Dave Favero

From: Pierce, Jeff (EGLE) <PierceJ2@michigan.gov>
Sent: Tuesday, December 20, 2022 4:05 PM
To: Taylor Vergin; Vanderlaan, Mary (EGLE)
Cc: Mala Hettiarachchi; Dean Anos; Dave Favero; Steve Black; Beavers, Brittney (EGLE)
Subject: RE: Wetland Concern - RACER Davison Road Industrial Land

Hi Taylor,

This email is a follow-up to our phone call earlier today. I have reviewed the aerial imagery and lidar maps for the site as well as the documents you have sent over. Based on my review I am concluding that no wetland was impacted by the parking lot construction. The wetland that was present in this location that NWI shows was historically filled and no longer present by the time the parking lot construction occurred. It looks like there is likely wetland present along the stream corridor to the west at the base of the hillslope at approximately 854/856 elevation contour shown on wetland document you provided. These wetlands do not appear to have been impacted by the activities in question.

Based on these conclusions, no violation to the wetlands protection statute, Part 303, has occurred and the proposed restoration does not fall under EGLE Water Resources Division Part 303 jurisdiction.

If you have any questions about the above information or would like to discuss this further, please contact me by phone or email.

Jeff Pierce
Environmental Quality Analyst
Water Resources Division, Lansing District Office
Michigan Department of Environment, Great Lakes, and Energy

517-416-4297 | piercej2@Michigan.gov
Follow Us | **Michigan.gov/EGLE**

From: Taylor Vergin <taylor.vergin@ergrp.net>
Sent: Tuesday, December 13, 2022 9:42 AM
To: Vanderlaan, Mary (EGLE) <VANDERLAANM@michigan.gov>
Cc: Mala Hettiarachchi <mala.hettiarachchi@ergrp.net>; Dean Anos <danos@prevh.com>; Dave Favero <dfavero@racertrust.org>; Steve Black <sblack@racertrust.org>; Pierce, Jeff (EGLE) <PierceJ2@michigan.gov>; Rogers, Matthew (EGLE) <RogersM17@michigan.gov>; Beavers, Brittney (EGLE) <BeaversB3@michigan.gov>
Subject: Re: Wetland Concern - RACER Davison Road Industrial Land

Good morning Ms. Vanderlaan,

I wanted to follow up on our phone call last week to see if you have had a chance to review the information that we've sent over. Please feel free to reach out if there is anything else we can provide to assist.

Thanks,

Taylor Vergin

Project Engineer

Environmental Resources Group

Toll Free: 888-589-1746

Cell: 586-719-2164

From: Taylor Vergin <taylor.vergin@ergrp.net>
Sent: Tuesday, December 6, 2022 12:15 PM
To: GarwoodA@michigan.gov <GarwoodA@michigan.gov>
Cc: Mala Hettiarachchi <mala.hettiarachchi@ergrp.net>; Dean Anos <danos@prevh.com>; Dave Favero <dfavero@racertrust.org>; Steve Black <sblack@racertrust.org>; PierceJ2@michigan.gov <PierceJ2@michigan.gov>; RogersM17@michigan.gov <RogersM17@michigan.gov>; BeaversB3@michigan.gov <BeaversB3@michigan.gov>
Subject: Wetland Concern - RACER Davison Road Industrial Land

Dear Ms. Garwood,

Environmental Resources Group, LLC (ERG) is reaching out on behalf of our client, Precision Vehicle Holding (PVH), and the property owner, RACER Properties (RACER), regarding a potential wetland concern at the RACER Davison Road Landfill site, located at the intersection of Davison and Donegal Roads, Burton, Michigan. Please see the attached documentation (originally sent to Brittney Beavers at the Lansing District office) and previous correspondence below for background information regarding the concern. We have reached out to several district permitting staff at EGLE and have not received a response at this time. Thank you for your attention on this matter and please feel free to reach out with any questions.

Thanks,

Taylor Vergin

Project Engineer

Environmental Resources Group

Toll Free: 888-589-1746

Cell: 586-719-2164

From: Taylor Vergin <taylor.vergin@ergrp.net>
Sent: Monday, November 28, 2022 9:41 AM
To: PierceJ2@michigan.gov <PierceJ2@michigan.gov>; RogersM17@michigan.gov <RogersM17@michigan.gov>
Cc: Mala Hettiarachchi <mala.hettiarachchi@ergrp.net>; Dean Anos <danos@prevh.com>; Dave Favero <dfavero@racertrust.org>; Steve Black <sblack@racertrust.org>; BeaversB3@michigan.gov <BeaversB3@michigan.gov>
Subject: Re: Wetland Concern - RACER Davison Road Industrial Land

Good morning,

Environmental Resources Group, LLC (ERG) is reaching out on behalf of our client, Precision Vehicle Holding (PVH), and the property owner, RACER Properties (RACER), regarding a potential wetland concern at the RACER Davison Road Landfill site, located at the intersection of Davison and Donegal Roads, Burton, Michigan. Please refer to the attached letter and our previous correspondence with Brittney Beavers below for details regarding the concern. We have forwarded this request to the both of you as we have not received a response from Brittney at this time. Please feel free to reach out with any questions or advise us if there are other EGLE staff we should reach out to.

