

2014 ANNUAL REPORT – FINAL REPORT

**Landfill Inspection Report  
Coldwater Road Landfill  
Flint, Michigan  
MID 005 356 860**

**RACER Trust  
Detroit, Michigan**

February 2015



**Landfill Inspection  
Coldwater Road Landfill  
Flint, Michigan  
MID 005 356 860**

**Prepared for RACER Trust  
Detroit, Michigan**



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**SCOTT L. CORMIER, P.E.  
VICE PRESIDENT  
O'BRIEN & GERE ENGINEERS, INC.**



February 11, 2015

**Mr. Richard Conforti, P.E.**  
Environmental Engineer  
Michigan Department of Environmental Quality  
Office of Waste Management and Radiological Protection  
P.O. Box 30473  
Lansing, Michigan 48909-7973

RE: 2014 Annual Landfill Inspection Report  
Coldwater Road Landfill  
Flint, Michigan  
FILE: 15388/51440/rep

Dear Mr. Conforti:

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), O'Brien & Gere Engineers, Inc. (O'Brien & Gere) is presenting this annual Landfill Inspection Report summarizing the 2014 Quarterly Post Closure Inspections at the hazardous waste landfill for the Coldwater Road Landfill facility in Flint, Michigan.

Each quarterly inspection event 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 quarterly inspection reports are included as Attachment A. A Site Location Map (Figure 1), a Site Layout (Figure 2), and a 2014 Incident Location Map (Figure 3) are also included.

### **CAP AND BERMS**

The cap and berms were visually inspected each quarter for deep root penetration, burrowing animals, soil erosion, slope failures, and ponding water in the ditch and/or washouts. No slope failures or ponding of water was observed during the 2014 quarterly inspections. The following is a summary of the issues encountered on the cap and berms during the 2014 quarterly inspections.

Several hundred woody-stemmed plants were removed by the root from the landfill cap between March 2014 and December 2014.

Two animal burrows were identified and closed throughout the year. Animal burrows were photographically documented (before and after repair), and the approximate size and configuration of the burrows were documented and included in the Quarterly Status Reports.

Traps were set at the opening of each of the animal burrows. Animals were trapped at each burrow after a several weeks of being set up. The burrows were filled using methods approved by the Michigan Department of Environmental Quality (MDEQ). Animal burrows located during the quarterly inspections are noted on Figure 3. 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.

### **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 O'Brien & Gere and during quarterly inspections in accordance with the post-closure care plan (PCP). No evidence of leakage was observed within the AST secondary containment area or the associated piping.

### **ACCESS ROADS**

The landfill access and perimeter roads were inspected for sufficient gravel and proper drainage during the quarterly inspections. Shallow ruts in the road and ponded water were observed along the north and northwest perimeter road. The wet sections of road were avoided until the road was dry. The shallow ruts do not affect access and will continue to be monitored and repaired when necessary. No other problems to the access roads were observed during 2014.

### **SITE PERIMETER FENCING AND GATES**

Damage to the site perimeter fence was noted at two locations during the quarterly inspections. During the 1<sup>st</sup> quarter inspection, one previously repaired hole was reopened along the west perimeter fence. During the 3<sup>rd</sup> quarter inspection, the southwest perimeter fence along Klein Street appeared to have been hit by a vehicle. The fence was pushed in with one pole being partially bent. The integrity of the fence is intact and still standing, providing adequate protection.

The hole in the perimeter fence was repaired during the 1<sup>st</sup> quarterly inspection on March 20, 2014.

### **LEACHATE COLLECTION SYSTEM**

The leachate collection system was inspected quarterly 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.

### **LEACHATE DETECTION ALARM SYSTEM**

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

### **VAULT LIQUID REMOVAL**

The leak detection vaults were pumped out monthly during the year. Per the revised Post Closure Care Plan, no dewatering of the leak detection vaults occurred during the month of December. The volumes of liquid evacuated from each cell are provided in Table 1 and were reported in the Quarterly Status Reports.

### **DRAINAGE INSPECTION**

The perimeter of the landfill and berm, drainage trenches at the base of the landfill, the Remaining Materials Area (RMA, Figure 2), and the wetland area were inspected for potential drainage problems. No drainage issues were observed during the quarterly inspections for 2014.

This summary of the quarterly inspections fulfills the annual inspection reporting requirements for 2014. If you have any questions, feel free to contact either of us at (248) 477-5701.

Very truly yours,  
**O'BRIEN & GERE ENGINEERS, INC.**



Scott L. Cormier, P.E.  
Vice President

Very truly yours,  
**O'BRIEN & GERE ENGINEERS, INC.**



Clifford S. Yantz, P.G.  
Scientist-3

**ENCLOSURES:**

Table 1 – Liquid Volumes Removed in 2014  
Figure 1 – Site Location Map  
Figure 2 – Site Layout  
Figure 3 – Incident Location Map  
Attachment A – Inspection Logs

cc: David Favero – RACER Trust  
Kevin Schneider – O'Brien & Gere

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with 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 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



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Scott L. Cormier, P.E.  
Vice President – O'Brien & Gere Engineers, Inc.

