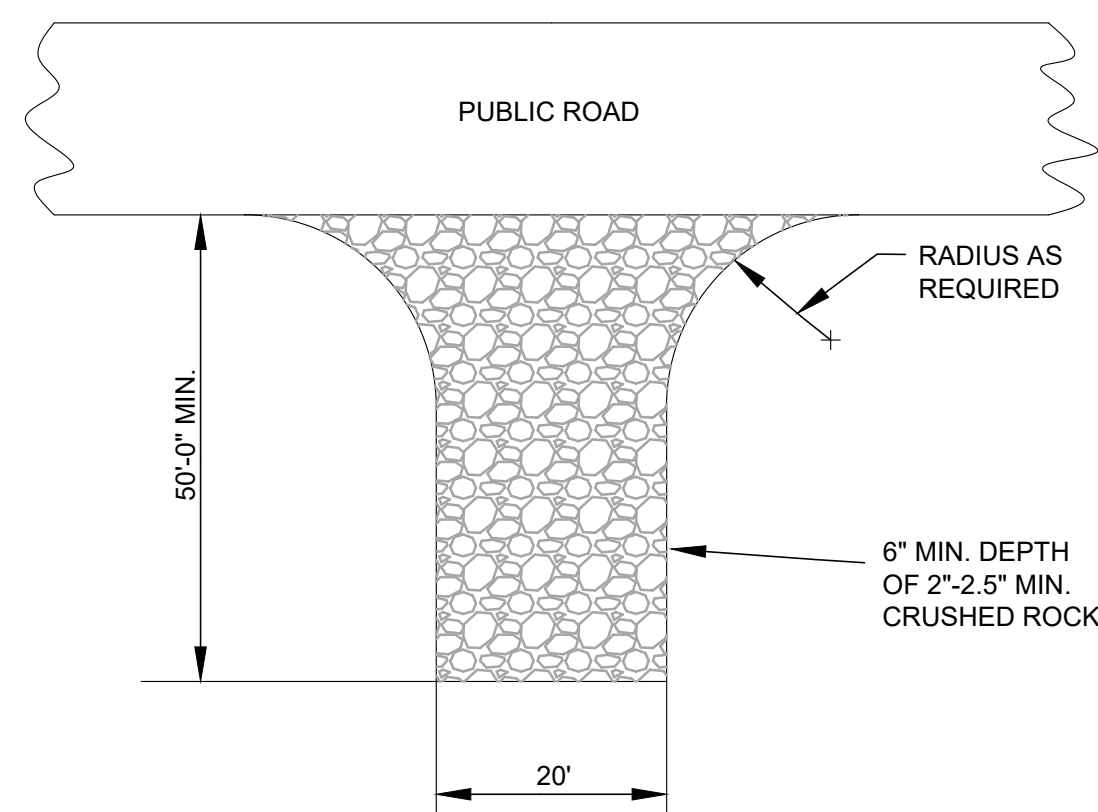
DETAIL

PROJ. NO.	18052.000
DRAWING NO.	C109



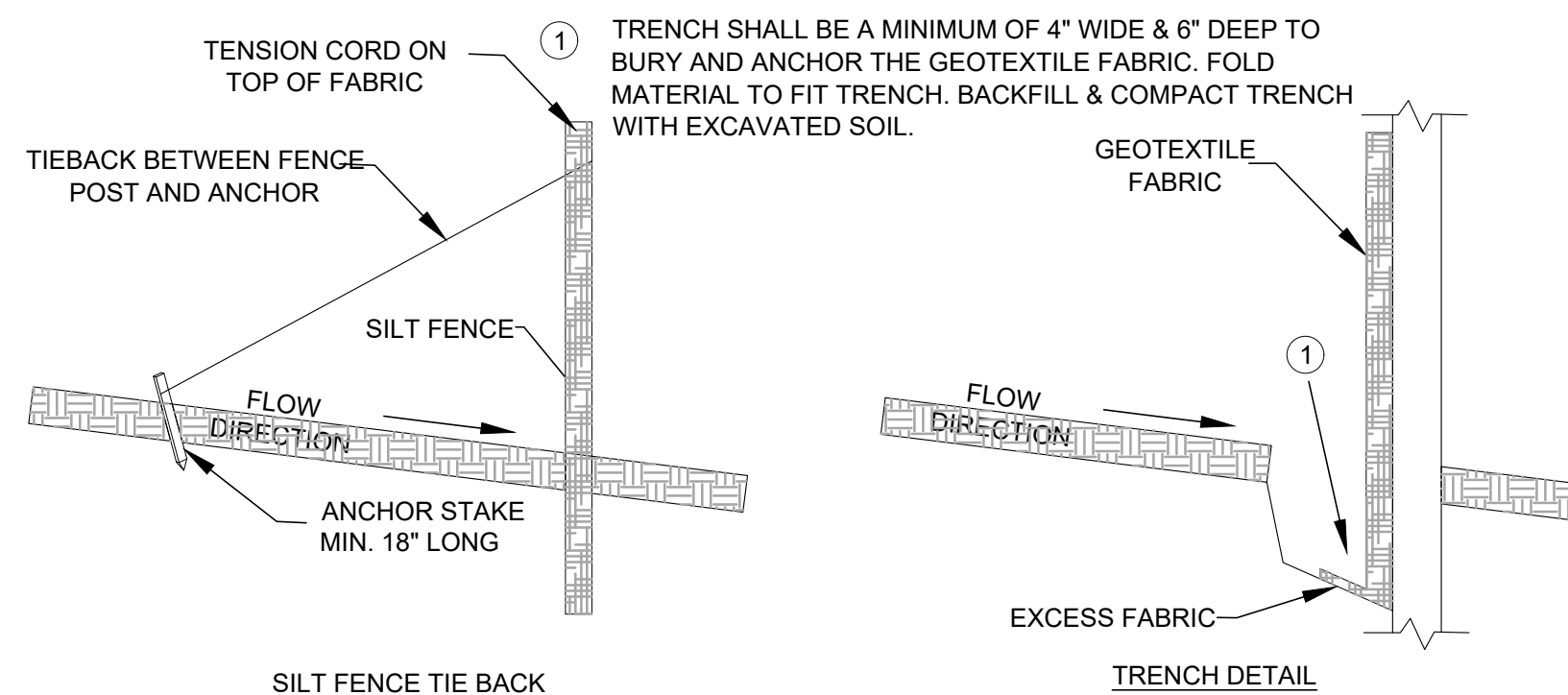
- NOTES:
1. VALVES SHALL BE CONNECTED DIRECTLY TO AN ANCHORING TEE. WHENEVER DIRECT CONNECTION IS NOT POSSIBLE, TIE RODS OR MEGALUGS SHALL BE USED. TIE RODS SHALL BE GALVANIZED.
  2. USE EPOXY COATING ON VALVE AND HYDRANT BASE.
  3. ALL BOLTS SHALL BE COR-TEN WITH ZINC ANODE CAPS CONFORMING TO ASTM B-418 FOR ALL MECHANICAL JOINT FITTINGS. ANODE SIZE - REGULAR.

**1** FIRE HYDRANT SETTING DETAIL  
C110 NO SCALE

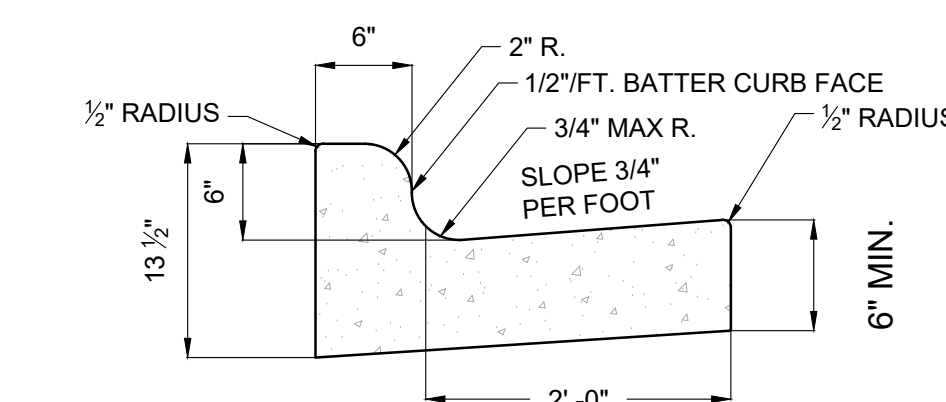


**2** TRACKOUT CONTROL WISDNR 1057-TS  
C110 NO SCALE

- ② ROCKS AT ENTRANCE CLEAN WORKSITE MUD OFF OF TRUCK TIRES BEFORE DRIVING ON MAIN ROAD. THIS WILL PREVENT AUTO DAMAGE. KEEP CONSTRUCTION SEDIMENT OUT OF DRAINAGESYSTEMS AND WETLANDS.

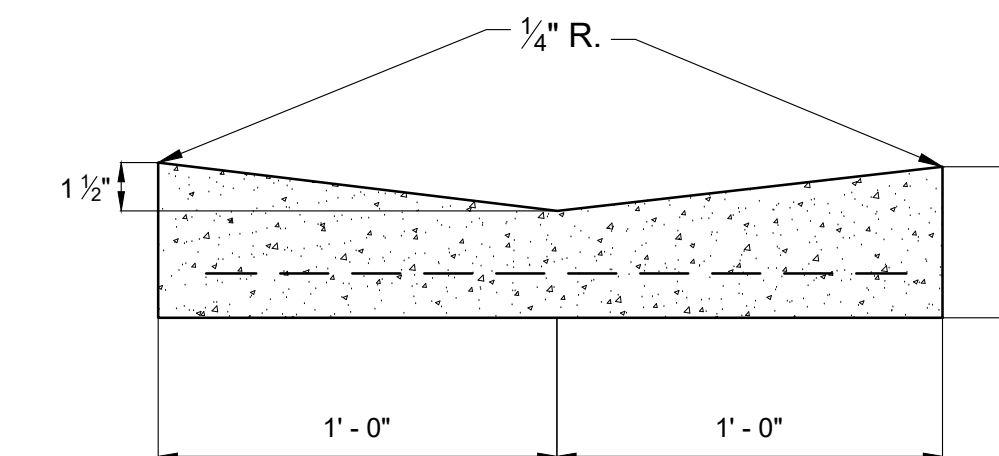


**3** SILT FENCE WISDNR 1056-TS  
C110 NO SCALE



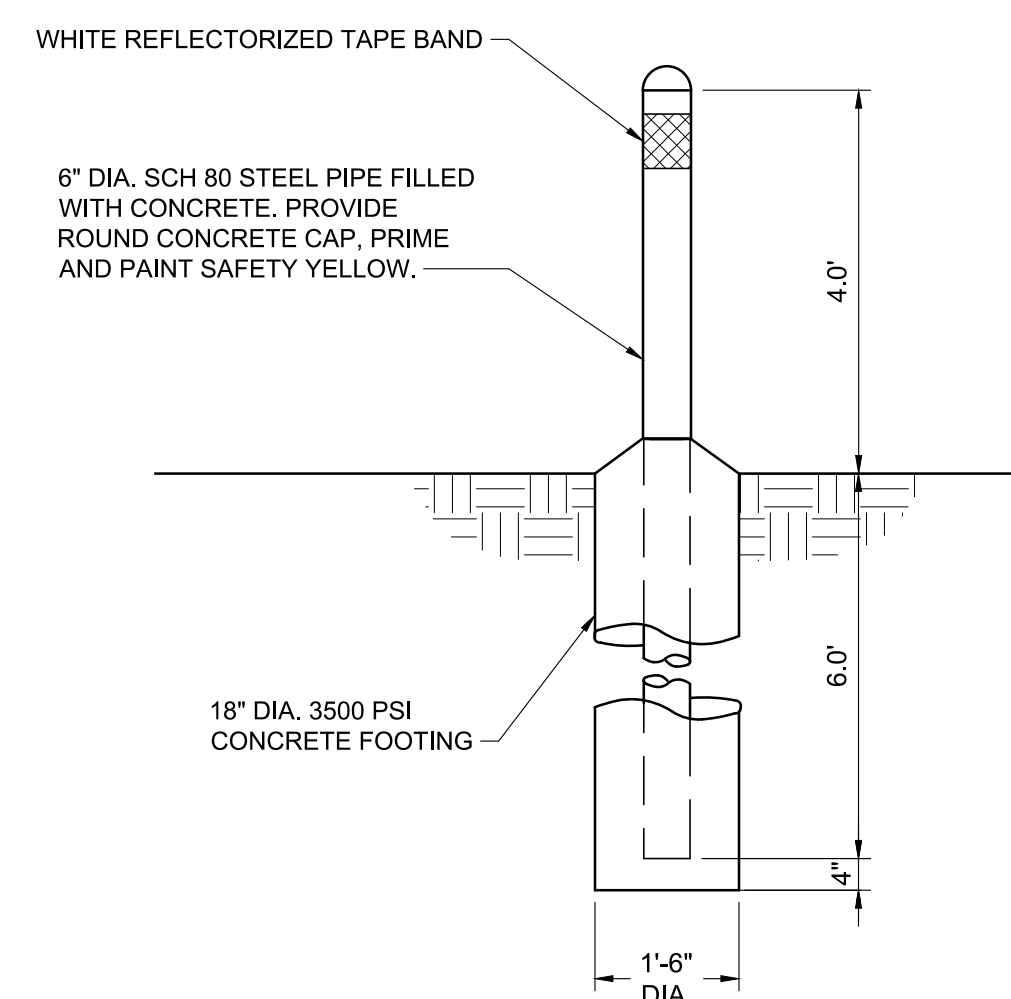
1. TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPE A.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6\"/>
- 3. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN PLANS.

**4** CURB AND GUTTER DETAIL  
C110 NO SCALE

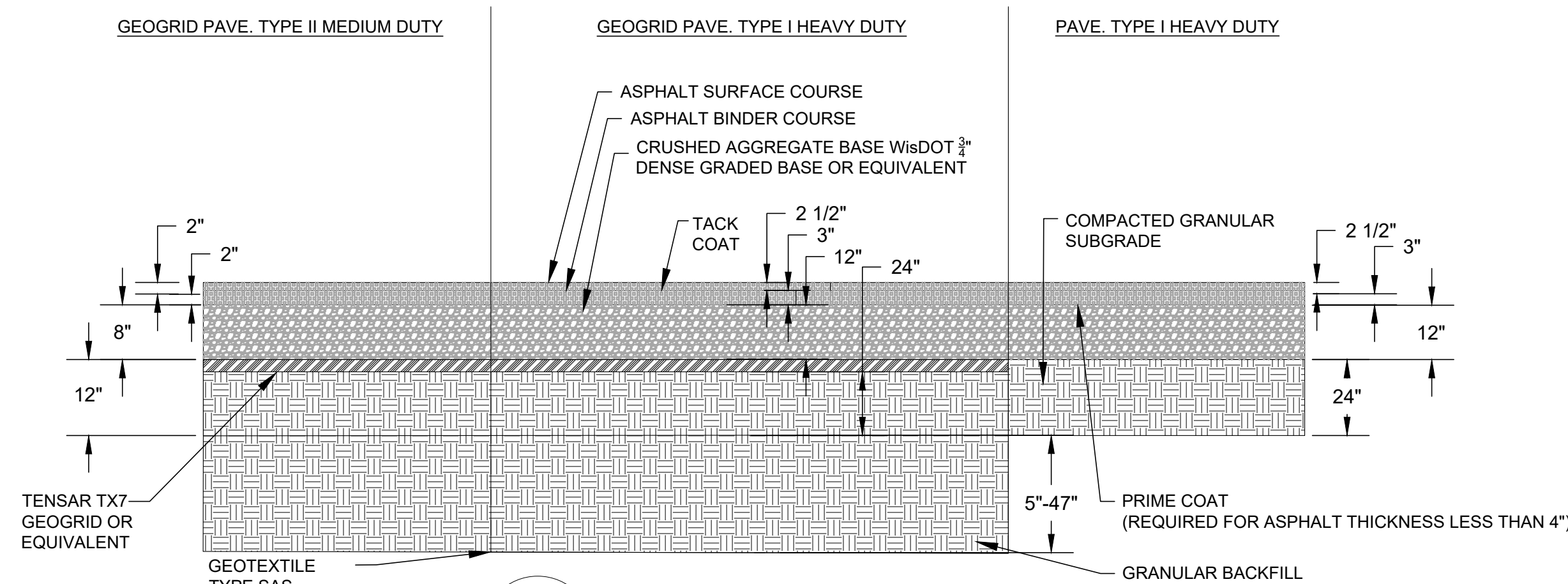


1. WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CONCRETE GUTTER 24\"/>

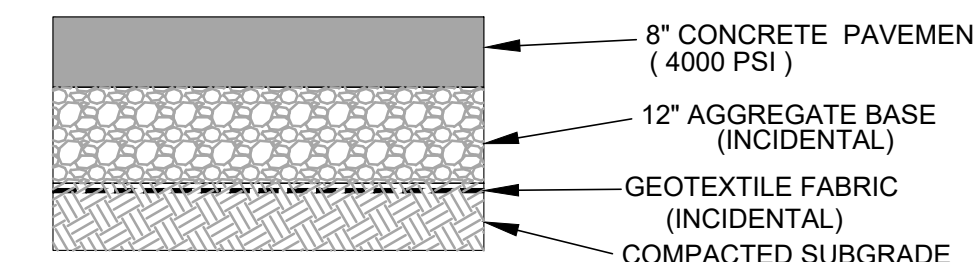
**5** CONCRETE VALLEY GUTTER  
C110 NO SCALE



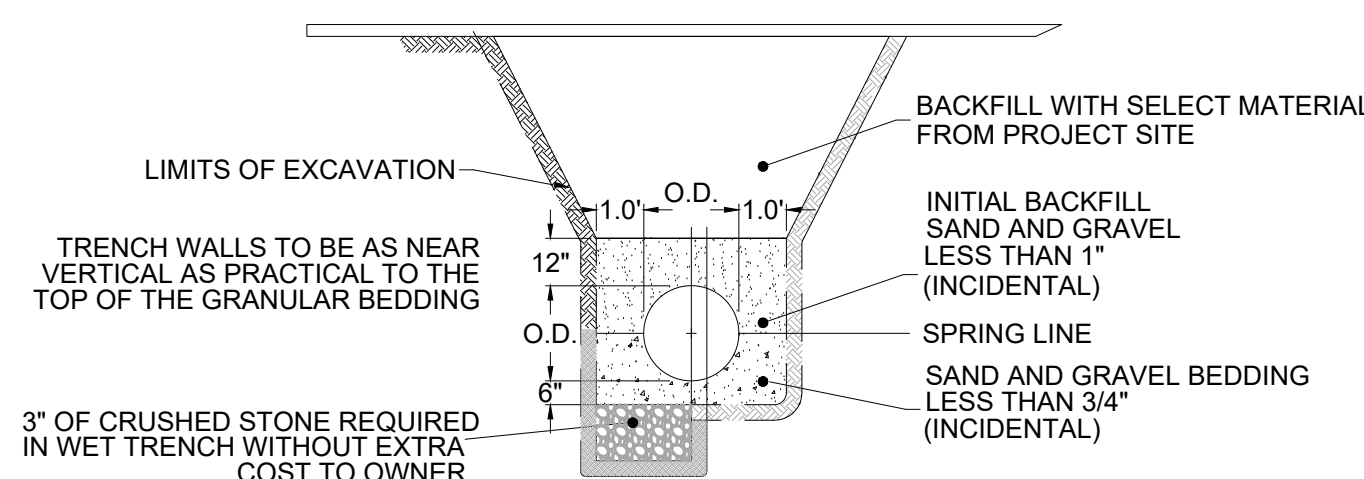
**6** PIPE BOLLARD - TYPE 1 DESIGN  
C110 (NO SCALE)



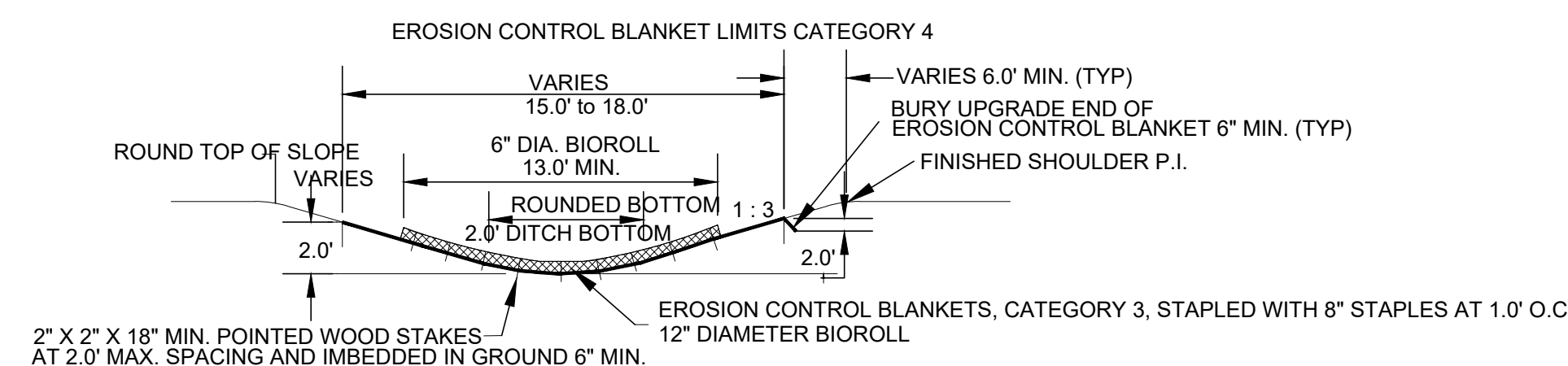
**7** ASPHALT PAVEMENT  
C110 NO SCALE



**8** CONCRETE PAVING  
C110 NO SCALE



**9** TYPICAL TRENCH SECTION FOR WATERMAIN  
C110 NO SCALE



**10** FILTER LOG TYPE STRAW BIOROLL WISDNR 1071-TS  
C110 NO SCALE

NOTE: CHANNEL EROSION MAT WISDNR 1053-TS TO BE USED IN CHANNELS AND NON-CHANNEL EROSION MAT WISDNR 1052-TS TO BE USED IN NON-CHANNEL AREAS. SEE WISDNR TECHNICAL STANDARD 1071 FOR DETAILS ON PROPER LOCATIONS AND INSTALLATION.