Thank you,

Taylor Vergin

Project Engineer

Environmental Resources Group

Toll Free: 888-589-1746

Cell: 586-719-2164

From: Taylor Vergin <taylor.vergin@ergrp.net>
Sent: Friday, November 18, 2022 12:56 PM

To: BeaversB3@michigan.gov <BeaversB3@michigan.gov>
Cc: Mala Hettiarachchi <mala.hettiarachchi@ergrp.net>; Dean Anos <danos@prevh.com>; Dave Favero <dfavero@racertrust.org>; Steve Black <sblack@racertrust.org>
Subject: Re: Wetland Concern - RACER Davison Road Industrial Land

Good afternoon,

Just reaching out to confirm that you received my previous email. Please let me know if we can provide any additional information to assist in your review.

Thank you,

Taylor Vergin

Project Engineer

Environmental Resources Group

Toll Free: 888-589-1746

Cell: 586-719-2164

ISNetworld® MEMBER CONTRACTOR

From: Taylor Vergin
Sent: Monday, November 14, 2022 3:44 PM
To: BeaversB3@michigan.gov <BeaversB3@michigan.gov>
Cc: Mala Hettiarachchi <mala.hettiarachchi@ergrp.net>; Dean Anos <danos@prevh.com>; Dave Favero <dfavero@racertrust.org>; Steve Black <sblack@racertrust.org>
Subject: Wetland Concern - RACER Davison Road Industrial Land

Dear Brittney,

Environmental Resources Group, LLC (ERG), in follow-up to my voicemail this morning, is reaching out on behalf of our client, Precision Vehicle Holding (PVH), and the property owner, RACER Properties (RACER), regarding a potential wetland concern at the RACER Davison Road Landfill site, located at the intersection of Davison and Donegal Roads, Burton, Michigan. This concern was brought to our attention by the City of Burton DPW following the conversion of a portion of the site to a gravel-paved parking lot. There is an approximately 1.48-acre National Wetland Inventory (NWI) designated wetland located in the southern portion of the site. During construction of the gravel parking lot, approximately 0.7 acres of the NWI polygon were disturbed. This disturbance consisted of removal of vegetation, placement of a geotextile fabric and gravel, and general grading. PVH has chosen to not pursue the continued use of the site as a parking lot and will remove all gravel/fabric and reseed, including that placed within the NWI area. The City's concern is that, as a portion of the gravel to be removed is within the NWI boundary, they do not have the authority to approve our restoration plan in that area. However, it is ERG's belief that the portion of the NWI wetland that

was covered with gravel is not part of an actual wetland area. We would like your guidance and feedback on how to proceed at the site, based on the attached background information.

Thank you for your attention on this matter and please feel free to reach out with any questions. If it would be helpful to set up a meeting with all parties to discuss, please let us know.

Thanks,

Taylor Vergin

Project Engineer

Environmental Resources Group

Toll Free: 888-589-1746

Cell: 586-719-2164

Environmental Resources Group
28003 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108

November 14, 2022

Brittney Beavers
Water Resources Division
Michigan Department of Environment, Great Lakes and Energy
PO Box 30242, 525 W. Allegan
Lansing, Michigan 48909

RE: Precision Vehicle Holding
Wetland Concern – City of Burton DPW
Vacant Parcel, Davison and Donegal Roads, Burton, Michigan – SPID #59-10-100-031

Dear Ms. Beavers,

Environmental Resources Group, LLC (ERG) is reaching out on behalf of our client, Precision Vehicle Holding (PVH), and the property owner, RACER Properties (RACER), regarding a potential wetland concern at the RACER Davison Road Landfill site, located at the intersection of Davison and Donegal Roads, Burton, Michigan. This concern was brought to our attention by the City of Burton DPW following the conversion of a portion of the site to a gravel-paved parking lot. There is an approximately 1.48-acre National Wetland Inventory (NWI) designated wetland located in the southern portion of the site. During construction of the gravel parking lot, approximately 0.7 acres of the NWI polygon were disturbed. This disturbance consisted of removal of vegetation, placement of a geotextile fabric and gravel, and general grading. PVH has chosen to not pursue the continued use of the site as a parking lot and will remove all gravel/fabric and reseed, including that placed within the NWI area. The City's concern is that, as a portion of the gravel to be removed is within the NWI boundary, they do not have the authority to approve our restoration plan in that area.