Agent for RACER Trust

February 11, 2015

Date

cc: file

***TABLES***

**Table 1**

Coldwater Road Landfill Facility							
Liquid Volumes Removed from LDS Vaults in 2014							
Date 2014	Vault A	Vault B	Vault C	Vault D	Vault E	Vault F	TOTAL LDS GALLONS
15-Jan-14	36	19	6	28	35	21	145
21-Feb-14	32	60	25	36	228	-	381
14-Mar-14	28	58	18	29	200	41	374
18-Apr-14	33	119	20	25	361	30	588
14-May-14	60	140	20	21	372	14	627
12-Jun-14	142	121	30	25	459	23	800
25-Jul-14	218	23	96	59	340	52	788
15-Aug-14	58	50	57	42	99	19	325
12-Sep-14	89	83	77	48	92	7	396
22-Oct-14	139	224	63	55	211	22	714
20-Nov-14	124	153	30	41	285	97	730
1-Dec-14	--	--	--	--	--	--	0
YEAR END TOTAL	959	1,050	442	409	2,682	326	5,868

## Notes:

Liquid volumes in gallons.

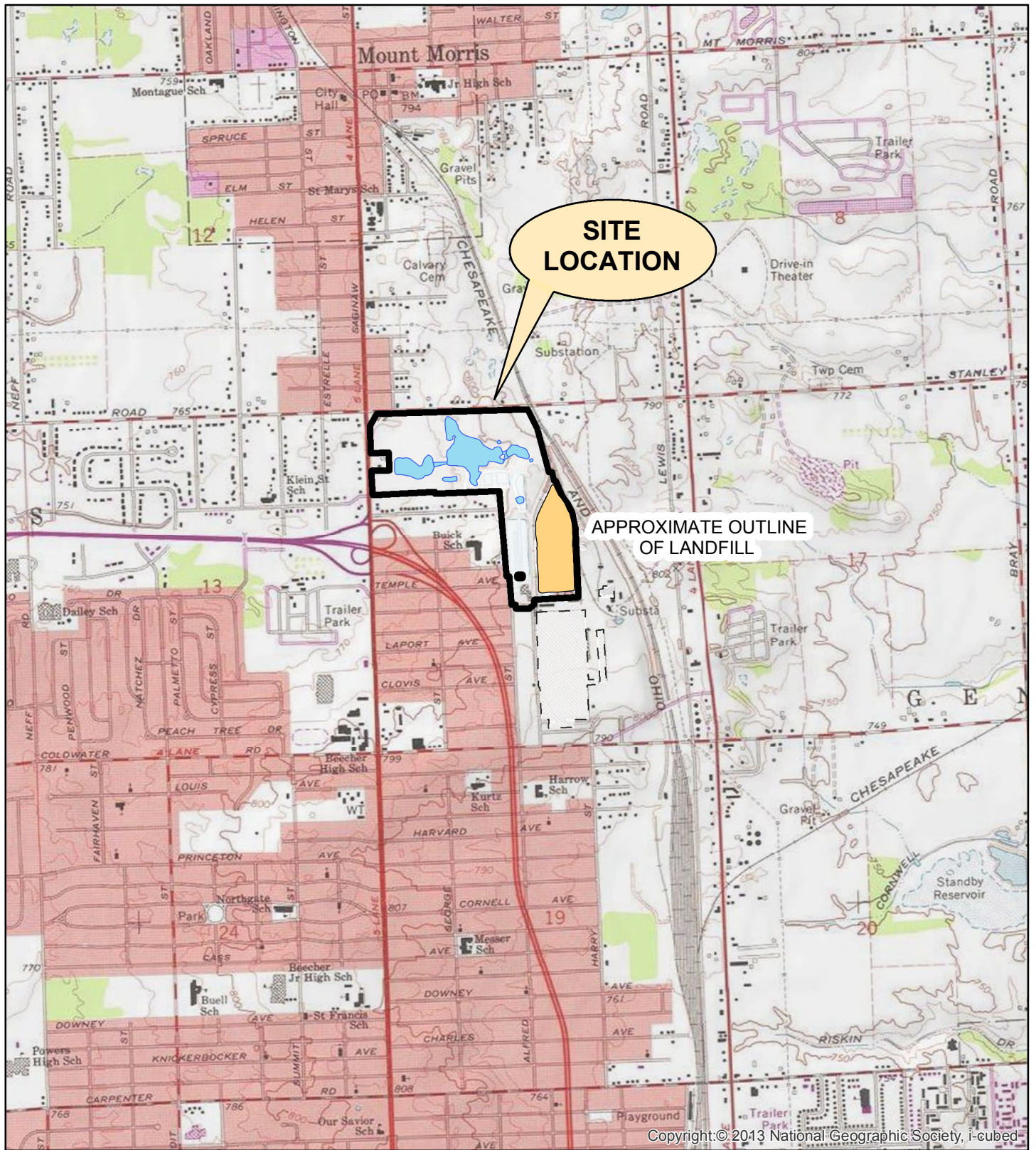
LDS - Leak Detection System

Pre the revised Post Closure Care Plan, no dewatering of the leak detection vaults occurred during the month of December.

*FIGURES*

Document Path: I:\Racer-Trust\15388\51440\Coldwater-Rd-La.Docs\Reports\GW Monitoring\Annual 11-14\Figures\001 - Site\_Location (2014-11).mxd

PLOT DATE: 12/22/2014 KBS

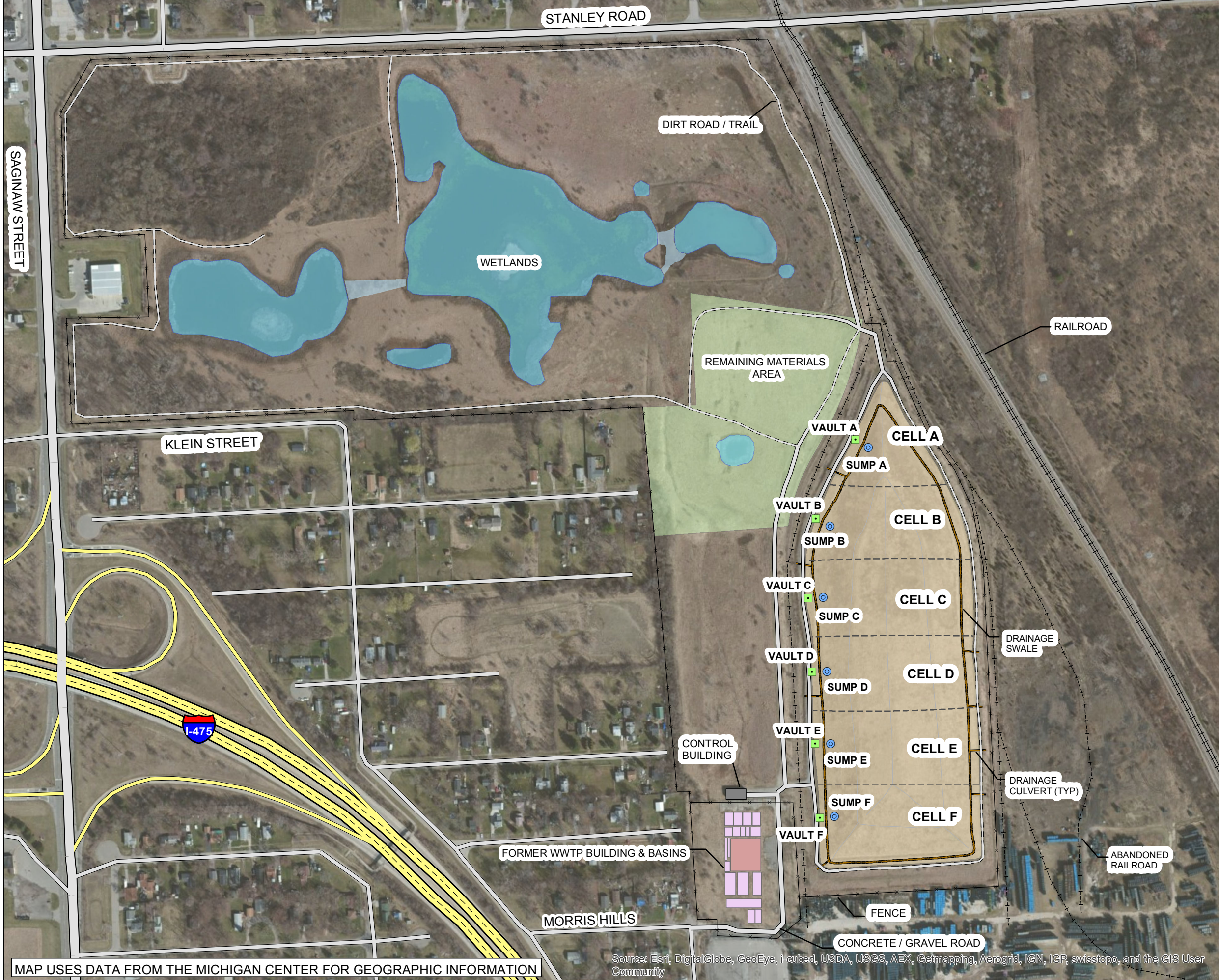


RACER TRUST  
 COLDWATER ROAD LANDFILL FACILITY  
 FLINT, MICHIGAN

**SITE LOCATION MAP**



I:\Racer-Trust\_15388\51440.Coldwater-Rd-La\Docs\Reports\Landfill Inspection\Annual Report\Figures\002 - Site\_Layout\2014 Annual Rpts (Insp-Sec Rpt) (2014-12).mxd  
PLOT DATE: 1/21/2015 KBS





MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

FIGURE 2

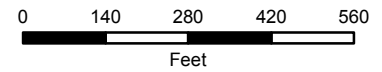


**LEGEND**

-  LEACHATE COLLECTION SUMP
-  ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

**SITE LAYOUT**



FEBRUARY 2015  
15388/51440-002



I:\Racer-Trust\15388\51440.Coldwater-Rd-La\Docs\Reports\Landfill Inspection\Annual Report\Figures\003 - Incident Location Map 2014 Annual Rpt.mxd

PLOT DATE: 1/22/2015 KBS

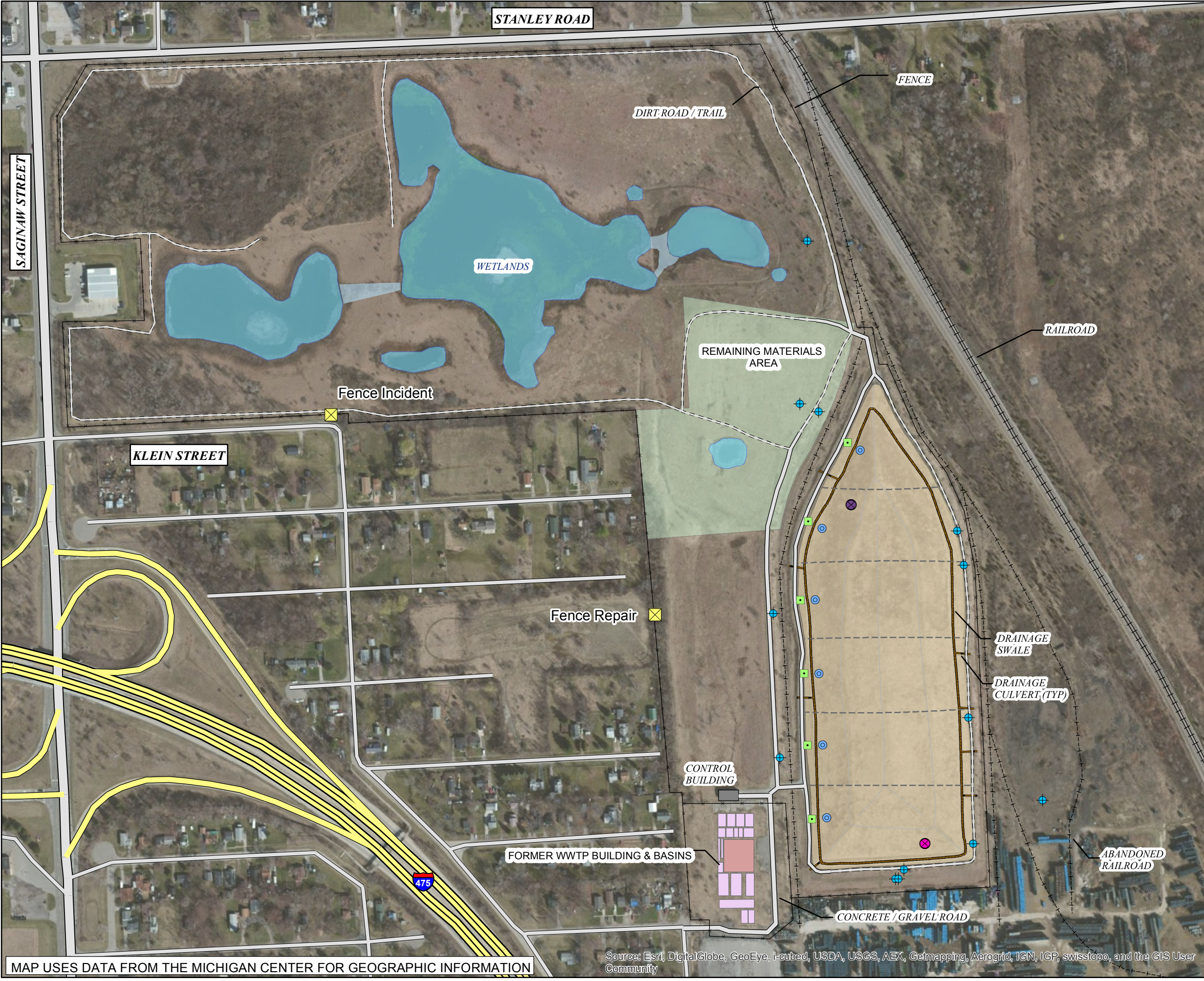








FIGURE 3

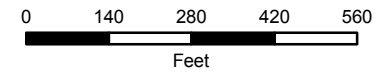


**LEGEND**

-  LEACHATE COLLECTION SUMP
-  ACCESS PORT FOR LEAK DETECTION VAULT
-  MONITORING WELL LOCATION
-  FENCE REPAIR
-  ANIMAL BURROW LOCATION 2ND QUARTER
-  ANIMAL BURROW LOCATION 4TH QUARTER

