

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

September 13, 2022

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 pavement consists of approximately 12 inches of crushed aggregate base WisDOT 3/4 -inch base and 5-inches of asphalt surface and binder material for paved surfaces. The concrete barrier consists of approximately 12-inch aggregate base with 8-inches of concrete pavement. 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 dry pond consists of a 30-MIL PVC geomembrane liner to protect from infiltration of groundwater and contact with soils. The barriers are located as shown on the **Figure 1. Two detail pages from the construction specification drawings is also included for reference on relative thickness of these features.**

Cover/Building/Slab/Barrier Purpose

The asphalt pavement, concrete pavement, 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 act 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 Figure 1 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 will be documented.

The stormwater pond as depicted in Figures 1 and 2 will be inspected once per 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, increasing age, and other factors. Any area where soils have become or are likely to become exposed will be documented.

The concrete and asphalt areas overlying the contaminated soil and as depicted in Figure 1 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 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 asphalt, concrete, or berm overlying the contaminated soils 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 and tenant 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
Peter Mitrou
2929 Halvor Lane
pete.mitrou@fedex.com

Property Owner: Cory Hart
HCI Limited Partnership
3121 Mercedes Drive
Monroe, LA 71291
chart@hcilp.com
318-323-0209

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 September 2021. Photographs will be submitted with the first Inspection and Maintenance Log 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.)

The Monitoring Well Abandonment Work Plan and Abandonment and Transmissivity Memo from the Antea Group detail proposed monitoring well abandonment without replacement. Antea Group has requested 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 is pending approval of WI DNR.

Contact Information:

August 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:

Location of abandoned wells will be submitted with Well Abandonment Forms. If monitoring wells are to be replaced, a location of where the monitoring well installation occurs will be provided by Antea Group.








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, if required to be replaced.

LEGEND

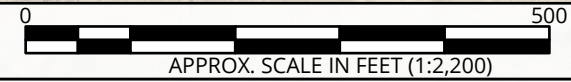
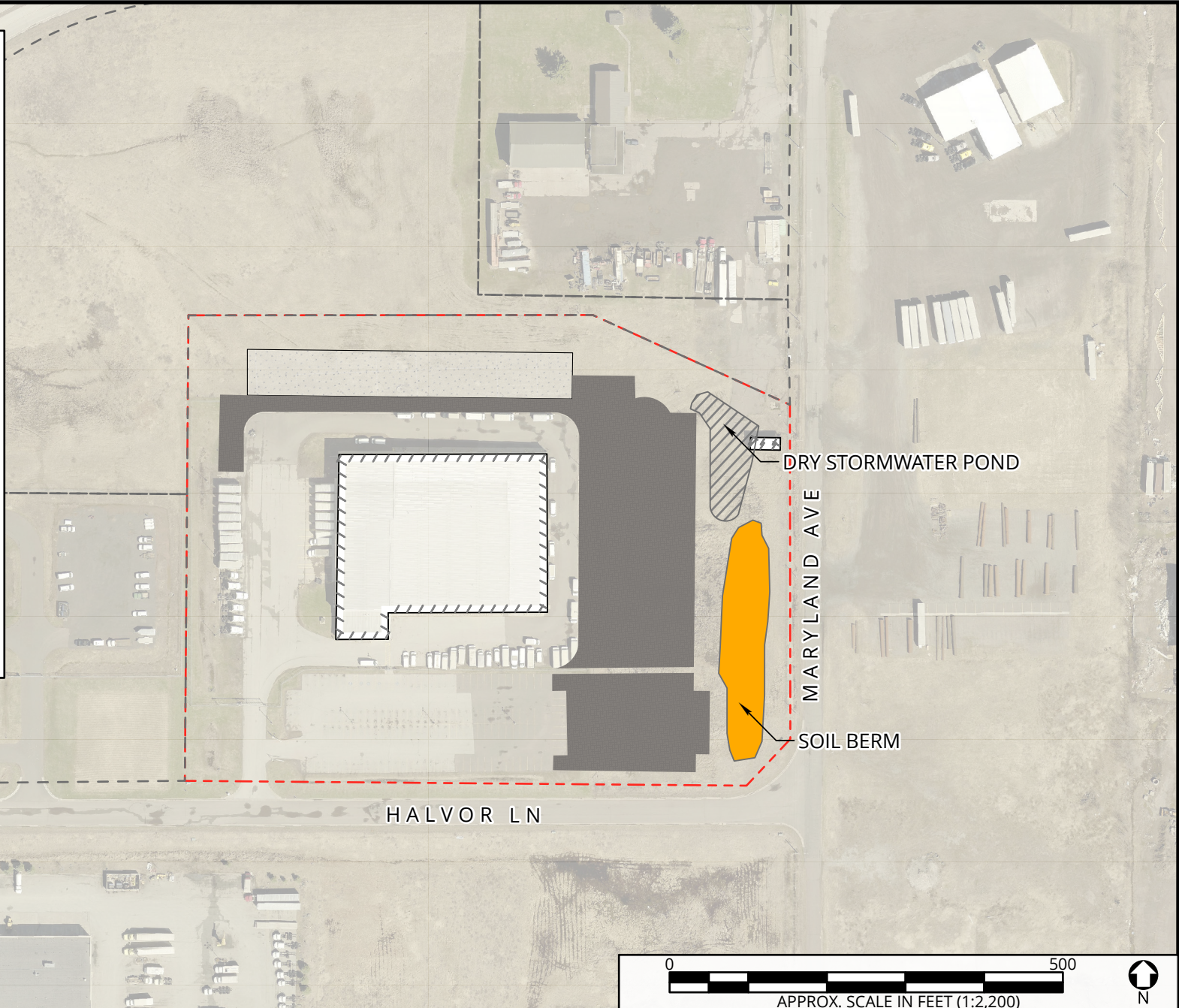
-  SOIL BERM
-  DRY STORMWATER POND
-  CONCRETE SURFACE
-  STRUCTURE - MAIN
-  SUBJECT PROPERTY
-  BITUMUNOUS PAVEMENT
-  PARCEL

NOTES

AERIAL IMAGERY PROVIDED AS SID BY DOUGLAS COUNTY, DATED 2019 AND AVAILABLE AT 3-INCH RESOLUTION.

THE CONCRETE, BITUMUNOUS (ASPHALT) PAVEMENT, AND SOIL BERM ARE THE FEATURES THAT REQUIRE ANNUAL INSPECTION. ANNUAL INSPECTIONS WILL BE RECORDED IN THE INSPECTION LOG.

LOCATIONS ARE APPROXIMATE. SHOULD NOT BE USED FOR SURVEYING PURPOSES.

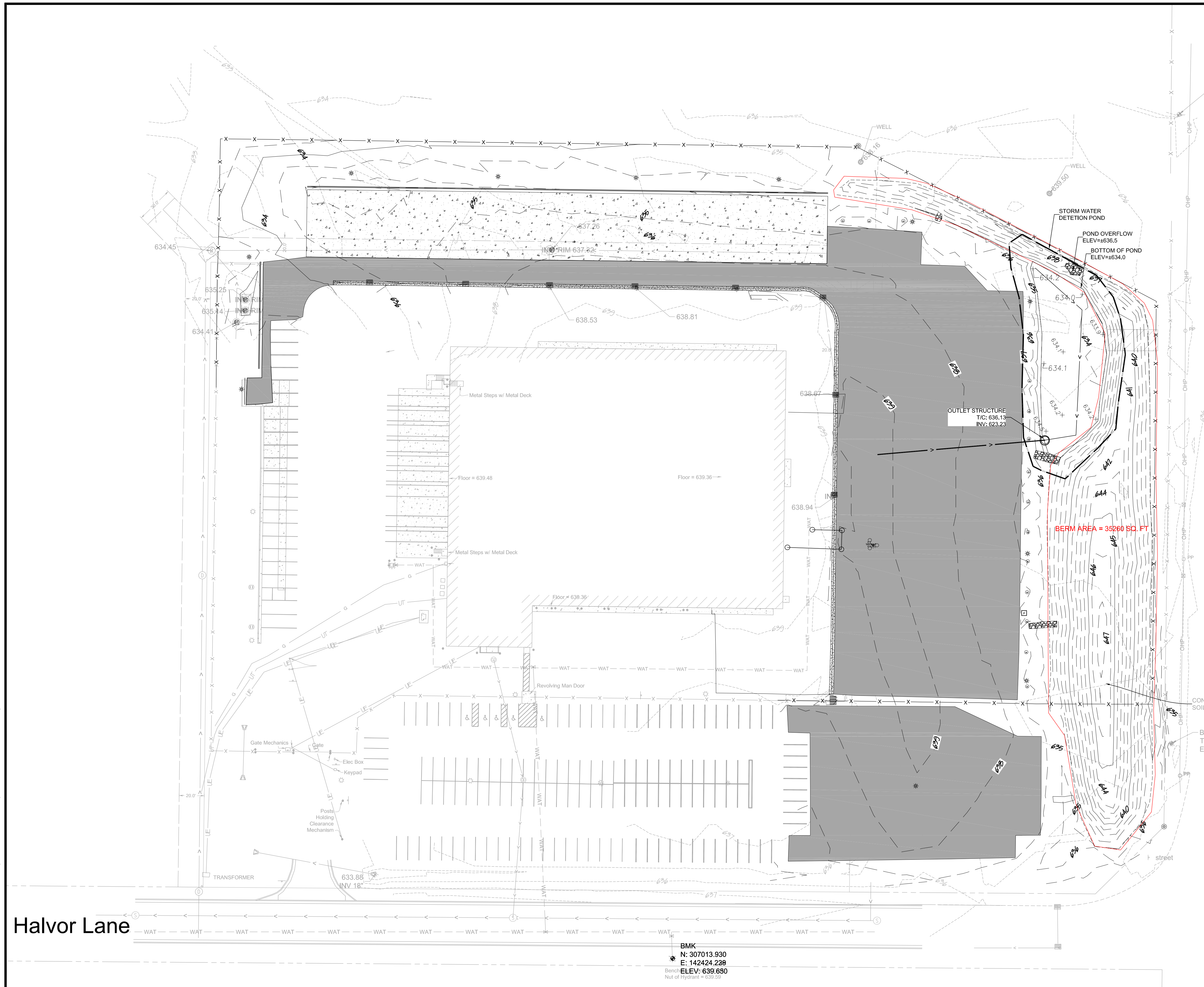


	PROJECT NO: R2112496
	CREATED BY: JBH 08.24.2021
	CHECKED BY: JBH 08.24.2021
	APPROVED BY: KLM 08.24.2021

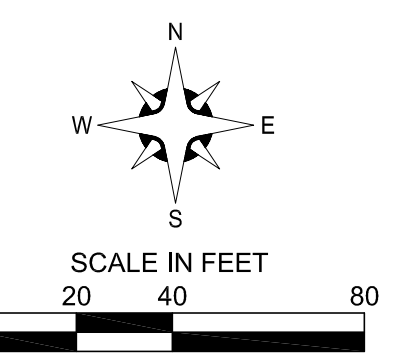
**SITE LAYOUT AND LOCATIONS OF FEATURES
REQUIRING ANNUAL MAINTENANCE**
 FEDEX FACILITY
 2929 HALVOR LANE
 SUPERIOR, WISCONSIN

FIGURE
 1

PLOT DATE: Aug 15, 2022 - 10:19am
 FILENAME: K:\g-m\UDC\Properties\LL\C18052000\02_Project-Data\04_Surveys\Asbuilt\Fed Ex Base.dwg



Benchmark
 Top Nut Hydrant
 ELEV: 638.40



Bearings, Distances, and Coordinates are based on the Douglas County Coordinate System

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, CS
	UNDERGROUND ELECTRIC W/ L POLE
	UNDERGROUND ELECTRIC W/ POLE
	PARKING STRIPE
	CONTOUR - MAJOR
	CONTOUR - MINOR
	CONCRETE
	CURB AND GUTTER
	BITUMINOUS
	ELECTRIC PLUG
	WATER HYDRANT, VALVE
	SIEM
	MONITORING WELL
	GUARDEPOST

POND BERM CALCULATIONS

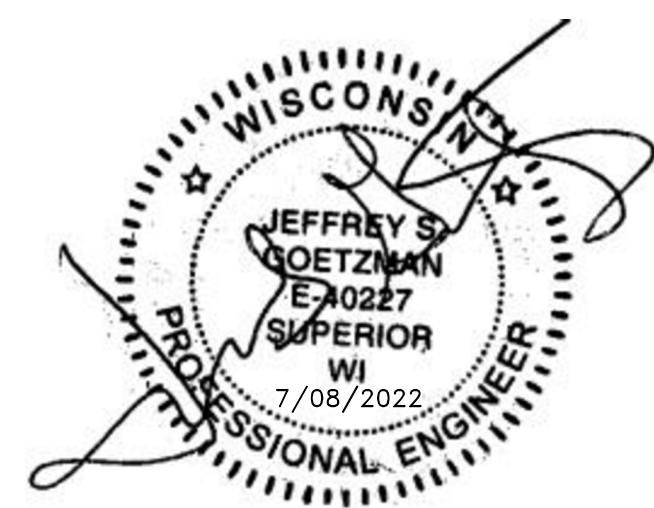
TOTAL GROSS POND BERM VOLUME: 153,900 CUBIC FEET
 COVER VOLUME: 35,260 x .05 = 17,630 CUBIC FEET
 NET CONTAMINATED SOILS VOLUME: 153,900 - 17,630 = 136,270 CUBIC FEET

BERM AREA = 35260 SQ. FT.

Maryland Avenue

Halvor Lane

BMK
 N: 307013.930
 E: 142424.228
 Bench ELEV: 639.680
 Nut of Hydrant = 639.59



NO.	DATE	BY	DESCRIPTION OF REVISIONS
1	6/30/22	JK	BERM AS-BUILT
2	7/08/22	JK	CLIENT COMMENTS
3	8/15/22	JK	POND 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		
AB		
SIGNATURE:		DATE: 6/30/2022
NAME: JEFF S. GOETZMAN		LIC. NO.: 40227



444 Cedar Street, Suite 1500
 Saint Paul, MN 55101
 651.292.4400
 tkda.com

FedEx PARKING LOT EXPANSION

BERM AS-BUILT

PROJ. NO.	18052.001
DRAWING NO.	1 of 1