PLOT DATE: Jul 20, 2021 - 12:42pm  
FILENAME: K:\g-m\JDC\Properties\LC1805200004\_Production\01\_CAD\02\_Sheets\C110\_Details.dwg

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED	JL	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN. SIGNATURE: <i>[Signature]</i> DATE: 07/19/2021 NAME: Jeffrey S. Goetzman LIC. NO.: 40227
DRAWN	JK, TM	
CHECKED	JG	

11 E. Superior Street, Suite 420  
Duluth, MN 55802  
218.724.8578  
tkda.com

**FedEx PARKING LOT EXPANSION**

**DETAIL**

PROJ. NO.	18052.000
DRAWING NO.	<b>C110</b>

**ANTEA WELL ABANDONMENT WORK PLAN REQUEST**

March 12, 2021

Mr. John Hunt  
Wisconsin Dept. of Natural Resources  
223 E Steinfest Road  
Antigo, WI 54409

**Subject: Well Abandonment Work Plan**  
**Attachment to Request to Manage Materials Form 4400-315**  
FedEx Ground Package System  
2929 Halvor Lane  
Superior, Wisconsin

Dear Mr. Hunt:

FedEx Ground Package System (FedEx) at 2929 Halvor Lane in Superior, Wisconsin has proposed an expansion of the existing facility to include additional semi-truck and auto parking spaces. A preliminary design for the facility expansion is included in the attached **Figure 1** and includes expansion of the existing facility to the east (to Maryland Avenue), and expansion to the north (to Lake City Towing). Development is scheduled to begin in early summer 2021, and a work plan and request to manage material for the site during development, including contaminated soil, will be submitted as Form 4400-315 by BBJ Group. This Well Abandonment Work Plan serves as an attachment to Form 4400-315 and includes a request to abandon existing monitoring and recovery wells installed by Antea Group on behalf of BP Products North America Inc. (BP). The abandonment of the monitoring and recovery wells is required to be completed before soil handling and redevelopment takes place.

In order to accommodate the proposed expansion plans and redevelopment for the FedEx facility, BBJ Group has requested that existing monitoring and recovery wells MW-3, MW-23, and RW-6 be abandoned. These wells have been used to delineate the extent of the releases associated with the Former Amoco Terminal (BRRTS #02-16-000331) and are located to the east of the existing FedEx building (**Figure 2**). Well MW-3 is upgradient of defined light non-aqueous liquid (LNAPL) identified at the Terminal, and wells MW-23 and RW-06 are located in identified LNAPL area of concern 5 (AOC 5). The history and conditions of these wells are detailed in the contents of this memorandum. Due to the extensive investigation, delineation and stability of the extent of LNAPL, dissolved-phase benzene, and direct contact soil contamination, these wells are proposed to be abandoned without replacement.

### **EXTENT OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL)**

The LNAPL identified in wells MW-23 and RW-06 originated from releases that occurred during the operation of the Terminal. Product type and composition have been identified through historical product “fingerprinting”; otherwise known as chromatographic analysis. The Delta Site Investigation and Interim Response Actions Report dated June 17, 1999 presents the LNAPL fingerprinting results and interpretations for all product samples collected at the Terminal. The extent of LNAPL within these wells, as defined as AOC 5, has been determined by investigation with UVF/LIF (Ultraviolet Fluorescence/Laser-Induced Fluorescence) borings, through soil and hand



auger borings, and an extensive history of monitoring for the presence of LNAPL in the network of monitoring and recovery wells.

### LNAPL EXTENT

AOC 5 as shown in **Figure 2** includes two active wells (RW-6 and MW-23) and one abandoned well (MW-2). Monitor well MW-2 was abandoned in September 2007. Recovery well RW-6 is constructed of 6-inch-diameter casing and screen and is screened from 20.2 to 45.2 feet bgs. The well was installed in May 1990 and has been gauged 148 times since installation. Monitor well MW-23 is constructed of 2-inch-diameter PVC casing and screen and is screened from 9.2 to 24.2 feet bgs. It was installed in June 1989 and has been gauged 138 times since installation. The thicknesses of LNAPL in wells RW-6 and MW-23 is influenced by groundwater elevation variations and precipitation. As the groundwater elevation increases, the water table pushes the water table up against the clay/sand interface and causes LNAPL to accumulate at higher thicknesses. Through the extensive gauging history of the wells as shown in **Table 1**, LNAPL thicknesses are predictable and stable, varying only due to the change in water table.

The extent of LNAPL within AOC 5 has been defined based on LIF and UVF borings, soil logs for wells, and laboratory analysis of soil samples for petroleum constituents. As shown in **Figure 2**, the LNAPL extent is defined by the minimal or absence of LIF response at CPT/LIF (Cone Penetrometer/Laser-Induced Fluorescence) borings LIF-36 to the north, LIF-38 to the east, LIF-42 to the west, and T-28 to the south. Hydraulically downgradient of AOC 5, LNAPL within AOC 4 to the north is defined based on LNAPL fingerprinting and analysis, and is bounded by the minimal or absence of LIF response at CPT/LIF borings LIF-36 to the south, LIF-37 to the west, and LIF-47 to the east (**Figure 2**), as well as a lack of LNAPL present in EW-3 to the east, EW-9 to the west, or EW-10 to the southwest since installation. The lack of measurable LNAPL in extraction well EW-3, the minimal LIF response at CPT/LIF boring LIF-47, and the distinctly different product type at monitor well MW-24 are key factors for constraining AOC 4 to the former Terminal property. Since groundwater flow has consistently been gauged to the north-northwest, LNAPL within AOCs 4 and 5 is further delineated through gauging at EW-09 and MW-10. Measurable LNAPL has not been observed in EW-09 over the 9 years of gauging data, and measurable LNAPL has only been observed once in MW-10 (0.01 feet in 3/13/1996) over the 32 years of gauging data (**Table 1**).

### LNAPL IMMOBILITY AND PLUME STABILITY

The potential LNAPL velocities within AOC 5 were analyzed at monitor well MW-23. Based on the LNAPL thickness, a potential LNAPL velocity at monitor well MW-23 was calculated as  $5.64 * 10^{-8}$  cm/second, or 0.06 feet/year (using the maximum LNAPL saturation) and  $2.30 * 10^{-8}$  cm/second, or 0.02 feet/year (using the average LNAPL saturation through the smear zone). ASTM standard E2531-06 suggests that an LNAPL plume is stable when the potential velocity is less than 1 foot per year. Based on the calculated values for monitoring well MW-23, which is located at the center of AOC 5, the LNAPL plume is not expanding or migrating.

### LNAPL TRANSMISSIVITIES

An additional indicator of LNAPL stability within AOC 5 and throughout the Terminal has been shown through LNAPL transmissivity testing. A manual skimmer test was performed at monitor well MW-23 in August 2011 in AOC 5. The LNAPL transmissivity was determined to be 0.37 ft<sup>2</sup>/day. Research published by the ITRC (*Evaluating LNAPL Remedial Technologies for Achieving Project Goals*; 2009, p.14) suggests that physical recovery (hydraulic or pneumatic pumping) is capable of removing LNAPL and reducing transmissivity to a practical limit of between 0.1 and 0.8 ft<sup>2</sup>/day. Since the calculated transmissivity value in MW-23 has already been reduced to this range, additional LNAPL recovery would be minimal through physical recovery.

## LNAPL VISCOSITIES AND CHEMICAL SIGNATURES

Samples of LNAPL from monitoring well MW-23 and recovery well RW-6 have been collected and analyzed numerous times through the investigation history of the Terminal, with the first LNAPL samples collected from both wells in 1995. An additional LNAPL sample was collected from recovery well RW-6 on April 23, 2004, and sampling analysis further supported that the LNAPL was an older vintage, characterized within the gasoline, naphtha, diesel fuel, and No. 2 fuel oil ranges.

LNAPL samples were again collected for geochemical property characterization at RW-6 on July 16, 2019. The LNAPL sample was used to evaluate the changes in LNAPL mass based on the changes in LNAPL chemical concentrations and ratios, and a technical memorandum evaluating those changes was submitted as a technical memo titled *Evidence for and Quantification of LNAPL Mass Depletion*, Antea Group, October 30, 2019.

Since the initial volume or mass of LNAPL at the Site is not available, the use of diagnostic ratios for estimation of petroleum mass depletion were calculated. These diagnostic ratios included “Evaporation”, “Waterwashing”, and “Biodegradation”. These ratios were then compared to a standard petroleum diagnostic ratio for 87 Octane Gasoline to evaluate changes in LNAPL composition over time at the Site.

For the Terminal property specifically, the diagnostic ratios developed for LNAPL samples collected from monitor wells throughout the site indicated significant reductions in contaminant concentrations as a result of Evaporation and Waterwashing. A comparison of the LNAPL samples collected from RW-6 in 2004 and 2019 indicates that Waterwashing has reduced the benzene mass by 80% in 2004 and further to 91% in 2019 (**Table 5**). This analysis supports the conclusion that limited benzene contaminant mass remains in the residual LNAPL in AOC 5, as the mass has been depleted through several processes: predominantly Waterwashing and Evaporation.

## DISSOLVED-PHASE CONTAMINATION

### EXTENT OF DISSOLVED-PHASE CONTAMINATION

The extent of dissolved-phase hydrocarbons in groundwater at the Terminal is monitored with a network of monitoring wells with shallow well screens bisecting the unconfined water table and deeper monitoring wells (piezometers) with wells screens submerged below the water table. Benzene is the primary contaminant of concern in the dissolved phase, and since the benzene mass in a majority of the Terminal LNAPL wells shows significant depletion through waterwashing and degradation (**Evidence for and Quantification of LNAPL Mass Depletion, Antea Group**, October 30, 2019), dissolved-phase benzene concentrations that exceed NR 140 ES are limited to monitoring wells within or adjacent to the LNAPL AOCs. Non-LNAPL wells downgradient of AOCs 4 and 5 include EW-10, EW-09, and MW-10 (Figure 2). Upgradient wells from AOC 5 include MW-3 and MW-35.

Benzene concentrations in upgradient and downgradient wells from AOCs 4 and 5 have decreasing or stable trends as shown in the hydrographs in **Appendix A**. Upgradient well MW-35 has not had any exceedances of the NR 140 ES since the well was initially sampled in 1991 (**Table 2**). The percent reduction from the historical high benzene concentrations to the most recently sampled benzene concentration (October 2016) for the upgradient and downgradient monitoring wells is presented below:

Well	Number of Well Sampling Events	Number of Sampling Events exceeding NR 140 ES	October 2016 Benzene Concentration (µg/L)	Historical High Benzene Concentration (µg/L)	Date of Historical High Benzene Concentration	% Reduction From Historical High Benzene Concentration
MW-3	20	8	7.6	230	October 2003	96.69%
EW-10	7	6	1.4	3,970	October 2011	99.96%
MW-10	30	22	3.1	400	April 2004	99.23%
EW-9	7	7	28.1	374	October 2011	92.49%

Wells adjacent to AOCs 4 and 5 (MW-10, EW-10, and MW-35), show that dissolved-phase benzene is not migrating laterally to the east and west of the defined plume boundaries. Migration follows groundwater flow through the unconfined layer to the northwest and is delineated by a comprehensive network of multi-level vertical delineation wells north of Winter Street and the rail corridor. Well MW-3 exhibits low level benzene impact and is no longer required as an upgradient delineation well due to the consistent sampling results and downgradient delineation of dissolved-phase impact at the Terminal.

## SOIL CONTAMINATION

### EXTENT OF SOIL CONTAMINATION

Soil considered a potential direct contact risk (0-4 feet bgs) within the area of MW-3, MW-23, and RW-06 was addressed and removed through five rounds of delineation from 2013 to 2014. Work included the delineation of two soil excavation limits at soil boring SB-24 (southern portion of former Parcel B, **Figure 4**), and at soil borings SB-23, SB-39, and SB-40 (northern portion of former Parcel B, **Figure 5**). A total of 5,271 tons of impacted soil were removed from these two excavation areas. Individual excavation area results for South B and North B are summarized below:

- **South B (former Parcel B, north of Halvor Lane)**

The South B area included excavation surrounding soil borings SB-24, SB-25 and SB-32, which were defined as containing exceedances to industrial direct contact standards (**Table 3**). The excavation area was delineated on June 18 and July 28, 2014 through additional soil borings until soil samples did not exceed industrial direct contact standards (**Table 3**). Excavation was completed to a depth of 4 feet bgs on November 7-14, 2014, and a total of 2,076.71 tons of soil was removed. The area was backfilled with clean soil on November 18, 2014.

- **North B (former Parcel B, north of Halvor Lane)**

The North B area included excavation surrounding soil borings SB-22, SB-23, SB-39, SB-40 and SB-48, which were defined as containing exceedances to industrial direct contact standards (**Table 3**). The excavation area was delineated on June 17, July 28 and August 21, 2014 through additional soil borings until soil samples did not exceed industrial direct contact standards (**Table 3**). Excavation was completed to a depth of 4 ft bgs on November 14-21, 2014, and a total of 3,194.29 tons of soil was removed. The area was backfilled with clean soil on December 3, 2014.

Additional soil samples within and around AOCs 4 and 5 were collected during soil boring and delineation work as shown in **Figure 3**, and additional direct contact soil exceedances were not observed. Soil samples collected within and around AOC 5 (SB-21, SB-46, SB-47, and SB-44) did not contain any exceedances of the Industrial Direct Contact RCLs (Residual Contaminant Levels).

## SUMMARY AND CONCLUSIONS

To accommodate redevelopment and expansion of the FedEx facility at 2929 Halvor Lane to the east and northeast of the existing facility, Antea Group proposes abandonment of monitoring wells MW-3, MW-23, and RW-6. The area will be redeveloped into additional truck and auto parking spaces, allowing for utilization of the Brownfield site with no additional risk to human health or the environment. Based on the below conclusions, Antea Group recommends that the wells be abandoned without replacement:

- The LNAPL extent of AOC 5, which includes monitoring and recovery wells RW-6 and MW-23, has been fully delineated through the advancement of CPT/LIF soil borings, soil logs or wells, and analysis of soil samples for petroleum constituents.
- The LNAPL within AOC 5 is stable as defined through the calculation of LNAPL velocity and transmissivity at monitoring well MW-23, located within the center of AOC 5.
- The residual LNAPL mass contains limited residual benzene contaminant mass, and LNAPL samples from RW-06 collected in 2004 and 2019 indicate that the benzene mass has been depleted through evaporation and Waterwashing. Calculations indicate that 91% of the benzene within RW-6 has been removed through Waterwashing.
- Groundwater samples collected from monitoring wells adjacent and downgradient of AOCs 4 and 5 indicate that the dissolved-phase benzene concentrations are stable or decreasing. Recent dissolved-phase benzene concentrations within wells that have historically had NR 140 ES exceedances for benzene have been reduced 92-99% from the historical high concentrations.
- MW-3 is no longer required as an upgradient delineator well due to the consistent sampling results and downgradient delineation of dissolved-phase groundwater impact at the Terminal.
- The potential for direct contact exceedances within soil was investigated through the advancement of numerous soil borings and collection of soil samples during 2013 and 2014. Two areas with shallow soil impact were excavated within former Parcel B to the south of MW-23, and a total of 5,270 tons of soil within the direct contact interval was removed and backfilled with clean soil. Additional soil borings collected within and around AOC 5 did not contain exceedances of the Industrial Direct Contact RCLs.

Antea Group requests the review and response to this work plan, along with the soil handling plan submitted for the FedEx facility (Form 4400-315 and fee, submitted under separate cover) to include a written response indicating the Wisconsin Department of Natural Resources approval for abandonment of monitoring and recovery wells MW-3, MW-23, and RW-06 without replacement. Redevelopment and expansion of the FedEx facility is anticipated to begin in June 2021.

John Hunt  
Wisconsin Department of Natural Resources  
March 12, 2021



Questions regarding this memorandum can be directed to Layne Kortbein at the phone number and email listed below.

Sincerely,

A handwritten signature in black ink that reads "Layne Kortbein".

---

Layne Kortbein  
Project Professional  
+1 651 697 5117  
[Layne.Kortbein@anteagroup.us](mailto:Layne.Kortbein@anteagroup.us)  
Antea Group

## ATTACHMENTS

### FIGURES

- Figure 1 – Preliminary FedEx Expansion Plans
- Figure 2 – Terminal LNAPL Extent Map
- Figure 3 – Comprehensive Site Investigation Map
- Figure 4 – Excavation Map Surrounding SB-24
- Figure 5 – Excavation Map Surrounding SB-23, SB-39, and SB-40

### TABLES

- Table 1 – Groundwater and LNAPL Gauging Data
- Table 2 – Groundwater Analytical Results
- Table 3 – Shallow Soil Analytical Results
- Table 4 – Terminal LNAPL Degradation Ratios

### APPENDIX

- Appendix A – Dissolved-Phase Benzene Hydrographs



**Figure 1**  
**SITE PLAN**  
 SCALE: 1"=40'-0"

**SITE LAYOUT SUMMARY**

ITEM	EXISTING	REQ'D.	PROV.
ACREAGE			
TOTAL	5.87	9.91	9.91
PARKING (SPACES)			
AUTOMOBILE TOTAL	140	223	223
STANDARD	135	216	216
HANDICAP	5	7	7
TRAILER TOTAL	16	55	60
28' TRAILER	14	14	22
LONG TRAILER	2	39	36
LONG TRAILER EQUIVALENT SPACE	0	2	2
TRACTOR	0	6	6
DOLLY STORAGE	0	6	6
VAN	5	84	84

- LEGEND**
- NEW ASPHALT PAVEMENT TYPE I
  - NEW ASPHALT PAVEMENT TYPE II
  - NEW ASPHALT PAVEMENT TYPE I (W/ SEALCOAT)
  - NEW CONCRETE PAD
  - NEW FENCE
  - REMOVE FENCE
  - EXISTING FENCE
  - REMOVED
  - NEW STRIPE
  - EXISTING STRIPE

- DESIGN DETAILS**
1. ASPHALT PAVEMENT TYPE I USED IN TRAILER/TRACTOR/VAN AREAS REFER FXG SPECS AND STD. DETAIL 02510-001
  2. ASPHALT PAVEMENT TYPE II USED IN AUTO PARKING LOT ONLY REFER FXG SPECS AND STD. DETAIL 02510-001
  3. CONCRETE PAVEMENT REFER FXG SPECS AND STD DETAIL 02510-007
  4. CONCRETE CURB AT REAR OF TRACTOR AND DOLLY PARKING REFER FXG SPECS AND STD. DETAIL 02522-002
  5. TRAILER PARKING BACK-IN REFER FXG STD. DETAIL 02002-006
  6. TRAILER PARKING BACK-TO-BACK LONGS REFER FXG STD. DETAIL 02002-008
  7. TRACTOR PARKING TO HAVE SEALCOAT REFER FXG SPECS.
  8. CHAIN LINK FENCE REFER FXG SPECS AND STD. DETAIL 02830-006
  9. BLOCK HEATER RECEPTACLES (IF SHOWN ON DRAWING) REFER FXG STD DETAIL 16601-001

- GENERAL NOTES**
1. VERIFY DISTANCE REQUIRED FOR LOCAL SETBACKS, STORM WATER MANAGEMENT REQUIREMENTS AND TOPOGRAPHICAL ADJUSTMENTS.

**DISCLAIMER:**  
 THIS SURVEY IS NOT 100% ACCURATE AND WAS DERIVED FROM ESTIMATED DATA. A FIELD SURVEY IS REQUIRED FOR ACCURACY.  
 AERIAL IMAGERY CONTAINED HEREIN HAS BEEN GENERATED BY BING MAPS. IMAGERY SHOULD BE FIELD VERIFIED FOR ACCURACY.

**Surveyors Note:**  
 A difference in actual and record measurements existed between the location of the irons as found on site as compared to the location of the section corners. The irons on site were held more specifically, the southeast corner of Lot 1, CSM 955 and the southwest corner of Halvor Lane, CSM 955. Section corner locations as found are noted.

**Note:** Underground Telephone, Gas, and Electric shown based on field location of marker flags and record documents (ALTA Survey dated 7/09/07)

**Note:** Underground Water shown based on field location of visible features (valves & hydrants) and record documents (Utility Plan dated 9/28/06)

**BENCHMARK:**  $\text{chm} \text{ TOP OF } \text{TOP NUT OF HYDRANT} = 639.43$   
 $\text{Hydrant} = 639.43$

REVISIONS

--	--

JOB # 06.02.2020  
 DATE 06.02.2020  
 DRAWN BY: KEN  
 CHECKED BY:

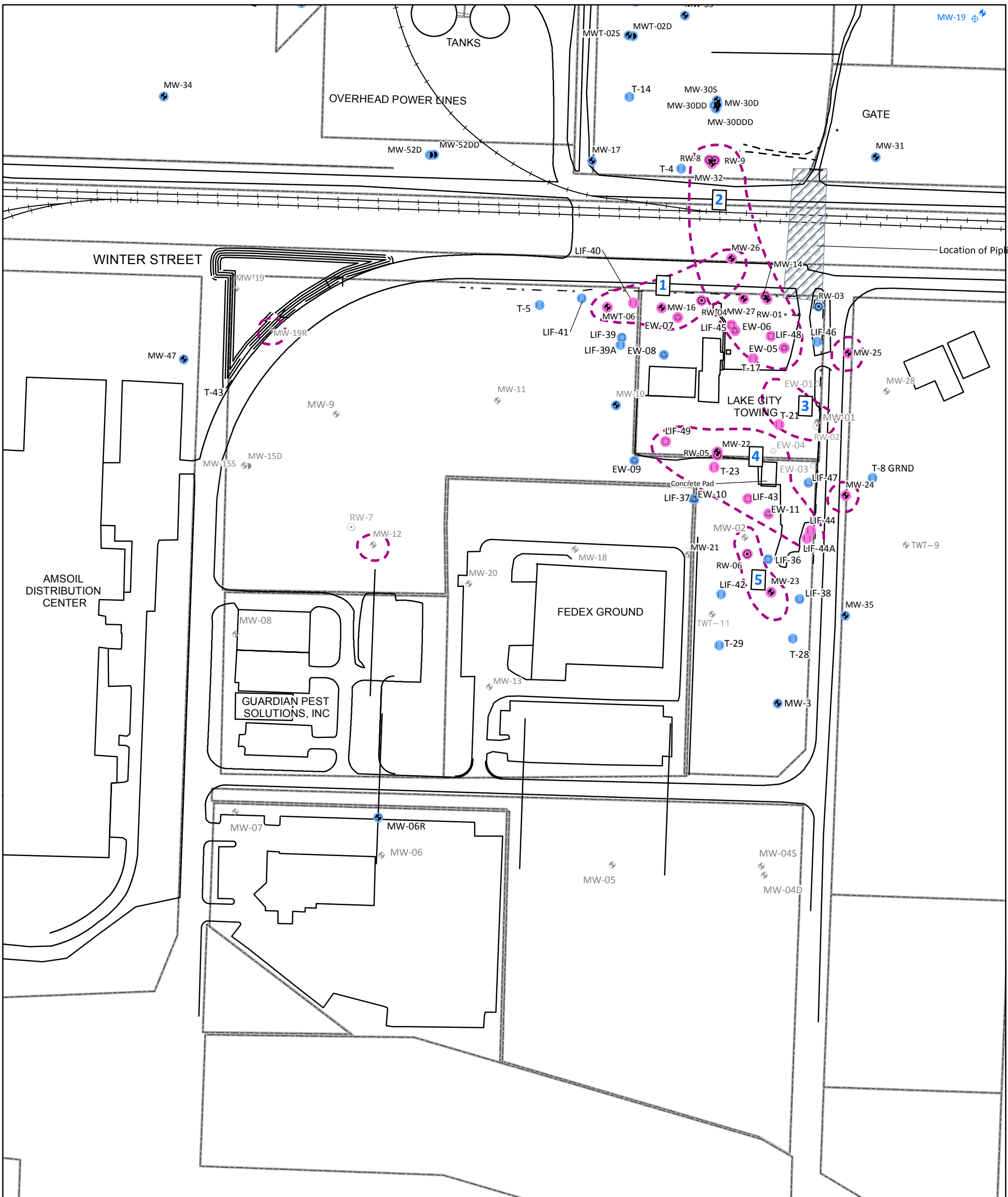
FOR INFORMATION PURPOSES ONLY  
 NOT FOR CONSTRUCTION



DULUTH, MN  
 SITE LAYOUT

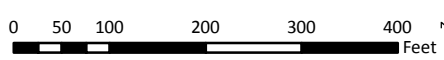
SDI.01C  
 FILE NO. SDI.01c.dwg

© 2020 HERE



**Legend**

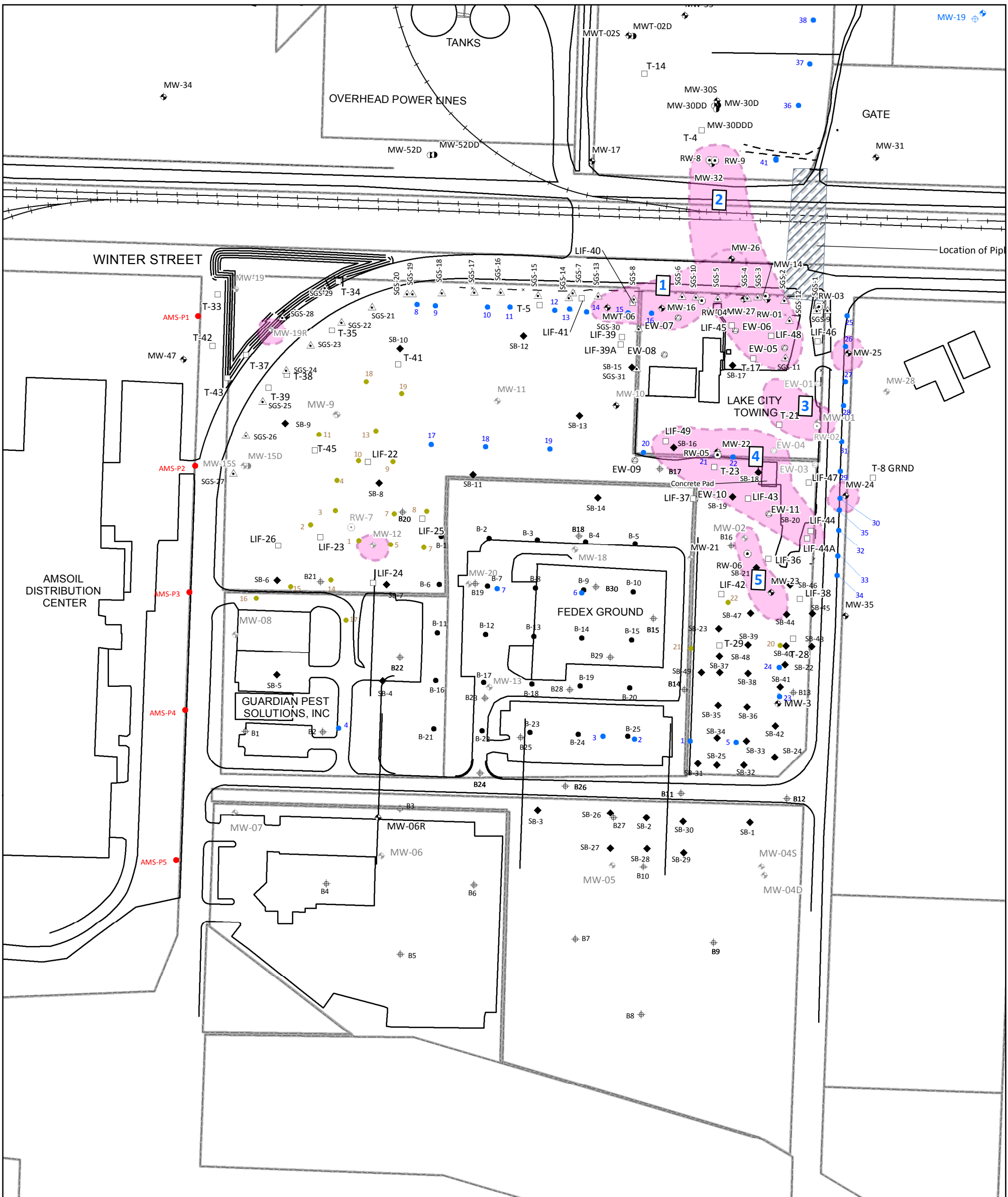
- ◆ Monitoring Well Location
- ◆ Abandoned Monitoring Well Location
- Deep Monitoring Well Location
- Abandoned Deep Monitoring Well Location
- ⊙ Recovery Well Location
- ⊙ Abandoned Recovery Well Location
- ⊕ Extraction Well
- ⊕ Abandoned Extraction Well Location
- CPT-LIF Boring Location
- ◆ ABC Rail Monitoring Well
- ◆ ABC Rail Piezometer
- Points with LNAPL
- No LNAPL
- LNAPL Extent
- - - Gravel Access Road
- x - Fence
- ▨ Location of Pipelines Abandoned in Place
- + - Railroad
- ▭ Property Boundary



**FIGURE 2**  
LNAPL EXTENT MAP  
TERMINAL DETAIL  
FORMER AMOCO TERMINAL  
SUPERIOR, WISCONSIN

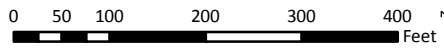
PROJECT NO. WISUP191	PREPARED BY SAA/MB	REF SCALE 1:2,400
DATE 3/3/2021	REVIEWED BY JZ	MAP SCALE 1 INCH = 200 FEET





**Legend**

- ◆ Monitoring Well Location
- ◆ Abandoned Monitoring Well Location
- Deep Monitoring Well Location
- Abandoned Deep Monitoring Well Location
- ⊙ Recovery Well Location
- ⊙ Abandoned Recovery Well Location
- ⊕ Extraction Well
- ⊕ Abandoned Extraction Well Location
- CPT-LIF Boring Location
- ◆ ABC Rail Monitoring Well
- ⊕ ABC Rail Piezometer
- ◆ Soil Boring Location (Vinje Industrial Park Area) (2003 Soil Borings- TPT Geotech Soil Report 2004)
- Hand Auger Boring (1990)
- Soil Borings (December 1994)
- Amsoil Temporary Well (2004 Data)
- ◆ Hand Auger Sampling Location
- △ SGS Sampling Location
- Soil Sampling Location
- LNAPL Extent
- - - Gravel Access Road
- × - - Fence
- ▨ Location of Pipelines Abandoned in Place
- +— Railroad
- Property Boundary

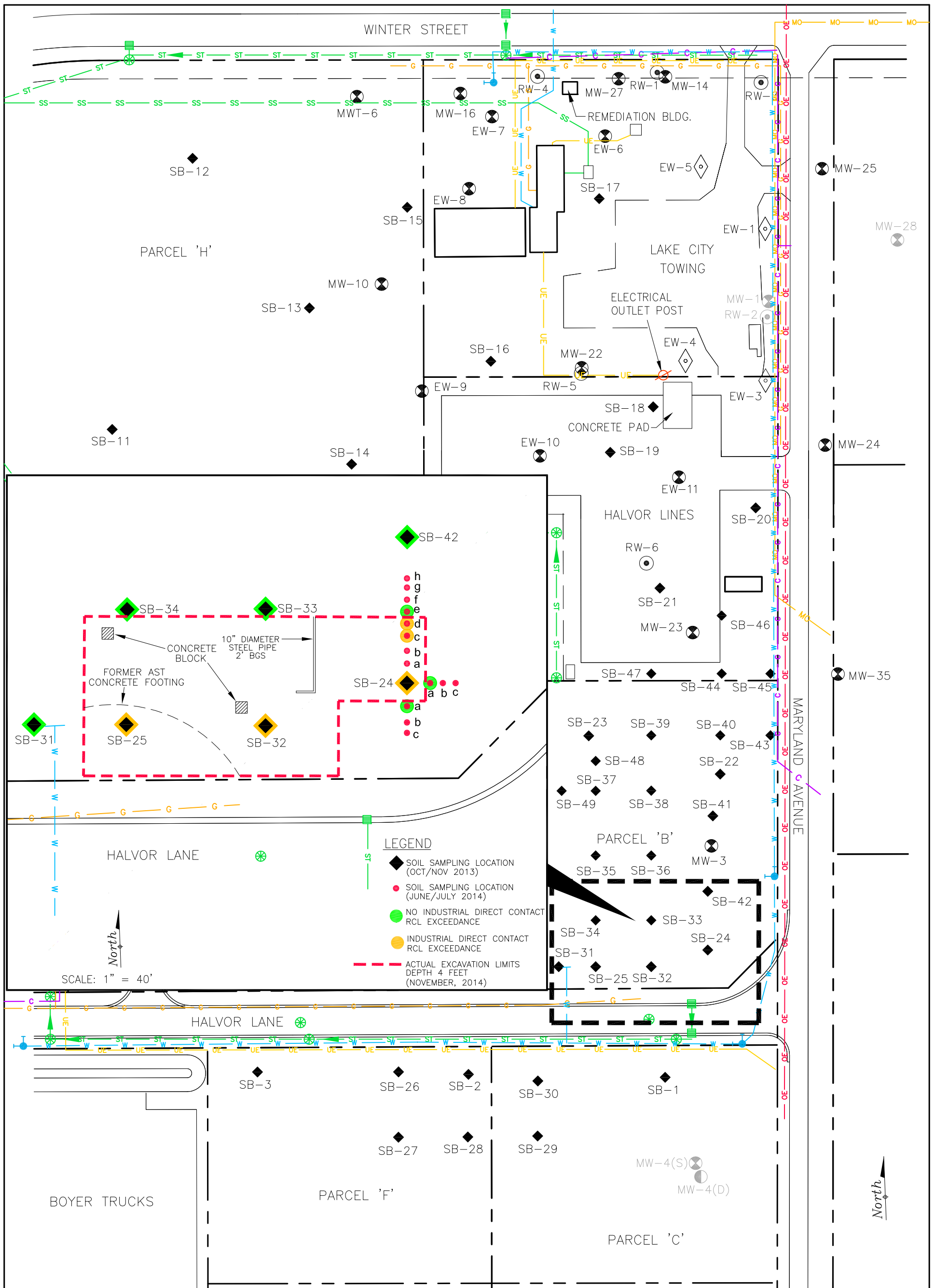


**FIGURE 3**  
SITE MAP  
TERMINAL DETAIL  
FORMER AMOCO TERMINAL  
SUPERIOR, WISCONSIN

PROJECT NO. WISUP191	PREPARED BY SAA/MB	REF SCALE 1:2,400
DATE 3/3/2021	REVIEWED BY JZ	MAP SCALE 1 INCH = 200 FEET







**LEGEND**

- ◆ SOIL SAMPLING LOCATION (OCT/NOV 2013)
- SOIL SAMPLING LOCATION (JUNE/JULY 2014)
- NO INDUSTRIAL DIRECT CONTACT RCL EXCEEDANCE
- INDUSTRIAL DIRECT CONTACT RCL EXCEEDANCE
- - - ACTUAL EXCAVATION LIMITS DEPTH 4 FEET (NOVEMBER, 2014)

**LEGEND:**

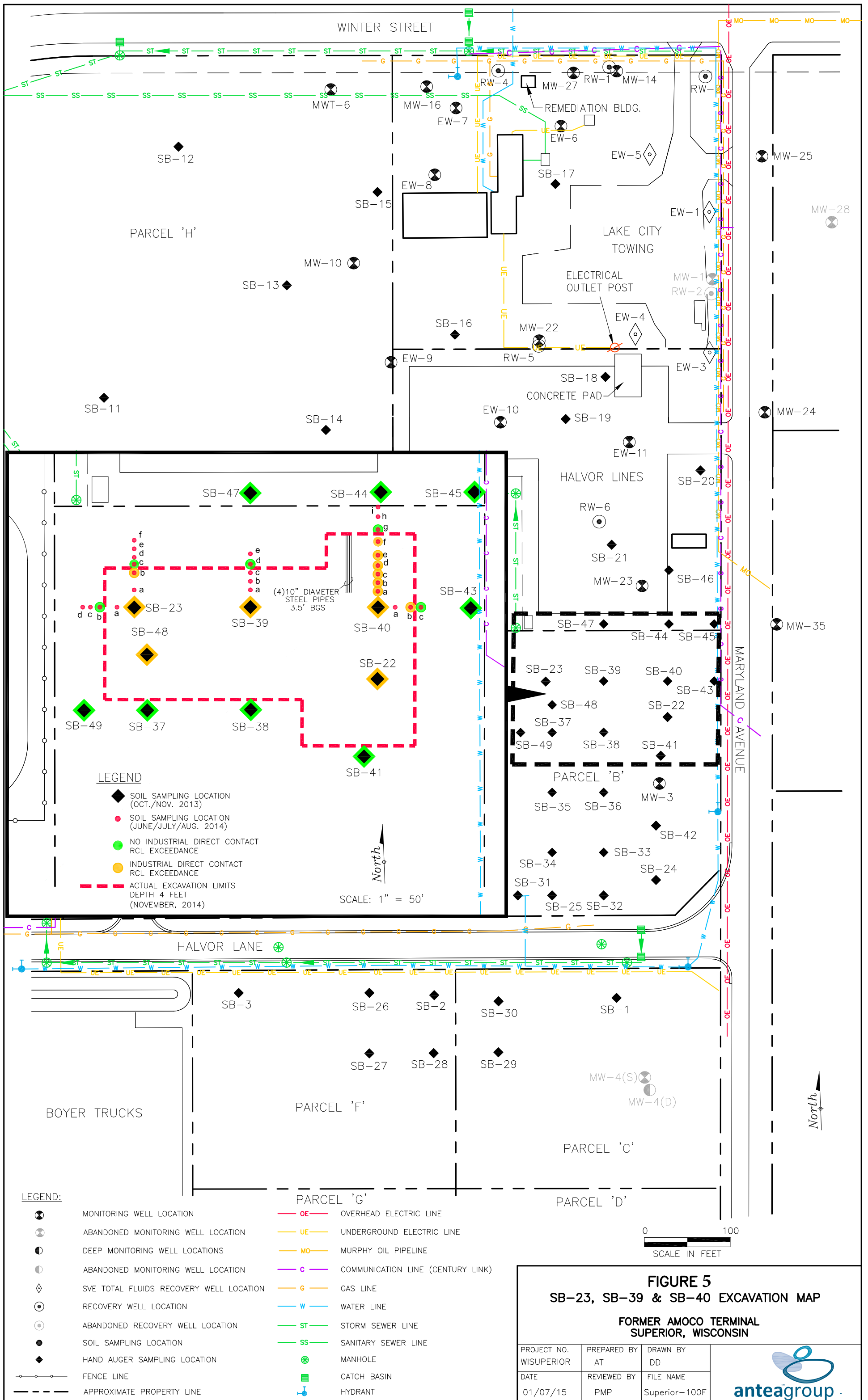
- ⊗ MONITORING WELL LOCATION
- ⊗ ABANDONED MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATIONS
- ABANDONED MONITORING WELL LOCATION
- ◇ SVE TOTAL FLUIDS RECOVERY WELL LOCATION
- ⊙ RECOVERY WELL LOCATION
- ⊙ ABANDONED RECOVERY WELL LOCATION
- SOIL SAMPLING LOCATION
- ◆ HAND AUGER SAMPLING LOCATION
- - - FENCE LINE
- - - APPROXIMATE PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UE — UNDERGROUND ELECTRIC LINE
- MO — MURPHY OIL PIPELINE
- C — COMMUNICATION LINE (CENTURY LINK)
- G — GAS LINE
- W — WATER LINE
- ST — STORM SEWER LINE
- SS — SANITARY SEWER LINE
- ⊗ MANHOLE
- ⊗ CATCH BASIN
- ⊗ HYDRANT



**FIGURE 4**  
**SB-24 EXCAVATION MAP**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

PROJECT NO. WISUPERIOR	PREPARED BY AT	DRAWN BY DD
DATE 01/07/15	REVIEWED BY PMP	FILE NAME Superior-100F





**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	03/23/88	633.90	636.17	618.60	609.60	NP	0.00	18.15	15.88	618.02	No	
MW-03	09/08/88	633.90	636.17	618.60	609.60	NP	0.00	17.89	15.62	618.28	No	
MW-03	09/20/88	633.90	636.17	618.60	609.60	NP	0.00	17.38	15.11	618.79	Yes	
MW-03	04/27/89	633.90	636.17	618.60	609.60	NP	0.00	16.37	14.10	619.80	Yes	
MW-03	05/18/89	633.90	636.17	618.60	609.60	NP	0.00	15.80	13.53	620.37	Yes	
MW-03	06/30/89	633.90	636.17	618.60	609.60	NP	0.00	16.33	14.06	619.84	Yes	
MW-03	07/12/89	633.90	636.17	618.60	609.60	NP	0.00	17.07	14.80	619.10	Yes	
MW-03	07/26/89	633.90	636.17	618.60	609.60	NP	0.00	17.38	15.11	618.79	Yes	
MW-03	07/27/89	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	09/03/89	633.90	636.17	618.60	609.60	NP	0.00	17.76	15.49	618.41	No	
MW-03	11/16/89	633.90	636.17	618.60	609.60	NP	0.00	17.72	15.45	618.45	No	
MW-03	11/28/89	633.90	636.17	618.60	609.60	NP	0.00	18.15	15.88	618.02	No	
MW-03	06/01/90	633.90	636.17	618.60	609.60	NP	0.00	13.42	11.15	622.75	Yes	
MW-03	06/19/90	633.90	636.17	618.60	609.60	NP	0.00	16.35	14.08	619.82	Yes	
MW-03	06/27/90	633.90	636.17	618.60	609.60	NP	0.00	17.23	14.96	618.94	Yes	
MW-03	07/05/90	633.90	636.17	618.60	609.60	NP	0.00	17.81	15.54	618.36	No	
MW-03	07/13/90	633.90	636.17	618.60	609.60	NP	0.00	18.11	15.84	618.06	No	
MW-03	07/17/90	633.90	636.17	618.60	609.60	NP	0.00	17.72	15.45	618.45	No	
MW-03	07/25/90	633.90	636.17	618.60	609.60	NP	0.00	18.26	15.99	617.91	No	
MW-03	08/09/90	633.90	636.17	618.60	609.60	NP	0.00	18.14	15.87	618.03	No	
MW-03	08/14/90	633.90	636.17	618.60	609.60	NP	0.00	18.23	15.96	617.94	No	
MW-03	08/27/90	633.90	636.17	618.60	609.60	NP	0.00	17.51	15.24	618.66	Yes	
MW-03	09/06/90	633.90	636.17	618.60	609.60	NP	0.00	17.02	14.75	619.15	Yes	
MW-03	01/04/91	633.90	636.17	618.60	609.60	NP	0.00	17.51	15.24	618.66	Yes	
MW-03	01/30/91	633.90	636.17	618.60	609.60	NP	0.00	17.96	15.69	618.21	No	
MW-03	04/24/91	633.90	636.17	618.60	609.60	NP	0.00	15.96	13.69	620.21	Yes	
MW-03	07/09/91	633.90	636.17	618.60	609.60	NP	0.00	13.77	11.50	622.40	Yes	
MW-03	10/08/91	633.90	636.17	618.60	609.60	NP	0.00	13.44	11.17	622.73	Yes	
MW-03	01/07/92	633.90	636.17	618.60	609.60	NP	0.00	13.42	11.15	622.75	Yes	
MW-03	10/14/92	633.90	636.17	618.60	609.60	NP	0.00	7.53	5.26	628.64	Yes	
MW-03	01/29/94	633.90	636.17	618.60	609.60	NP	0.00	15.95	13.68	620.22	Yes	
MW-03	04/27/94	633.90	636.17	618.60	609.60	NP	0.00	12.84	10.57	623.33	Yes	
MW-03	07/21/94	633.90	636.17	618.60	609.60	NP	0.00	13.99	11.72	622.18	Yes	
MW-03	10/25/94	633.90	636.17	618.60	609.60	NP	0.00	6.76	4.49	629.41	Yes	
MW-03	10/27/94	633.90	636.17	618.60	609.60	NP	0.00	6.68	4.41	629.49	Yes	
MW-03	11/02/94	633.90	636.17	618.60	609.60	17.50	0.70	18.20	15.39	618.51	No	
MW-03	02/01/95	633.90	636.17	618.60	609.60	NP	0.00	15.45	13.18	620.72	Yes	
MW-03	04/04/95	633.90	636.17	618.60	609.60	NP	0.00	16.94	14.67	619.23	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	07/12/95	633.90	636.17	618.60	609.60	NP	0.00	15.41	13.14	620.76	Yes	
MW-03	11/13/95	633.90	636.17	618.60	609.60	13.45	0.01	13.46	11.18	622.72	Yes	
MW-03	03/13/96	633.90	636.17	618.60	609.60	16.64	0.01	16.65	14.37	619.53	Yes	
MW-03	10/08/96	633.90	636.17	618.60	609.60	NP	0.00	13.32	11.05	622.85	Yes	
MW-03	04/29/97	633.90	636.17	618.60	609.60	NP	0.00	10.22	7.95	625.95	Yes	
MW-03	11/03/98	633.90	636.17	618.60	609.60	NP	0.00	16.55	14.28	619.62	Yes	
MW-03	03/02/99	633.90	636.17	618.60	609.60	NP	0.00	16.94	14.67	619.23	Yes	
MW-03	04/26/00	633.90	636.17	618.60	609.60	NP	0.00	6.72	4.45	629.45	Yes	
MW-03	08/18/00	633.90	636.17	618.60	609.60	NP	0.00	16.31	14.04	619.86	Yes	
MW-03	03/20/02	633.90	636.17	618.60	609.60	NP	0.00	18.14	15.87	618.03	No	
MW-03	05/15/02	633.90	636.17	618.60	609.60	NP	0.00	6.84	4.57	629.33	Yes	very silty
MW-03	08/20/02	633.90	636.17	618.60	609.60	NP	0.00	6.59	4.32	629.58	Yes	
MW-03	11/05/02	633.90	636.17	618.60	609.60	NP	0.00	6.52	4.25	629.65	Yes	
MW-03	12/23/02	633.90	636.17	618.60	609.60	NP	0.00	17.07	14.80	619.10	Yes	
MW-03	01/28/03	633.90	636.17	618.60	609.60	NP	0.00	17.75	15.48	618.42	No	
MW-03	02/19/03	633.90	636.17	618.60	609.60	NP	0.00	18.02	15.75	618.15	No	
MW-03	04/17/03	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	06/10/03	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	10/20/03	633.90	636.17	618.60	609.60	NP	0.00	17.98	15.71	618.19	No	
MW-03	12/03/03	633.90	636.17	618.60	609.60	NP	0.00	18.30	16.03	617.87	No	
MW-03	04/19/04	634.51	635.97	618.60	609.60	NP	0.00	17.79	16.33	618.18	No	
MW-03	07/28/04	634.51	635.97	618.60	609.60	NP	0.00	16.80	15.34	619.17	Yes	
MW-03	11/16/04	634.51	635.97	618.60	609.60	NP	0.00	15.69	14.23	620.28	Yes	
MW-03	04/18/05	634.51	635.97	618.60	609.60	NP	0.00	15.78	14.32	620.19	Yes	
MW-03	10/11/05	634.51	635.97	618.60	609.60	NP	0.00	15.30	13.84	620.67	Yes	
MW-03	05/23/06	634.51	635.97	618.60	609.60	NP	0.00	12.72	11.26	623.25	Yes	
MW-03	10/16/06	634.51	635.97	618.60	609.60	NP	0.00	16.78	15.32	619.19	Yes	
MW-03	04/23/07	634.51	635.97	618.60	609.60	NP	0.00	10.32	8.86	625.65	Yes	
MW-03	09/25/07	634.51	636.63	618.60	609.60	NP	0.00	13.97	11.85	622.66	Yes	
MW-03	05/01/08	634.51	636.63	618.60	609.60	NP	0.00	12.15	10.03	624.48	Yes	
MW-03	10/20/08	634.51	636.63	618.60	609.60	NP	0.00	6.93	4.81	629.70	Yes	
MW-03	04/18/09	634.51	636.63	618.60	609.60	NP	0.00	8.48	6.36	628.15	Yes	
MW-03	10/11/09	634.51	636.63	618.60	609.60	NP	0.00	16.87	14.75	619.76	Yes	
MW-03	04/28/10	634.51	636.63	618.60	609.60	NP	0.00	15.46	13.34	621.17	Yes	
MW-03	10/25/10	634.51	636.63	618.60	609.60	NP	0.00	7.57	5.45	629.06	Yes	
MW-03	04/25/11	634.51	636.63	618.60	609.60	NP	0.00	7.42	5.30	629.21	Yes	
MW-03	10/10/11	634.51	636.63	618.60	609.60	NP	0.00	16.11	13.99	620.52	Yes	
MW-03	01/04/12	634.51	636.63	618.60	609.60	NP	0.00	17.37	15.25	619.26	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	04/16/12	634.51	636.63	618.60	609.60	NP	0.00	15.80	13.68	620.83	Yes	
MW-03	06/26/12	634.51	636.63	618.60	609.60	NP	0.00	7.02	4.90	629.61	Yes	
MW-03	09/30/12	634.51	636.63	618.60	609.60	NP	0.00	17.49	15.37	619.14	Yes	
MW-03	12/17/12	634.51	636.63	618.60	609.60	NP	0.00	17.83	15.71	618.80	Yes	
MW-03	03/25/13	634.51	636.63	618.60	609.60	NP	0.00	19.01	16.89	617.62	No	
MW-03	05/05/13	634.51	636.63	618.60	609.60	NP	0.00	9.33	7.21	627.30	Yes	
MW-03	10/01/13	634.51	636.63	618.60	609.60	NP	0.00	17.44	15.32	619.19	Yes	
MW-03	05/21/14	634.51	636.63	618.60	609.60	NP	0.00	5.87	3.75	630.76	Yes	
MW-03	10/30/14	634.51	636.63	618.60	609.60	NP	0.00	8.74	6.62	627.89	Yes	
MW-03	05/06/15	634.51	636.63	618.60	609.60	NP	0.00	15.09	12.97	621.54	Yes	
MW-03	10/06/15	634.51	636.63	618.60	609.60	NP	0.00	8.09	5.97	628.54	Yes	
MW-03	05/23/16	634.51	636.63	618.60	609.60	NP	0.00	6.92	4.80	629.71	Yes	
MW-03	10/03/16	634.51	636.63	618.60	609.60	NP	0.00	6.70	4.58	629.93	Yes	
MW-03	06/29/17	634.51	636.63	618.60	609.60	NP	0.00	7.73	5.61	628.90	Yes	
MW-03	05/26/20	634.51	636.63	618.60	609.60	NP	0.00	7.34	5.22	629.29	Yes	
MW-10	03/23/88	631.40	633.77	615.90	606.90	NP	0.00	18.01	15.64	615.76	No	
MW-10	09/08/88	631.40	633.77	615.90	606.90	NP	0.00	18.38	16.01	615.39	No	
MW-10	09/20/88	631.40	633.77	615.90	606.90	NP	0.00	18.60	16.23	615.17	No	
MW-10	04/27/89	631.40	633.77	615.90	606.90	NP	0.00	18.37	16.00	615.40	No	
MW-10	05/18/89	631.40	633.77	615.90	606.90	NP	0.00	18.10	15.73	615.67	No	
MW-10	06/30/89	631.40	633.77	615.90	606.90	NP	0.00	17.55	15.18	616.22	Yes	
MW-10	07/12/89	631.40	633.77	615.90	606.90	NP	0.00	17.66	15.29	616.11	Yes	
MW-10	07/26/89	631.40	633.77	615.90	606.90	NP	0.00	17.61	15.24	616.16	Yes	
MW-10	07/27/89	631.40	633.77	615.90	606.90	NP	0.00	17.68	15.31	616.09	Yes	
MW-10	09/03/89	631.40	633.77	615.90	606.90	NP	0.00	17.73	15.36	616.04	Yes	
MW-10	11/16/89	631.40	633.77	615.90	606.90	NP	0.00	17.94	15.57	615.83	No	
MW-10	11/28/89	631.40	633.77	615.90	606.90	NP	0.00	18.20	15.83	615.57	No	
MW-10	06/01/90	631.40	633.77	615.90	606.90	NP	0.00	18.34	15.97	615.43	No	
MW-10	06/19/90	631.40	633.77	615.90	606.90	NP	0.00	18.14	15.77	615.63	No	
MW-10	06/27/90	631.40	633.77	615.90	606.90	NP	0.00	18.28	15.91	615.49	No	
MW-10	07/05/90	631.40	633.77	615.90	606.90	NP	0.00	18.50	16.13	615.27	No	
MW-10	07/13/90	631.40	633.77	615.90	606.90	NP	0.00	18.40	16.03	615.37	No	
MW-10	07/17/90	631.40	633.77	615.90	606.90	NP	0.00	18.23	15.86	615.54	No	
MW-10	07/25/90	631.40	633.77	615.90	606.90	NP	0.00	18.36	15.99	615.41	No	
MW-10	08/09/90	631.40	633.77	615.90	606.90	NP	0.00	18.28	15.91	615.49	No	
MW-10	08/14/90	631.40	633.77	615.90	606.90	NP	0.00	18.39	16.02	615.38	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-10	08/27/90	631.40	633.77	615.90	606.90	NP	0.00	18.09	15.72	615.68	No	
MW-10	09/06/90	631.40	633.77	615.90	606.90	NP	0.00	18.02	15.65	615.75	No	
MW-10	01/04/91	631.40	633.77	615.90	606.90	NP	0.00	17.44	15.07	616.33	Yes	
MW-10	01/30/91	631.40	633.77	615.90	606.90	NP	0.00	17.57	15.20	616.20	Yes	
MW-10	04/24/91	631.40	633.77	615.90	606.90	NP	0.00	18.19	15.82	615.58	No	
MW-10	07/09/91	631.40	633.77	615.90	606.90	NP	0.00	16.16	13.79	617.61	Yes	
MW-10	10/08/91	631.40	633.77	615.90	606.90	NP	0.00	14.89	12.52	618.88	Yes	
MW-10	01/07/92	631.40	633.77	615.90	606.90	NP	0.00	14.88	12.51	618.89	Yes	
MW-10	10/14/92	631.40	633.77	615.90	606.90	NP	0.00	14.87	12.50	618.90	Yes	
MW-10	01/29/94	631.40	633.77	615.90	606.90	NP	0.00	16.01	13.64	617.76	Yes	
MW-10	04/27/94	631.40	633.77	615.90	606.90	NP	0.00	16.13	13.76	617.64	Yes	
MW-10	07/21/94	631.40	633.77	615.90	606.90	NP	0.00	14.78	12.41	618.99	Yes	
MW-10	10/25/94	631.40	633.77	615.90	606.90	NP	0.00	15.25	12.88	618.52	Yes	
MW-10	10/27/94	631.40	633.77	615.90	606.90	NP	0.00	14.70	12.33	619.07	Yes	
MW-10	11/02/94	631.40	633.77	615.90	606.90	NP	0.00	17.20	14.83	616.57	Yes	
MW-10	02/01/95	631.40	633.77	615.90	606.90	NP	0.00	16.96	14.59	616.81	Yes	
MW-10	04/04/95	631.40	633.77	615.90	606.90	NP	0.00	17.12	14.75	616.65	Yes	
MW-10	07/12/95	631.40	633.77	615.90	606.90	NP	0.00	16.15	13.78	617.62	Yes	
MW-10	11/13/95	631.40	633.77	615.90	606.90	NP	0.00	14.88	12.51	618.89	Yes	
MW-10	03/13/96	631.40	633.77	615.90	606.90	16.67	0.01	16.68	14.30	617.10	Yes	
MW-10	10/08/96	631.40	633.77	615.90	606.90	NP	0.00	14.02	11.65	619.75	Yes	
MW-10	04/29/97	631.40	633.77	615.90	606.90	NP	0.00	13.30	10.93	620.47	Yes	
MW-10	11/03/98	631.40	633.77	615.90	606.90	NP	0.00	17.01	14.64	616.76	Yes	
MW-10	03/02/99	631.40	633.77	615.90	606.90	NP	0.00	17.01	14.64	616.76	Yes	
MW-10	04/26/00	631.40	633.77	615.90	606.90	NP	0.00	16.18	13.81	617.59	Yes	
MW-10	08/18/00	631.40	633.77	615.90	606.90	NP	0.00	16.62	14.25	617.15	Yes	
MW-10	10/10/00	631.40	633.77	615.90	606.90	NP	0.00	16.80	14.43	616.97	Yes	
MW-10	09/30/02	631.40	633.77	615.90	606.90	NP	0.00	17.09	14.72	616.68	Yes	
MW-10	11/05/02	631.40	633.77	615.90	606.90	NP	0.00	16.34	13.97	617.43	Yes	
MW-10	06/10/03	631.40	633.77	615.90	606.90	NP	0.00	17.85	15.48	615.92	Yes	
MW-10	10/20/03	631.40	633.77	615.90	606.90	NP	0.00	17.97	15.60	615.80	No	
MW-10	12/03/03	631.40	633.77	615.90	606.90	NP	0.00	18.31	15.94	615.46	No	
MW-10	04/19/04	634.75	633.83	615.90	606.90	NP	0.00	18.39	19.31	615.44	No	
MW-10	07/28/04	634.75	633.83	615.90	606.90	NP	0.00	17.74	18.66	616.09	Yes	
MW-10	11/16/04	634.75	633.83	615.90	606.90	NP	0.00	17.17	18.09	616.66	Yes	
MW-10	04/18/05	634.75	633.83	615.90	606.90	NP	0.00	17.39	18.31	616.44	Yes	
MW-10	10/11/05	634.75	633.83	615.90	606.90	NP	0.00	16.62	17.54	617.21	Yes	
MW-10	05/23/06	634.75	633.83	615.90	606.90	NP	0.00	15.91	16.83	617.92	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-10	10/16/06	634.75	633.83	615.90	606.90	NP	0.00	16.81	17.73	617.02	Yes	
MW-10	04/23/07	634.75	633.83	615.90	606.90	NP	0.00	17.69	18.61	616.14	Yes	
MW-10	09/25/07	634.75	635.95	615.90	606.90	NP	0.00	19.56	18.36	616.39	Yes	
MW-10	05/01/08	634.75	635.95	615.90	606.90	NP	0.00	18.35	17.15	617.60	Yes	
MW-10	10/20/08	634.75	635.95	615.90	606.90	NP	0.00	17.26	16.06	618.69	Yes	
MW-10	04/18/09	634.75	635.95	615.90	606.90	NP	0.00	18.33	17.13	617.62	Yes	
MW-10	10/11/09	634.75	635.95	615.90	606.90	NP	0.00	18.79	17.59	617.16	Yes	
MW-10	04/28/10	634.75	635.95	615.90	606.90	NP	0.00	18.91	17.71	617.04	Yes	
MW-10	10/25/10	634.75	635.95	615.90	606.90	NP	0.00	16.70	15.50	619.25	Yes	
MW-10	04/25/11	634.75	635.95	615.90	606.90	NP	0.00	17.92	16.72	618.03	Yes	
MW-10	10/10/11	634.75	635.95	615.90	606.90	NP	0.00	17.48	16.28	618.47	Yes	
MW-10	01/04/12	634.75	635.95	615.90	606.90	NP	0.00	18.78	17.58	617.17	Yes	
MW-10	04/16/12	634.75	635.95	615.90	606.90	NP	0.00	19.57	18.37	616.38	Yes	
MW-10	06/26/12	634.75	635.95	615.90	606.90	NP	0.00	17.18	15.98	618.77	Yes	
MW-10	09/30/12	634.75	635.95	615.90	606.90	NP	0.00	18.61	17.41	617.34	Yes	
MW-10	12/17/12	634.75	635.95	615.90	606.90	NP	0.00	19.21	18.01	616.74	Yes	
MW-10	03/25/13	634.75	635.95	615.90	606.90	NP	0.00	19.97	18.77	615.98	Yes	
MW-10	05/05/13	634.75	635.95	615.90	606.90	NP	0.00	19.76	18.56	616.19	Yes	
MW-10	10/03/13	634.75	635.95	615.90	606.90	NP	0.00	19.31	18.11	616.64	Yes	
MW-10	05/21/14	634.75	635.95	615.90	606.90	NP	0.00	17.85	16.65	618.10	Yes	
MW-10	10/31/14	634.75	635.95	615.90	606.90	NP	0.00	17.43	16.23	618.52	Yes	
MW-10	05/05/15	634.75	635.95	615.90	606.90	NP	0.00	19.14	17.94	616.81	Yes	
MW-10	10/05/15	634.75	635.95	615.90	606.90	NP	0.00	17.08	15.88	618.87	Yes	
MW-10	05/23/16	634.75	635.95	615.90	606.90	NP	0.00	15.15	13.95	620.80	Yes	
MW-10	10/03/16	634.75	635.95	615.90	606.90	NP	0.00	16.22	15.02	619.73	Yes	
MW-10	06/29/17	634.75	635.95	615.90	606.90	NP	0.00	15.75	14.55	620.20	Yes	
MW-10	05/26/20	634.75	635.95	615.90	606.90	NP	0.00	15.05	13.85	620.90	Yes	
MW-23	06/30/89	633.90	636.81	624.70	609.70	17.07	3.20	20.27	14.88	619.02	No	
MW-23	07/12/89	633.90	636.81	624.70	609.70	15.08	2.50	17.58	12.73	621.17	No	
MW-23	07/26/89	633.90	636.81	624.70	609.70	17.81	2.73	20.54	15.52	618.38	No	
MW-23	07/27/89	633.90	636.81	624.70	609.70	17.83	2.77	20.60	15.55	618.35	No	
MW-23	09/03/89	633.90	636.81	624.70	609.70	17.95	3.72	21.67	15.88	618.02	No	
MW-23	11/16/89	633.90	636.81	624.70	609.70	17.20	5.15	22.35	15.45	618.45	No	
MW-23	11/29/89	633.90	636.81	624.70	609.70	17.55	3.98	21.53	15.54	618.36	No	
MW-23	12/01/89	633.90	636.81	624.70	609.70	18.20	2.27	20.47	15.80	618.10	No	
MW-23	12/02/89	633.90	636.81	624.70	609.70	18.41	1.41	19.82	15.82	618.08	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	05/04/90	633.90	636.81	624.70	609.70	18.03	<b>4.26</b>	22.29	16.08	617.82	No	
MW-23	06/01/90	633.90	636.81	624.70	609.70	17.35	<b>3.65</b>	21.00	15.26	618.64	No	
MW-23	06/19/90	633.90	636.81	624.70	609.70	17.49	<b>3.37</b>	20.86	15.34	618.56	No	
MW-23	06/27/90	633.90	636.81	624.70	609.70	17.78	<b>3.28</b>	21.06	15.61	618.29	No	
MW-23	07/05/90	633.90	636.81	624.70	609.70	18.10	<b>3.43</b>	21.53	15.96	617.94	No	
MW-23	07/13/90	633.90	636.81	624.70	609.70	18.02	<b>3.65</b>	21.67	15.93	617.97	No	
MW-23	07/17/90	633.90	636.81	624.70	609.70	17.78	<b>3.57</b>	21.35	15.68	618.22	No	
MW-23	07/25/90	633.90	636.81	624.70	609.70	18.10	<b>3.79</b>	21.89	16.05	617.85	No	
MW-23	08/09/90	633.90	636.81	624.70	609.70	20.68	<b>2.65</b>	23.33	18.37	615.53	No	
MW-23	08/27/90	633.90	636.81	624.70	609.70	18.29	<b>3.71</b>	22.00	16.22	617.68	No	
MW-23	09/06/90	633.90	636.81	624.70	609.70	17.75	<b>3.07</b>	20.82	15.53	618.37	No	
MW-23	01/04/91	633.90	636.81	624.70	609.70	17.84	<b>2.56</b>	20.40	15.51	618.39	No	
MW-23	01/30/91	633.90	636.81	624.70	609.70	18.05	<b>3.18</b>	21.23	15.86	618.04	No	
MW-23	04/24/91	633.90	636.81	624.70	609.70	17.18	<b>3.78</b>	20.96	15.12	618.78	No	
MW-23	06/06/91	633.90	636.81	624.70	609.70	15.11	<b>4.67</b>	19.78	13.25	620.65	No	
MW-23	07/09/91	633.90	636.81	624.70	609.70	13.76	<b>5.93</b>	19.69	12.19	621.71	No	
MW-23	08/06/91	633.90	636.81	624.70	609.70	12.87	<b>7.10</b>	19.97	11.56	622.34	No	
MW-23	09/04/91	633.90	636.81	624.70	609.70	13.93	<b>6.02</b>	19.95	12.38	621.52	No	
MW-23	10/08/91	633.90	636.81	624.70	609.70	13.10	<b>6.60</b>	19.70	11.68	622.22	No	
MW-23	11/08/91	633.90	636.81	624.70	609.70	14.32	<b>5.15</b>	19.47	12.57	621.33	No	
MW-23	12/03/91	633.90	636.81	624.70	609.70	10.40	<b>10.15</b>	20.55	9.78	624.12	No	
MW-23	01/07/92	633.90	636.81	624.70	609.70	13.27	<b>7.60</b>	20.87	12.08	621.82	No	
MW-23	02/04/92	633.90	636.81	624.70	609.70	15.40	<b>4.54</b>	19.94	13.52	620.38	No	
MW-23	03/03/92	633.90	636.81	624.70	609.70	15.45	<b>5.75</b>	21.20	13.84	620.06	No	
MW-23	09/24/92	633.90	636.81	624.70	609.70	13.02	<b>6.61</b>	19.63	11.60	622.30	No	
MW-23	10/14/92	633.90	636.81	624.70	609.70	14.23	<b>5.64</b>	19.87	12.59	621.31	No	
MW-23	06/25/93	633.90	636.81	624.70	609.70	9.77	<b>9.74</b>	19.51	9.06	624.84	Yes	
MW-23	10/28/93	633.90	636.81	624.70	609.70	15.31	<b>4.55</b>	19.86	13.43	620.47	No	
MW-23	01/29/94	633.90	636.81	624.70	609.70	16.32	<b>3.70</b>	20.02	14.25	619.65	No	
MW-23	04/27/94	633.90	636.81	624.70	609.70	13.99	<b>6.34</b>	20.33	12.51	621.39	No	
MW-23	07/21/94	633.90	636.81	624.70	609.70	13.72	<b>5.86</b>	19.58	12.13	621.77	No	
MW-23	10/25/94	633.90	636.81	624.70	609.70	13.84	<b>6.49</b>	20.33	12.40	621.50	No	
MW-23	02/01/95	633.90	636.81	624.70	609.70	17.28	<b>2.53</b>	19.81	14.94	618.96	No	
MW-23	04/04/95	633.90	636.81	624.70	609.70	17.60	<b>2.65</b>	20.25	15.29	618.61	No	
MW-23	11/13/95	633.90	636.81	624.70	609.70	13.05	<b>6.90</b>	19.95	11.70	622.20	No	
MW-23	10/08/96	633.90	636.81	624.70	609.70	12.78	<b>6.47</b>	19.25	11.33	622.57	No	
MW-23	04/29/97	633.90	636.81	624.70	609.70	10.25	<b>9.20</b>	19.45	9.42	624.48	No	
MW-23	06/10/97	633.90	636.81	624.70	609.70	13.45	<b>5.40</b>	18.85	11.76	622.14	No	FP bailed 5/22/97



**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	11/03/98	633.90	636.81	624.70	609.70	16.05	<b>5.16</b>	21.21	14.31	619.59	No	
MW-23	03/02/99	633.90	636.81	624.70	609.70	16.91	<b>4.04</b>	20.95	14.91	618.99	No	
MW-23	10/07/99	633.90	636.81	624.70	609.70	12.44	<b>5.61</b>	18.05	10.80	623.10	No	
MW-23	11/09/99	633.90	636.81	624.70	609.70	11.95	<b>6.75</b>	18.70	10.56	623.34	No	bailed 3 gal. FP
MW-23	12/21/99	633.90	636.81	624.70	609.70	14.55	<b>4.45</b>	19.00	12.65	621.25	No	bailed 8 gal. FP
MW-23	01/27/00	633.90	636.81	624.70	609.70	17.32	<b>1.58</b>	18.90	14.77	619.13	No	bailed 0.4 gal. FP
MW-23	02/24/00	633.90	636.81	624.70	609.70	17.64	<b>1.32</b>	18.96	15.03	618.87	No	bailed 0.25 gal. FP
MW-23	03/31/00	633.90	636.81	624.70	609.70	15.70	<b>4.07</b>	19.77	13.71	620.19	No	bailed 2 gal. FP
MW-23	04/20/00	633.90	636.81	624.70	609.70	13.18	<b>7.37</b>	20.55	11.93	621.97	No	bailed 6 gal. FP
MW-23	04/26/00	633.90	636.81	624.70	609.70	15.82	<b>3.18</b>	19.00	13.63	620.27	No	bailed 2 gal. FP
MW-23	05/31/00	633.90	636.81	624.70	609.70	16.20	<b>2.58</b>	18.78	13.87	620.03	No	bailed 3 gal. FP
MW-23	06/29/00	633.90	636.81	624.70	609.70	15.15	<b>3.60</b>	18.75	13.05	620.85	No	bailed 1 gal. FP
MW-23	07/26/00	633.90	636.81	624.70	609.70	16.02	<b>2.84</b>	18.86	13.75	620.15	No	bailed 1 gal. FP
MW-23	08/18/00	633.90	636.81	624.70	609.70	16.55	<b>2.50</b>	19.05	14.20	619.70	No	bailed 1 gal. FP
MW-23	09/27/00	633.90	636.81	624.70	609.70	17.41	<b>2.12</b>	19.53	14.98	618.92	No	bailed 1.25 gal. FP
MW-23	10/11/00	633.90	636.81	624.70	609.70	17.60	<b>1.75</b>	19.35	15.09	618.81	No	bailed .25 gal. FP
MW-23	11/17/00	633.90	636.81	624.70	609.70	14.98	<b>5.33</b>	20.31	13.27	620.63	No	bailed 4.25 gal. FP
MW-23	12/12/00	633.90	636.81	624.70	609.70	15.11	<b>4.98</b>	20.09	13.32	620.58	No	bailed 2.5 gal. FP
MW-23	01/18/01	633.90	636.81	624.70	609.70	15.51	<b>4.92</b>	20.43	13.71	620.19	No	bailed 2.75 gal. FP
MW-23	04/24/01	633.90	636.81	624.70	609.70	16.16	<b>3.46</b>	19.62	14.03	619.87	No	product abated using vactruck
MW-23	05/23/01	633.90	636.81	624.70	609.70	13.73	<b>5.82</b>	19.55	12.13	621.77	No	no product bailed
MW-23	06/19/01	633.90	636.81	624.70	609.70	14.77	<b>4.47</b>	19.24	12.87	621.03	No	
MW-23	07/26/01	633.90	636.81	624.70	609.70	16.99	<b>2.36</b>	19.35	14.61	619.29	No	
MW-23	08/31/01	633.90	636.81	624.70	609.70	16.99	<b>2.69</b>	19.68	14.69	619.21	No	
MW-23	09/26/01	633.90	636.81	624.70	609.70	17.59	<b>2.01</b>	19.60	15.13	618.77	No	
MW-23	10/24/01	633.90	636.81	624.70	609.70	17.16	<b>2.70</b>	19.86	14.86	619.04	No	
MW-23	12/20/01	633.90	636.81	624.70	609.70	17.90	<b>2.43</b>	20.33	15.54	618.36	No	
MW-23	01/22/02	633.90	636.81	624.70	609.70	17.89	<b>2.01</b>	19.90	15.43	618.47	No	
MW-23	02/26/02	633.90	636.81	624.70	609.70	18.32	<b>2.89</b>	21.21	16.06	617.84	No	
MW-23	03/20/02	633.90	636.81	624.70	609.70	18.45	<b>3.10</b>	21.55	16.24	617.66	No	
MW-23	04/24/02	633.90	636.81	624.70	609.70	17.33	<b>2.73</b>	20.06	15.04	618.86	No	
MW-23	05/15/02	633.90	636.81	624.70	609.70	16.47	<b>2.99</b>	19.46	14.24	619.66	No	
MW-23	06/27/02	633.90	636.81	624.70	609.70	16.97	<b>2.52</b>	19.49	14.63	619.27	No	
MW-23	07/25/02	633.90	636.81	624.70	609.70	17.23	<b>1.94</b>	19.17	14.76	619.14	No	
MW-23	08/20/02	633.90	636.81	624.70	609.70	17.44	<b>1.95</b>	19.39	14.97	618.93	No	
MW-23	09/30/02	633.90	636.81	624.70	609.70	16.65	<b>2.05</b>	18.70	14.20	619.70	No	
MW-23	11/05/02	633.90	636.81	624.70	609.70	15.29	<b>4.37</b>	19.66	13.37	620.53	No	
MW-23	12/23/02	633.90	636.81	624.70	609.70	17.69	<b>1.78</b>	19.47	15.18	618.72	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	01/28/03	633.90	636.81	624.70	609.70	18.18	<b>1.94</b>	20.12	15.71	618.19	No	
MW-23	02/19/03	633.90	636.81	624.70	609.70	18.31	<b>2.64</b>	20.95	16.00	617.90	No	
MW-23	04/17/03	633.90	636.81	624.70	609.70	18.63	<b>3.61</b>	22.24	16.54	617.36	No	
MW-23	05/15/03	633.90	636.81	624.70	609.70	18.42	<b>3.58</b>	22.00	16.32	617.58	No	
MW-23	06/10/03	633.90	636.81	624.70	609.70	18.10	<b>2.32</b>	20.42	15.71	618.19	No	
MW-23	10/23/03	633.90	636.81	624.70	609.70	18.46	<b>3.32</b>	21.78	16.30	617.60	No	
MW-23	12/03/03	633.90	636.81	624.70	609.70	18.58	<b>3.58</b>	22.16	16.48	617.42	No	
MW-23	04/19/04	635.07	636.91	624.70	609.70	18.89	<b>3.75</b>	22.64	17.90	617.17	No	
MW-23	07/28/04	635.07	636.91	624.70	609.70	17.95	<b>2.15</b>	20.10	16.60	618.47	No	
MW-23	11/15/04	635.07	636.91	624.70	609.70	16.31	<b>3.23</b>	19.54	15.20	619.87	No	
MW-23	04/18/05	635.07	636.91	624.70	609.70	16.59	<b>3.89</b>	20.48	15.63	619.44	No	
MW-23	09/09/05	635.07	636.91	624.70	609.70	17.85	<b>1.40</b>	19.25	16.33	618.74	No	
MW-23	10/11/05	635.07	636.91	624.70	609.70	16.07	<b>4.22</b>	20.29	15.18	619.89	No	
MW-23	05/23/06	635.07	636.91	624.70	609.70	15.63	<b>2.66</b>	18.29	14.39	620.68	No	
MW-23	10/16/06	635.07	636.91	624.70	609.70	17.59	<b>1.53</b>	19.12	16.10	618.97	No	
MW-23	04/23/07	635.07	636.91	624.70	609.70	18.25	<b>3.31</b>	21.56	17.16	617.91	No	
MW-23	09/25/07	635.07	636.91	624.70	609.70	17.93	<b>3.27</b>	21.20	16.83	618.24	No	
MW-23	05/01/08	635.07	636.91	624.70	609.70	15.32	<b>3.84</b>	19.16	14.35	620.72	No	
MW-23	10/20/08	635.07	636.91	624.70	609.70	12.98	<b>6.13</b>	19.11	12.52	622.55	No	
MW-23	04/18/09	635.07	636.91	624.70	609.70	15.02	<b>4.13</b>	19.15	14.11	620.96	No	
MW-23	10/11/09	635.07	636.91	624.70	609.70	17.82	<b>0.52</b>	18.34	16.10	618.97	No	
MW-23	04/28/10	635.07	636.91	624.70	609.70	17.22	<b>1.04</b>	18.26	15.61	619.46	No	
MW-23	10/25/10	635.07	636.91	624.70	609.70	14.84	<b>2.69</b>	17.53	13.61	621.46	No	
MW-23	04/25/11	635.07	636.91	624.70	609.70	15.62	<b>2.62</b>	18.24	14.37	620.70	No	
MW-23	08/03/11	635.07	636.91	624.70	609.70	14.29	<b>3.38</b>	17.67	13.21	621.86	No	
MW-23	10/10/11	635.07	636.91	624.70	609.70	16.41	<b>1.13</b>	17.54	14.83	620.24	No	
MW-23	01/04/12	635.07	636.91	624.70	609.70	17.95	<b>0.51</b>	18.46	16.23	618.84	No	
MW-23	04/05/12	635.07	636.91	624.70	609.70	18.21	<b>2.08</b>	20.29	16.84	618.23	No	Spill Buddy Before Reading
MW-23	04/05/12	635.07	636.91	624.70	609.70	19.55	<b>0.05</b>	19.60	17.72	617.35	No	Spill Buddy After Reading
MW-23	04/16/12	635.07	636.91	624.70	609.70	17.88	<b>1.73</b>	19.61	16.43	618.64	No	
MW-23	06/26/12	635.07	636.91	624.70	609.70	14.11	<b>3.82</b>	17.93	13.13	621.94	No	
MW-23	07/11/12	635.07	636.91	624.70	609.70	13.95	<b>3.90</b>	17.85	12.99	622.08	No	Spill Buddy Before Reading
MW-23	07/11/12	635.07	636.91	624.70	609.70	17.00	<b>0.23</b>	17.23	15.21	619.86	No	Spill Buddy After Reading
MW-23	08/09/12	635.07	636.91	624.70	609.70	16.72	<b>0.98</b>	17.70	15.10	619.97	No	Spill Buddy Before Reading
MW-23	08/09/12	635.07	636.91	624.70	609.70	17.40	<b>0.15</b>	17.55	15.59	619.48	No	Spill Buddy After Reading
MW-23	09/29/12	635.07	636.91	624.70	609.70	17.95	<b>0.50</b>	18.45	16.22	618.85	No	Spill buddy not working
MW-23	09/30/12	635.07	636.91	624.70	609.70	17.88	<b>0.50</b>	18.38	16.15	618.92	No	
MW-23	11/17/12	635.07	636.91	624.70	609.70	18.18	<b>1.35</b>	19.53	16.64	618.43	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	03/25/13	635.07	636.91	624.70	609.70	18.68	<b>3.09</b>	21.77	17.54	617.53	No	
MW-23	05/05/13	635.07	636.91	624.70	609.70	18.23	<b>2.33</b>	20.56	16.92	618.15	No	
MW-23	10/03/13	635.07	636.91	624.70	609.70	18.13	<b>1.48</b>	19.61	16.62	618.45	No	
MW-23	05/22/14	635.07	636.91	624.70	609.70	14.01	<b>2.18</b>	16.19	12.66	622.41	No	
MW-23	10/31/14	635.07	636.91	624.70	609.70	15.17	<b>3.74</b>	18.91	14.17	620.90	No	
MW-23	05/06/15	635.07	636.91	624.70	609.70	17.86	<b>1.04</b>	18.90	16.25	618.82	No	
MW-23	10/05/15	635.07	636.91	624.70	609.70	13.50	<b>5.10</b>	18.60	12.81	622.26	No	
MW-23	05/23/16	635.07	636.91	624.70	609.70	11.52	<b>6.40</b>	17.92	11.13	623.94	No	
MW-23	10/03/16	635.07	636.91	624.70	609.70	13.55	<b>4.30</b>	17.85	12.68	622.39	No	
MW-23	06/14/17	635.07	636.91	624.70	609.70	11.45	<b>6.51</b>	17.96	11.08	623.99	No	
MW-23	06/21/17	635.07	636.91	624.70	609.70	12.22	<b>5.72</b>	17.94	11.67	623.40	No	
MW-23	06/22/17	635.07	636.91	624.70	609.70	12.10	<b>5.80</b>	17.90	11.57	623.50	No	
MW-23	06/23/17	635.07	636.91	624.70	609.70	13.06	<b>2.19</b>	15.25	11.71	623.36	No	
MW-23	10/26/17	635.07	636.91	624.70	609.70	9.42	<b>8.29</b>	17.71	9.45	625.62	Yes	
MW-23	05/26/20	635.07	636.91	624.70	609.70	11.41	<b>8.18</b>	19.59	11.42	623.65	No	
MW-35	08/06/91	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.96	14.58	622.62	Yes	
MW-35	10/08/91	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.85	14.47	622.73	Yes	
MW-35	01/07/92	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.28	14.90	622.30	Yes	
MW-35	10/14/92	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.59	15.21	621.99	Yes	
MW-35	06/25/93	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	14.39	12.01	625.19	Yes	
MW-35	10/28/93	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	18.09	15.71	621.49	Yes	
MW-35	01/29/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	19.41	17.03	620.17	Yes	
MW-35	04/27/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.43	15.05	622.15	Yes	
MW-35	07/21/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.35	14.97	622.23	Yes	
MW-35	10/25/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.35	14.97	622.23	Yes	
MW-35	10/28/94	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.93	14.55	622.65	Yes	
MW-35	02/01/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	19.91	17.53	619.67	Yes	
MW-35	04/04/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	20.35	17.97	619.23	Yes	
MW-35	07/12/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	18.88	16.50	620.70	Yes	
MW-35	11/13/95	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.05	14.67	622.53	Yes	
MW-35	03/13/96	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	20.22	17.84	619.36	Yes	
MW-35	04/22/96	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	17.12	14.74	622.46	Yes	
MW-35	10/08/96	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	16.83	14.45	622.75	Yes	
MW-35	04/29/97	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	13.95	11.57	625.63	Yes	
MW-35	11/03/98	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	19.91	17.53	619.67	Yes	
MW-35	03/02/99	637.20	639.58	619.08	609.08	NP	<b>0.00</b>	21.59	19.21	617.99	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-35	04/26/00	637.20	639.58	619.08	609.08	NP	0.00	18.59	16.21	620.99	Yes	
MW-35	10/10/00	637.20	639.58	619.08	609.08	NP	0.00	21.90	19.52	617.68	No	
MW-35	10/23/01	637.20	639.58	619.08	609.08	NP	0.00	20.22	17.84	619.36	Yes	
MW-35	01/22/02	637.20	641.16	619.08	609.08	NP	0.00	22.09	18.13	619.07	No	
MW-35	02/26/02	637.20	641.16	619.08	609.08	NP	0.00	22.85	18.89	618.31	No	
MW-35	03/20/02	637.20	641.16	619.08	609.08	NP	0.00	23.07	19.11	618.09	No	
MW-35	04/23/02	637.20	641.16	619.08	609.08	NP	0.00	21.59	17.63	619.57	Yes	
MW-35	05/15/02	637.20	639.58	619.08	609.08	NP	0.00	18.47	16.09	621.11	Yes	
MW-35	08/20/02	637.20	639.58	619.08	609.08	NP	0.00	19.30	16.92	620.28	Yes	
MW-35	09/30/02	637.20	639.58	619.08	609.08	NP	0.00	18.78	16.40	620.80	Yes	
MW-35	11/05/02	637.20	639.58	619.08	609.08	NP	0.00	19.82	17.44	619.76	Yes	
MW-35	12/23/02	637.20	639.58	619.08	609.08	NP	0.00	21.83	19.45	617.75	No	
MW-35	01/28/03	637.20	639.58	619.08	609.08	NP	0.00	22.56	20.18	617.02	No	
MW-35	02/19/03	637.20	639.58	619.08	609.08	NP	0.00	23.12	20.74	616.46	No	
MW-35	04/17/03	637.20	639.58	619.08	609.08	NP	0.00	21.72	19.34	617.86	No	
MW-35	06/10/03	637.20	641.16	619.08	609.08	NP	0.00	22.07	18.11	619.09	Yes	
MW-35	10/20/03	637.20	641.16	619.08	609.08	NP	0.00	21.27	17.31	619.89	Yes	
MW-35	12/03/03	637.20	641.16	619.08	609.08	NP	0.00	23.21	19.25	617.95	No	
MW-35	04/19/04	637.55	639.74	619.08	609.08	NP	0.00	23.41	21.22	616.33	No	
MW-35	07/28/04	637.55	639.74	619.08	609.08	NP	0.00	20.06	17.87	619.68	Yes	
MW-35	11/16/04	637.55	639.74	619.08	609.08	NP	0.00	20.68	18.49	619.06	No	
MW-35	04/18/05	637.55	639.74	619.08	609.08	NP	0.00	21.63	19.44	618.11	No	
MW-35	10/11/05	637.55	639.74	619.08	609.08	NP	0.00	19.12	16.93	620.62	Yes	
MW-35	05/23/06	637.55	639.74	619.08	609.08	NP	0.00	17.97	15.78	621.77	Yes	
MW-35	10/16/06	637.55	639.74	619.08	609.08	NP	0.00	19.97	17.78	619.77	Yes	
MW-35	04/23/07	637.55	639.74	619.08	609.08	NP	0.00	21.26	19.07	618.48	No	
MW-35	09/25/07	637.55	639.74	619.08	609.08	NP	0.00	20.70	18.51	619.04	No	
MW-35	05/01/08	637.55	639.74	619.08	609.08	NP	0.00	18.73	16.54	621.01	Yes	
MW-35	10/20/08	637.55	639.74	619.08	609.08	NP	0.00	17.16	14.97	622.58	Yes	
MW-35	04/18/09	637.55	639.74	619.08	609.08	NP	0.00	19.34	17.15	620.40	Yes	
MW-35	10/11/09	637.55	639.74	619.08	609.08	NP	0.00	20.20	18.01	619.54	Yes	
MW-35	04/28/10	637.55	639.74	619.08	609.08	NP	0.00	20.26	18.07	619.48	Yes	
MW-35	10/25/10	637.55	639.74	619.08	609.08	NP	0.00	18.24	16.05	621.50	Yes	
MW-35	04/25/11	637.55	639.74	619.08	609.08	NP	0.00	19.61	17.42	620.13	Yes	
MW-35	10/10/11	637.55	639.74	619.08	609.08	NP	0.00	19.75	17.56	619.99	Yes	
MW-35	01/04/12	637.55	639.74	619.08	609.08	NP	0.00	21.18	18.99	618.56	No	
MW-35	04/16/12	637.55	639.74	619.08	609.08	NP	0.00	21.24	19.05	618.50	No	
MW-35	06/26/12	637.55	639.74	619.08	609.08	NP	0.00	17.50	15.31	622.24	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-35	09/30/12	637.55	639.74	619.08	609.08	NP	0.00	21.04	18.85	618.70	No	
MW-35	12/17/12	637.55	639.74	619.08	609.08	NP	0.00	21.53	19.34	618.21	No	
MW-35	03/25/13	637.55	639.74	619.08	609.08	NP	0.00	22.92	20.73	616.82	No	
MW-35	05/05/13	637.55	639.74	619.08	609.08	NP	0.00	21.67	19.48	618.07	No	
MW-35	10/01/13	637.55	639.74	619.08	609.08	NP	0.00	21.10	18.91	618.64	No	
MW-35	05/20/14	637.55	639.74	619.08	609.08	NP	0.00	18.50	16.31	621.24	Yes	
MW-35	10/29/14	637.55	639.74	619.08	609.08	NP	0.00	19.17	16.98	620.57	Yes	
MW-35	05/06/15	637.55	639.74	619.08	609.08	NP	0.00	21.75	19.56	617.99	No	
MW-35	10/06/15	637.55	639.74	619.08	609.08	NP	0.00	18.80	16.61	620.94	Yes	
MW-35	05/23/16	637.55	639.74	619.08	609.08	NP	0.00	16.94	14.75	622.80	Yes	
MW-35	10/03/16	637.55	639.74	619.08	609.08	NP	0.00	18.34	16.15	621.40	Yes	
MW-35	06/29/17	637.55	639.74	619.08	609.08	NP	0.00	17.96	15.77	621.78	Yes	
MW-35	05/26/20	637.55	639.74	619.08	609.08	NP	0.00	17.58	15.39	622.16	Yes	
RW-06	06/01/90	635.20	637.96	615.00	590.00	20.50	4.70	25.20	18.80	616.33	Yes	
RW-06	01/30/91	635.20	637.96	615.00	590.00	20.47	6.14	26.61	19.10	616.02	Yes	
RW-06	04/24/91	635.20	637.96	615.00	590.00	22.22	3.22	25.44	20.19	614.97	No	
RW-06	06/06/91	635.20	637.96	615.00	590.00	20.51	2.75	23.26	18.37	616.79	Yes	
RW-06	07/09/91	635.20	637.96	615.00	590.00	19.32	3.60	22.92	17.37	617.78	Yes	
RW-06	08/06/91	635.20	637.96	615.00	590.00	18.64	3.40	22.04	16.65	618.50	Yes	
RW-06	09/04/91	635.20	637.96	615.00	590.00	18.66	3.28	21.94	16.64	618.51	Yes	
RW-06	10/08/91	635.20	637.96	615.00	590.00	19.73	1.75	21.48	17.37	617.81	Yes	
RW-06	11/08/91	635.20	637.96	615.00	590.00	20.02	1.95	21.97	17.70	617.47	Yes	
RW-06	12/03/91	635.20	637.96	615.00	590.00	16.40	4.19	20.59	14.59	620.55	Yes	
RW-06	01/07/92	635.20	637.96	615.00	590.00	18.41	2.06	20.47	16.12	619.06	Yes	
RW-06	02/04/92	635.20	637.96	615.00	590.00	19.80	2.05	21.85	17.50	617.67	Yes	
RW-06	03/03/92	635.20	637.96	615.00	590.00	19.67	2.45	22.12	17.46	617.70	Yes	
RW-06	09/24/92	635.20	637.96	615.00	590.00	17.32	3.23	20.55	15.29	619.87	Yes	
RW-06	06/25/93	635.20	637.96	615.00	590.00	15.67	2.58	18.25	13.49	621.67	Yes	
RW-06	07/21/93	635.20	637.96	615.00	590.00	16.52	1.82	18.34	14.17	621.00	Yes	
RW-06	08/17/93	635.20	637.96	615.00	590.00	18.14	2.11	20.25	15.86	619.31	Yes	
RW-06	09/09/93	635.20	637.96	615.00	590.00	19.02	2.11	21.13	16.74	618.43	Yes	
RW-06	10/28/93	635.20	637.96	615.00	590.00	19.53	1.68	21.21	17.15	618.03	Yes	
RW-06	11/24/93	635.20	637.96	615.00	590.00	19.87	1.48	21.35	17.44	617.73	Yes	
RW-06	12/17/93	635.20	637.96	615.00	590.00	19.92	1.10	21.02	17.41	617.78	Yes	
RW-06	01/29/94	635.20	637.96	615.00	590.00	19.83	1.72	21.55	17.46	617.72	Yes	
RW-06	02/25/94	635.20	637.96	615.00	590.00	20.06	2.07	22.13	17.77	617.40	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	03/24/94	635.20	637.96	615.00	590.00	20.16	1.92	22.08	17.83	617.34	Yes	
RW-06	04/27/94	635.20	637.96	615.00	590.00	19.57	2.00	21.57	17.26	617.91	Yes	
RW-06	05/26/94	635.20	637.96	615.00	590.00	18.64	1.36	20.00	16.19	618.99	Yes	
RW-06	06/29/94	635.20	637.96	615.00	590.00	18.04	0.97	19.01	15.50	619.69	Yes	
RW-06	07/21/94	635.20	637.96	615.00	590.00	18.96	1.35	20.31	16.50	618.68	Yes	
RW-06	08/30/94	635.20	637.96	615.00	590.00	19.57	1.15	20.72	17.07	618.11	Yes	
RW-06	10/25/94	635.20	637.96	615.00	590.00	18.45	1.53	19.98	16.04	619.14	Yes	
RW-06	11/02/94	635.20	637.96	615.00	590.00	18.35	1.65	20.00	15.96	619.21	Yes	
RW-06	02/01/95	635.20	637.96	615.00	590.00	20.10	0.48	20.58	17.45	617.74	Yes	
RW-06	04/04/95	635.20	637.96	615.00	590.00	20.44	2.16	22.60	18.17	617.00	Yes	
RW-06	07/12/95	635.20	637.96	615.00	590.00	19.73	0.02	19.75	16.97	618.23	Yes	
RW-06	11/13/95	635.20	637.96	615.00	590.00	18.54	0.02	18.56	15.78	619.42	Yes	
RW-06	03/13/96	635.20	637.96	615.00	590.00	19.85	2.30	22.15	17.61	617.56	Yes	
RW-06	05/28/96	635.20	637.96	615.00	590.00	18.45	0.03	18.48	15.70	619.50	Yes	
RW-06	10/08/96	635.20	637.96	615.00	590.00	17.60	0.02	17.62	14.84	620.36	Yes	
RW-06	04/29/97	635.20	637.96	615.00	590.00	NP	0.00	16.62	13.86	621.34	Yes	
RW-06	06/10/97	635.20	637.96	615.00	590.00	NP	0.00	18.00	15.24	619.96	Yes	
RW-06	03/02/99	635.20	637.96	615.00	590.00	20.38	2.16	22.54	18.11	617.06	Yes	
RW-06	10/07/99	635.20	637.96	615.00	590.00	17.16	1.33	18.49	14.70	620.48	Yes	
RW-06	11/09/99	635.20	637.96	615.00	590.00	18.23	1.69	19.92	15.85	619.32	Yes	bailed 2 gal. FP
RW-06	12/21/99	635.20	637.96	615.00	590.00	18.76	0.12	18.88	16.03	619.17	Yes	
RW-06	01/27/00	635.20	637.96	615.00	590.00	19.95	0.12	20.07	17.22	617.98	Yes	
RW-06	02/24/00	635.20	637.96	615.00	590.00	19.87	1.65	21.52	17.48	617.69	Yes	bailed 2 gal. FP
RW-06	03/31/00	635.20	637.96	615.00	590.00	19.71	2.22	21.93	17.45	617.72	Yes	installed pump from MW-2
RW-06	04/20/00	635.20	637.96	615.00	590.00	18.92	2.96	21.88	16.83	618.33	Yes	bailed 4 gal. FP
RW-06	04/26/00	635.20	637.96	615.00	590.00	19.50	1.47	20.97	17.07	618.11	Yes	
RW-06	05/31/00	635.20	637.96	615.00	590.00	19.65	1.38	21.03	17.20	617.98	Yes	installed skimmer
RW-06	06/20/00	635.20	637.96	615.00	590.00	19.66	0.02	19.68	16.90	618.30	Yes	Skimmer operating
RW-06	07/26/00	635.20	637.96	615.00	590.00	19.86	0.02	19.88	17.10	618.10	Yes	Skimmer operating
RW-06	08/18/00	635.20	637.96	615.00	590.00	19.26	2.14	21.40	16.98	618.19	Yes	bailed 1 gal. FP-installed skimmer
RW-06	09/27/00	635.20	637.96	615.00	590.00	20.42	1.29	21.71	17.95	617.23	Yes	skimmer down-bailed 1.25 gal. FP
RW-06	10/11/00	635.20	637.96	615.00	590.00	20.11	1.88	21.99	17.77	617.40	Yes	skimmer down-bailed 3.75 gal. FP
RW-06	11/17/00	635.20	637.96	615.00	590.00	19.69	2.83	22.52	17.57	617.59	Yes	skimmer down-bailed 6 gal. FP
RW-06	12/12/00	635.20	637.96	615.00	590.00	19.94	1.59	21.53	17.54	617.64	Yes	skimmer down-bailed 3 gal. FP
RW-06	01/18/01	635.20	637.96	615.00	590.00	20.23	1.75	21.98	17.87	617.31	Yes	skimmer down-bailed 4 gal. FP
RW-06	04/24/01	635.20	637.96	615.00	590.00	20.21	3.01	23.22	18.13	617.03	Yes	product abated using vactruck
RW-06	05/23/01	635.20	637.96	615.00	590.00	19.22	1.30	20.52	16.75	618.43	Yes	skimmer down/no product bailed
RW-06	06/19/01	635.20	637.96	615.00	590.00	19.45	0.72	20.17	16.85	618.34	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	07/26/01	635.20	637.96	615.00	590.00	20.22	<b>0.99</b>	21.21	17.68	617.50	Yes	
RW-06	08/31/01	635.20	637.96	615.00	590.00	20.41	<b>0.01</b>	20.42	17.65	617.55	Yes	
RW-06	09/26/01	635.20	637.96	615.00	590.00	20.41	<b>0.24</b>	20.65	17.70	617.49	Yes	
RW-06	10/24/01	635.20	637.96	615.00	590.00	20.00	<b>1.45</b>	21.45	17.57	617.61	Yes	
RW-06	12/20/01	635.20	637.96	615.00	590.00	20.58	<b>1.84</b>	22.42	18.24	616.94	Yes	
RW-06	01/22/02	635.20	637.96	615.00	590.00	20.53	<b>1.88</b>	22.41	18.19	616.98	Yes	
RW-06	02/26/02	635.20	637.96	615.00	590.00	21.22	<b>0.89</b>	22.11	18.66	616.53	Yes	
RW-06	03/20/02	635.20	637.96	615.00	590.00	21.60	<b>0.14</b>	21.74	18.87	616.33	Yes	
RW-06	04/24/02	635.20	637.96	615.00	590.00	20.32	<b>2.54</b>	22.86	18.13	617.03	Yes	
RW-06	05/15/02	635.20	637.96	615.00	590.00	20.04	<b>2.29</b>	22.33	17.80	617.37	Yes	
RW-06	06/27/02	635.20	637.96	615.00	590.00	20.44	<b>1.53</b>	21.97	18.03	617.15	Yes	
RW-06	07/25/02	635.20	637.96	615.00	590.00	20.57	<b>0.04</b>	20.61	17.82	617.38	Yes	
RW-06	08/20/02	635.20	637.96	615.00	590.00	20.73	<b>0.15</b>	20.88	18.00	617.19	Yes	
RW-06	09/30/02	635.20	637.96	615.00	590.00	NP	<b>0.00</b>	20.03	17.27	617.93	Yes	
RW-06	11/05/02	635.20	637.96	615.00	590.00	19.89	<b>0.02</b>	19.91	17.13	618.07	Yes	
RW-06	12/23/02	635.20	637.96	615.00	590.00	20.74	<b>0.02</b>	20.76	17.98	617.22	Yes	
RW-06	01/28/03	635.20	637.96	615.00	590.00	21.11	<b>0.11</b>	21.22	18.37	616.82	Yes	
RW-06	02/19/03	635.20	637.96	615.00	590.00	21.24	<b>0.31</b>	21.55	18.55	616.65	Yes	
RW-06	03/13/03	635.20	637.96	615.00	590.00	21.27	<b>1.38</b>	22.65	18.82	616.36	Yes	
RW-06	04/17/03	635.20	637.96	615.00	590.00	21.20	<b>2.52</b>	23.72	19.01	616.16	Yes	
RW-06	04/25/03	635.20	637.96	615.00	590.00	21.42	<b>2.64</b>	24.06	19.26	615.91	Yes	
RW-06	05/15/03	635.20	637.96	615.00	590.00	21.44	<b>2.97</b>	24.41	19.35	615.81	Yes	
RW-06	06/10/03	635.20	637.96	615.00	590.00	21.19	<b>2.06</b>	23.25	18.90	616.28	Yes	
RW-06	07/31/03	635.20	637.96	615.00	590.00	20.90	<b>1.95</b>	22.85	18.58	616.59	Yes	
RW-06	10/23/03	635.20	637.96	615.00	590.00	21.14	<b>1.67</b>	22.81	18.76	616.42	Yes	
RW-06	12/03/03	635.20	637.96	615.00	590.00	21.36	<b>2.92</b>	24.28	19.26	615.90	Yes	
RW-06	04/19/04	636.09	638.10	615.00	590.00	21.94	<b>2.35</b>	24.29	20.46	615.60	Yes	
RW-06	07/28/04	636.09	638.10	615.00	590.00	21.02	<b>2.10</b>	23.12	19.48	616.58	Yes	
RW-06	11/15/04	636.09	638.10	615.00	590.00	20.14	<b>1.80</b>	21.94	18.54	617.53	Yes	
RW-06	04/18/05	636.09	638.10	615.00	590.00	20.25	<b>2.67</b>	22.92	18.84	617.21	Yes	
RW-06	10/11/05	636.09	638.10	615.00	590.00	20.00	<b>1.85</b>	21.85	18.41	617.66	Yes	
RW-06	05/23/06	636.09	638.10	615.00	590.00	19.30	<b>1.39</b>	20.69	17.60	618.47	Yes	
RW-06	10/16/06	636.09	638.10	615.00	590.00	20.23	<b>2.15</b>	22.38	18.71	617.35	Yes	
RW-06	04/23/07	636.09	638.10	615.00	590.00	21.03	<b>2.85</b>	23.88	19.66	616.39	Yes	
RW-06	09/25/07	636.09	638.10	615.00	590.00	20.98	<b>2.72</b>	23.70	19.58	616.47	Yes	
RW-06	05/01/08	636.09	638.10	615.00	590.00	19.70	<b>2.13</b>	21.83	18.17	617.89	Yes	
RW-06	10/20/08	636.09	638.10	615.00	590.00	18.36	<b>1.26</b>	19.62	16.63	619.44	Yes	
RW-06	04/18/09	636.09	638.10	615.00	590.00	19.43	<b>1.43</b>	20.86	17.74	618.33	Yes	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	04/28/10	636.09	638.10	615.00	590.00	19.99	1.80	21.79	18.39	617.68	Yes	
RW-06	10/25/10	636.09	638.10	615.00	590.00	17.95	1.11	19.06	16.19	619.88	Yes	
RW-06	04/25/11	636.09	638.10	615.00	590.00	19.24	0.99	20.23	17.45	618.62	Yes	
RW-06	09/14/11	636.09	638.10	615.00	590.00	18.48	0.97	19.45	16.69	619.39	Yes	
RW-06	09/23/11	636.09	638.10	615.00	590.00	18.69	0.95	19.64	16.89	619.18	Yes	
RW-06	09/29/11	636.09	638.10	615.00	590.00	18.55	0.98	19.53	16.76	619.31	Yes	
RW-06	10/07/11	636.09	638.10	615.00	590.00	18.68	0.97	19.65	16.89	619.19	Yes	
RW-06	10/11/11	636.09	638.10	615.00	590.00	19.03	0.96	19.99	17.24	618.84	Yes	
RW-06	10/21/11	636.09	638.10	615.00	590.00	19.14	0.98	20.12	17.35	618.72	Yes	
RW-06	10/27/11	636.09	638.10	615.00	590.00	19.24	0.98	20.22	17.45	618.62	Yes	
RW-06	11/04/11	636.09	638.10	615.00	590.00	19.49	0.96	20.45	17.70	618.38	Yes	
RW-06	11/09/11	636.09	638.10	615.00	590.00	19.38	0.92	20.30	17.58	618.50	Yes	
RW-06	11/18/11	636.09	638.10	615.00	590.00	19.46	0.96	20.42	17.67	618.41	Yes	
RW-06	11/22/11	636.09	638.10	615.00	590.00	19.62	0.99	20.61	17.83	618.24	Yes	
RW-06	12/01/11	636.09	638.10	615.00	590.00	20.09	0.98	21.07	18.30	617.77	Yes	
RW-06	01/04/12	636.09	638.10	615.00	590.00	20.01	1.82	21.83	18.41	617.65	Yes	
RW-06	02/16/12	636.09	638.10	615.00	590.00	20.46	2.32	22.78	18.97	617.08	Yes	
RW-06	03/13/12	636.09	638.10	615.00	590.00	21.74	1.44	23.18	20.06	616.01	Yes	
RW-06	04/05/12	636.09	638.10	615.00	590.00	20.73	2.48	23.21	19.28	616.78	Yes	Spill Buddy Before Reading
RW-06	04/05/12	636.09	638.10	615.00	590.00	21.76	1.19	22.95	20.02	616.05	Yes	Spill Buddy After Reading
RW-06	04/16/12	636.09	638.10	615.00	590.00	20.70	2.18	22.88	19.18	616.88	Yes	
RW-06	05/18/12	636.09	638.10	615.00	590.00	20.75	4.48	25.23	19.75	616.28	Yes	
RW-06	06/26/12	636.09	638.10	615.00	590.00	18.55	1.10	19.65	16.79	619.29	Yes	
RW-06	07/11/12	636.09	638.10	615.00	590.00	18.79	1.13	19.92	17.04	619.04	Yes	
RW-06	07/11/12	636.09	638.10	615.00	590.00	19.75	0.02	19.77	17.74	618.35	Yes	Spill Buddy Before Reading
RW-06	07/24/12	636.09	638.10	615.00	590.00	19.29	0.02	19.31	17.28	618.81	Yes	Spill Buddy After Reading
RW-06	08/09/12	636.09	638.10	615.00	590.00	19.51	0.03	19.54	17.51	618.58	Yes	
RW-06	08/17/12	636.09	638.10	615.00	590.00	19.68	0.03	19.71	17.68	618.41	Yes	
RW-06	09/17/12	636.09	638.10	615.00	590.00	20.07	0.02	20.09	18.06	618.03	Yes	
RW-06	09/30/12	636.09	638.10	615.00	590.00	20.30	0.04	20.34	18.30	617.79	Yes	
RW-06	11/21/12	636.09	638.10	615.00	590.00	20.20	1.99	22.19	18.64	617.42	Yes	
RW-06	12/17/12	636.09	638.10	615.00	590.00	20.45	2.09	22.54	18.91	617.15	Yes	
RW-06	03/25/13	636.09	638.10	615.00	590.00	21.08	2.90	23.98	19.73	616.32	Yes	
RW-06	05/05/13	636.09	638.10	615.00	590.00	20.83	2.74	23.57	19.44	616.61	Yes	
RW-06	05/16/13	636.09	638.10	615.00	590.00	20.90	2.33	23.23	19.42	616.64	Yes	Spill Buddy Before Reading
RW-06	05/16/13	636.09	638.10	615.00	590.00	22.92	0.05	22.97	20.92	615.17	Yes	Spill Buddy After Reading
RW-06	10/03/13	636.09	638.10	615.00	590.00	20.60	1.58	22.18	18.95	617.12	Yes	
RW-06	05/22/14	636.09	638.10	615.00	590.00	19.29	1.64	20.93	17.65	618.42	Yes	



**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	10/31/14	636.09	638.10	615.00	590.00	18.71	<b>1.58</b>	20.29	17.06	619.01	Yes	
RW-06	05/06/15	636.09	638.10	615.00	590.00	20.21	<b>2.01</b>	22.22	18.65	617.41	Yes	
RW-06	10/05/15	636.09	638.10	615.00	590.00	18.38	<b>1.50</b>	19.88	16.71	619.36	Yes	
RW-06	10/03/16	636.09	638.10	615.00	590.00	17.35	<b>1.35</b>	18.70	15.64	620.43	Yes	
RW-06	06/14/17	636.09	638.10	615.00	590.00	16.40	<b>1.26</b>	17.66	14.67	621.40	Yes	
RW-06	06/21/17	636.09	638.10	615.00	590.00	16.81	<b>1.25</b>	18.06	15.08	620.99	Yes	
RW-06	06/22/17	636.09	638.10	615.00	590.00	16.77	<b>0.64</b>	17.41	14.90	621.18	Yes	
RW-06	06/23/17	636.09	638.10	615.00	590.00	16.85	<b>0.66</b>	17.51	14.99	621.09	Yes	
RW-06	10/26/17	636.09	638.10	615.00	590.00	14.85	<b>0.64</b>	15.49	12.98	623.10	Yes	
RW-06	07/16/19	636.09	638.10	615.00	590.00	17.25	<b>1.39</b>	18.64	15.55	620.52	Yes	
RW-06	05/26/20	636.09	638.10	615.00	590.00	16.27	<b>0.52</b>	16.79	14.38	621.71	Yes	
EW-09	07/25/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.38	16.24	618.96	No	
EW-09	08/18/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	17.96	15.82	619.38	No	
EW-09	08/25/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.33	16.19	619.01	No	
EW-09	09/01/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.45	16.31	618.89	No	
EW-09	09/08/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	18.90	16.76	618.44	No	
EW-09	09/14/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.24	17.10	618.10	No	
EW-09	09/23/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.47	17.33	617.87	No	
EW-09	09/29/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.46	17.32	617.88	No	
EW-09	10/07/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.62	17.48	617.72	No	
EW-09	10/11/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.74	17.60	617.60	No	
EW-09	10/21/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.89	17.75	617.45	No	
EW-09	10/27/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.14	18.00	617.20	No	
EW-09	11/04/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.39	18.25	616.95	No	
EW-09	11/09/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.35	18.21	616.99	No	
EW-09	11/18/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.56	18.42	616.78	No	
EW-09	11/22/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.28	18.14	617.06	No	
EW-09	12/01/11	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.66	18.52	616.68	No	
EW-09	01/04/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	21.37	19.23	615.97	No	
EW-09	02/16/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	21.92	19.78	615.42	No	
EW-09	03/13/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	22.20	20.06	615.14	No	
EW-09	04/16/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	22.05	19.91	615.29	No	
EW-09	05/18/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	21.08	18.94	616.26	No	
EW-09	06/26/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.32	17.18	618.02	No	
EW-09	07/24/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	19.89	17.75	617.45	No	
EW-09	08/19/12	635.20	637.34	620.20	600.20	NP	<b>0.00</b>	20.29	18.15	617.05	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-09	09/17/12	635.20	637.34	620.20	600.20	NP	0.00	20.78	18.64	616.56	No	
EW-09	09/30/12	635.20	637.34	620.20	600.20	NP	0.00	21.03	18.89	616.31	No	
EW-09	11/21/12	635.20	637.34	620.20	600.20	NP	0.00	21.38	19.24	615.96	No	
EW-09	12/17/12	635.20	637.34	620.20	600.20	NP	0.00	21.71	19.57	615.63	No	
EW-09	03/25/13	635.20	637.34	620.20	600.20	NP	0.00	22.57	20.43	614.77	No	
EW-09	05/05/13	635.20	637.34	620.20	600.20	NP	0.00	22.15	20.01	615.19	No	
EW-09	10/03/13	635.20	637.34	620.20	600.20	NP	0.00	21.58	19.44	615.76	No	
EW-09	05/21/14	635.20	637.34	620.20	600.20	NP	0.00	20.01	17.87	617.33	No	
EW-09	10/31/14	635.20	637.34	620.20	600.20	NP	0.00	19.57	17.43	617.77	No	
EW-09	05/05/15	635.20	637.34	620.20	600.20	NP	0.00	21.31	19.17	616.03	No	
EW-09	10/05/15	635.20	637.34	620.20	600.20	NP	0.00	19.23	17.09	618.11	No	
EW-09	05/23/16	635.20	637.34	620.20	600.20	NP	0.00	16.90	14.76	620.44	Yes	
EW-09	10/03/16	635.20	637.34	620.20	600.20	NP	0.00	17.90	15.76	619.44	No	
EW-09	06/29/17	635.20	637.34	620.20	600.20	NP	0.00	17.46	15.32	619.88	No	
EW-09	05/26/20	635.20	637.34	620.20	600.20	NP	0.00	16.60	14.46	620.74	Yes	
EW-10	07/25/11	635.90	637.83	620.90	600.90	NP	0.00	18.21	16.28	619.62	No	
EW-10	08/18/11	635.90	637.83	620.90	600.90	NP	0.00	17.74	15.81	620.09	No	
EW-10	08/25/11	635.90	637.83	620.90	600.90	NP	0.00	18.07	16.14	619.76	No	
EW-10	09/01/11	635.90	637.83	620.90	600.90	NP	0.00	18.03	16.10	619.80	No	
EW-10	09/08/11	635.90	637.83	620.90	600.90	NP	0.00	18.54	16.61	619.29	No	
EW-10	09/14/11	635.90	637.83	620.90	600.90	NP	0.00	18.93	17.00	618.90	No	
EW-10	09/23/11	635.90	637.83	620.90	600.90	NP	0.00	19.16	17.23	618.67	No	
EW-10	09/29/11	635.90	637.83	620.90	600.90	NP	0.00	19.10	17.17	618.73	No	
EW-10	10/07/11	635.90	637.83	620.90	600.90	NP	0.00	19.24	17.31	618.59	No	
EW-10	10/11/11	635.90	637.83	620.90	600.90	NP	0.00	19.38	17.45	618.45	No	
EW-10	10/21/11	635.90	637.83	620.90	600.90	NP	0.00	19.69	17.76	618.14	No	
EW-10	10/27/11	635.90	637.83	620.90	600.90	NP	0.00	19.83	17.90	618.00	No	
EW-10	11/04/11	635.90	637.83	620.90	600.90	NP	0.00	20.05	18.12	617.78	No	
EW-10	11/09/11	635.90	637.83	620.90	600.90	NP	0.00	19.95	18.02	617.88	No	
EW-10	11/18/11	635.90	637.83	620.90	600.90	NP	0.00	20.12	18.19	617.71	No	
EW-10	11/22/11	635.90	637.83	620.90	600.90	NP	0.00	20.20	18.27	617.63	No	
EW-10	12/01/11	635.90	637.83	620.90	600.90	NP	0.00	20.66	18.73	617.17	No	
EW-10	01/04/12	635.90	637.83	620.90	600.90	NP	0.00	20.85	18.92	616.98	No	
EW-10	02/16/12	635.90	637.83	620.90	600.90	NP	0.00	21.40	19.47	616.43	No	
EW-10	03/13/12	635.90	637.83	620.90	600.90	NP	0.00	21.65	19.72	616.18	No	
EW-10	04/16/12	635.90	637.83	620.90	600.90	NP	0.00	21.59	19.66	616.24	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-10	05/18/12	635.90	637.83	620.90	600.90	NP	0.00	20.68	18.75	617.15	No	
EW-10	06/26/12	635.90	637.83	620.90	600.90	NP	0.00	19.19	17.26	618.64	No	
EW-10	07/24/12	635.90	637.83	620.90	600.90	NP	0.00	19.54	17.61	618.29	No	
EW-10	08/19/12	635.90	637.83	620.90	600.90	NP	0.00	19.93	18.00	617.90	No	
EW-10	09/17/12	635.90	637.83	620.90	600.90	NP	0.00	20.33	18.40	617.50	No	
EW-10	09/30/12	635.90	637.83	620.90	600.90	NP	0.00	20.55	18.62	617.28	No	
EW-10	11/21/12	635.90	637.83	620.90	600.90	NP	0.00	20.96	19.03	616.87	No	
EW-10	12/17/12	635.90	637.83	620.90	600.90	NP	0.00	21.19	19.26	616.64	No	
EW-10	03/25/13	635.90	637.83	620.90	600.90	NP	0.00	21.97	20.04	615.86	No	
EW-10	05/05/13	635.90	637.83	620.90	600.90	NP	0.00	21.72	19.79	616.11	No	
EW-10	10/13/13	635.90	637.83	620.90	600.90	NP	0.00	21.17	19.24	616.66	No	
EW-10	05/21/14	635.90	637.83	620.90	600.90	NP	0.00	19.97	18.04	617.86	No	
EW-10	10/31/14	635.90	637.83	620.90	600.90	NP	0.00	19.30	17.37	618.53	No	
EW-10	05/05/15	635.90	637.83	620.90	600.90	NP	0.00	21.05	19.12	616.78	No	
EW-10	10/05/15	635.90	637.83	620.90	600.90	NP	0.00	18.98	17.05	618.85	No	
EW-10	05/23/16	635.90	637.83	620.90	600.90	NP	0.00	16.60	14.67	621.23	Yes	
EW-10	10/03/16	635.90	637.83	620.90	600.90	NP	0.00	17.65	15.72	620.18	No	
EW-10	06/29/17	635.90	637.83	620.90	600.90	NP	0.00	17.31	15.38	620.52	No	
EW-10	05/26/20	635.90	637.83	620.90	600.90	NP	0.00	16.25	14.32	621.58	Yes	
EW-11	07/25/11	637.20	639.14	622.20	602.20	18.65	1.84	20.49	17.13	620.07	No	
EW-11	08/18/11	637.20	639.14	622.20	602.20	17.94	3.58	21.52	16.81	620.39	No	
EW-11	08/25/11	637.20	639.14	622.20	602.20	18.28	4.01	22.29	17.25	619.95	No	
EW-11	09/01/11	637.20	639.14	622.20	602.20	18.15	4.05	22.20	17.12	620.08	No	
EW-11	09/08/11	637.20	639.14	622.20	602.20	18.69	4.08	22.77	17.67	619.53	No	
EW-11	09/14/11	637.20	639.14	622.20	602.20	19.10	4.30	23.40	18.13	619.07	No	
EW-11	09/23/11	637.20	639.14	622.20	602.20	19.20	4.66	23.86	18.31	618.89	No	
EW-11	09/29/11	637.20	639.14	622.20	602.20	18.99	5.13	24.12	18.21	618.99	No	
EW-11	10/07/11	637.20	639.14	622.20	602.20	19.15	5.07	24.22	18.36	618.84	No	
EW-11	10/11/11	637.20	639.14	622.20	602.20	19.21	5.16	24.37	18.44	618.76	No	
EW-11	10/21/11	637.20	639.14	622.20	602.20	19.62	4.13	23.75	18.61	618.59	No	
EW-11	10/27/11	637.20	639.14	622.20	602.20	19.70	4.78	24.48	18.84	618.36	No	
EW-11	11/04/11	637.20	639.14	622.20	602.20	19.87	5.03	24.90	19.07	618.13	No	
EW-11	11/09/11	637.20	639.14	622.20	602.20	19.68	5.31	24.99	18.94	618.26	No	
EW-11	11/10/11	637.20	639.14	622.20	602.20	19.80	5.49	25.29	19.10	618.10	No	Before EFR
EW-11	11/10/11	637.20	639.14	622.20	602.20	21.71	0.11	21.82	19.79	617.41	No	After EFR
EW-11	11/13/11	637.20	639.14	622.20	602.20	19.99	2.76	22.75	18.67	618.53	No	EFR Check
EW-11	11/18/11	637.20	639.14	622.20	602.20	20.23	3.07	23.30	18.98	618.22	No	
EW-11	11/22/11	637.20	639.14	622.20	602.20	20.38	3.32	23.70	19.19	618.01	No	

**Table 1**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-11	12/01/11	637.20	639.14	622.20	602.20	20.71	<b>3.88</b>	24.59	19.65	617.55	No	
EW-11	01/04/12	637.20	639.14	622.20	602.20	20.67	<b>4.96</b>	25.63	19.85	617.35	No	
EW-11	02/16/12	637.20	639.14	622.20	602.20	21.31	<b>4.87</b>	26.18	20.47	616.73	No	
EW-11	03/13/12	637.20	639.14	622.20	602.20	21.68	<b>4.34</b>	26.02	20.72	616.48	No	
EW-11	04/12/12	637.20	639.14	622.20	602.20	21.61	<b>4.06</b>	25.67	20.59	616.61	No	Spill Buddy Before Reading
EW-11	04/12/12	637.20	639.14	622.20	602.20	22.65	<b>0.17</b>	22.82	20.75	616.45	No	Spill Buddy After Reading
EW-11	04/16/12	637.20	639.14	622.20	602.20	22.03	<b>2.56</b>	24.59	20.67	616.53	No	
EW-11	03/13/12	637.20	639.14	622.20	602.20	21.68	<b>4.34</b>	26.02	20.72	616.48	No	
EW-11	04/12/12	637.20	639.14	622.20	602.20	21.61	<b>4.06</b>	25.67	20.59	616.61	No	Spill Buddy Before Reading
EW-11	04/12/12	637.20	639.14	622.20	602.20	22.65	<b>0.17</b>	22.82	20.75	616.45	No	Spill Buddy After Reading
EW-11	04/16/12	637.20	639.14	622.20	602.20	22.03	<b>2.56</b>	24.59	20.67	616.53	No	
EW-11	05/18/12	637.20	639.14	622.20	602.20	19.93	<b>1.75</b>	21.68	18.39	618.81	No	
EW-11	06/26/12	637.20	639.14	622.20	602.20	19.44	<b>3.31</b>	22.75	18.25	618.95	No	
EW-11	06/27/12	637.20	639.14	622.20	602.20	19.44	<b>3.31</b>	22.75	18.25	618.95	No	Installed Portable system 1
EW-11	11/21/12	637.20	639.14	622.20	602.20	21.42	<b>2.40</b>	23.82	20.02	617.18	No	
EW-11	12/17/12	637.20	639.14	622.20	602.20	21.56	<b>3.29</b>	24.85	20.36	616.84	No	
EW-11	03/25/13	637.20	639.14	622.20	602.20	22.38	<b>3.40</b>	25.78	21.21	615.99	No	
EW-11	05/05/13	637.20	639.14	622.20	602.20	22.07	<b>3.37</b>	25.44	20.89	616.31	No	
EW-11	05/16/13	637.20	639.14	622.20	602.20	21.98	<b>3.60</b>	25.58	20.85	616.35	No	Spill Buddy Before Reading
EW-11	05/16/13	637.20	639.14	622.20	602.20	22.92	<b>0.05</b>	22.97	20.99	616.21	No	Spill Buddy After Reading
EW-11	10/03/13	637.20	639.14	622.20	602.20	21.28	<b>4.69</b>	25.97	20.40	616.80	No	
EW-11	05/22/14	637.20	639.14	622.20	602.20	19.96	<b>5.07</b>	25.03	19.17	618.03	No	
EW-11	10/31/14	637.20	639.14	622.20	602.20	19.25	<b>5.11</b>	24.36	18.46	618.74	No	
EW-11	05/06/15	637.20	639.14	622.20	602.20	21.02	<b>4.70</b>	25.72	20.14	617.06	No	
EW-11	10/05/15	637.20	639.14	622.20	602.20	19.29	<b>3.63</b>	22.92	18.17	619.03	No	
EW-11	05/23/16	637.20	639.14	622.20	602.20	16.07	<b>7.92</b>	23.99	15.92	621.28	No	
EW-11	10/03/16	637.20	639.14	622.20	602.20	17.65	<b>5.78</b>	23.43	17.02	620.18	No	
EW-11	06/14/17	637.20	639.14	622.20	602.20	16.42	<b>7.04</b>	23.46	16.07	621.13	No	
EW-11	06/21/17	637.20	639.14	622.20	602.20	16.93	<b>6.39</b>	23.32	16.43	620.77	No	
EW-11	06/22/17	637.20	639.14	622.20	602.20	17.66	<b>1.78</b>	19.44	16.12	621.08	No	
EW-11	06/23/17	637.20	639.14	622.20	602.20	17.78	<b>1.90</b>	19.68	16.27	620.93	No	
EW-11	10/26/17	637.20	639.14	622.20	602.20	14.43	<b>8.41</b>	22.84	14.39	622.81	Yes	
EW-11	07/25/19	637.20	639.14	622.20	602.20	18.34	<b>4.61</b>	22.95	17.44	619.76	No	
EW-11	05/26/20	637.20	639.14	622.20	602.20	15.54	<b>9.99</b>	25.53	15.86	621.34	No	

**Notes:**  
 NM = Not Measured  
 NP = No Product  
 BTOC = Below Top of Casing  
 AMSL = Above Mean Sea Level  
 \* Corrections for free product made using: TOC elevation-[depth to ground water-(product thickness \* product density)]  
 Average Product Density = 0.77 g/cm3 based on average of 4 NE terminal wells (Table 8) - MW-32, RW-2, RW-4 and RW-6

**Table 2**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters							
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Specific Conductance	Conductivity	pH	Alkalinity (ppm CaCO3)	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µs/cm	µmhos/cm	pH units		ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
Sample Date																					
MW-3	3/23/1988		30	30	20	50	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-3	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	3.50	141	NM	NM	NM	NM	0.07	
MW-3	10/21/2003		230	17	23	42	22.2	<4.0	NA	NA	490	NA	NA	3.70	-107	NM	NM	NM	NM	NM	
MW-3	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.24	009	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.90	067	NM	NM	NM	NM	0.10	NM	NM	NM	NM	
MW-3	4/19/2005		1.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA	1.1	-010	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	4.74	-089	NM	NM	NM	753	7.42	NM	1.0	NM	NM	
MW-3	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	3.6	-052	NM	NM	NM	840	7.40	NM	1.0	NM	NM	
MW-3	10/22/2006		4.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	6.1	-227	NM	NM	NM	6.87	NM	7.0	NM	NM	NM	
MW-3	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.04	-169.8	NM	NM	NM	6.97	NM	3.0	NM	NM	NM	
MW-3	9/29/2007		3.9	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.28	-059.1	NM	NM	NM	7.05	NM	5.0	NM	NM	NM	
MW-3	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	2.94	249.4	NM	NM	NM	6.32	NM	1.0	NM	NM	NM	
MW-3	10/25/2008		1.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA	2.25	101.4	NM	NM	NM	6.80	NM	2.0	NM	NM	NM	
MW-3	10/14/2009		2.9	<2.0	<2.0	<6.0	<2.0	<2.0	NA	4.51	163.0	NM	NM	NM	7.34	NM	NM	NM	NM	NM	
MW-3	10/17/2011		18.2	1.2	<1.0	<3.0	<1.0	<1.0	NA	0.89	-201.0	7.91	NM	NM	969	7.85	NM	NM	NM	NM	
MW-3	10/3/2012		29.9	2.2	<1.0	<3.0	<1.0	<1.0	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/2/2013		11.3	1.1	<0.34	<1.0	NA	<0.37	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/30/2014		7.8	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/6/2015		9.8	2.2	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-3	10/5/2016		7.6	0.68J	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
MW-10	3/23/1988		230	<1.0	90	40	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	9/21/1988		80	11	3.0	15	NA	NA	NA	NA	NA	NA	600	NM	NM	NM	NM	NM	NM	NM	
MW-10	4/27/1989		260	42	18	45	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	8/29/1990		235	27	69	63	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	1/31/1991		69	7.0	15	17	NA	30	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-10	7/10/1991		26	13	31	22	NA	30	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM	NM	
MW-10	1/8/1992		3.0	<1.0	17	11	NA	30	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/14/1992		11	7.0	21	10	NA	<20	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	3/3/1999		110	7.9	35	25	NA	<4.0	NA	NA	1000	350	NA	3.32	NM	7.5	NM	NM	NM	NM	
MW-10	8/17/1999		5.3	4.1	6	3	NA	<4.0	NA	NA	330	<100	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	8/18/2000		48	12	49	43	36	<0.8	18	NA	1400	1000	NA	2.40	-096	NM	NM	NM	NM	10+	
MW-10	10/10/2000		140	31	120	130	103	<1.6	76	NA	2800	860	NA	2.10	106	NM	NM	NM	NM	10.00	
MW-10	10/21/2003		72	11	79	50	27	<4.0	NA	NA	910	NA	NA	1.10	-120	NM	NM	NM	NM	NM	
MW-10	4/20/2004		400	46	210	150	149	21	NA	NA	2900	NA	NA	2.40	056	NM	NM	NM	NM	NM	
MW-10	11/18/2004		90.6	3.0	61.6	31.0	41.5	<1.0	21.9	NA	1100	830	NA	1.10	-134	NM	NM	NM	NM	4.00	
MW-10	4/19/2005		7.6	<1.0	2.9	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.2	-040	NM	NM	NM	NM	NM	
MW-10	10/12/2005		4.3	<1.0	0.61 J	<3.0	<1.0	<1.0	1.5	NA	NA	NA	NA	1.85	-090	NM	NM	996	7.66	NM	
MW-10	10/12/2005	D	10	0.91 J	1.2	<3.0	<1.0	<1.0	1.4	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	5/23/2006		6.7	<1.0	3.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.9	-087	NM	NM	1015	7.60	NM	
MW-10	5/23/2006	D	6.6	<1.0	3.6	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/22/2006		12.1	0.73 J	8.5	3.2	1.3	<1.0	1.2	NA	NA	NA	<1000	6.80	-98.2	NM	NM	NM	7.07	NM	
MW-10	10/22/2006	D	12.2	0.76 J	8.9	3.0	1.5	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	4/29/2007		24.1	<1.0	8.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.14	-94.2	NM	NM	NM	7.18	NM	
MW-10	4/29/2007	D	24.4	<1.0	8.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/1/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	0.25	-23.6	NM	NM	NM	7.16	NM	
MW-10	5/10/2008		<1.0	<1.0	5.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.95	-32.4	NM	NM	NM	6.52	NM	
MW-10	5/10/2008	D	<1.0	<1.0	4.7	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/28/2008		4.0	<1.0	4.2	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.86	0.86	NM	NM	NM	6.97	NM	
MW-10	10/14/2009		4.3	<1.0	1.9	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	1.54	-39	NM	NM	NM	7.21	NM	
MW-10	10/27/2010		1.1	1.6	1.8	3.0	1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/17/2011		6.4	<1.0	1.7	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	2.67	-187	8.47	NM	895	7.99	NM	
MW-10	10/3/2012		9.3	<1.0	1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	10/3/2012	D	9.0	<1.0	1.1	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	5/21/2014		<1.0	<1.0	5.0	<3.0	1.7	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	
MW-10	5/21/2014	D	<1.0	<1.0	5.1	<3.0	<2.8	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	



**Table 2**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Specific Conductance	Conductivity	pH	Alkalinity (ppm CaCO3)	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µs/cm	µmhos/cm	pH units		ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
EW-10	7/28/2011		<b>3430</b>	<20.0	<20.0	<60.0	<20.0	<20.0	<80.0	2.28	-143	8.93	NM	1190	7.73	NM	NM	NM	NM	NM	NM
EW-10	10/19/2011		<b>3970</b>	<1.0	2.6	<3.0	<1.0	<1.0	<4.0	0.32	-162	8.45	NM	1130	7.99	NM	NM	NM	NM	NM	NM
EW-10	4/18/2012		<b>1510</b>	<1.0	1.0	<3.0	<1.0	<1.0	NA	1.06	91.4	7.6	NM	1437	7.17	NM	NM	NM	NM	NM	NM
EW-10	5/7/2013		<b>18.3</b>	<1.0	6.0	44.4	48.9	<1.0	4.9	0.93	167.1	8.2	NM	1225	7	NM	NM	NM	NM	NM	NM
EW-10	5/7/2013	D	<b>16.0</b>	<1.0	4.4	34.0	38.7	<1.0	<4.0	0.93	167.1	8.2	NM	1225	7	NM	NM	NM	NM	NM	NM
EW-10	5/21/2014		<b>18.6</b>	<1.0	<1.0	<3.0	<2.0	1.3	<4.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-10	5/4/2015		<b>7.2</b>	<0.39	<0.39	<1.2	<0.84	2.0	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-10	10/5/2016		1.4	<0.39	<0.39	<1.2	<0.84	2.6	<0.42	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-11	<b>07/25/2011 to present - The well was not sampled due to the presence of free product.</b>																				

**Notes:**

- µg/L ..... = micrograms per liter (equivalent to parts per billion)
- D ..... = Duplicate sample
- 1,2-DCA ..... = 1,2-Dichloroethane
- DRO ..... = Diesel Range Organics
- GRO ..... = Gasoline Range Organics
- FP ..... = The well was not sampled due to the presence of free product
- THC ..... = Total hydrocarbons or total petroleum hydrocarbons as gasoline
- MTBE ..... = Methyl Tertiary Butyl Ether
- NA ..... = Not Analyzed for indicated parameter
- NM ..... = Not Measured
- NR 140 ES ..... = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard
- NS ..... = Not Sampled on indicated date
- TMBs ..... = Trimethylbenzenes
- "BOLD TYPE"** ..... = The indicated concentration exceeds the NR 140 ES
- J ..... = Laboratory flag. Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.





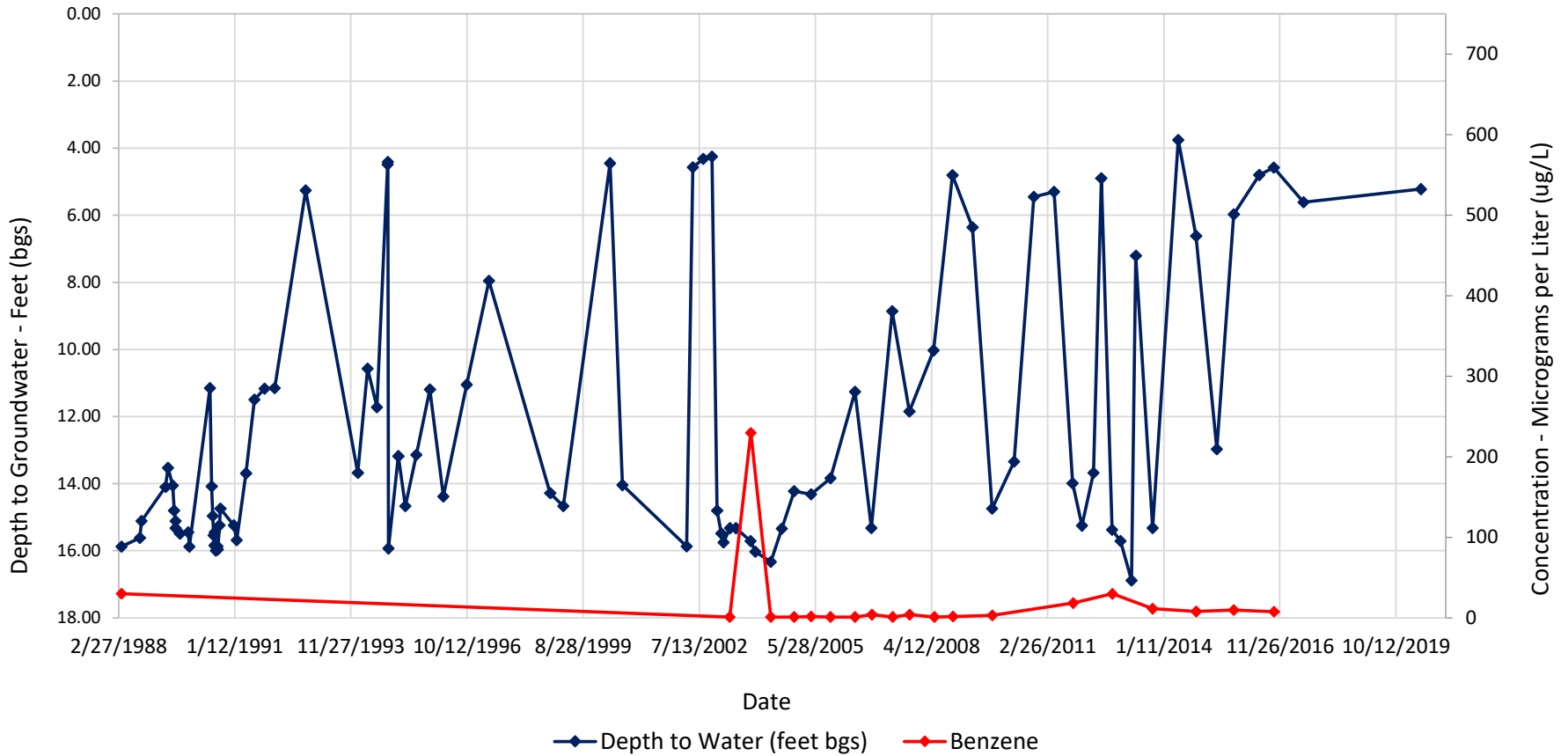
**Table 4:** Hydrocarbon Ratios Related to Degradation and Mass Reduction  
 LNAPL Samples Collected From Terminal Wells RW -5 and RW-6 (AOCs 4 & 5)  
 Former Amoco Terminal 00406 (Superior, WI)

			AOC 4	AOC 5	AOC 5
Lab	87 Octane	Std (G/D/W)	RW-5	RW-6	RW-6
Date of analysis		Torkelson	Pace Energy	Torkelson	Pace Energy
		TGI # 04115	7/26/2019	4/30/2004	7/26/2019
Evaporation					
n-Pentane/n-Heptane	2.1	2.28	0.01	0.65	0.60
Waterwashing					
Benzene/Cyclohexane	4.3	4.16	0.94	0.87	0.39
Toluene/Methylcyclohexane	10.8	6.09	0.20	0.82	0.73
Biodegradation					
3-Methylhexane/n-Heptane	1.6	1.15	0.39	0.40	0.36
Methylcyclohexane/n-Heptane	0.6	0.71	0.38	0.89	0.79

	87 Octane	Std (G/D/W)	RW-5	RW-6	RW-6
% Reduction in Mass Compared		Torkelson	Pace Energy	Torkelson	Pace Energy
87 Octane Ratios		TGI # 04115	7/26/2019	4/30/2004	7/26/2019
Evaporation					
n-Pentane/n-Heptane	2.1		99.29	69.05	71.30
Waterwashing					
Benzene/Cyclohexane	4.3		78.11	79.77	90.98
Toluene/Methylcyclohexane	10.8		98.19	92.41	93.21
Biodegradation					
3-Methylhexane/n-Heptane	1.6		75.90	75.00	77.77
Methylcyclohexane/n-Heptane	0.6		37.25	-48.33	-31.77

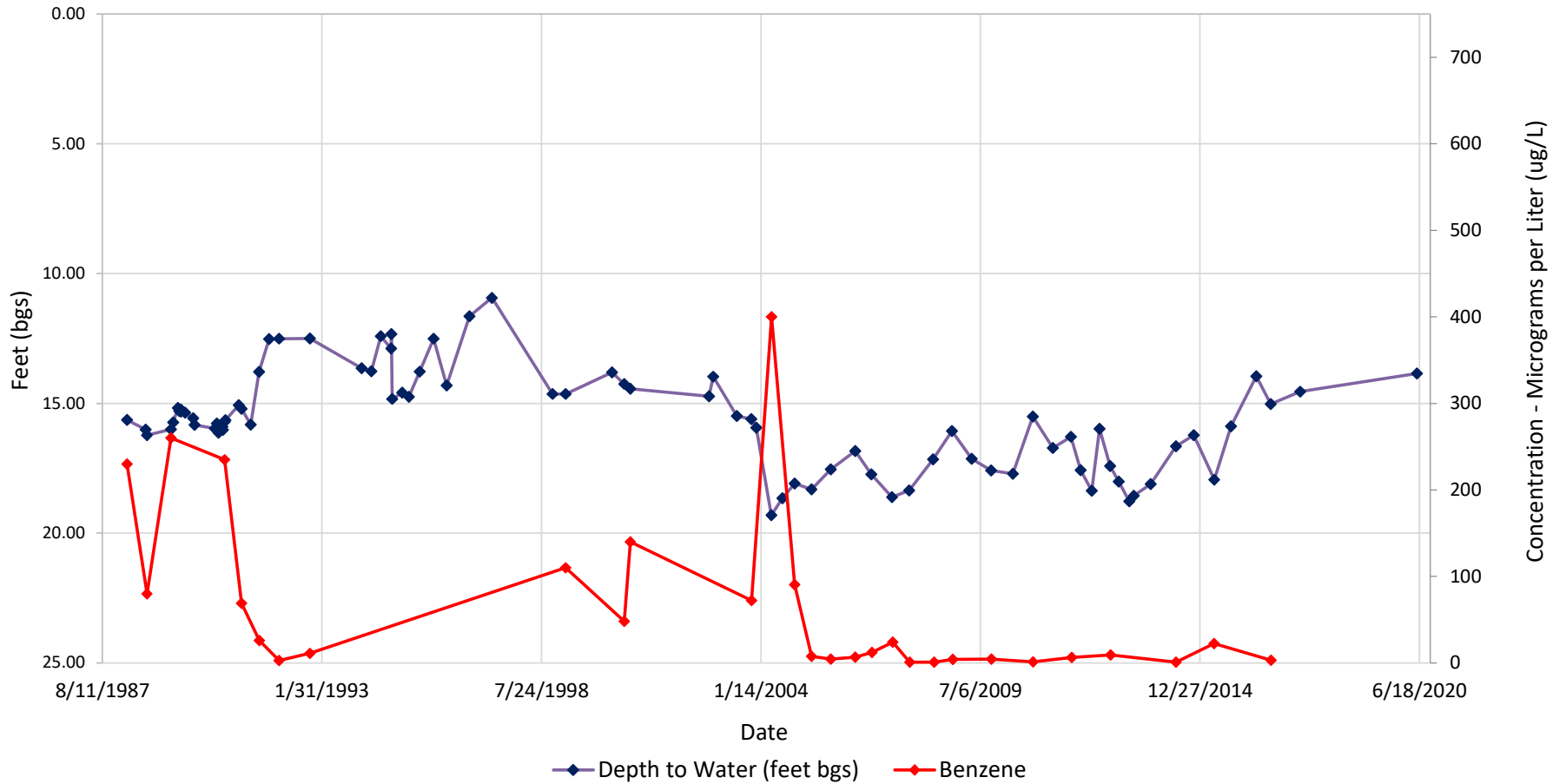
# Appendix A

**MW-3**  
**Benzene/Groundwater Hydrograph**  
Former Amoco Terminal  
Superior, Wisconsin



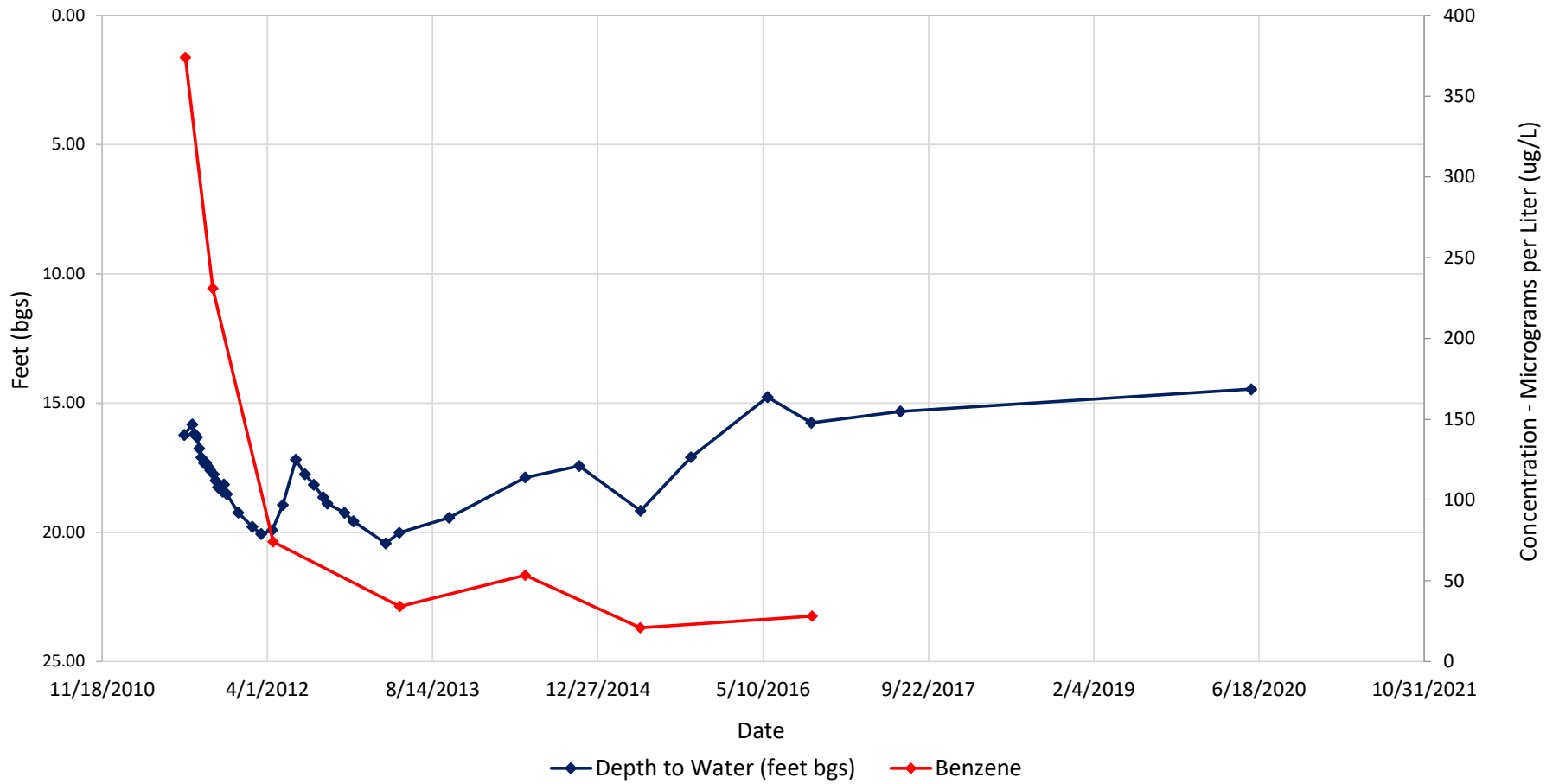
# Appendix A

## MW-10 Benzene/Groundwater Hydrograph Former Amoco Terminal Superior, Wisconsin



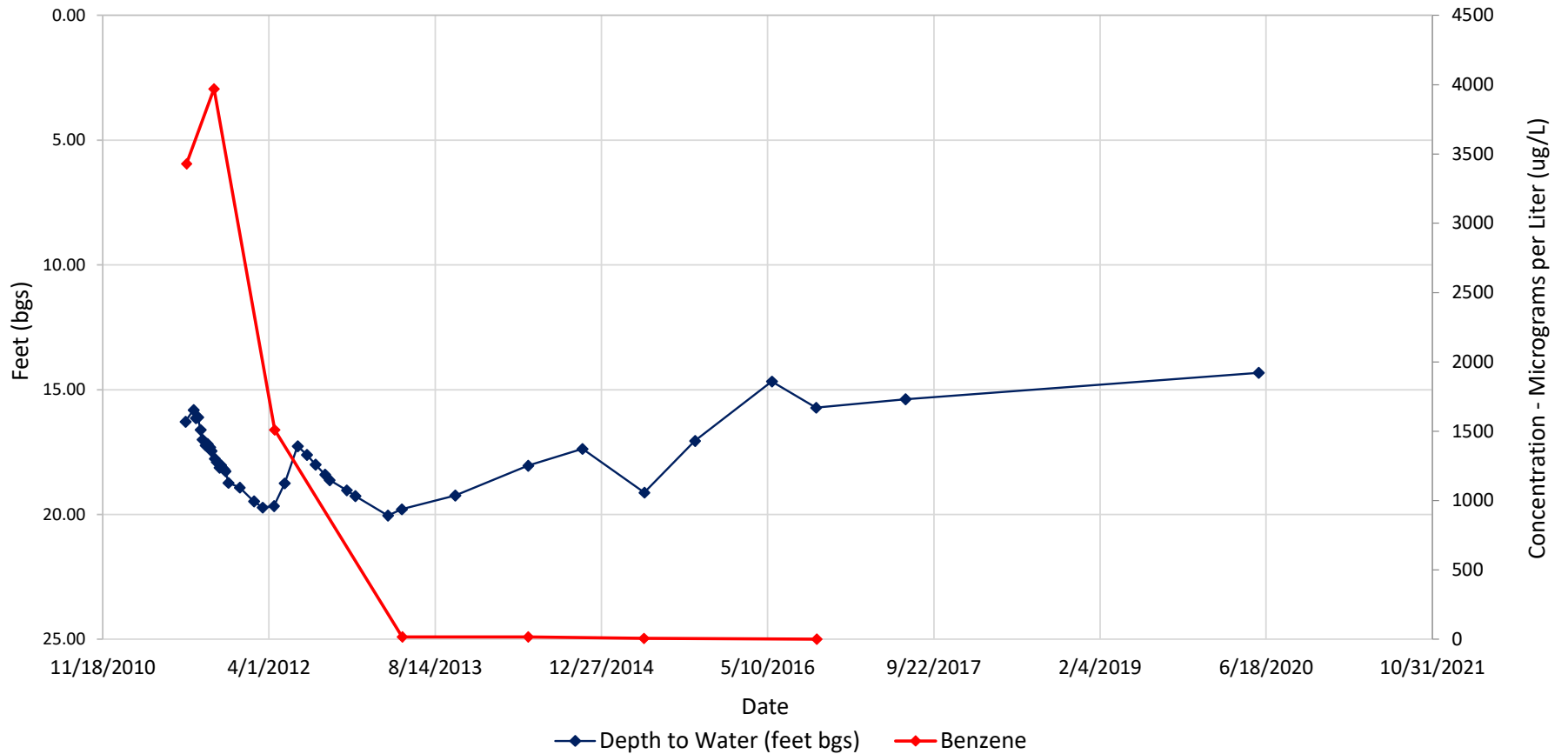
# Appendix A

## EW-9 Benzene/Groundwater Hydrograph Former Amoco Terminal Superior, Wisconsin



# Appendix A

## EW-10 Benzene/Groundwater Hydrograph Former Amoco Terminal Superior, Wisconsin



ANTEA ABANDONMENT AND TRANSMISSIVITY MEMO

June 14, 2021

Mr. John Hunt  
Wisconsin Dept. of Natural Resources  
223 E Steinfest Road  
Antigo, WI 54409

**Subject: Addendum to: Well Abandonment Work Plan  
Attachment to Request to Manage Materials Form 4400-315**  
FedEx Ground Package System  
2929 Halvor Lane  
Superior, Wisconsin

BRRTS No. 07-16-583046 (FedEx Facility)  
BRRTS No. 02-16-000331 (Amoco Oil Terminal)

Dear Mr. Hunt:

In the Well Abandonment Work Plan submitted to the Wisconsin Department of Natural Resources (WDNR) on March 12, 2021, Antea Group proposed for the abandonment of three existing monitoring and recovery wells installed by Antea Group on behalf of BP Products North America Inc. (BP). The Well Abandonment Work Plan serves as an attachment to Form 4400-315, submitted by BBJ Group on May 24, 2021. After additional discussion with BBJ Group on the Materials Management Plan, two additional monitoring wells are proposed to be added to the list of wells to be abandoned. In addition to the original request to abandon existing monitoring and recovery wells MW-3, MW-23, and RW-06, Antea Group proposes the addition of EW-09 and EW-10 to the well abandonment proposal to accommodate the expansion of the adjacent property FedEx facility. The history and conditions of these wells, including EW-09 and EW-10, were detailed in the contents of the Well Abandonment Work Plan. Based on the summary and conclusions presented in the Well Abandonment Work Plan, Antea Group recommends that all wells be abandoned without replacement.

Additional evaluation has also been completed on wells MW-23 and RW-6 since the Well Abandonment Work Plan has been submitted and includes an analysis on the LNAPL thicknesses and recoverability in the wells. Regular well gauging and LNAPL bailing has been completed on the wells since April 29, 2021, and the results are presented in greater detail below. The results of the LNAPL recovery events indicate that the apparent LNAPL thickness gauged within the wells is not indicative of LNAPL recoverability, and mass recovery technology such as a pumping or skimming system would not be effective.

### **LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) RECOVERY**

Between April 29, 2021 and June 8, 2021, LNAPL gauging and recovery events were completed at wells MW-23 and RW-06 to assist in the determination of whether additional recovery could be conducted on the wells using mass recovery systems. A total of six gauging and recovery events were completed. The wells were gauged prior to LNAPL removal, and LNAPL was removed with bailers to the maximum extent practicable.

John Hunt  
Wisconsin Department of Natural Resources  
June 14, 2021



Graphs of the depth to water and depth to LNAPL gauged in MW-23 and RW-06 before LNAPL recovery was performed and the total estimated volume of LNAPL recovered via bailer are included as **Appendix A**. Both of the wells yielded the most product during the first baildown event, and recovery quickly decreased until a recovery of 0.1 gallons was observed during the third baildown event. Recovery was consistent and limited to 0.2-0.1 gallons for all remaining recovery events.

Recovery of the LNAPL through mass removal technologies such as a skimming system would not be a feasible at these wells. LNAPL skimming is limited to the recovery of mobile LNAPL where LNAPL saturations are sufficient to produce LNAPL transmissivities greater than the recoverability threshold of 0.8 ft<sup>2</sup>/day (ITRC, 2009). The LNAPL transmissivity at monitoring well MW-23 was previously reported as 0.37 ft<sup>2</sup>/day (Antea Group, March 12, 2021) which is below the ITRC threshold value. Based on these observed field conditions and the conclusions presented in the Well Abandonment Work Plan, wells MW-23 and RW-06 are proposed to be abandoned without replacement. Additional LNAPL recovery on the wells is not feasible, and the existing LNAPL is immobile with limited residual dissolved phase benzene contaminant mass as documented by downgradient groundwater sampling over the past 33 years (analytical and gauging tables and benzene concentrations trends are included in the Well Abandonment Work Plan).

Questions regarding this memorandum can be directed to Layne Kortbein at the phone number and email listed below.

Sincerely,

A handwritten signature in black ink that reads "Layne Kortbein".

---

Layne Kortbein  
Project Professional  
+1 651 697 5117  
[Layne.Kortbein@anteagroup.us](mailto:Layne.Kortbein@anteagroup.us)  
Antea Group

## ATTACHMENTS

### APPENDIX

Appendix A – LNAPL Gauging and Recovery

## REFERENCES

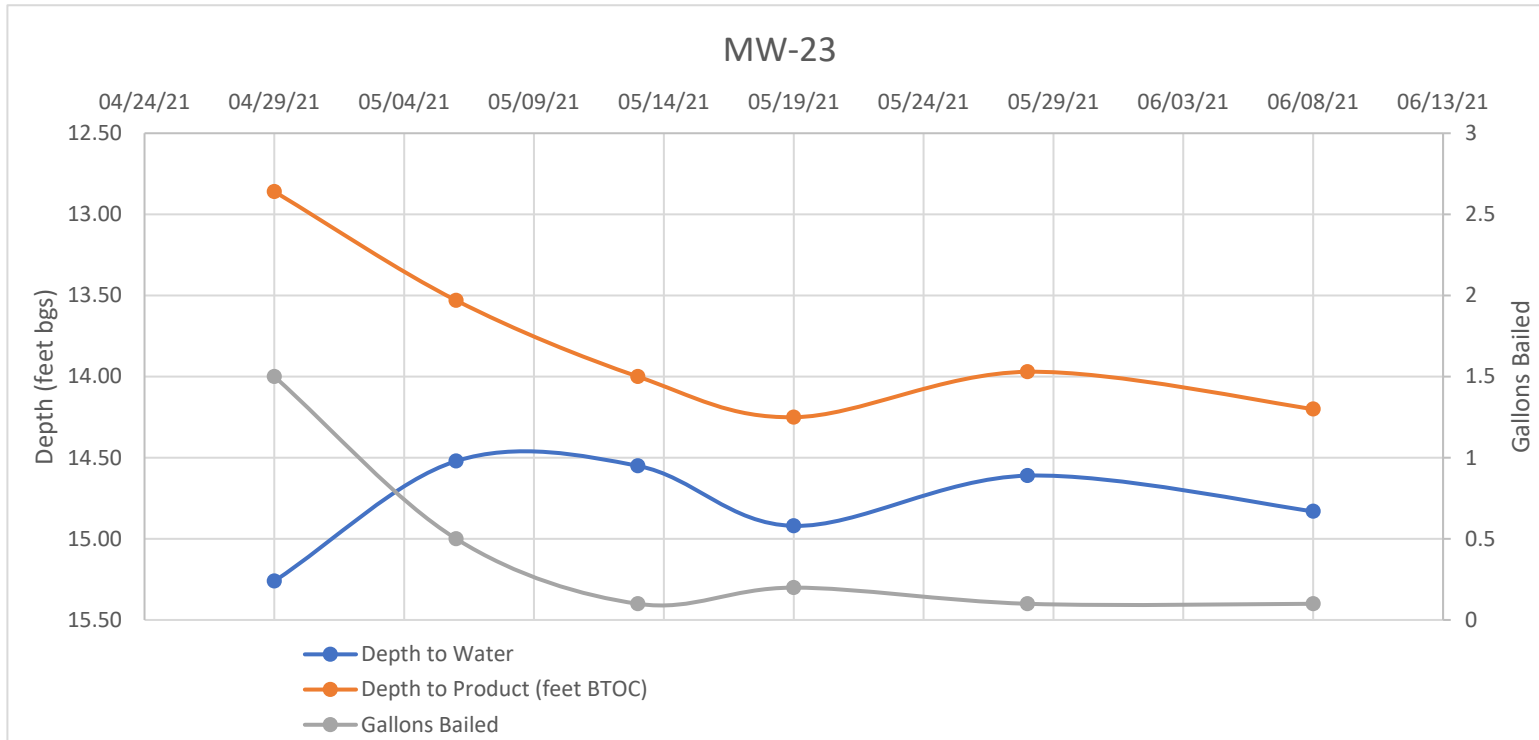
Antea Group, (March 12, 2021). *Well Abandonment Work Plan*.

The Interstate Technology & Regulatory Council. (2009, December). Evaluating LNAPL Remedial Technologies for Achieving Project Goals.

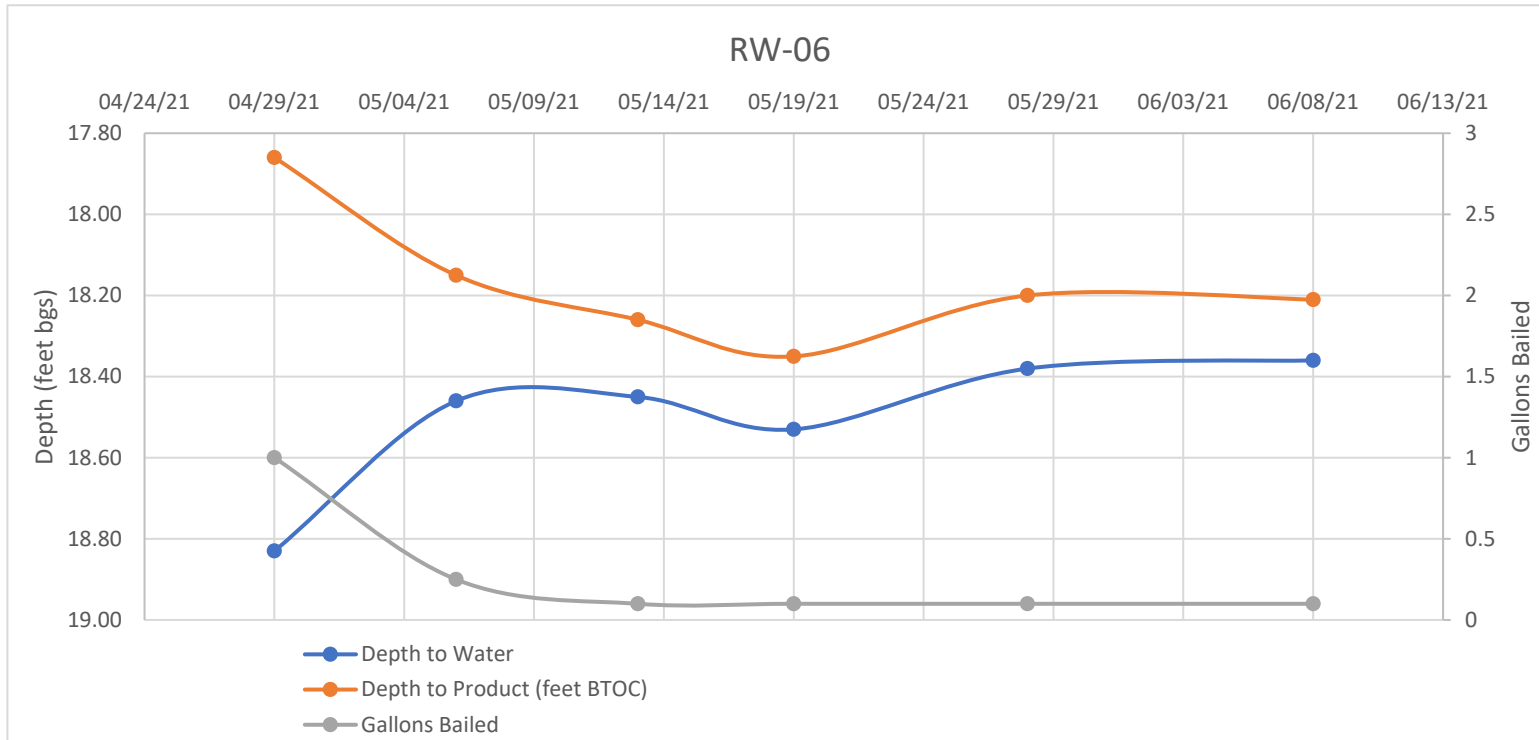




# Appendix A - LNAPL Recovery



# Appendix A - LNAPL Recovery



## INSPECTION LOG

**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name \_\_\_\_\_ BRRTS No. \_\_\_\_\_

Inspections are required to be conducted (see closure approval letter):  
 annually  
 semi-annually  
 other – specify \_\_\_\_\_

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input checked="" type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

BRRTS No. \_\_\_\_\_ Activity (Site) Name \_\_\_\_\_

{Click to Add/Edit Image} Date added:

Title:

{Click to Add/Edit Image} Date added:

Title: