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Michigan Department of Environment, Great Lakes, and Energy

Document type

Landfill Inspection Report 2024

Date

February 2025

COLDWATER ROAD LANDFILL - MID 005 356 860 LANDFILL INSPECTION REPORT



Bright ideas. Sustainable change.

COLDWATER ROAD LANDFILL - MID 005 356 860 LANDFILL INSPECTION REPORT

Project name **RACER Trust Coldwater Road Landfill**
Project no. **15388/1940107203**
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Prepared by **Kevin Schneider**
Checked by **Clifford Yantz**
Approved by **Clifford Yantz**
Description **Landfill Inspection Annual Report**

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1. INTRODUCTION

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), Ramboll Americas Engineering Solutions, Inc. (Ramboll), is presenting this annual Landfill Inspection Report summarizing the 2024 Semiannual Post Closure Inspections at the hazardous waste landfill for the Coldwater Road Landfill (Site) in Flint, Michigan.

A request to change the frequency of site/landfill cap inspections from quarterly to occur on a semiannual basis was submitted to the Department of Environment, Great Lakes, and Energy (EGLE) in the 2nd Quarterly Status Report, dated July 14, 2023, and was approved by EGLE in a response letter dated January 24, 2024. The updated inspection frequency was implemented in 2024, with the inspections being conducted in April and October.

Each semiannual inspection event in 2024 consisted of the following activities:

- A visual inspection of the landfill cap and berms
- A visual inspection of the leachate accumulation above ground storage tank (AST)
- A visual inspection of the site access roads
- A visual inspection of the site perimeter fencing and gates
- An inspection of the leachate collection system
- Testing of the leachate detection alarm system
- A summary of the monthly removal of liquids from the leak detection vaults
- A visual inspection of site drainage structures.

A summary of the inspections is outlined in the following sections and copies of the semiannual inspection reports are included as **Appendix A**. A Site Location Map (**Figure 1**), and a 2024 Incident Location Map (**Figure 2**) are also included.

2. INSPECTION FINDINGS

The below sections summarize the findings and repairs made during the 2024 semiannual inspections.

2.1 Cap and Landfill Berms

The cap and surrounding landfill berms were visually inspected during each semiannual event for deep root penetration, burrowing animals, soil erosion, slope failures, and ponding water, including within the ditch and/or washouts.

Several hundred woody-stemmed plants were removed from the landfill cap during the growing season (April through November).

No areas of bare vegetation were observed on the landfill cap during the semiannual inspections. The tall weeds observed in 2022 and 2023 did not sprout this growing season.

Two potentially active animal burrow were observed on October 17, 2024, and a trap was set at each burrow. One of the burrows was found to be inactive and was closed on October 29, 2024. The other animal burrow was found to be active, as an animal was trapped. This animal burrow was also closed out on October 29, 2024. The burrow was filled using methods approved by EGLE, which included measuring the approximate length, depth, and diameter, and recording the location.

Once the burrow was filled in, the area was raked smooth and grass seed was spread. No signs of liner damage were observed during the inspection and repair of the animal burrow. A log of burrow activity throughout the year is maintained at the landfill. The log contains information on the date that a burrow was identified, response activities, and the date the burrow was filled and seeded. A photo log and figure containing the location of the burrow was also included in the Semiannual Status Report. The location of the animal burrows can be found on **Figure 2** in this report. Animal activity will continue to be addressed during future landfill cap maintenance.

2.2 Leachate Collection AST

The 15,000-gallon leachate accumulation AST is located in the containment/control building. An inspection of this AST system (tank, piping, containment) is completed and documented during each site visit by Ramboll and during semiannual inspections in accordance with the post-closure care plan (PCCP). No evidence of leakage was observed within the AST secondary containment area or the associated piping.

2.3 Access Roads

The landfill access and perimeter roads were inspected for useability, including sufficient gravel, proper drainage, and ruts during the semiannual inspections.

Throughout the access roads drainage is generally adequate and there are areas of shallow rutting and areas with minimal gravel. The shallow rutting and lack of gravel do not affect travel around the Site and will be addressed if the road surfaces deteriorate significantly.

No other problems to the access roads were observed during 2024.

2.4 Site Perimeter Fencing and Gates

An opening in the perimeter fence was repaired during the 1st semiannual of 2024. This was an opening that had previously been repaired, the opening was repaired and reinforced to deter future openings. See **Figure 2** for the location of the fence repair.

2.5 Leachate Collection System

The leachate collection system was inspected semiannually for visible signs of damage. System components inspected include the control panels for the sumps and the leak detection vaults, as well as the visible portions of the vault piping. No evidence of damage was observed for the aboveground components of the system. Additionally, no signs of erosion/washouts were noticed in the areas around the control panels and posts.

2.6 Leachate Detection Alarm System

The PermAlert automated leak detection alarm was tested during each semiannual inspection. The alarm was found to be operating during each of the semiannual inspections.

2.7 Vault Liquid Removal

The leak detection vaults were pumped monthly or bi-monthly for Vaults B and E and quarterly for Vaults A, C, D, and F by means of a portable trash pump. The dewatering was completed per the modified dewatering frequency approved by EGLE via letter on January 24, 2024. If three or more vaults had more than 300 gallons removed during a dewatering event, then the next monthly dewatering event included all the vaults. The volumes of liquid evacuated from each cell are provided in **Table 1** and were reported in the Semiannual Status Reports.

2.8 Drainage Inspection

The perimeter of the landfill, the berm surrounding the landfill, drainage swales at the base of the landfill, the Remaining Materials Area (RMA), **Figure 2**, and the pond area were inspected during each of the semiannual inspections for potential drainage problems. No drainage issues associated with the operation of the landfill were observed.

3. SUMMARY

This summary of the semiannual inspections fulfills the annual inspection reporting requirements for 2024. The first semiannual 2025 site inspection will be conducted in April 2025. If you have any questions, feel free to contact me at (313) 333-0211.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

On Behalf of RACER Trust



Clifford S. Yantz
Project Manager – Ramboll Americas Engineering Solutions, Inc.
Agent for RACER Trust

Date: February 28, 2025

TABLE



TABLE 1
RACER Trust - Coldwater Road
Liquid Volumes Removed from Leak Detection Vaults in 2024

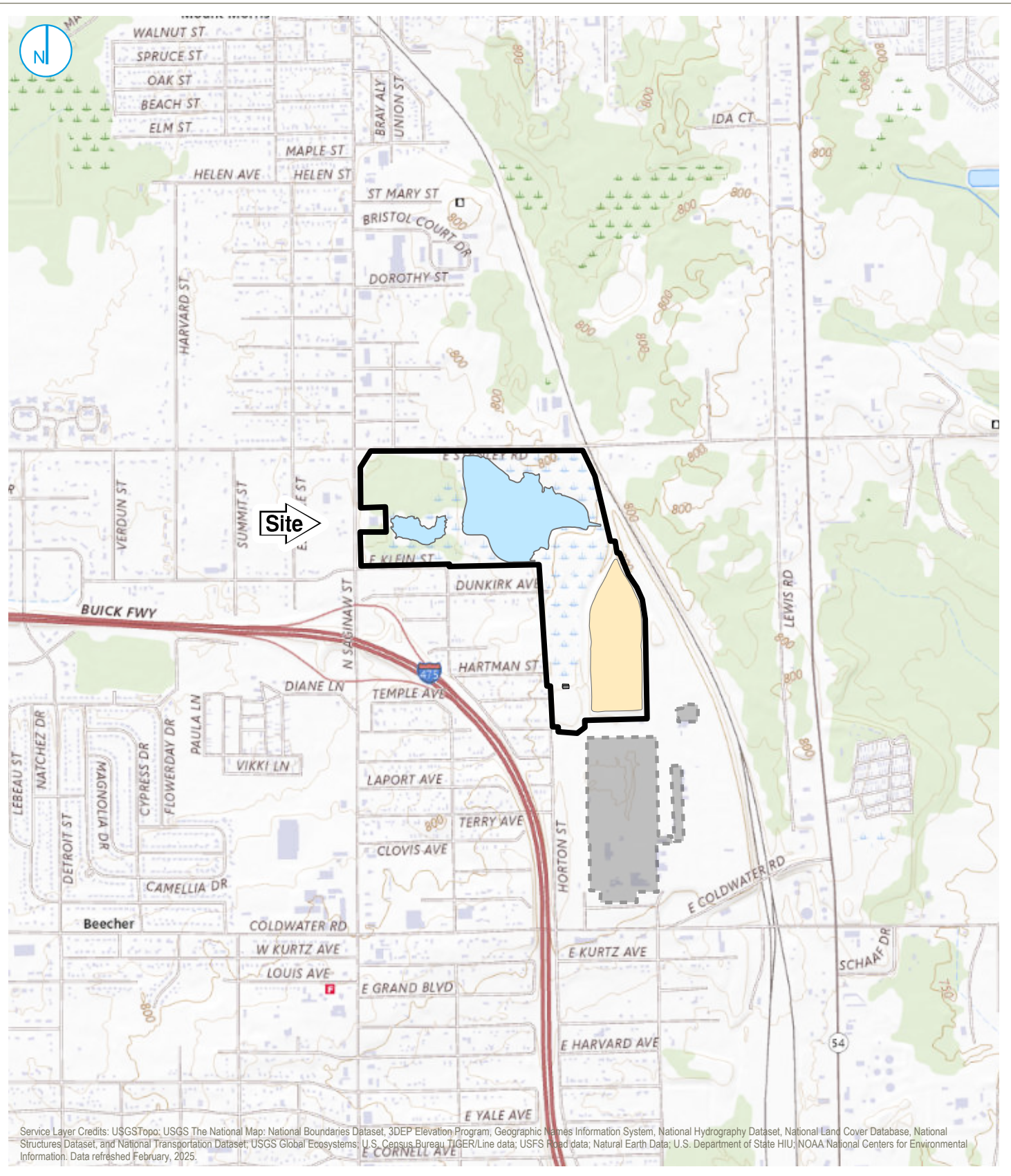
Date 2024	VAULT A	VAULT B	VAULT C	VAULT D	VAULT E	VAULT F	TOTAL LDS GALLONS
11-Jan-2024	149	364	27	52	475	293	1360
21-Feb-2024	--	675	--	--	924	--	1599
13-Mar-2024	--	302	--	--	546	--	848
18-Apr-2024	349	522	55	200	1001	4	2131
23-May-2024	--	336	--	--	1134	--	1470
25-Jun-2024	--	231	--	--	1213	--	1444
18-Jul-2024	811	259	119	421	1090	0	2700
29-Aug-2024	--	377	--	--	1086	--	1463
30-Sep-2024	--	210	--	--	1573	--	1783
23-Oct-2024	875	61	212	822	458	5	2433
21-Nov-2024	239	43	63	104	304	2	755
17-Dec-2024	--	--	--	--	547	--	547
YEAR END TOTAL	2,423	3,380	476	1,599	10,351	304	18,533

Notes

Liquid volumes in gallons
 LDS - Leak Detection System
 -- Vault not dewatered

The dewatering was completed per the modified dewatering frequency approved by EGLE via letter on January 24, 2024. The dewatering for Vault B and Vault E occurred on an every other month basis unless more than 300 gallons of liquid were removed from a vault during a dewatering event. The vault dewatering frequency for Vaults A, C, D, and F occurred on a quarterly basis. If three or more vaults had more than 300 gallons removed during a dewatering event, then the next monthly dewatering event included all the vaults.







FIGURES



Service Layer Credits: USGSTopo; USGS The National Map; National Boundaries Dataset; 3DEP Elevation Program; Geographic Names Information System; National Hydrography Dataset; National Land Cover Database; National Structures Dataset; and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information. Data refreshed February, 2025.

Map Scale: 1:24,000 | Map Center: 83°41'17"W 43°6'2"N



-  PROPERTY BOUNDARY
-  LANDFILL
-  FORMER BUILDING
-  FORMER POWERHOUSE
-  SITE BUILDINGS
-  PONDS



SITE LOCATION

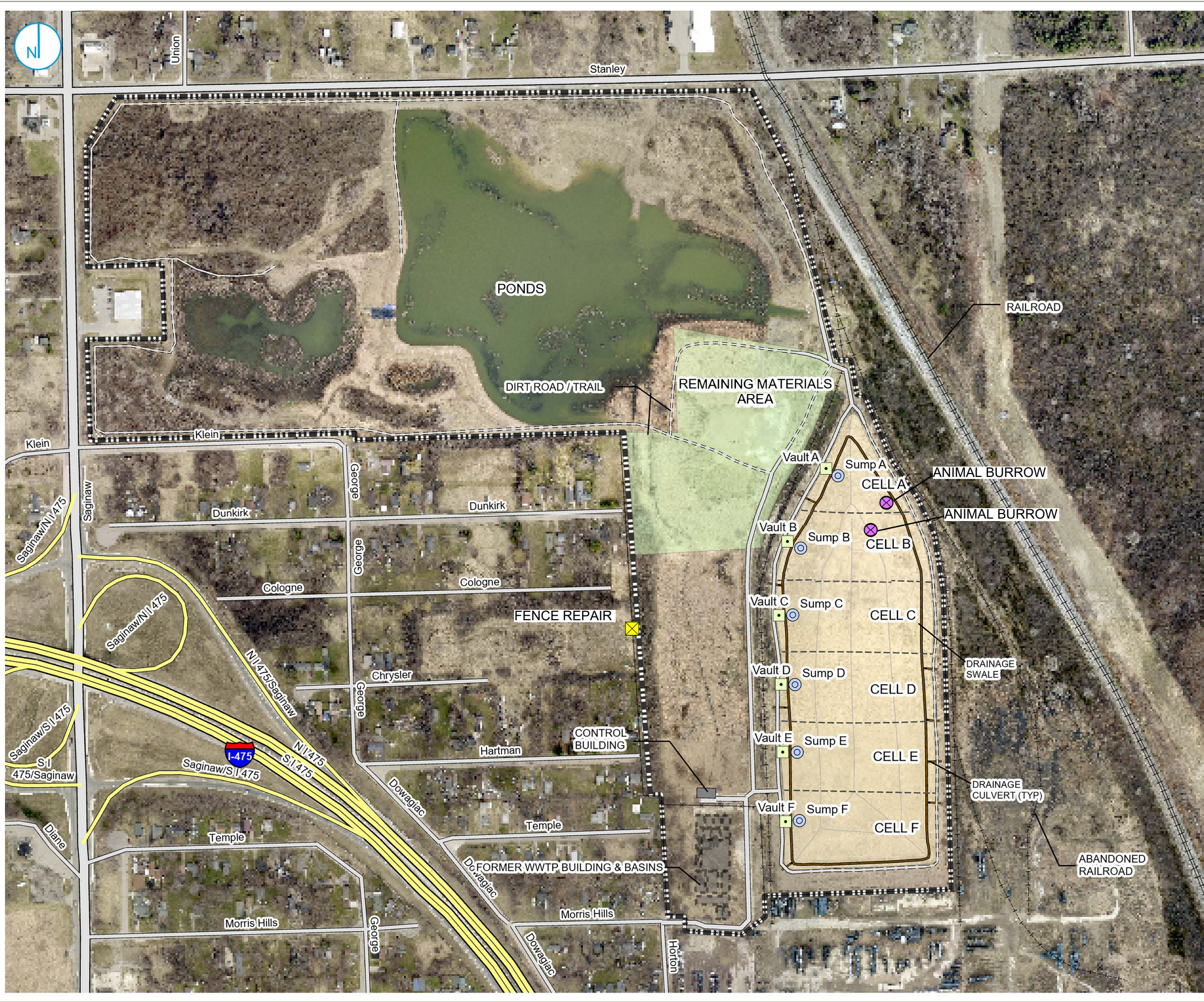
FIGURE 1

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY



PROJECT: 1940103462 | DATED: 2/7/2023 | DESIGNER: MONETANT
 I:\Racer-Trust\1088190\GIS\Coldwater_Road\ProRACER_Coldwater_Road_2022_Annual_LDS_and_GW_Figures.aprx\002 - Site_Layout 2022 SA Rpts (LDS-Rpt)_02032023



- ⊙ LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- ▬ PROPERTY BOUNDARY
- ⊠ FENCE REPAIR
- ⊗ ANIMAL BURROW



2024 INCIDENT LOCATION MAP

RACER Trust
 Coldwater Road Landfill Facility
 Flint, Michigan

FIGURE 02

RAMBOLL AMERICAS
 ENGINEERING SOLUTIONS, INC.
 A RAMBOLL COMPANY



APPENDIX A
SEMIANNUAL INSPECTION LOGS

Semiannual Post Closure Inspection Log Sheet
Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 1940107203

Inspector’s Name/Title: Kevin Schneider, Senior Project Scientist

Inspector’s Signature/Date/Time:  April 25, 2024

Cap and Berm

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken	Date Corrected
Cell A	No	No	No	No	No	No		
Cell B	No	No	No	No	No	No		
Cell C	No	No	No	No	No	No		
Cell D	No	No	No	No	No	No		
Cell E	No	No	No	No	No	No		
Cell F	No	No	No	No	No	No		
Berms	No	No	No	No	No	No		

Woody Plant Removal Activities

Summarize monthly activities: Several woody plants (coniferous type) observed during inspection.

Leachate Tank Storage

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

Tank

- Cracks or holes observed in tank? No Yes
- Liquid dripping or running from tank? No Yes
- Staining observed on the tank surface? No Yes

If yes to any, describe issue, location, and actions taken	Date Corrected

Piping

- Is piping sagging, cracked or punctured? No Yes
- Liquid dripping or running from piping? No Yes
- Is the tank discharge valve open? No Yes
- Staining observed on the piping surface? No Yes

If yes to any, describe issue, location, and actions taken	Date Corrected

Emergency Response

- Are drums present in accumulation building? No Yes
- Are sandbags present in accumulation building? No Yes
- Are shovels present in accumulation building? No Yes

If no to any, describe issue, location, and actions taken	Date Corrected

Vegetation

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Do areas around building and equipment need to be mowed?	Do access roads need to be mowed?	If yes, describe issue, and actions taken	Date Corrected
A	No	Noted on drawing	No	No	Access roads and around building mowed on June 12, 2024	6/12/24
B	No	Noted on drawing	No	No		
C	No	Noted on drawing	No	No		
D	No	Noted on drawing	No	No		
E	No	Noted on drawing	No	No		
F	No	Noted on drawing	No	No		
Berms	No	Noted on drawing	No	No		

Access Roads

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe issue, and actions taken	Date Corrected
Roads located approx. west of landfill	Some areas there are spare gravel	Yes	No action required at this time.	
Roads located approx. east of landfill	Some areas there are spare gravel	Yes	No action required at this time.	
Roads located approx. north of wetlands	Yes	Yes		
Roads located approx. south of wetlands	Yes	Yes		
Roads located approx. west of wetlands	Yes	Yes		
Roads located approx. east of wetlands	Some areas there are spare gravel	Yes	No action required at this time.	

Site Perimeter Fence

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	“Trespassing Prohibited” and “Private Property” Signs Missing?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line	No	No	No	No		
Fences along south property line	No	No	No	No		
Fences along west property line	Yes	No	No	No	Previous hole reopened. Limbs down on fence.	Repaired during inspection.
Fences along east property line	No	No	No	No		

Leachate Collection System

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

Alarm Test

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

Cable Test

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
			No

Battery Test

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

Describe any issues and actions taken	Date Corrected
N/A	

Remaining Materials Area

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken	Date Corrected
RMA	No	Yes, in road by rain	No	No	No	Shallow erosion gully across road due to rain. No action required at this time.	

Drainage Inspections

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions	Date Corrected
Perimeter of landfill and berm	None				
Drainage trenches at base of landfill	None				
RMA	None	In road	Shallow gully due to rain	No action required at this time.	
Wetlands area	None				
Culverts around landfill	None				
Western drainage swale	None				
North landfill catch basin	None				

4/25/24

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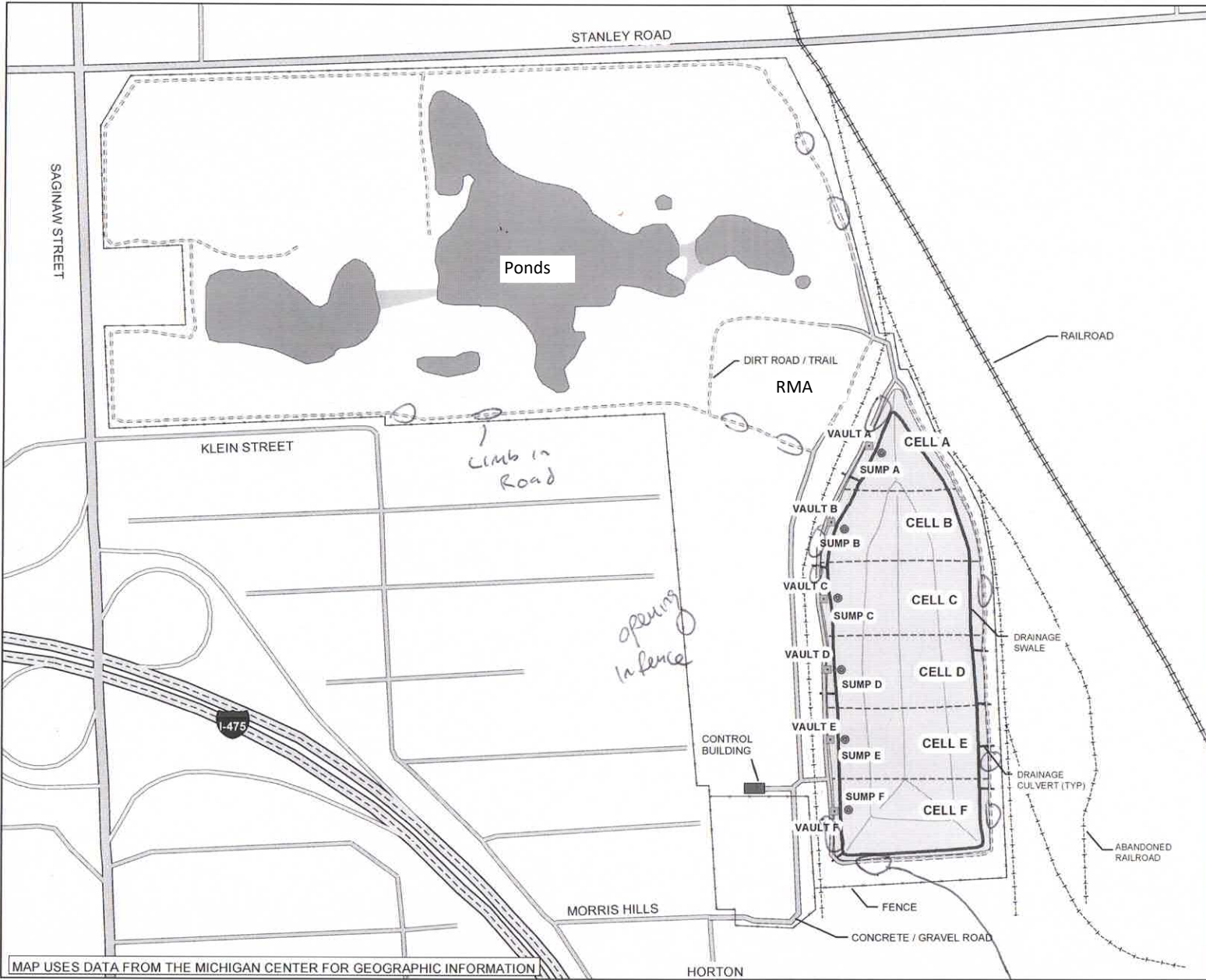


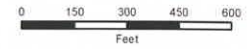
FIGURE 1



- LEGEND**
- LEACHATE COLLECTION SUMP
 - ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

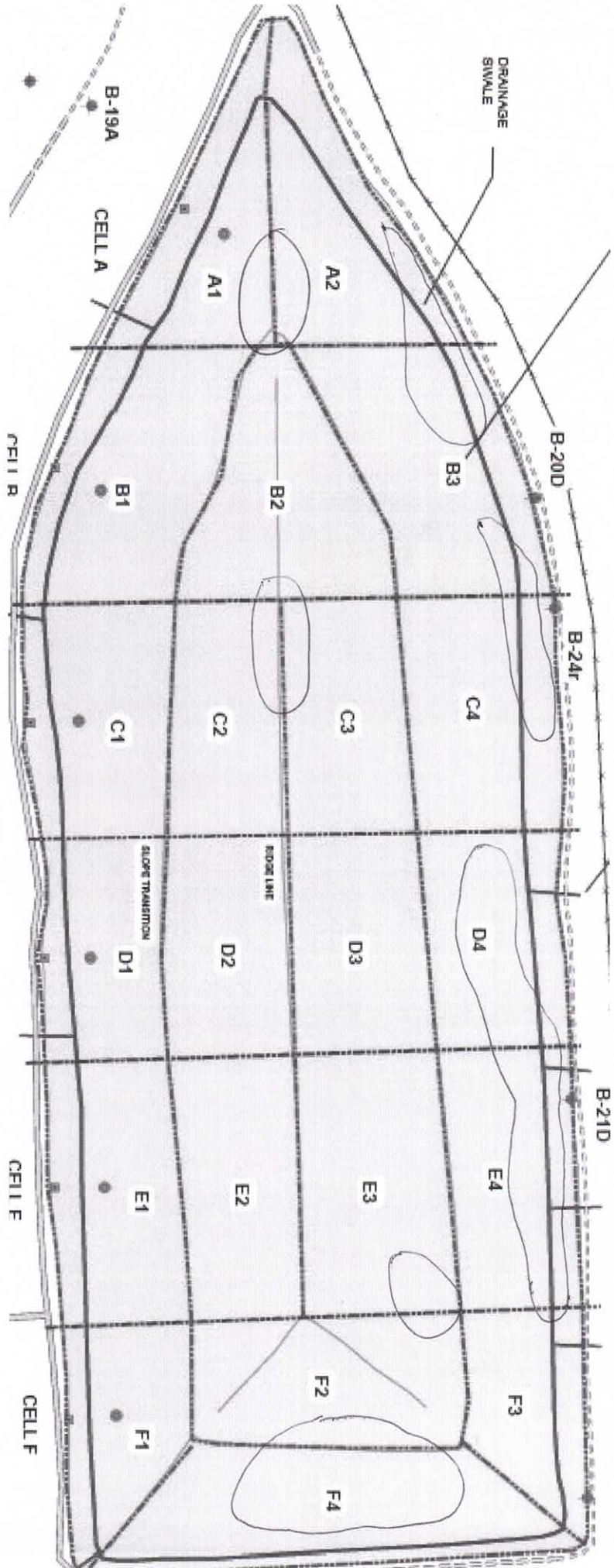
SITE LAYOUT



FEBRUARY 2021



MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION



4/25/24
 ○ - Tall Dead weeds

Semiannual Post Closure Inspection Log Sheet
Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 1940107203

Inspector’s Name/Title: Kevin Schneider, Senior Project Scientist

Inspector’s Signature/Date/Time:  October 29, 2024

Cap and Berm

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken	Date Corrected
Cell A	Yes	No	No	No	No	No	One animal burrow observed. Trapped groundhog. Closed burrow.	10/29/24
Cell B	Yes	No	No	No	No	No	One animal burrow observed at Cell B3. No activity. Closed burrow.	10/29/24
Cell C	No	No	No	No	No	No		
Cell D	No	No	No	No	No	No		
Cell E	No	No	No	No	No	No		
Cell F	No	No	No	No	No	No		
Berms	No	No	No	No	No	No		

Woody Plant Removal Activities

Summarize monthly activities: Several woody plants (coniferous type) removed during inspection and during 4th quarter.

Leachate Tank Storage

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

Tank

- Cracks or holes observed in tank? No Yes
- Liquid dripping or running from tank? No Yes
- Staining observed on the tank surface? No Yes

If yes to any, describe issue, location, and actions taken	Date Corrected

Piping

- Is piping sagging, cracked or punctured? No Yes
- Liquid dripping or running from piping? No Yes
- Is the tank discharge valve open? No Yes
- Staining observed on the piping surface? No Yes

If yes to any, describe issue, location, and actions taken	Date Corrected

Emergency Response

- Are drums present in accumulation building? No Yes
- Are sandbags present in accumulation building? No Yes
- Are shovels present in accumulation building? No Yes

If no to any, describe issue, location, and actions taken	Date Corrected

Vegetation

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Do areas around building and equipment need to be mowed?	Do access roads need to be mowed?	If yes, describe issue, and actions taken	Date Corrected
A	No	Noted on drawing	Grass longer but still manageable	Grass longer but still manageable	Access roads and around building will be mowed again 1 st or 2 nd quarter 2025 depending on the rate of growth.	
B	No	Noted on drawing	Grass longer but still manageable	Grass longer but still manageable		
C	No	Noted on drawing	Grass longer but still manageable	Grass longer but still manageable		
D	No	Noted on drawing	Grass longer but still manageable	Grass longer but still manageable		
E	No	Noted on drawing	Grass longer but still manageable	Grass longer but still manageable		
F	No	Noted on drawing	Grass longer but still manageable	Grass longer but still manageable		
Berms	No	Noted on drawing	Grass longer but still manageable	Grass longer but still manageable		

Access Roads

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe issue, and actions taken	Date Corrected
Roads located approx. west of landfill	Some areas there are spare gravel	Yes	No action required at this time.	
Roads located approx. east of landfill	Some areas there are spare gravel	Yes	No action required at this time.	
Roads located approx. north of wetlands	Yes	Yes		
Roads located approx. south of wetlands	Yes	Yes		
Roads located approx. west of wetlands	Yes	Yes		
Roads located approx. east of wetlands	Some areas there are spare gravel	Yes	No action required at this time.	

Site Perimeter Fence

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	“Trespassing Prohibited” and “Private Property” Signs Missing?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line	No	No	No	No		
Fences along south property line	No	No	No	No		
Fences along west property line	No	No	No	No	Limbs down on fence.	
Fences along east property line	No	No	No	No		

Leachate Collection System

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

Alarm Test

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

Cable Test

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
			No

Battery Test

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

Describe any issues and actions taken	Date Corrected
N/A	

Remaining Materials Area

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken	Date Corrected
RMA	No	Yes, in road by rain	No	No	No	Shallow erosion gully across road due to rain. No action required at this time.	

Drainage Inspections

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions	Date Corrected
Perimeter of landfill and berm	None				
Drainage trenches at base of landfill	None				
RMA	None	In road	Shallow gully due to rain	No action required at this time.	
Wetlands area	None				
Culverts around landfill	None				
Western drainage swale	None				
North landfill catch basin	None				

10/29/24

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PLOT DATE: 2/9/2012.kbs

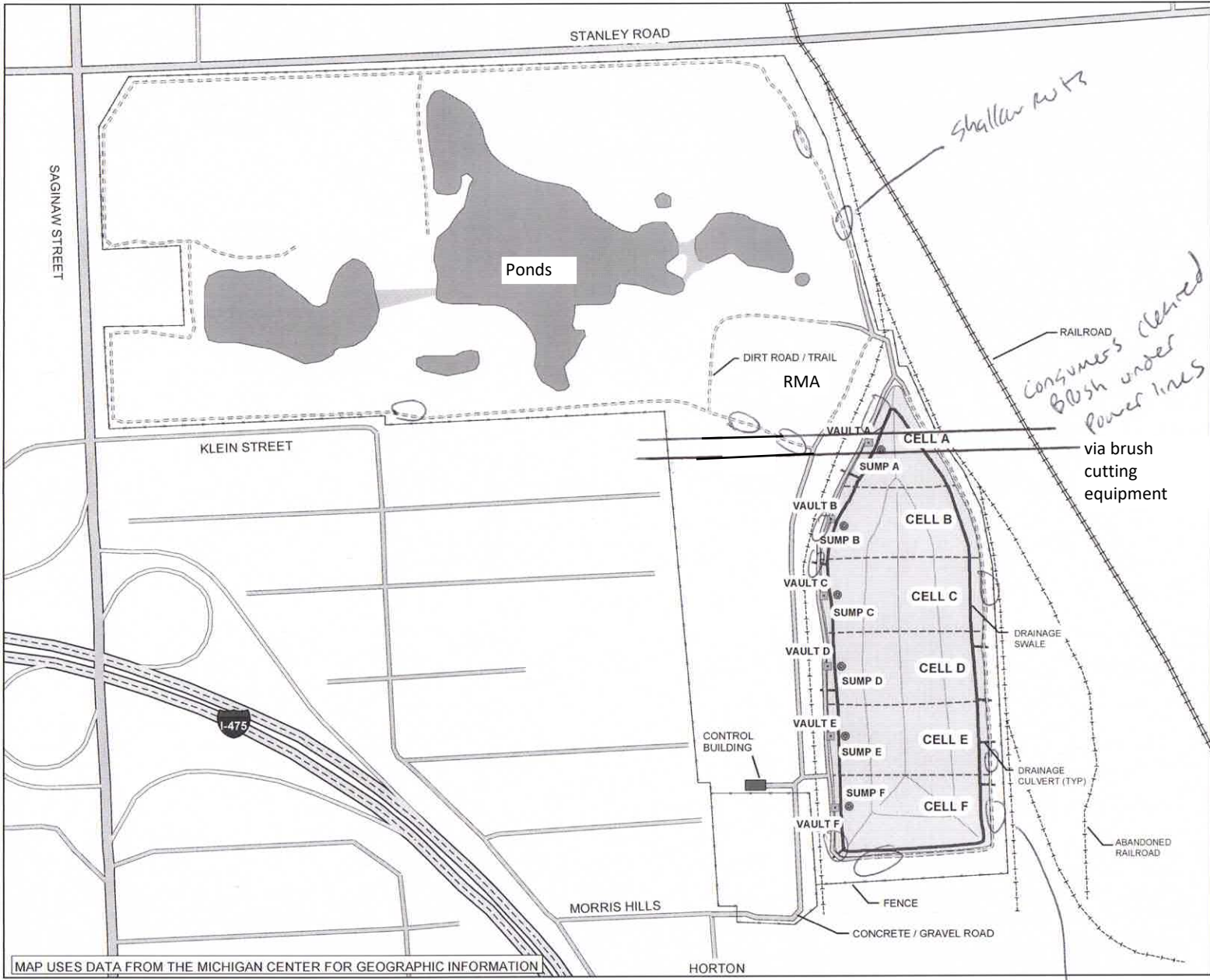


FIGURE 1

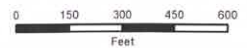


LEGEND

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT



FEBRUARY 2021



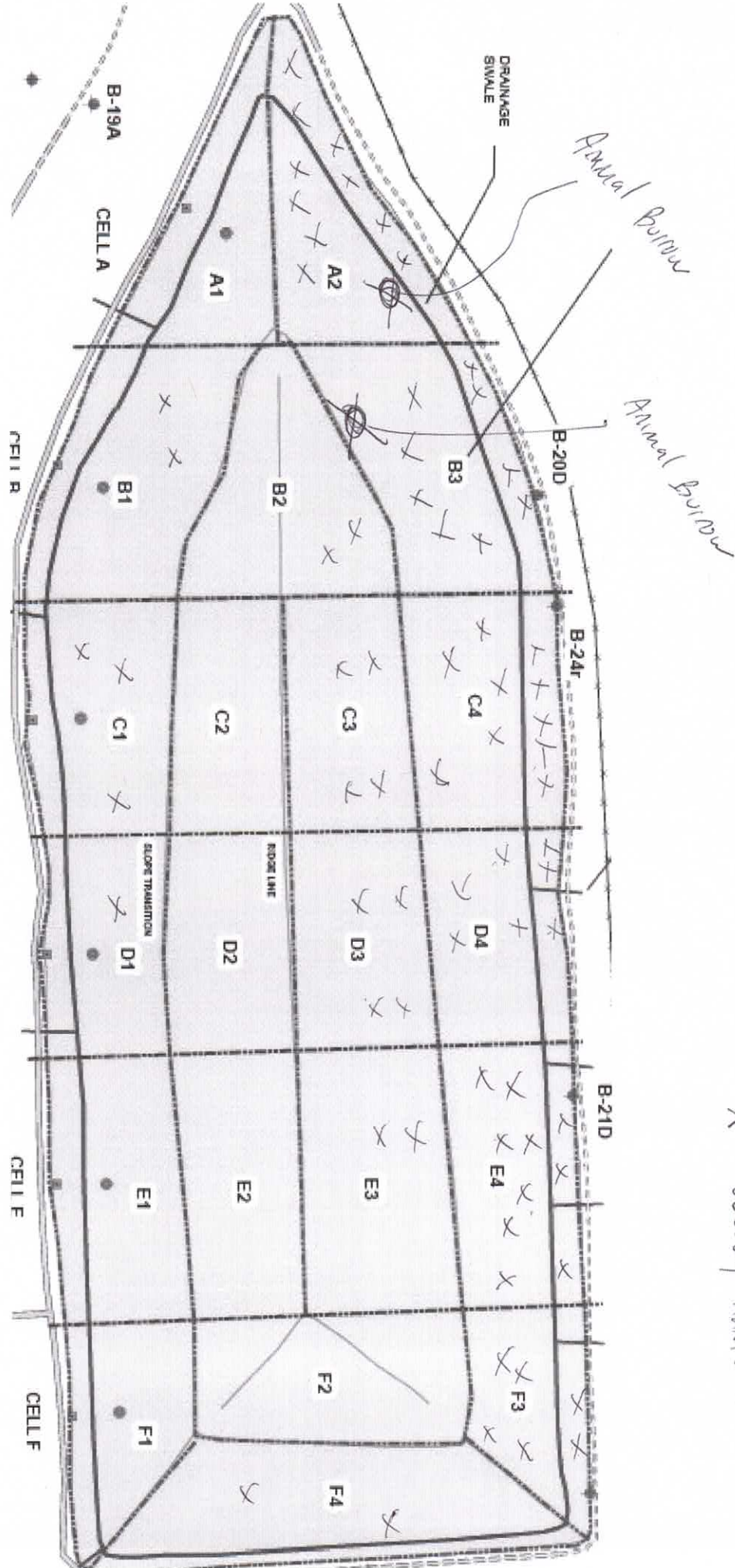
Shallow cuts

*Consumers Cleared
Brush under
Power lines*

*via brush
cutting
equipment*

Shallow cuts

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION



10/29/24

X - Woody Plants removed