RACER TRUST  
 COLDWATER ROAD  
 LANDFILL FACILITY  
 FLINT, MICHIGAN

**2014  
 INCIDENT LOCATION  
 MAP**



JANUARY 2015  
 15388/51440-003



Source: Esri, DigitalGlobe, GeoEye, i-ubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

***ATTACHMENT A***  
***Inspection Logs***

**Quarterly Post Closure Inspection Log Sheet**  
**Coldwater Road Landfill Site – Operations and Maintenance**  
**Flint, Michigan**  
**Project No. 50137**

Inspector's Name/Title Kevin Schneider Scientist

Inspector's Signature/Date/Time *[Signature]* 3/20/14 10:00

**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	↓	↓	↓	↓	↓		
Cell C	No							
Cell D	No							
Cell E	No							
Cell F	Yes							
Berms	No	↓	↓	↓	↓	↓		

**Woody Plant Removal Activities**

Summarize monthly activities:

A number of woody plants were spotted during inspection.  
The ground was frozen and the plants will be removed once the ground is thawed.  
The landfill cap was covered in snow till late March.

**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 closed and locked? 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 yes to any, describe issue, location, and actions taken	Date Corrected
added 20 sandbags and 4 drums	5/2/14

**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?	Areas around building and equipment mowed?	Access roads mowed and in good condition?	If yes, describe issue, and actions taken	Date Corrected
A	Yes	None	No	No	A few areas where previous burrows were filled in are still sparse. will reseed next quarter.	5/14/14
B	Yes	↓	↓	↓	installed drains areas have sparse veg and will be reseeded next quarter	5/14/14
C	NONE					
D	Yes					
E	NONE					
F	NONE					
Berms	NONE					

**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	Yes	Yes		
Roads located approx. east of landfill	↓	Yes		
Roads located approx. north of wetlands		Some NTS	does not effect access	
Roads located approx. south of wetlands		Some NTS	does not effect access	
Roads located approx. west of wetlands		Yes		
Roads located approx. east of wetlands		Yes		

**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 Posted?	If yes to any, describe issue, and actions taken	Date Corrected			
Fences along north property line	No	No	No	Yes					
Fences along south property line	↓	↓	↓	↓					
Fences along west property line							No	One opening @ previous repair	3/20/14
Fences along east property line									

**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

**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	No	No	No	No		

**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	No				
Drainage trenches at base of landfill	No				
RMA	No				
Wetlands area	No				
Culverts around landfill	No				
Western drainage swale	No				
North landfill catch basin	No				

1st quarter  
3/20/14

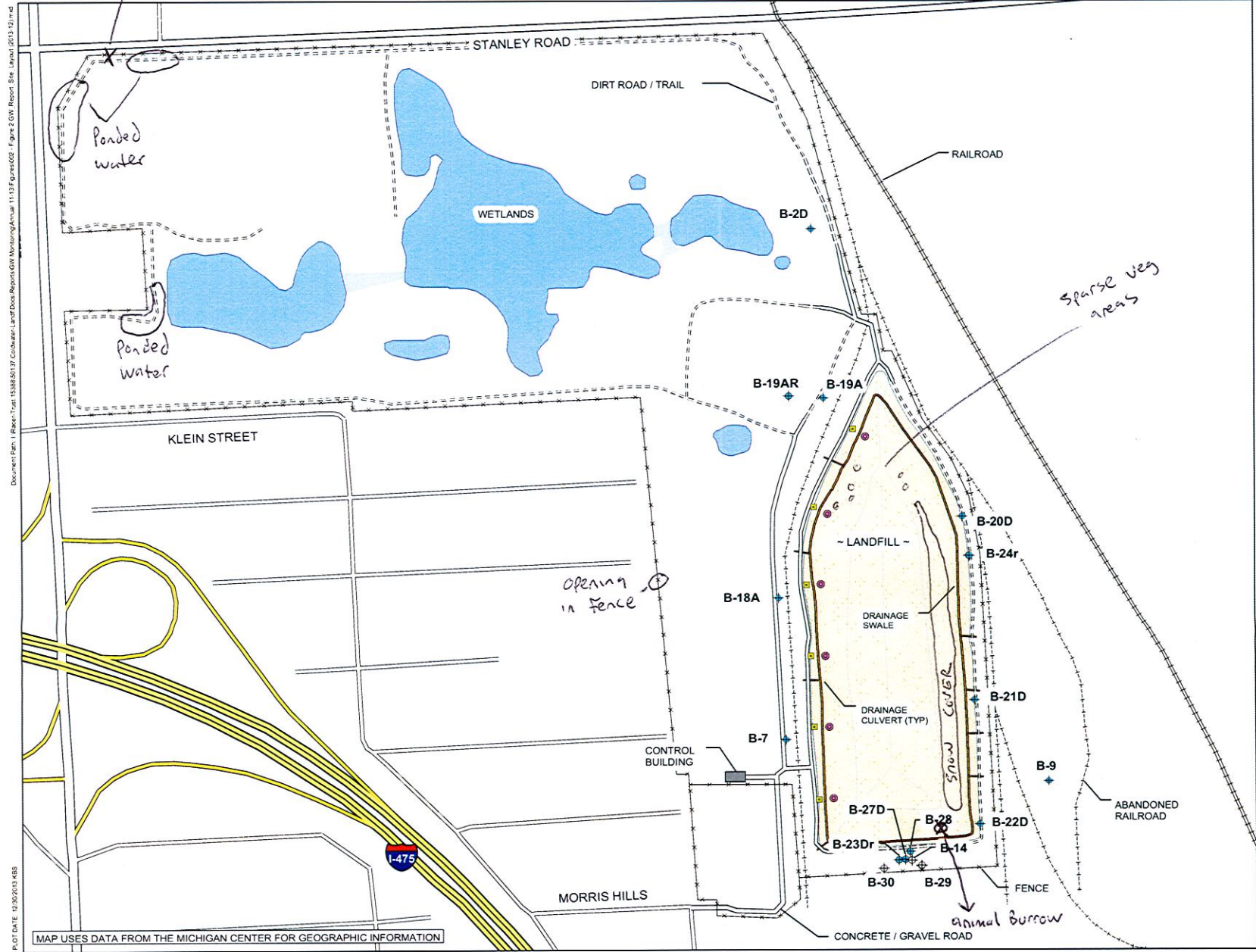


FIGURE 2

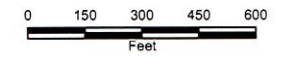


LEGEND

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- ◆ MONITORING WELL
- ⊕ ABANDONED WELL

RACER TRUST  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

SITE LAYOUT



DECEMBER 2013  
15386/50137/002

Document Path: \\P:\Bentley\15386\50137\002\Drawings\Landfill\Drawings\GW\_Monitoring\Annual\_111317\_Figure02.dwg Report Site Layout\_201310.mxd  
 PLOT DATE: 12/20/13 8:58

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

**Quarterly Post Closure Inspection Log Sheet**  
**Coldwater Road Landfill Site - Operations and Maintenance**  
**Flint, Michigan**  
**Project No. 51440**

Inspector's Name/Title Kevin Schneider

Inspector's Signature/Date/Time *[Signature]* 6/10/14

**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	↓	↓	↓	↓	↓	↓		
Cell C								
Cell D								
Cell E								
Cell F								
Berms								

**Woody Plant Removal Activities**

Summarize monthly activities:

woody plants were removed throughout the quarter

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**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 X Yes \_\_\_  
 Liquid dripping or running from tank? No X Yes \_\_\_  
 Staining observed on the tank surface? No X Yes \_\_\_

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

**Piping**

Is piping sagging, cracked or punctured? No X Yes \_\_\_  
 Liquid dripping or running from piping? No X Yes \_\_\_  
 Is the tank discharge valve closed and locked? No \_\_\_ Yes X  
 Staining observed on the piping surface? No X Yes \_\_\_

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

**Emergency Response**

Are drums present in accumulation building? No \_\_\_ Yes X  
 Are sandbags present in accumulation building? No \_\_\_ Yes X  
 Are shovels present in accumulation building? No \_\_\_ Yes X

If yes 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?	Areas around building and equipment mowed?	Access roads mowed and in good condition?	If yes, describe issue, and actions taken	Date Corrected
A	NO	NONE	No	No	Plan to cut grass next quarter	7/29/14
B	↓	↓	↓	↓		
C	↓	↓	↓	↓		
D	↓	↓	↓	↓		
E	↓	↓	↓	↓		
F	↓	↓	↓	↓		
Berms	↓	↓	↓	↓		

**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	Yes			
Roads located approx. east of landfill	↓			
Roads located approx. north of wetlands		Some shallow rts	Do not effect access	
Roads located approx. south of wetlands		Some shallow rts	Do not effect access	
Roads located approx. west of wetlands				
Roads located approx. east of wetlands				

**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 Posted?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line	No	No	No	Yes		
Fences along south property line	↓	↓	↓	↓		
Fences along west property line						
Fences along east property line						

**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	Any damage noted to system panel boxes?
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	
			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

**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	No	No	No	No		

**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	No				
Drainage trenches at base of landfill	Some grass in drainage trenches				
RMA	No				
Wetlands area	No				
Culverts around landfill	No				
Western drainage swale	No				
North landfill catch basin	No				

2nd Quarter 2014



FIGURE 2

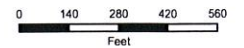


**LEGEND**

- ⊙ LEACHATE COLLECTION SUMP
- ⊠ ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

**SITE LAYOUT**



JANUARY 2015  
15388/51440-002



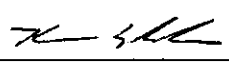
I:\Racer Trust\15388/51440\Coldwater-Rd-Landfill\Reports\Annual Report\Figure02\_Site\_Layout\_2014\_Annual RBS (Imp-Sec Rpt) (2014-12).mxd

PLOT DATE: 1/21/2015 9:58

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

**Quarterly Post Closure Inspection Log Sheet**  
**Coldwater Road Landfill Site – Operations and Maintenance**  
**Flint, Michigan**  
**Project No. 51440**

Inspector's Name/Title Kevin Schneider

Inspector's Signature/Date/Time  9/15/14 - 9/29/14

**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	Yes (animal burrow appears around)						set trap at animal burrow	10/22/14
Cell C	No							
Cell D	No							
Cell E	No							
Cell F	No							
Berms								

**Woody Plant Removal Activities**

Summarize monthly activities:  
A few wood plants were spotted and killed during inspection.  
2/3 of landfill cap covered with tall weeds. weeds have shallow roots  
but very dense on southern part of landfill.

**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 closed and locked? 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 yes 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?	Areas around building and equipment mowed?	Access roads mowed and in good condition?	If yes, describe issue, and actions taken	Date Corrected
A	No	None	Yes	Yes		
B	↓	↓	↓	↓		
C						
D						
E						
F						
Berms						

**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	Yes	Yes		
Roads located approx. east of landfill	↓	Yes		
Roads located approx. north of wetlands		some shallow ruts	Do not effect access	
Roads located approx. south of wetlands		Some shallow ruts	Do not effect access	
Roads located approx. west of wetlands		Yes		
Roads located approx. east of wetlands		Yes		

**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 Posted?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line	No	No	No	Yes		
Fences along south property line	No	No	No	Yes		
Fences along west property line	Yes SW fence along Klein St was hit by car	No	No	Yes	fence is pushed in but still standing	
Fences along east property line	No	No	No	Yes		

**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

**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	No	No	No	No		

**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	No				
Drainage trenches at base of landfill	Some grass in drainage trenches on east & west				
RMA	No				
Wetlands area	No				
Culverts around landfill	Some woody plants in east & west culverts				
Western drainage swale	No				
North landfill catch basin	No				

3rd Qrt 2014

10278 PROJECT 15388 RACER TRUST 50137 DDCS REPORTS 2013 Q1 ANNUAL FIGURES 002 WVD

PLOT DATE: 7-8-2013 4:03

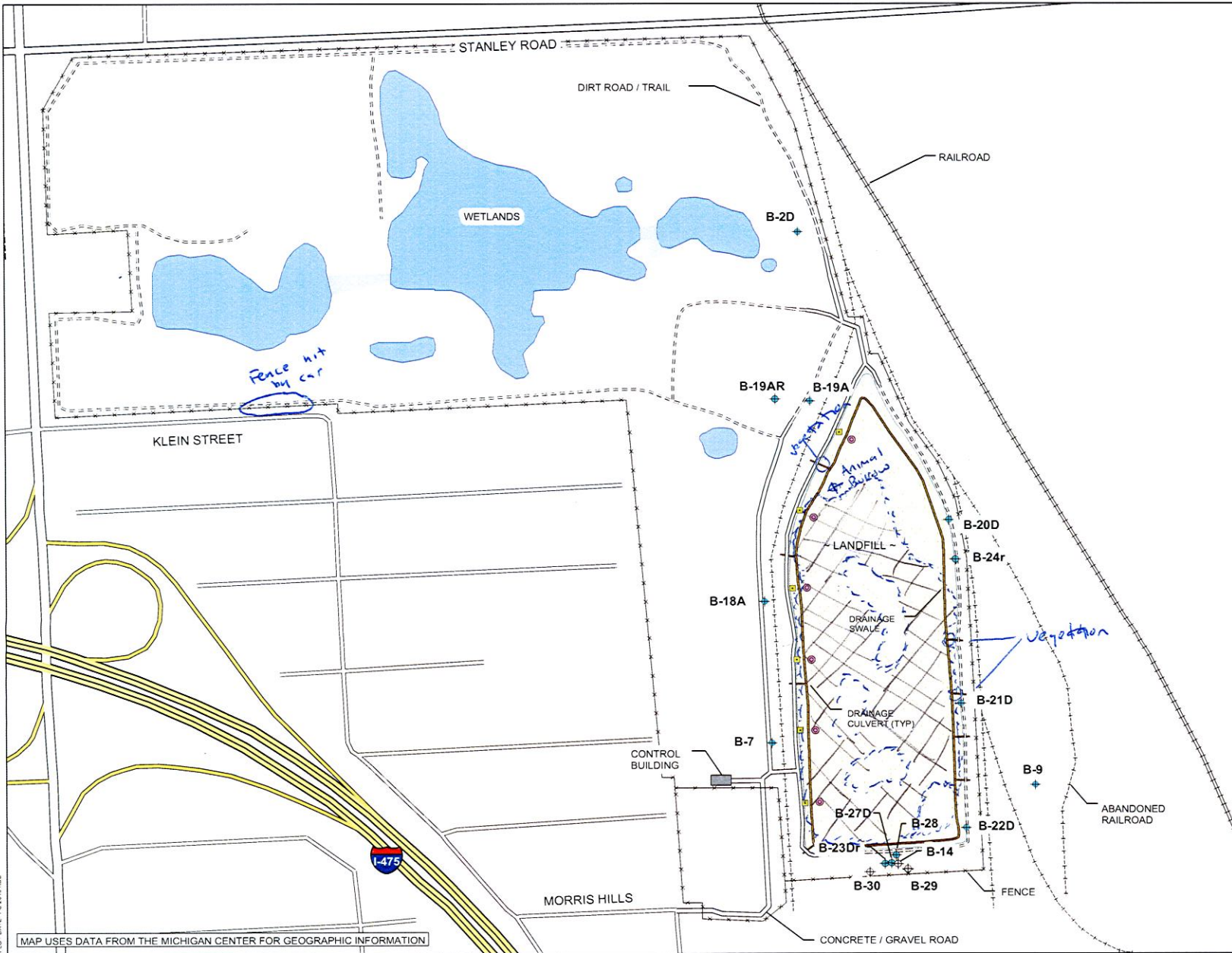


FIGURE 2

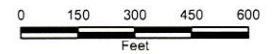


**LEGEND**

-  LEACHATE COLLECTION SUMP
-  ACCESS PORT FOR LEAK DETECTION VAULT
-  MONITORING WELL
-  ABANDONED WELL

RACER TRUST  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

**SITE LAYOUT**



JULY 2013  
15388/50137/002

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

**Quarterly Post Closure Inspection Log Sheet**  
 Coldwater Road Landfill Site – Operations and Maintenance  
 Flint, Michigan  
 Project No. 51440

Inspector's Name/Title Kevin Schneider Scientist

Inspector's Signature/Date/Time 12/15/14

**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							
Cell C	No							
Cell D	No							
Cell E	No							
Cell F	No							
Berms	No						√	√

**Woody Plant Removal Activities**

Summarize monthly activities:

A number of woody plants were spotted and pulled during inspection  
 2/3 of landfill cap is covered with dead tall weeds,  
 very dense on southside of landfill

**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 X Yes \_\_\_
- Liquid dripping or running from tank? No X Yes \_\_\_
- Staining observed on the tank surface? No X Yes \_\_\_

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

**Piping**

- Is piping sagging, cracked or punctured? No X Yes \_\_\_
- Liquid dripping or running from piping? No X Yes \_\_\_
- Is the tank discharge valve closed and locked? No \_\_\_ Yes X
- Staining observed on the piping surface? No X Yes \_\_\_

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

**Emergency Response**

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

If yes 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?	Areas around building and equipment mowed?	Access roads mowed and in good condition?	If yes, describe issue, and actions taken	Date Corrected
A	NONE	NONE	Yes	Yes		
B	↓	↓	↓	↓		
C						
D						
E						
F						
Berms						

**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	Yes	Yes		
Roads located approx. east of landfill	↓	Yes		
Roads located approx. north of wetlands		some shallow ruts (1-2")	Do not effect access	
Roads located approx. south of wetlands		some shallow ruts (1-2")	Do not effect access	
Roads located approx. west of wetlands		Yes		
Roads located approx. east of wetlands		Yes		

**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 Posted?	If yes to any, describe issue, and actions taken	Date Corrected
Fences along north property line	No	No	No	Yes		
Fences along south property line	No	No	No	Yes		
Fences along west property line	Fence SW along Klem st was hit by car	No	No	Yes	Fence is pushed in but still standing	
Fences along east property line	No	No	No	Yes		

**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.

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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	Any damage noted to system panel boxes?
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	
			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

**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	No	No	No	No		

**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	No				
Drainage trenches at base of landfill	No				
RMA	No				
Wetlands area	No				
Culverts around landfill	No				
Western drainage swale	No				
North landfill catch basin	No				

4th Oct 2014

1079 PROJECTS 15388 RACER Trust 50137.DWG REPORTS 2013.01 ANNUAL FIGURES 02.MXD

PLOT DATE 7-8-2013 09:5



FIGURE 2

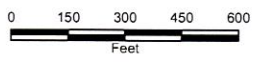


**LEGEND**

- ⊙ LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- ⊕ MONITORING WELL
- ⊕ ABANDONED WELL

RACER TRUST  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

**SITE LAYOUT**



JULY 2013  
15388/50137/002

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

*More than Engineering Solutions*

*All materials printed on recycled paper.* 