However, it is ERG's understanding that the Part 303 Wetland Inventory Maps, which include the NWI areas, are to be used as general guidance for where wetlands have the potential to exist and not as actual delineated boundaries. Based on ERG's knowledge of the property and extensive review of historical records, including soil boring data and historical aerial photographs, ERG believes that the portion of the NWI wetland area polygon that was covered with gravel is not part of an actual wetland area. We would like your guidance and feedback on how to proceed at the site, based on the background information provided below and as attachments. Several figures are included that provide details of the area of concern. Figure 1 shows a general overview of the site with both the gravel area (surveyed by ERG on October 12, 2022) and NWI wetland area.

SITE HISTORY

ERG reviewed historical aerial photographs (circa 1937, 1941, 1950, 1957, 1964, 1972, 1982, 1992, 2000, 2005, 2006, 2009, 2010, and 2012) and various reports to produce the following general history of the

site, especially as it relates to the NWI identified wetland area. A summary of the findings is listed below.

Year	Site History
Pre-1950's	The site consisted of cultivated farmland, with a wooded area along Gilkey Creek.
1950's	Residential development began at the site.
1960's	GMC Buick Motor Division purchased the property.
1969	The United States Geological Survey (USGS) prepared a topographic map using aerial imagery with some field verification and identified an area of intermittent standing water in the southern portion near Gilkey Creek.
1970's	GMC placed fill at the property, primarily in the central and southeast portions. Fill was placed in the area where intermittent standing water shown in the 1969 topographic map.
1975	USGS updated infrastructure on topographic map using aerial imagery; no additional survey information was collected.
1978	Michigan Department of Natural Resources (MDNR) performed an assessment of land cover at the property using aerial photographs as part of the Michigan Resource Inventory System (MIRIS 1978). A lowland hardwood wetland area was identified surrounding Gilkey Creek in the central portion of the property. Note: This area is completely separate from the NWI wetland and has not been covered with gravel.
1981	US Fish and Wildlife Service (USFWS) completed original NWI survey of the area, utilizing aerial photography and topographic maps.
2005	USFWS designated a 1.48-acre area of the southern portion of the property as a Freshwater Emergent Wetland as part of the National Wetland Inventory. According to the USFWS, the wetlands and deep-water habitats in this area were photo interpreted using 1 meter (or less) digital, true color imagery from 2005. In areas of heavy canopy cover, like the site, the USFWS also used topographic maps to supplement the areas. Note: It appears that this may have been the case at the Site, as the NWI wetland coincides with the intermittent standing water shown in the topographic maps.
2011	RACER Trust was created in March 2011 to oversee the cleanup and position for redevelopment certain real properties formerly owned by GMC at the time of GMC's bankruptcy in 2009. RACER began managing the site at this time.

SUPPORTING DOCUMENTATION

Line of Evidence No. 1 – GMC Filling Operations

As described in the site history above, ERG believes that the second main data source for the placement of the NWI wetland area on the site by the USFWS was the USGS topographic map produced in 1969/75. Figure 2 shows aerial imagery of the site from 1964, showing the site as it existed during the USGS survey. Although a water body or wetland cannot be seen in the 1964 aerial imagery, even if a wetland area existed at the time of the USGS survey, fill was placed over that area by GMC during their landfilling operations in the early 1970s. This activity was shown in the 1972 aerial map, overlain on the site map in Figure 3. In the aerial imagery, a large amount of fill material was observed being placed in the

southeastern portion of the property, particularly in the NWI wetland area. Fill and general land disturbance was visible within the entire area of the NWI boundary where PVH has placed gravel. This indicates that the gravel placed by PVH was in an area already disturbed by GMC, where wetlands no longer could have existed.

Line of Evidence No. 2 – USFWS Data Sources

Aerial imagery from 2005 was listed by the USFWS as their primary data source for determining wetland areas for the NWI. This imagery is shown overlain with the site diagram in Figure 4. A grass-covered area is shown in this imagery over most of the NWI boundary. Therefore, it is unclear what the reasoning was for the placement of the NWI wetland in that area. However, based on previously described filling operations and the knowledge of the site, if there ever was an area of intermittent standing water, it no longer existed and the grass-covered area is at a higher elevation (approximately 760' above mean sea level, AMSL) than the riparian area along Gilkey Creek to the south and west (approximately 752' AMSL). The elevation difference indicates that the conditions do not exist for a wetland to form in that area. Finally, the area of potential wetlands identified by the MDNR in 1978, shown in all figures as an orange polygon, does not overlap with the NWI area. If this wetland area existed, it likely would have been identified at least partially by both parties. Therefore, it appears that the USFWS made an error in its survey for the NWI and misattributed a portion of the NWI area (especially where gravel was placed by PVH) as a wetland.

Line of Evidence No. 3 – Soil Boring Data

During the course of environmental investigation activities at the site, ERG and other consulting firms have advanced several borings along the eastern and western edges of the NWI wetland area. The locations of borings, along with general lithology data, are provided in Figure 5. Boring logs from these soil borings are provided in Attachment 2. As shown in the boring logs and figure, fill is present along the eastern boundary of the NWI wetland to a maximum depth of 11.5' below ground surface (bgs) at SBMW-2 and along the western boundary of the NWI wetland to a maximum depth of 2' bgs at SB/MW-11-12. The depth of fill in the borings, along with the current elevation contours shown in the figure, demonstrate the significant quantity of fill that was placed in this area and further prove that the NWI wetland had been misidentified.

SUMMARY

It is ERG's opinion that the portion of the NWI identified wetland covered with gravel by PVH was not in fact an actual wetland area and if it was ever present, hasn't been since at least the 1970's, prior to when wetland regulations went into effect in Michigan. This is based on the following lines of evidence:

- Aerial images since 1937 do not show standing water or an apparent wetland.
- Aerial imagery from 1972 shows fill being placed in the NWI wetland area by GMC.
- The data sources used by the USFWS (2005 aerial imagery and the 1969/75 USGS topographic map) show areas, such as standing water and grass-covered areas, that could be easily mistaken for wetland areas.
- Soil borings advanced along both the east and west sides of the NWI boundary show fill with a maximum depth of 11.5' bgs on the east side.

- The NWI wetland was not identified as a wetland by the MDNR in their MIRIS land cover database.
- The area within the NWI boundary where gravel was placed by PVH is a significantly higher elevation than the surrounding riparian area, indicating that the conditions required for wetland formation do not exist in that area.

Please let us know your thoughts on the above. While it is ERG's belief that all evidence, besides the existence of a potentially misattributed NWI polygon, points to the conclusion that the area covered by PVH was not a wetland and restoration of the surface to its previous status (grass-covered) should be sufficient to address the City's concerns, we would appreciate your feedback on this matter.

Thank you for your attention on this matter and please feel free to reach out with any questions. If it would be helpful to set up a meeting with all parties to discuss, please let us know.

ENVIRONMENTAL RESOURCES GROUP

Taylor N. Vergin
Project Engineer

Mala C. Hettiarachchi, PhD, PE
Senior Engineer/Senior Project Manager

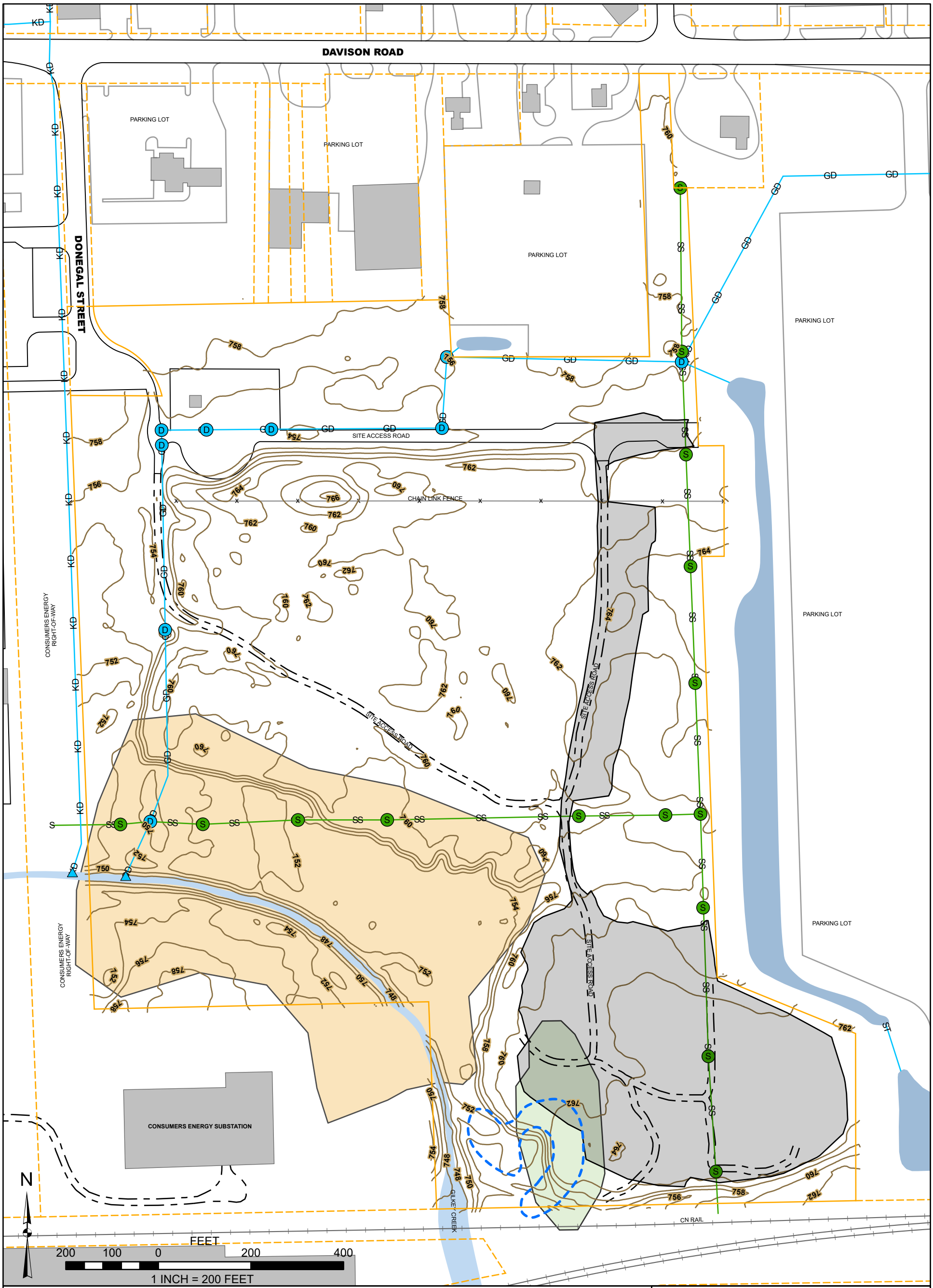
Encl.

Attachment 1 – Figures
Attachment 2 – Soil Boring Logs

Cc: Dean Anos, PVH
Dave Favero, RACER Trust
Steve Black, RACER Trust

ATTACHMENT 1

FIGURES



LEGEND

- Appx. Site Parcel Boundary
- Appx. Adjacent Parcel Boundaries
- Area of Standing Water Shown on 1969/1975 Topographic Map
- Area of Gravel Cover
- Sanitary Sewer Manholes
- Catch Basins - Granger Drain
- Drain Outfalls
- Granger Drain
- Ketzler Drain
- Storm Sewer
- Sanitary Sewer
- Stormwater Retention Ponds - East Adjacent Property
- Current Elevation Contour (ft)
- Wetlands (Per National Wetland Inventory, 2005)
- Wetlands (Per MIRIS Land Cover, 1978)

PRECISION VEHICLE HOLDING

DAVISON AND DONEGAL ROADS, BURTON, MI

SITE MAP

JOB NO.: 9190

BY: TNV DATE: 10/26/2022

FIGURE 1

ERG Environmental Resources Group
28003 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108

LEGEND

- Appx. Site Parcel Boundary
- Appx. Adjacent Parcel Boundaries
- Area of Standing Water Shown on 1969/1975 Topographic Map
- Area of Gravel Cover
- Wetlands (Per National Wetland Inventory, 2005)
- Wetlands (Per MIRIS Land Cover, 1978)

PRECISION VEHICLE HOLDING
DAVISON AND DONEGAL ROADS, BURTON, MI
1964 AERIAL IMAGERY
JOB NO.: 9190
BY: TNV DATE: 10/26/2022
FIGURE 2

ERG Environmental Resources Group
28003 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108

LEGEND

- Appx. Site Parcel Boundary
- Appx. Adjacent Parcel Boundaries
- Area of Standing Water Shown on 1969/1975 Topographic Map
- Area of Gravel Cover
- Wetlands (Per National Wetland Inventory, 2005)
- Wetlands (Per MIRIS Land Cover, 1978)

PRECISION VEHICLE HOLDING
DAVISON AND DONEGAL ROADS, BURTON, MI
1972 AERIAL IMAGERY
JOB NO.: 9190
BY: TNV DATE: 10/26/2022
FIGURE 3

ERG Environmental Resources Group
28003 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108

LEGEND

- Appx. Site Parcel Boundary
- Appx. Adjacent Parcel Boundaries
- Area of Standing Water Shown on 1969/1975 Topographic Map
- Area of Gravel Cover
- Wetlands (Per National Wetland Inventory, 2005)
- Wetlands (Per MIRIS Land Cover, 1978)

PRECISION VEHICLE HOLDING

DAVISON AND DONEGAL ROADS, BURTON, MI

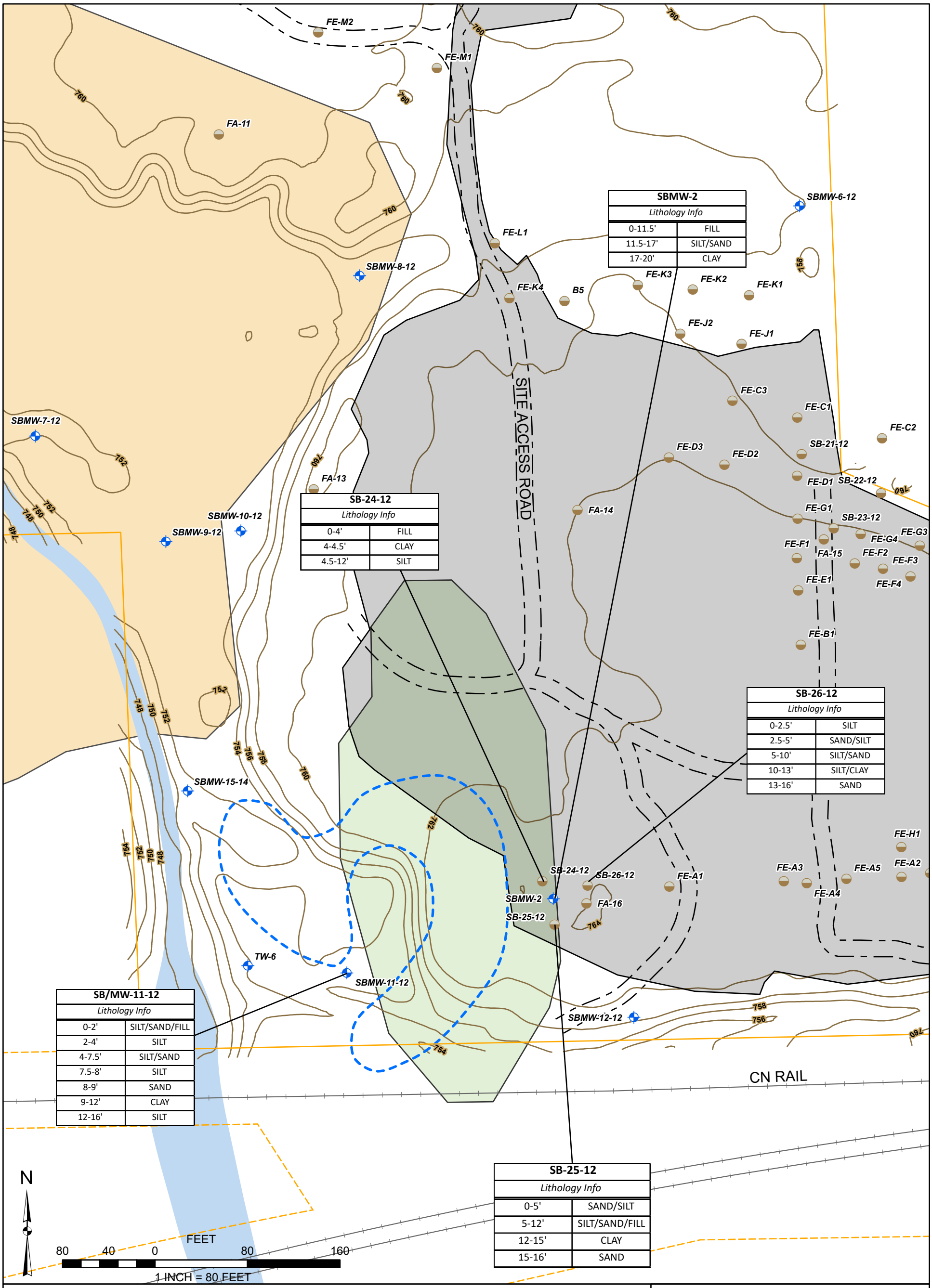
2005 AERIAL IMAGERY

JOB NO.: 9190

BY: TNV DATE: 10/26/2022

FIGURE 4

ERG Environmental Resources Group
28003 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108



SBMW-2	
Lithology Info	
0-11.5'	FILL
11.5-17'	SILT/SAND
17-20'	CLAY

SB-24-12	
Lithology Info	
0-4'	FILL
4-4.5'	CLAY
4.5-12'	SILT

SB-26-12	
Lithology Info	
0-2.5'	SILT
2.5-5'	SAND/SILT
5-10'	SILT/SAND
10-13'	SILT/CLAY
13-16'	SAND

SB/MW-11-12	
Lithology Info	
0-2'	SILT/SAND/FILL
2-4'	SILT
4-7.5'	SILT/SAND
7.5-8'	SILT
8-9'	SAND
9-12'	CLAY
12-16'	SILT

SB-25-12	
Lithology Info	
0-5'	SAND/SILT
5-12'	SILT/SAND/FILL
12-15'	CLAY
15-16'	SAND

LEGEND

- Appx. Site Parcel Boundary
- Appx. Adjacent Parcel Boundaries
- Monitoring Wells
- Soil Borings
- Area of Standing Water Shown on 1969/1975 Topographic Map
- Area of Gravel Cover
- Current Elevation Contour (ft)
- Wetlands (Per National Wetland Inventory, 2005)
- Wetlands (Per MIRIS Land Cover, 1978)

PRECISION VEHICLE HOLDING

DAVISON AND DONEGAL ROADS, BURTON, MI

SOIL BORING / MONITORING WELL LOCATION MAP

JOB NO.: 9190

BY: TNV DATE: 10/26/2022

FIGURE 4

ERG Environmental Resources Group
28003 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108

ATTACHMENT 2

SOIL BORING LOGS

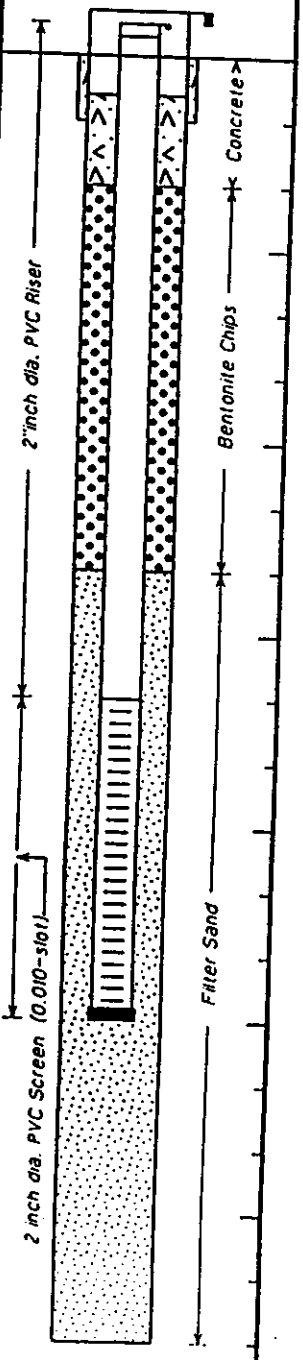
Techna Corporation
Plymouth, Michigan

Log of Monitoring Well MW2

PROJECT: *GM Corporation*	LOCATION: *Green Parcel East of Delphi Plant 700*
PROJECT NO.: *00654-OIM-002*	SURFACE ELEVATION: *764.23 Feet*
DATE START/FINISH: *3-11-96*	INITIAL H2O LEVEL: *11 Feet*
DRILLING METHOD: *4.5-inch ID Hollow Stem Auger*	STATIC H2O ELEV.: *754.22 Feet (03/15/96)*
SAMPLING METHOD: *2 foot by 2-inch Split Barrel Sampler*	TOTAL DEPTH: *20 Feet*
DRILLING COMPANY: *Carlo Environmental*	LOGGED BY: *(074)*

DEPTH feet	LAB SAMPLE NO.	BLOWS/0.5 ft.	PID (relative ppm) VALUES	PID (relative ppm) PROFILE 0 50	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
3	MW2-A 3-5'	10 10 9 11	<1			SP	Fill Sand, some gravels, (apparent slag material) yellow brown, black, red brown.
9		42 24 11 5					No sample return, driving concrete in split barrel sampler. Drilled through concrete from 8-10'.
12						ML SM	SILT and SAND: fine to medium, trace fine gravels, wood debris, saturated, gray.
15	MW2-B 14-16'	2 2 2 2 2 2 1 1	<1				No sample return from 13 to 15 feet.
18	MW2-C 18-20'	1 3 4 2	<1			CL	CLAY: trace silt, and fine gravels, soft to medium stiff, moist, gray.
21							END OF BORING

WELL DIAGRAM



Wilcox PROFESSIONAL SERVICES

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

SOIL BORING LOG

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB/MW-11-12
BORING LOCATION: SW corner of site
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/19/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Lambert
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Brown, Dry, SILT, SAND and FOUNDRY FILL; trace organics			1SS 0-1'			<1	
					2SS 1-2'			<1	
		(2.0 - 3.0) Mottled Brown and Red, Dry, SILT and Fine SAND; trace organics			3SS 2-3'			<1	Collected sample at 2-3'
		(3.0 - 4.0) Mottled Brown and Gray, Dry, SILT			4SS 3-4'			<1	
		(4.0 - 7.5) Mottled Brown and Orange, Moist, SILT and Fine SAND			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	Collected sample at 6-7'
		(7.5 - 8.0) Gray, Moist, Sandy SILT; trace organics			8SS 7-8'			<1	
		(8.0 - 9.0) Brown, Wet, Silty SAND		▽	9SS 8-9'			<1	
		(9.0 - 12.0) Gray, Wet, CLAY; trace silt with a coarse sand lense at 10.75'			10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 16.0) Gray, Wet, SILT; some clay			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS
▽ DURING DRILLING: 8.5'
▼ AT COMPLETION OF DRILLING: NR
▼ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE
AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limt - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine

Wilcox PROFESSIONAL SERVICES

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

SOIL BORING LOG

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB-24-12
BORING LOCATION: Near MW-2
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/16/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Lambert
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Dark Brown, Dry, Foundry FILL; with silt and organics, some gravel			1SS 0-1'			<1	
					2SS 1-2'			1.9	
		(2.0 - 4.0) Dark Brown-Black, Dry, Foundry FILL; with silt and organics, some gravel			3SS 2-3'			<1	
					4SS 3-4'			12.9	Collected sample at 3-4'
		(4.0 - 4.5) Gray, Moist, CLAY; with silt, trace gravel			5SS 4-5'			1	
-5.0	5	(4.5 - 12.0) Gray/Brown, Moist, SILT; trace clay and gravel			6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
		Evidence of foundry debris from 7.5-12'			9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 16.0) No recovery - was unable to collect a sample.			13SS 12-13'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS
- DURING DRILLING: NE
- AT COMPLETION OF DRILLING: NR
- AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE
AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limt - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine

Wilcox PROFESSIONAL SERVICES

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

SOIL BORING LOG

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB-25-12
BORING LOCATION: Near MW-2
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/16/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Graves
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.5) Brown, Dry, SAND and SILT; trace gravel			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
		(2.5 - 5.0) Dark Brown, Dry, Fine SAND and SILT; with concrete pieces			4SS 3-4'			<1	
		Driller reported rocks/concrete from 3-5'			5SS 4-5'			<1	
-5.0	5	(5.0 - 12.0) Black, Dry, SILT and SAND; trace foundry sand, concrete and debris			6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
					9SS 8-9'			<1	
		Driller reported concrete at 8.5'			10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
		White pasty clay material with slight odor encountered from 11-11.5'			12SS 11-12'			<1	Collected sample at 11-12'
		(12.0 - 15.0) Gray, CLAY; with silt			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15	(15.0 - 16.0) Gray, Wet, Fine SAND		▽	16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS
▽ DURING DRILLING: 15.5'
◤ AT COMPLETION OF DRILLING: NR
▼ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE
AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limt - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine

Wilcox PROFESSIONAL SERVICES

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Saginaw, MI 48604
989-752-6500
989-752-6600 fax

SOIL BORING LOG

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB-26-12
BORING LOCATION: Near MW-2
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/16/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Graves
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.5) Brown, Dry, Sandy SILT; trace gravel			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
		(2.5 - 5.0) Dark Brown, Dry, Fine SAND and SILT; trace broken glass and gravel			4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5	(5.0 - 10.0) Black, Moist, SILT and SAND; trace foundry sand			6SS 5-6'			<1	
					7SS 6-7'			1.2	
					8SS 7-8'			1.9	Collected sample at 7-8'
					9SS 8-9'			1	
					10SS 9-10'			1	
-10.0	10	(10.0 - 13.0) Gray, Moist, SILT and CLAY; trace coarse sand			11SS 10-11'			1	
					12SS 11-12'			1	
					13SS 12-13'			1	
		(13.0 - 16.0) Gray, Wet, Fine SAND becomming more coarse with depth		▽	14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS
▽ DURING DRILLING: 13.5'
▼ AT COMPLETION OF DRILLING: NR
▼ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE
AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limt - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine