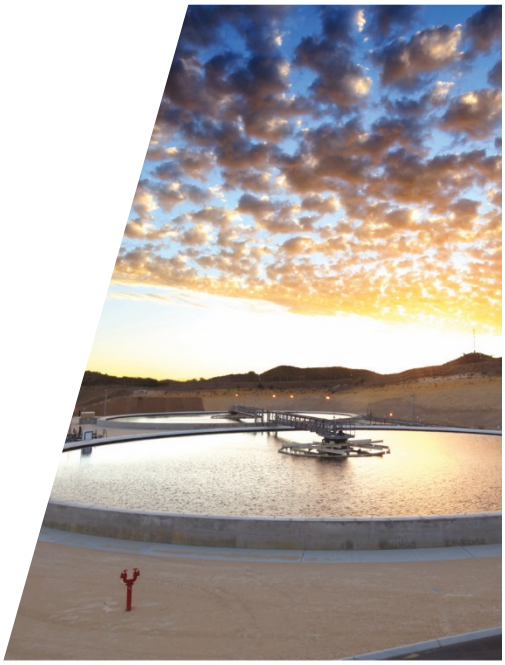
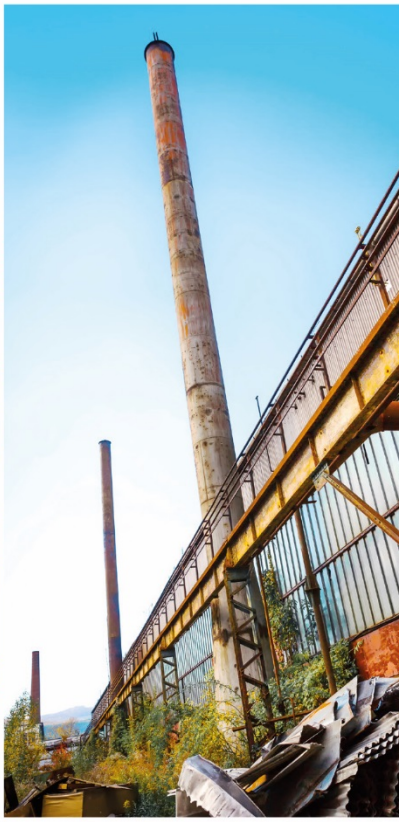


PCB-Impacted Soil Removal Summary Report

Former Nodular Industrial Land
Saginaw, Michigan

Revitalizing Auto Communities Environmental Response Trust



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Appendix Index

1. Introduction

GHD Services, Inc. (GHD) has prepared this Polychlorinated Biphenyl (PCB) Impacted Soil Removal Summary Report (Report) on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust for the former Nodular Industrial Land (Site) in Saginaw, Michigan. The Site location is presented in Figure 1.1 and the Site Plan is presented in Figure 1.2. The Site is undergoing Resource Conservation and Recovery Act (RCRA) Corrective Action under Administrative Order on Consent RCRA-05-2011-0023.

An Interim Measures Work Plan for PCB-Impacted Soil Removal (Work Plan) was prepared in accordance with Title 40 of the Code of Federal Regulations, Part 761 (40 CFR 761) as a notification to the United States Environmental Protection Agency – Region 5 (U.S. EPA) of RACER's intent to implement a cleanup at the Site of PCB contamination under the risk based option set forth under 40 CFR §761.61(c). The Work Plan was submitted to U.S. EPA on July 10th, 2020 in accordance with the procedures set forth in 40 CFR §761.61 of TSCA. The purpose of the Work Plan was to remove soil within the top 12 inches with <50 parts per million (ppm) PCBs to reduce risk to benthic invertebrates. U.S. EPA approved the Work Plan in a letter dated September 2, 2020. A copy of the Work Plan documents and subsequent U.S. EPA approval are provided in Appendix A. This Report has been prepared for submittal to U.S. EPA in accordance with conditions specified in the U.S. EPA approved Work Plan.

2. Site Characterization

Initial Site characterization was completed prior to removal activities as presented in the Work Plan. A copy of the aforementioned document is presented in Appendix A.

A waste disposal characterization sample was collected on July 13, 2020 of the soil via hand auger and analyzed for TCLP VOCs, SVOCs, and RCRA metals. A copy of the waste characterization sample results are provided in Appendix B. This sample result and copies of the PCB-impacted soil characterization analytical results were provided to the off-Site disposal facility for profiling. The soil was found to be characteristically non-hazardous.

3. Project Cleanup Levels

The proposed cleanup level for elevated PCB-impacted soil from within a small area of IU G was <1 ppm PCBs in shallow soils (<1-foot below ground surface [ft bgs]). The highest PCB concentration in soil was 11.2 ppm.

4. Permitting

GHD obtained all applicable permits prior to implementing the work, including a State of Michigan Environment, Great Lakes & Energy (EGLE) Water Resources Division Permit (Part 303, Wetland Protection and Part 31, Water Resources Protection) and a City of Saginaw Floodplain permit.

Copies of the EGLE and City of Saginaw permits are provided in Appendix C.

A sediment erosion and sediment control permit was deemed unnecessary since work within the wetland was limited to less than an acre.

5. Soil Removal

Work Plan implementation occurred between September 15th and September 17th, 2020. A photographic log of PCB-impacted soil removal activities is presented in Appendix D.

All applicable health and safety, temporary facilities, traffic control, and site preparation measures were implemented in accordance with the Work Plan.

Prior to soil removal activities, the contractor, Job Site Services (JSS), constructed a competent working surface to access the excavation area using track mats and a surveyor demarcated the excavation area.

The 60 ft by 20 ft area was excavated to a depth of at least 1 ft bgs, resulting in a volume of 64.5 cubic yards of soil. No additives were necessary to stabilize the material to meet the paint filter test (i.e., no free liquids), which is required by the off-site disposal facility to accept the waste. As such, soils were directly loaded into haul trucks for disposal off-Site.

5.1 Soil Disposal

Prior to leaving the Site, the haul trucks were secured with tarps and outside surfaces cleaned to avoid tracking material off-Site. PCB-impacted soils were disposed at the following Subtitle D landfill:

Peoples Landfill – Birch Run (Waste Management)
4143 Rathburn Road, Birch Run, MI 48415
License No. 9480

Manifests were prepared in accordance with 40 CFR 761 Subpart K PCB Waste Disposal Records and Reports to accompany each load. A table summarizing the manifests and the associated tonnage disposed is summarized in Table 5.1. Copies of all waste manifests are available in Appendix E.

A total of four truckloads of material was disposed containing a total of 92.62 tons of PCB-impacted soil and associated work debris. A copy of the certificate of destruction from the disposal facility is provided in Appendix F.

5.2 Decontamination

Decontamination was conducted in accordance with 40 CFR 761.79(c)(2)(i). Following excavation activities, only the excavator bucket required decontamination. A confirmation wipe sample was collected and analyzed prior to mobilizing the bucket off-Site. The wipe sample results did not detect PCBs. A copy of analytical report for the wipe sample is provided in Appendix B.

5.3 Restoration

Following completion of soil removal, the excavation was backfilled with clean material from an on-Site source. A straw mat was placed over the area to aid re-establishment of wetland vegetation. Wetland seed was broadcast over the disturbed area including the surrounding area where soils were disturbed. Temporary fencing, signs, facilities, and equipment were removed, with any materials coming into contact with PCB-impacted soil being decontaminated or disposed off-Site.

6. Implementation Verification

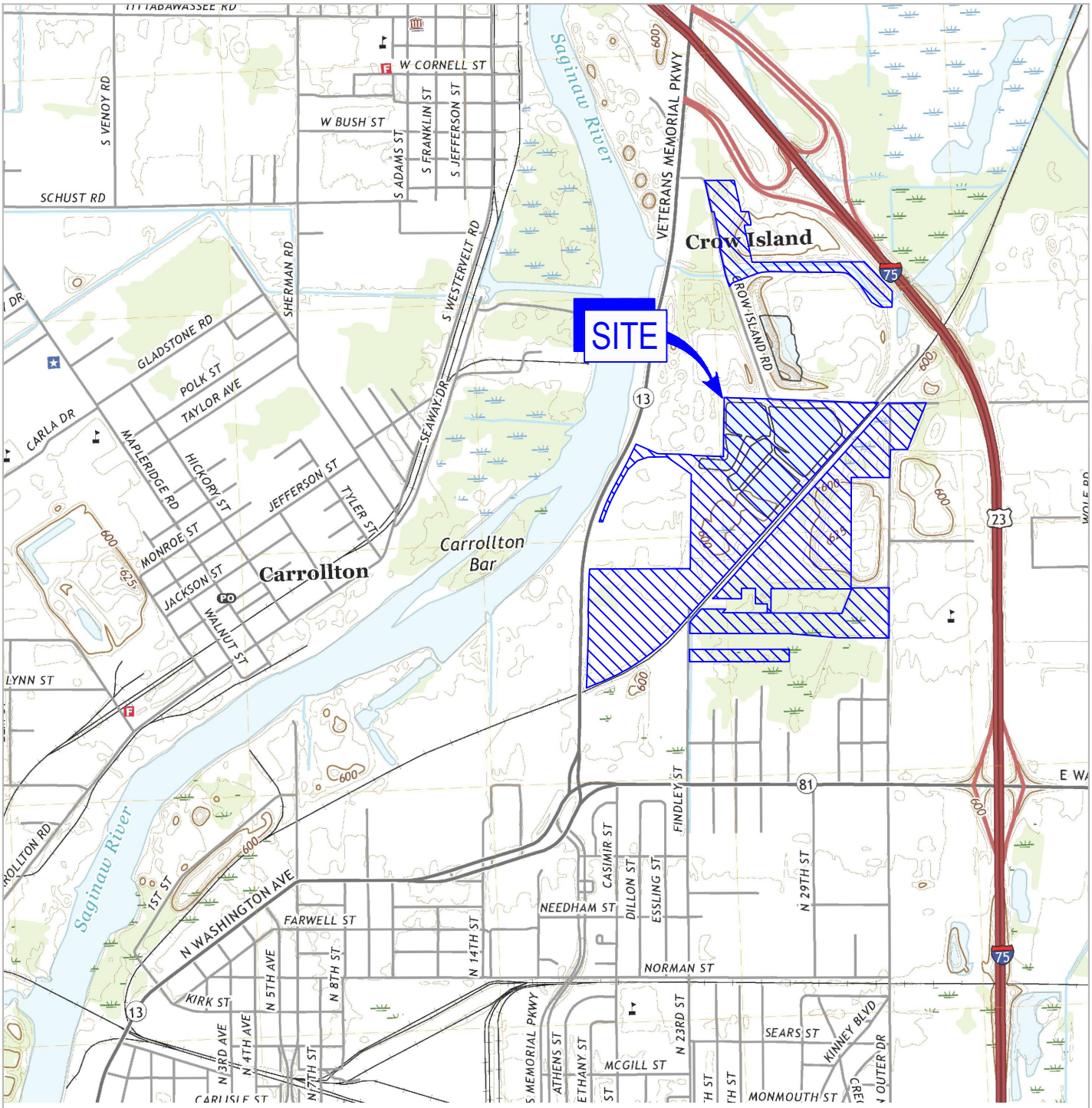
The horizontal and vertical limits of soil removal were confirmed by a surveyor using land survey equipment. The survey confirmed that horizontal extents of the excavation were consistent with the area identified in the Work Plan. The elevation data collected from the floor of the excavation was compared against the elevations immediately adjacent to the excavation area, which confirmed that a minimum of 1-foot of PCB-impacted soil was removed. Approximately 64.5 cubic yards of soil were excavated. A summary of the elevation measurements and the resulting volume calculation is presented in Appendix G.

7. Deed Notification and Restriction

With the extent of PCBs above 1 ppm and below 10 ppm defined, RACER proposes to place a notice on the property's deed identifying the presence of PCB remediation waste in this area pursuant to Part 761.61(a)(8)(i)(A) of Title 40 of the Code of Federal Regulations and place a deed restriction limiting use of this area to low occupancy as defined pursuant to 40 CFR Part 761.3. See Appendix H for an exhibit that has been drafted for the restrictive covenant which shows the PCB remediation waste and low occupancy area.

8. Recordkeeping

Records of the implementation of the Work Plan, including copies of analytical laboratory reports, data validation, and waste manifests will be maintained for a minimum of 5 years, in accordance with the retention requirements specified in 40 CFR §761.61(a)(9).



0 1000 2000 ft

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RACER TRUST
SAGINAW, MICHIGAN

Project No. **11208041**
Date **October 2020**

SITE LOCATION MAP

FIGURE 1.1

Filename: \\ghdnet\ghd\CA\Waterloo\Projects\662\11208041\Digital_Design\ACAD 2018\Figures\RPT004\11208041(RPT004)GN-WA002.DWG
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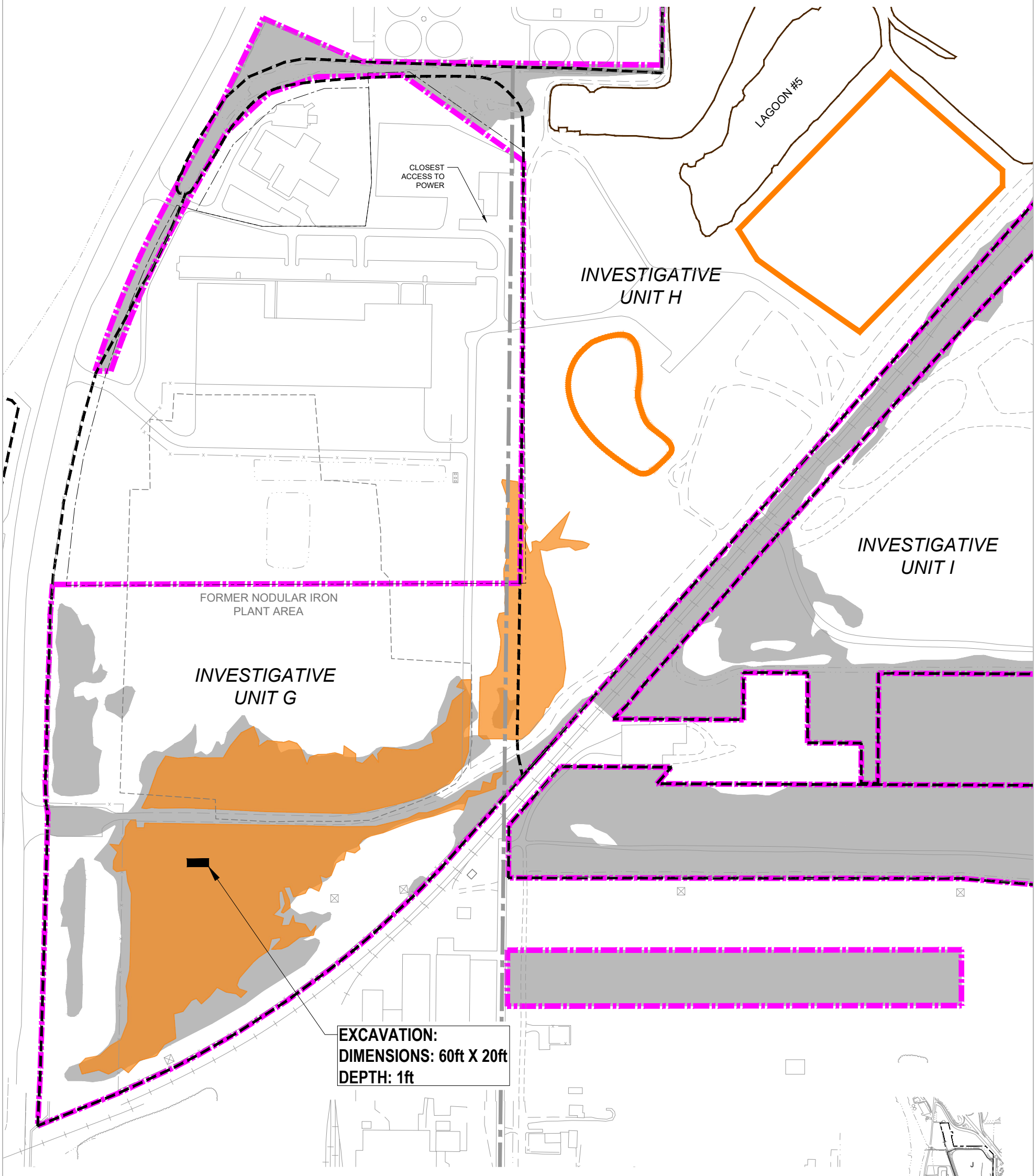
Data Source: USGS QUADRANGLE MAP; SAGINAW, MI; 2019



RACER TRUST
SAGINAW, MICHIGAN

Project No. **11208041**
Date **October 2020**

SITE PLAN

FIGURE 1.2

Filename: \\ghdnet\ghd\CA\Waterloo\Projects\662\11208041\Digital_Design\ACAD 2018\Figures\RPT004\11208041(RPT004)GN-WA003.DWG
Plot Date: 16 October 2020 10:33 AM

Data Source: MICHIGAN STATE PLANE SOUTH, NAD 83 USING INTERNATIONAL FEET, NGVD 88 SPICER SURVEY, OCTOBER 2009.

Table 5.1

Soil Disposal Summary
RACER Nodular Industrial Land, Saginaw MI

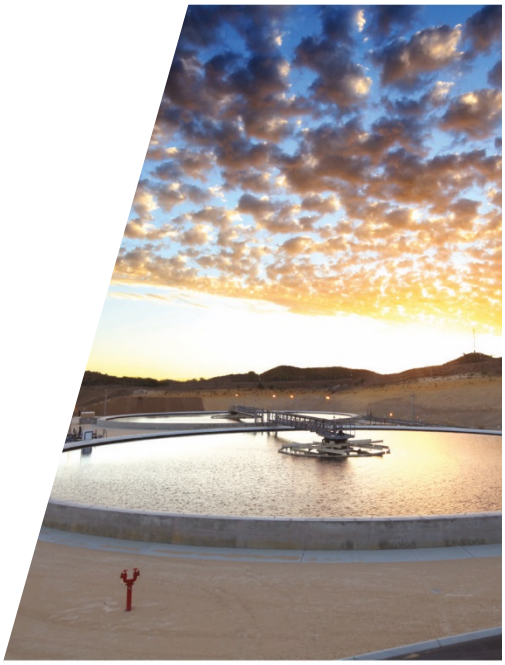
Peoples Landfill
4143 E. Rathburn Birch Run, MI 48415
License No. 9480

Load #	Date	Landfill Receipt #	Manifest #	Quantity (Tons)	Certificate of Disposal
1	9/15/2020	391241	91520-1	19.54	Y
2	9/15/2020	391261	91520-2	21.86	Y
3	9/15/2020	391276	91520-3	24.74	Y
4	9/15/2020	391315	91520-4	26.48	Y
			Total	**92.62**	

Appendices

Appendix A
Work Plan and Corresponding Approval

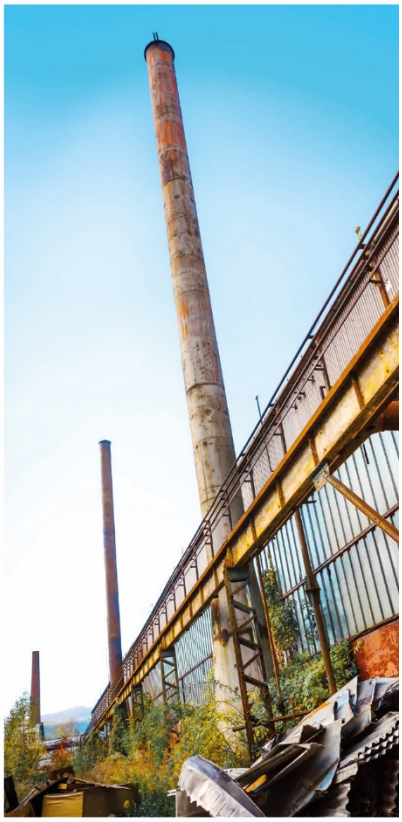
Appendix A.1
Interim Measures Work Plan for PCB-Impacted Soil Removal



Interim Measures Work Plan for PCB-Impacted Soil Removal

Former Nodular Industrial Land
Saginaw, Michigan

Revitalizing Auto Communities Environmental Response Trust



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1. Introduction

This report presents the proposed interim measure work plan (Work Plan) to remove PCB-impacted soils from within a wetland area in Investigative Unit G (IU G) at Revitalizing Auto Communities Environmental Response Trust's (RACER) Former Nodular Industrial Lands (Site) in Saginaw, Michigan. The Site location is presented on Figure 1.1 and the Site Plan is presented on Figure 1.2. The Site is undergoing Resource Conservation and Recovery Act (RCRA) Corrective Action under Administrative Order on Consent RCRA-05-2011-0023.

This Work Plan was prepared in accordance with Title 40 of the Code of Federal Regulations, Part 761 (40 CFR 761) as a notification to EPA of RACER's intent to implement a cleanup of the Site related PCB contamination under the risk based option set forth under 40 CFR 761.61(c).

The remainder of the Work Plan provides the following information:

- Nature of contamination including kinds of materials contaminated
- Procedures used to sample contaminated and adjacent areas and a site map showing PCB concentrations measured in all pre-cleanup characterization samples
- Location and extent of the PCB-impacted area
- Remedial plan for PCB impacts at the site including approach, schedule, and disposal facilities
- Written Certification as required by 40 CFR 761.61(a)(3)(E)

It is RACER's intent that this interim measure be the final active remediation activity for the area and future activities related to this area be limited to deed restrictions to provide for proper institutional controls.

1.1 Background

IU G was formerly the location of the Nodular Iron Plant, but in the early 2000s, the plant was demolished. As part of the General Motors Corporation (GMC) bankruptcy, a portion of IU G (southern half) became the responsibility of RACER. RACER's portion of IU G is approximately 1,300 ft by 1,800 ft, for a total area of approximately 54 acres.

The Description of Current Conditions Report (EMCON, 1995), identified seven areas of interest (AOI) in the vicinity of the proposed excavation area. Two of the AOI's specifically identified the storage of PCBs (AOI-G.8 Former Virgin Oils Storage Pad and AOI-G.1 Former Nodular Iron Plant Oil House RCRA Hazardous Waste Drum Storage Area). These storage areas operated between 1965 to 1989 and 1966 to 1987, respectively. There is no recorded release of PCBs, however, we expect that the source of PCBs in soil is related to these areas.

More recently, sumps that dewatered the area were turned off in 2012 and as a result surface water drainage has tended to collect in this low lying area and in nearby low lying areas at the southern end of IU G. Over the last decade or so, this ponded water has produced hydric soils and promoted dominance by wetland vegetation. In 2015, a wetland survey of the area, as required by MDEQ to support a proposed development, determined that several small isolated wetlands had formed (Niswander 2015). The wetland survey delineated five isolated wetlands with areas of 0.23, 0.84,

1.08, 3.93, and 7.23 acres for a total of approximately 13.31 acres of wetland. These wetlands are isolated from each other due to access roads and driveways, which apparently preclude hydrologic connections among them. The wetlands may contain a foot or more of water during wetter seasons but tend to dry up completely during dry seasons.

The wetland which will be affected by this project is approximately 7.23 acres total, and is classified as an emergent/scrub-shrub wetland (Figure 2). The proposed excavation area is also within with the 100-year floodplain. The 100-year floodplain elevation is 589.7 feet above mean sea level (ft AMSL) (NGVD29), while the current ground surface elevation in the area of the proposed excavation is approximately 588.5 ft AMSL (NGVD29).

2. Investigation Summary

The following section presents previous investigations, sample results, and evaluations of the proposed excavation area.

2.1 RCRA Facility Investigation

As part of the RCRA Facility Investigation (RFI) conducted by GM prior to bankruptcy, four rounds of sampling were conducted in the proposed excavation area. The four rounds of sampling were conducted in September 1998, December 2001, December 2020, and March 2003. The early rounds of sampling were analyzed for a full list of parameters (SVOCs, VOCs, Metals, PCBs, and general chemistry) and later rounds only analyzed PCBs. The results of PCBs in soil ranged from non-detect to 13.4 mg/kg. The results were summarized in a Phase 1C RFI Report (CRA, March 2007) and are herein included in Figure 2.1. As part of the Phase 1C RFI Report an ecological risk assessment (ERA) was conducted by Exponent (2007) for the entire Nodular Site, including this portion of IU G. As described therein, in 2007, the vegetation in IU G was in the early stages of old field succession. In the original ERA, the biological habitat of IU G was considered too poor to warrant consideration (Exponent 2007). At that time, the very southern edge of IU G, just south of the Nodular Plant footprint, contained “a small, isolated, low-lying area that was periodically wet and supported some wetland vegetation (e.g., cattails, Typha angustifolia)” (Exponent 2007). However, the ERA stated that this low-lying area was nonetheless poor terrestrial habitat that did not support aquatic habitat. Thus, this area was not considered in the Exponent ERA.

2.2 2015 Additional Investigation to Support RCRA Corrective Action

In 2015, GHD conducted additional delineation of PCBs in soil to assist in developing and evaluating TSCA compliant remediation alternatives, including defining the limits of a possible PCB notice and restriction area. The work was completed in two phases. The scope of work for Phase 1 was summarized in Conestoga-Rovers & Associates Inc.’s (now GHD) February 27, 2015 letter to EPA, which was approved by email on March 2, 2015. The Phase 1 results were submitted to EPA on May 8, 2015. Based on the results of the Phase 1 work, the Phase 2 scope of work was proposed in a July 15, 2015 email to EPA which was approved by email on July 30, 2015. The Phase 2 results were submitted to EPA on February 15, 2017. With the additional investigation, PCB concentrations

in soil have been delineated to 1 mg/kg vertically and horizontally. The results are presented on Figure 2.1.

2.3 Wetland Ecological Evaluation

As noted above, the 2007 ERA did not consider potential ecological risks in this area because highly disturbed, abandoned industrial uplands have minimal ecological value. However, wetlands, even mediocre and low quality wetlands, are typically accorded more public protection than uplands. Consequently, since some of IU G has transitioned to wetlands, GHD on behalf of RACER, prepared a streamlined ERA (GHD, January 2019) to determine whether acute ecological impacts are likely.

The streamlined ERA concluded that significant ecological risks are unlikely to occur in the newly formed wetlands. In response, due to the potential for small ecological risks associated with PCBs in shallow soil, EPA requested that shallow soil be removed and disposed of off-Site.

3. Proposed PCB-Impacted Soil Removal

The proposed removal of PCB-impacted soil <50 ppm (highest PCB concentration in soil of 11.2 ppm) from a small area in IU G will consist of:

- Excavating the proposed area to a depth of 1-ft; stockpile PCB-impacted soil on a polyvinyl chloride (PVC) liner; stabilize, as necessary, to meet waste facility requirements (i.e., paint filter test); load; and transport for off-Site disposal.
- Backfill excavation with clean soil from on-Site.
- Restoration including broadcasting wetland seed over excavation area.

3.1 Scope of Work and Schedule

The following sections describe the interim measure activities related to on-Site work to be conducted under this Work Plan.

3.1.1 Preparation of Health and Safety Plan

To ensure that all on-Site work is completed safely, a Site-specific Health and Safety Plan (HASP) has already been prepared for the Site by GHD for GHD's personnel. The selected contractor(s) will prepare a HASP, including identifying a Site health and safety officer and job safety analysis (JSA) for its personnel for the soil removal activities. The hazard analysis will identify the potential hazards, evaluate the level of personal protective equipment that will be used during the cleanup activities, and describe the personnel decontamination procedures required to control any potential personal exposures during implementation of this Work Plan.

The contractor's HASP will be prepared and implemented consistent with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120.

3.1.2 Contractor Procurement

One or more qualified, OSHA 29 CFR 1910.120 trained contractors will be procured for removal, stockpiling, loading, transportation, and disposal of the soil. The division of responsibilities, if any, will be determined through a competitive bidding process.

3.1.3 Permitting

All applicable permits will be obtained before conducting the work. An EGLE Water Resources Division Permit (Part 303, Wetland Protection and Part 31, Water Resources Protection) has been obtained and a City of Saginaw Floodplain permit is in the process of being obtained.

3.1.4 Mobilization/Site Preparation

Upon mobilization of the contractor to the Site, the contractor will establish security controls and designate work zones (exclusion zone, contamination reduction zone, and support zone) to minimize tracking impacted soils. The contractor will install a temporary orange safety fence or caution tape, with warning signs, as necessary to define the work zones.

3.1.5 Soil Removal and Stockpiling Activities

Removal of the PCB-impacted soil <50 ppm (highest PCB concentration in soil of 11.2 ppm) will be completed as follows:

- Construct a competent working surface to access the excavation area (i.e., track mats, etc.).
- Install silt fencing around the proposed excavation area to minimize erosion potential.
- Removal of the PCB-impacted soil. The proposed excavation area (60 ft x 20 ft) will be marked out by a surveyor prior to initiating removal of PCB-impacted soils. The excavation will be to a depth of 1-ft.
- PCB-impacted soils removed may be stockpiled on a 15 millimeter (mm) PVC liner to allow the soils to be stabilized sufficiently to pass the paint filter test. Once the soil is sufficiently stabilized it will be loaded and transported to the disposal facility.

3.1.6 Proposed Sampling

3.1.6.1 Soil Characterization

One sample from the proposed excavation area will be collected via hand auger and analyzed for TCLP VOCs, TCLP SVOCs, TCLP RCRA Metals, and other parameters if required by the disposal facility to complete the waste profile.

3.1.6.2 Soil Verification Sampling

No soil verification sampling is proposed since ecological risks to benthic invertebrates are limited to the top 6-inches of soil and existing results adequately delineate the area.

3.1.7 Soil Transportation and off-Site Disposal

Once stabilized the soil impacted with PCBs < 50 ppm are proposed to be disposed at one of the following Subtitle D disposal facility:

Peoples Landfill – Birch Run (Waste Management)
4143 Rathburn Road, Birch Run, MI 48415
License No. 9480

Brent Run Landfill
8335 Vienna Road, Montrose, MI 48457
License No. 9508

Whitefeather Landfill (Republic Services)
2401 E Whitefeather Road, Pinconning, MI 48650
License No. 9578

If a disposal facility is proposed other than the facility listed above, details for the disposal facility will be provided to EPA for review and approval.

Prior to leaving the Site, the haul trucks and/or roll off boxes will be secured with tarps, and will be cleaned to avoid tracking material off-Site. Manifests will be prepared and will accompany the loads in accordance with 40 CFR 761 Subpart K PCB Waste Disposal Records and Reports.

3.1.8 Decontamination

Decontamination will be required for equipment that potentially comes in contact with PCB-impacted soil. This will include the excavator and may include roll-off boxes, haul truck beds, and small equipment.

Decontamination will be conducted in accordance with 40 CFR 761.79(c)(2) by swabbing surfaces that have contacted PCBs with a solvent or completing a double wash/rinse. Decontamination materials will be solidified and disposed of at Peoples Landfill.

3.1.9 Site Restoration

Once the horizontal and vertical limits of the excavation have been confirmed, the excavation will be backfilled with clean material from on-Site. Wetland seed will be broadcast over the disturbed area of the excavation. Other areas of the Site where soils were exposed will also be seeded to minimize erosion.

3.1.10 Demobilization

Once the work is completed, the contractor will remove any temporary fencing, temporary structures, equipment, and other materials and supplies brought onto the Site for the interim measure activities. Any materials coming in contact with PCB impacted soil will either be decontaminated in accordance with Section 3.1.8 or disposed of at People's Landfill.

4. Deed Restrictions

With the extent of PCBs above 1 mg/kg and below 10 mg/kg defined, RACER proposes to place a notice on the property's deed identifying the presence of PCB remediation waste in this area pursuant to Part 761.61(a)(8)(i)(A) of Title 40 of the Code of Federal Regulations (40 CFR 761.61(a)(8)(i)(A) and place a deed restriction limiting use of this area to low occupancy as defined pursuant to 40 CFR Part 761.3. See Appendix A for an exhibit that has been drafted for the restrictive covenant which shows the PCB remediation waste and low occupancy area.

5. Reporting/Document Preparation

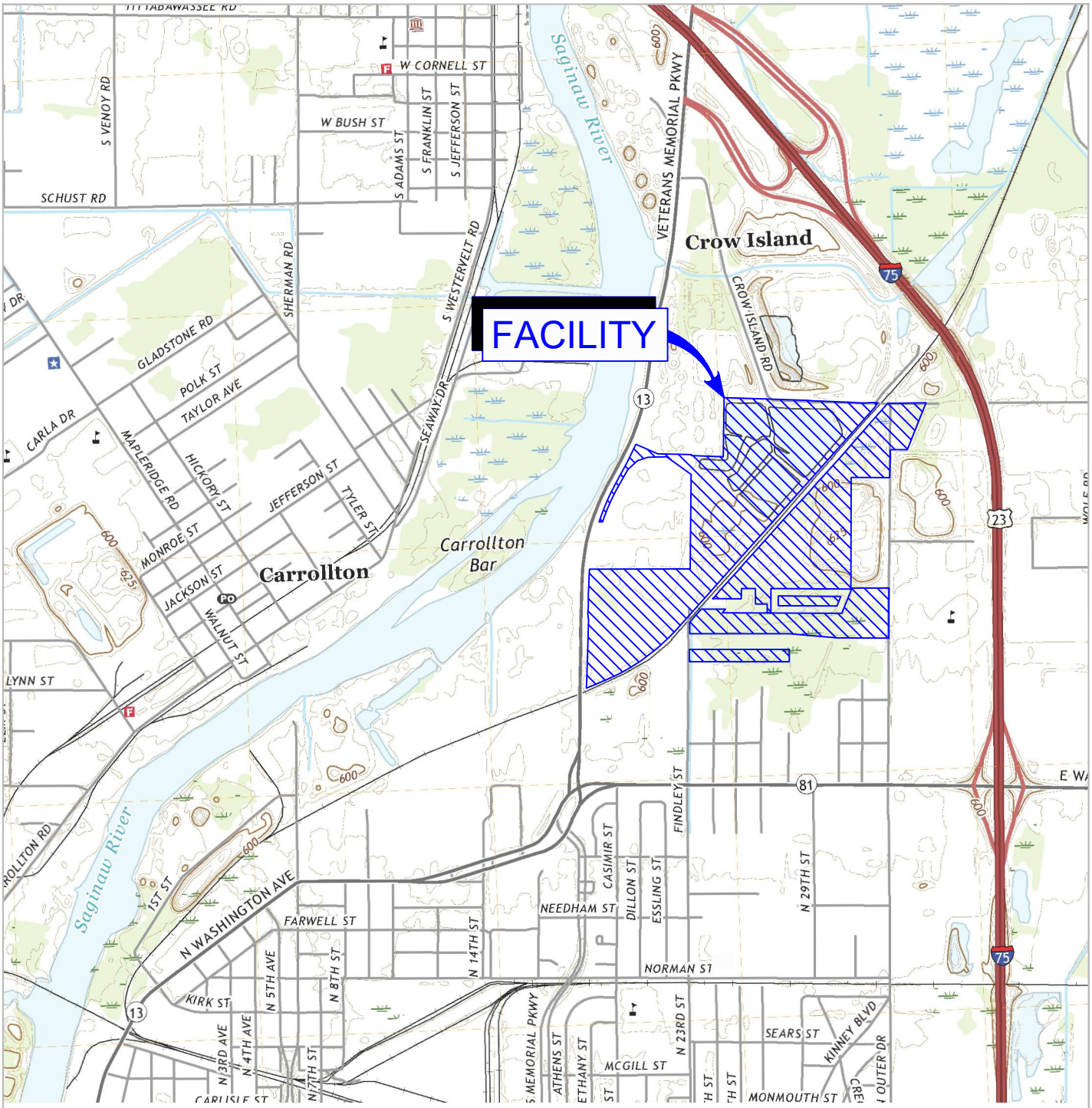
Upon the completion of this Work Plan, a completion report will be prepared to present a summary of the interim measure removal. The report will include a summary of the work completed, a summary of field observations, quantities of materials removed, and certificates of disposal.

6. Certification

The certification statement required under 40 CFR 761.61(a)(3)(E) is provided in Appendix B.

7. Schedule

A contractor is being procured to complete the work and applicable permits are being obtained. The work will be initiated as soon as practicable but during a time of the year with suitable, dry weather conditions.



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RACER TRUST
SAGINAW, MICHIGAN

Project No. **11208041**
Date **July 2020**

SITE LOCATION MAP

FIGURE 1.1

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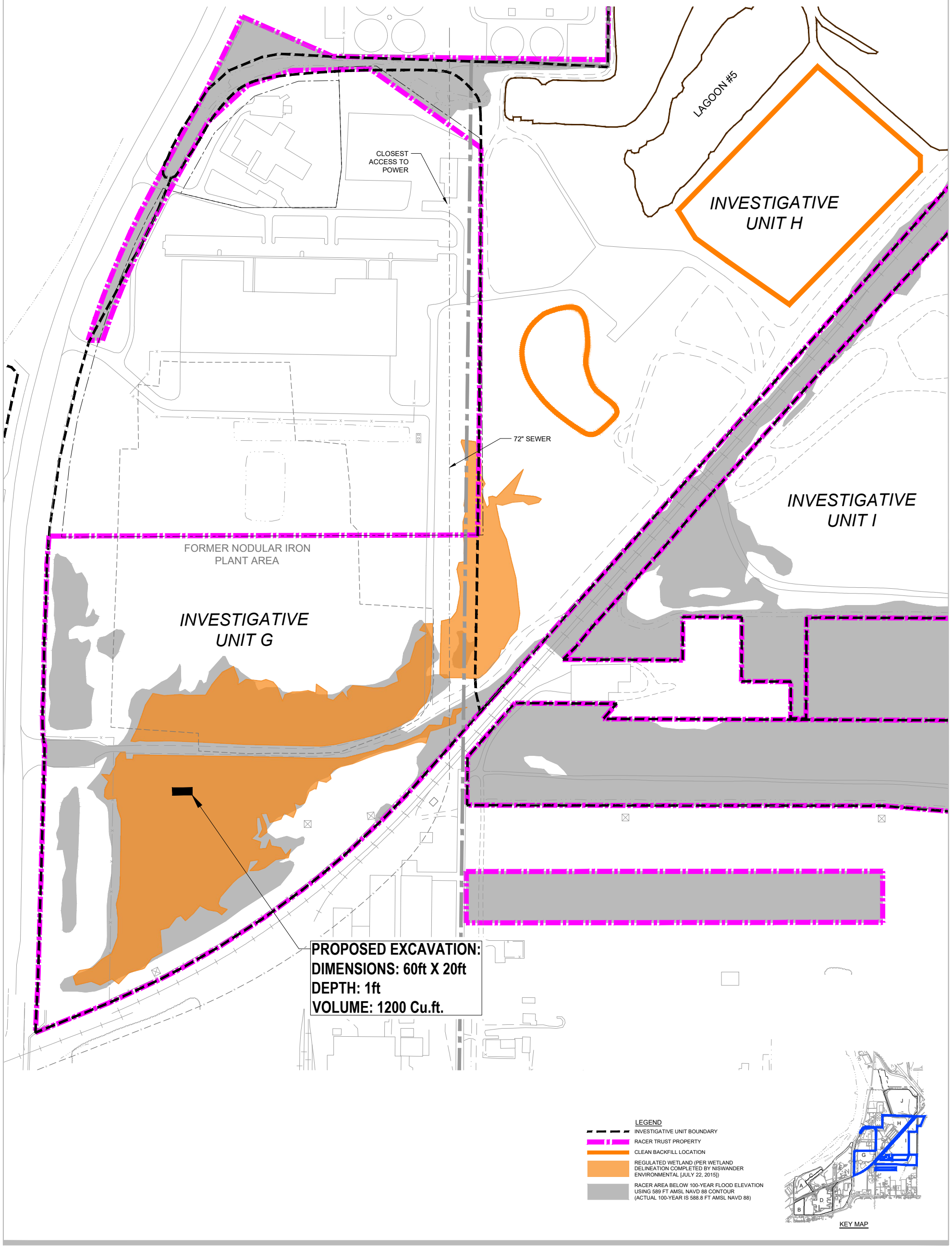


RACER TRUST
SAGINAW, MICHIGAN

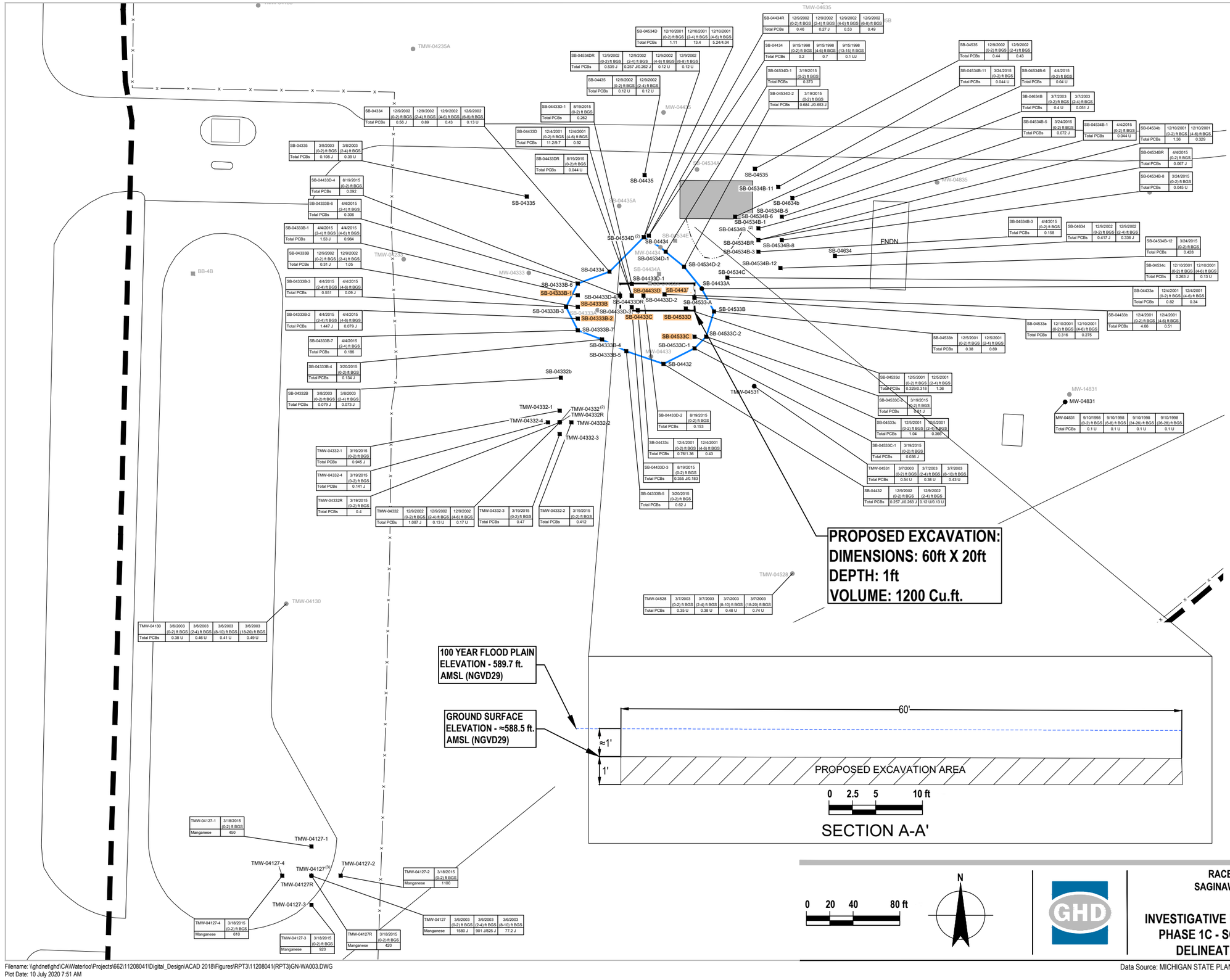
Project No. **11208041**
Date **July 2020**

SITE PLAN

FIGURE 1.2

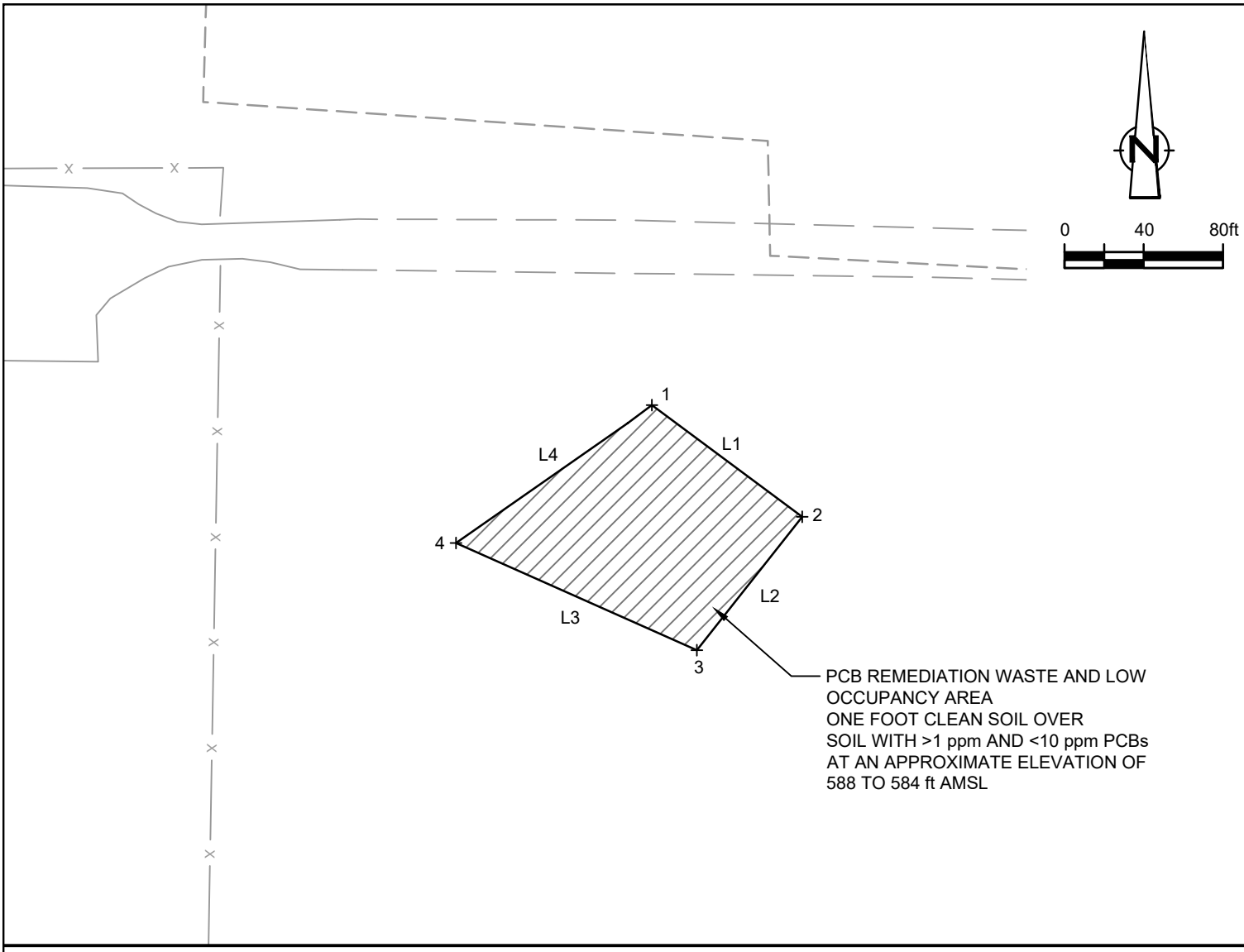
Filename: \\ghdnet\ghd\CA\Waterloo\Projects\662\11208041\Digital_Design\ACAD 2018\Figures\RPT3\11208041(RPT3)GN-WA002.DWG
Plot Date: 10 July 2020 7:51 AM

Data Source: MICHIGAN STATE PLANE SOUTH, NAD 83 USING INTERNATIONAL FEET, NGVD 88 SPICER SURVEY, OCTOBER 2009.

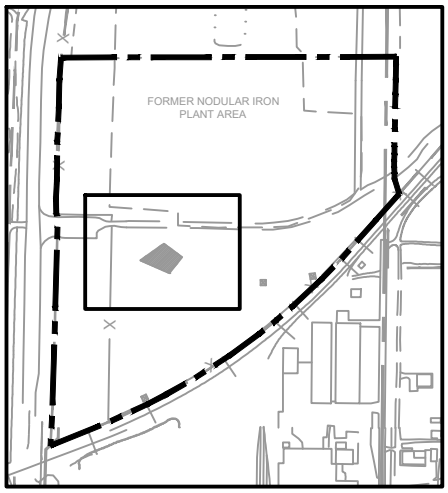

TMW-04635
SB-04534D | 12/10/2001 (0-2) ft BGS | 12/10/2001 (2-4) ft BGS | 12/10/2001 (4-6) ft BGS
Total PCBs | 1.11 | 13.4 | 5,244.04
SB-04534DR | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS | 12/9/2002 (4-6) ft BGS | 12/9/2002 (6-8) ft BGS
Total PCBs | 0.539 J | 0.257 J/0.262 J | 0.12 U | 0.12 U
SB-04435 | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS
Total PCBs | 0.12 U | 0.12 U
SB-04334 | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS | 12/9/2002 (4-6) ft BGS | 12/9/2002 (6-8) ft BGS
Total PCBs | 0.56 J | 0.89 | 0.43 | 0.13 U
SB-04433D-1 | 8/19/2015 (0-2) ft BGS
Total PCBs | 0.262
SB-04433D | 12/4/2001 (0-2) ft BGS | 12/4/2001 (4-6) ft BGS
Total PCBs | 11.2/9.7 | 0.92
SB-04433DR | 8/19/2015 (0-2) ft BGS
Total PCBs | 0.044 U
SB-04335 | 3/8/2003 (0-2) ft BGS | 3/8/2003 (2-4) ft BGS
Total PCBs | 0.108 J | 0.39 U
SB-04433D-4 | 8/19/2015 (0-2) ft BGS
Total PCBs | 0.092
SB-04333B-6 | 4/4/2015 (2-4) ft BGS
Total PCBs | 0.306
SB-04333B-1 | 4/4/2015 (2-4) ft BGS | 4/4/2015 (4-6) ft BGS
Total PCBs | 1.53 J | 0.984
SB-04333B | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS
Total PCBs | 0.31 J | 1.05
SB-04333B-3 | 4/4/2015 (2-4) ft BGS | 4/4/2015 (4-6) ft BGS
Total PCBs | 0.551 | 0.09 J
SB-04333B-2 | 4/4/2015 (2-4) ft BGS | 4/4/2015 (4-6) ft BGS
Total PCBs | 1.447 J | 0.079 J
SB-04333B-7 | 4/4/2015 (2-4) ft BGS
Total PCBs | 0.186
SB-04333B-4 | 3/20/2015 (0-2) ft BGS
Total PCBs | 0.134 J
SB-04332B | 3/8/2003 (0-2) ft BGS | 3/8/2003 (2-4) ft BGS
Total PCBs | 0.079 J | 0.073 J
SB-04434R | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS | 12/9/2002 (4-6) ft BGS | 12/9/2002 (6-8) ft BGS
Total PCBs | 0.46 | 0.27 J | 0.53 | 0.49
SB-04434 | 9/15/1998 (0-2) ft BGS | 9/15/1998 (4-6) ft BGS | 9/15/1998 (13-15) ft BGS
Total PCBs | 0.2 | 0.7 | 0.1 UJ
SB-04534D-1 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.373
SB-04534D-2 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.684 J/0.653 J
SB-04535 | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS
Total PCBs | 0.44 | 0.43
SB-04534B-11 | 3/24/2015 (0-2) ft BGS
Total PCBs | 0.044 U
SB-04534B-6 | 4/4/2015 (0-2) ft BGS
Total PCBs | 0.04 U
SB-04634B | 3/7/2003 (0-2) ft BGS | 3/7/2003 (2-4) ft BGS
Total PCBs | 0.4 U | 0.051 J
SB-04534B-5 | 3/24/2015 (0-2) ft BGS
Total PCBs | 0.072 J
SB-04534B-1 | 4/4/2015 (0-2) ft BGS
Total PCBs | 0.044 U
SB-04534b | 12/10/2001 (0-2) ft BGS | 12/10/2001 (4-6) ft BGS
Total PCBs | 1.36 | 0.329
SB-04534BR | 4/4/2015 (0-2) ft BGS
Total PCBs | 0.067 J
SB-04534B-8 | 3/24/2015 (0-2) ft BGS
Total PCBs | 0.045 U
SB-04534B-3 | 4/4/2015 (0-2) ft BGS
Total PCBs | 0.158
SB-04634 | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS
Total PCBs | 0.417 J | 0.336 J
SB-04534B-12 | 3/24/2015 (0-2) ft BGS
Total PCBs | 0.428
SB-04534c | 12/10/2001 (0-2) ft BGS | 12/10/2001 (4-6) ft BGS
Total PCBs | 0.263 J | 0.13 U
SB-04533a | 12/4/2001 (0-2) ft BGS | 12/4/2001 (4-6) ft BGS
Total PCBs | 0.82 | 0.34
SB-04533b | 12/4/2001 (0-2) ft BGS | 12/4/2001 (4-6) ft BGS
Total PCBs | 4.66 | 0.51
SB-04533a | 12/10/2001 (0-2) ft BGS | 12/10/2001 (4-6) ft BGS
Total PCBs | 0.316 | 0.275
SB-04533b | 12/5/2001 (0-2) ft BGS | 12/5/2001 (2-4) ft BGS
Total PCBs | 0.38 | 0.69
SB-04533d | 12/5/2001 (0-2) ft BGS | 12/5/2001 (2-4) ft BGS
Total PCBs | 0.329/0.318 | 1.36
SB-04533C-2 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.41 J
SB-04533c | 12/5/2001 (0-2) ft BGS | 12/5/2001 (2-4) ft BGS
Total PCBs | 1.04 | 0.366
SB-04533C-1 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.036 J
TMW-04531 | 3/7/2003 (0-2) ft BGS | 3/7/2003 (2-4) ft BGS | 3/7/2003 (8-10) ft BGS
Total PCBs | 0.54 U | 0.38 U | 0.43 U
SB-04432 | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS
Total PCBs | 0.257 J/0.263 J | 0.12 U/0.13 U
MW-04831 | 9/10/1998 (0-2) ft BGS | 9/10/1998 (6-8) ft BGS | 9/10/1998 (24-26) ft BGS | 9/10/1998 (26-28) ft BGS
Total PCBs | 0.1 U | 0.1 U | 0.1 U | 0.1 U
SB-04433a | 12/4/2001 (0-2) ft BGS | 12/4/2001 (4-6) ft BGS
Total PCBs | 0.82 | 0.34
SB-04433b | 12/4/2001 (0-2) ft BGS | 12/4/2001 (4-6) ft BGS
Total PCBs | 4.66 | 0.51
SB-04433D-2 | 8/19/2015 (0-2) ft BGS
Total PCBs | 0.153
SB-04433c | 12/4/2001 (0-2) ft BGS | 12/4/2001 (4-6) ft BGS
Total PCBs | 0.76/1.36 | 0.43
SB-04433D-3 | 8/19/2015 (0-2) ft BGS
Total PCBs | 0.355 J/0.183
SB-04333B-5 | 3/20/2015 (0-2) ft BGS
Total PCBs | 0.62 J
TMW-04332-1 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.945 J
TMW-04332-4 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.141 J
TMW-04332R | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.4
TMW-04332 | 12/9/2002 (0-2) ft BGS | 12/9/2002 (2-4) ft BGS | 12/9/2002 (4-6) ft BGS
Total PCBs | 1.087 J | 0.13 U | 0.17 U
TMW-04332-3 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.47
TMW-04332-2 | 3/19/2015 (0-2) ft BGS
Total PCBs | 0.412
TMW-04130 | 3/6/2003 (0-2) ft BGS | 3/6/2003 (2-4) ft BGS | 3/6/2003 (8-10) ft BGS | 3/6/2003 (18-20) ft BGS
Total PCBs | 0.38 U | 0.46 U | 0.41 U | 0.49 U
TMW-04528 | 3/7/2003 (0-2) ft BGS | 3/7/2003 (2-4) ft BGS | 3/7/2003 (8-10) ft BGS | 3/7/2003 (18-20) ft BGS
Total PCBs | 0.35 U | 0.38 U | 0.48 U | 0.74 U
TMW-04127-1 | 3/18/2015 (0-2) ft BGS
Manganese | 450
TMW-04127-4 | 3/18/2015 (0-2) ft BGS
Manganese | 610
TMW-04127 | 3/6/2003 (0-2) ft BGS | 3/6/2003 (2-4) ft BGS | 3/6/2003 (8-10) ft BGS
Manganese | 1580 J | 901 J/825 J | 77.2 J
TMW-04127-2 | 3/18/2015 (0-2) ft BGS
Manganese | 1100
TMW-04127-3 | 3/18/2015 (0-2) ft BGS
Manganese | 920
TMW-04127R | 3/18/2015 (0-2) ft BGS
Manganese | 420
MW-04435
MW-04534R
MW-04835
MW-04435A
MW-04534E
MW-04534A
MW-04433
MW-14831
MW-04831
TMW-04531
TMW-04528
TMW-04130
TMW-04235A
BB-4B
FNDN
SB-04335
SB-04435
SB-04535
SB-04534B-11
SB-04634b
SB-04534B-5
SB-04534B-1
SB-04534B (2)
SB-04534BR
SB-04534B-8
SB-04534B-3
SB-04634
SB-04534B-12
SB-04534C
SB-04534D (2)
SB-04434
SB-04534D-1
SB-04534D-2
SB-04334
SB-04433A
SB-04333B-6
SB-04333B-1
SB-04433D-4
SB-04433B
SB-04433DR
SB-04433D-2
SB-04533-A
SB-04533B
SB-04333B-3
SB-04333B-2
SB-04433C
SB-04533D
SB-04333B-7
SB-04533C
SB-04533C-2
SB-04333B-4
SB-04533C-1
SB-04333B-5
SB-04432
SB-04332b
TMW-04332-1
TMW-04332 (2)
TMW-04332R
TMW-04332-4
TMW-04332-2
TMW-04332-3
TMW-04127-1
TMW-04127-4
TMW-04127 (3)
TMW-04127-2
TMW-04127R
TMW-04127-3
PROPOSED EXCAVATION:
DIMENSIONS: 60ft X 20ft
DEPTH: 1ft
VOLUME: 1200 Cu.ft.
100 YEAR FLOOD PLAIN
ELEVATION - 589.7 ft.
AMSL (NGVD29)
GROUND SURFACE
ELEVATION - ≈588.5 ft.
AMSL (NGVD29)
60'
≈1'
1'
PROPOSED EXCAVATION AREA
0 2.5 5 10 ft
SECTION A-A'
LEGEND
INVESTIGATIVE UNIT BOUNDARY AND IDENTIFIER
MONITORING WELL LOCATION - RFI
SOIL BORING LOCATION - RFI
SAMPLE LOCATION - NO REPORTED DATA
PCBs GREATER THAN 1ppm
DELINEATION BOUNDARY
AREA OF STANDING WATER (~10 FEET DEEP IN SOME SPOTS)
EXISTING CONCRETE SLAB FROM HISTORICAL OIL HOUSE STORAGE UNIT
SAMPLE LOCATION
SB-04634 | 12/9/02 | 12/9/02
0-2(ft BGS) | 2-4(ft BGS)
Total PCBs | 0.357 J | 0.271 J
SAMPLE DATE
SAMPLE DEPTH
RESULT (mg/kg)
PARAMETER
NOTES:
1. TOTAL PCBs WERE SUMMED BY ADDING THE POSITIVE DETECTIONS PLUS HALF THE QUANTITATION LIMITS FOR NON-DETECT RESULTS OF AROCLORS DETECTED ELSEWHERE IN THIS AREA. IF QUANTITATION LIMITS ARE NOT AVAILABLE, HALF THE REPORTING LIMITS ARE USED FOR NON-DETECTED VALUES.
2. THE MOST RECENT SAMPLE RESULTS REPORTED PCB RESULTS BELOW 1 mg/kg (TSCA - CLEANUP LEVEL FOR BULK REMEDIATION WASTE IN HIGH OCCUPANCY AREA WITHOUT FURTHER CONDITIONS) AT ALL DEPTH INTERVALS. THEREFORE, NO ADDITIONAL ACTIVITIES ARE PROPOSED FOR THIS LOCATION.
3. THE MOST RECENT SAMPLE RESULTS REPORTED MANGANESE RESULTS BELOW 1,500 mg/kg (MDQ PART 201 NONRESIDENTIAL PARTICULATE INHALATION CRITERIA) AT ALL DEPTH INTERVALS. THEREFORE, NO ADDITIONAL ACTIVITIES ARE PROPOSED FOR THIS LOCATION.
KEY MAP
0 20 40 80 ft
N
RACER TRUST
SAGINAW, MICHIGAN
INVESTIGATIVE UNIT G - SOUTH RFI
PHASE 1C - SOIL ADDITIONAL
DELINEATION RESULTS
Project No. 11208041
Date July 2020
FIGURE 2.1
Filename: \\ghdnet\ghd\CA\Waterloo\Projects\662\11208041\Digital_Design\ACAD 2018\Figures\RPT3\11208041(RPT3)GN-WA003.DWG
Plot Date: 10 July 2020 7:51 AM
Data Source: MICHIGAN STATE PLANE SOUTH, NAD 83 USING INTERNATIONAL FEET, NGVD 88 TOPO - SANBORN, 1996

Appendices

Appendix A
Draft Exhibit for the Restrictive Covenant – Low Level PCB Impacted Area



1	X = 13244588.2394, Y = 713414.4580
L1	S 53d22'31" E @ 94.35
2	X = 13244663.9620, Y = 713358.1708
L2	S 38d18'40" W @ 85.66
3	X = 13244610.8616, Y = 713290.9608
L3	N 66d0'7" W @ 132.78
4	X = 13244489.5565, Y = 713344.9646
L4	N 54d50'47" E @ 120.70



KEY MAP
SCALE: 1" = 800'

LEGEND

PCB REMEDIATION WASTE/LOW OCCUPANCY AREA AS DEFINED IN 40 CFR 761.61

APPROXIMATE PROPERTY BOUNDARY

Exhibit

NOTE:
MICHIGAN SOUTH STATE PLANE COORDINATE SYSTEM
NAD 83, IN U.S. INTERNATIONAL FEET.

Appendix B
Written Certification

As required by 40 CFR761.61(a)(3)(i)(E), I certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the Site, are herein provided on CD for the RACER Former Nodular Industrial Land Site at 2100 Veterans Memorial Parkway, Saginaw, Michigan, for U.S. EPA inspection.

David Favero

July 10, 2020

Owner Representative

Date

The following documents are included on this CD to comply with the certification that is required by 40 CFR Part 761.61,

- RFI Work Plan – Volume I (EMCON, June 1998)
- RFI Work Plan – Volume II (EMCON, June 1998)
- RFI – Phase 1C Report – Revised (CRA, March 2007)
- Additional Delineation of PCB and Manganese Impacts - Letter (CRA, February 2015)
- Additional Delineation of PCB and Manganese Impacts – Memorandum (CRA, May 2015)
- Additional Delineation of PCB and Manganese Impacts – Memorandum (GHD, February 2017)
- Ecological Screening Assessment for Isolated Wetlands Recently Formed in IU G (GHD, January 2019)

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

John-Eric Pardys
john-eric.pardys@ghd.com
519.340.4316

www.ghd.com

Appendix A.2
Interim Measures Work Plan – 40 CFR 761.61(c) Approval

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: **LU-16J**

Mr. Grant Trigger
Michigan Cleanup Manager
RACER Trust
1505 Woodward Avenue, Suite 200
Detroit, MI 48226

RE: Interim Measures Work Plan - 40 CFR §761.61(c) Approval
Investigative Unit G PCB-Impacted Soil Removal
RACER Former Nodular Industrial Lands, Saginaw, Michigan

Dear Mr. Trigger:

On July 9th, 2020, GHD, on behalf of the Revitalizing Auto Communities Environmental Response Trust (RACER), requested that the U.S. Environmental Protection Agency Regional Administrator approve its July 9th, 2020 Interim Measures Work Plan (IMWP), including the proposed disposal under the risk-based disposal provisions of the polychlorinated biphenyl (PCB) regulations at 40 Code of Federal Regulations (CFR) §761.61(c). The IWMP included a written certification consistent with 40 CFR §761.61 (a)(3)(E). Under the Toxic Substances Control Act (TSCA) delegation 12-5, the Regional Administrator has redelegated his authority to approve risk-based disposal of PCB remediation waste to the Director of the Land, Chemicals and Redevelopment Division.

The IMWP addresses the excavation, sampling and off-site disposal activities of soils contaminated with PCBs at Investigative Unit (IU) G, the former Nodular Iron Plant at the RACER property located at 2100 Veterans Memorial Parkway, Saginaw, Michigan. RACER is conducting the PCB cleanup and corrective action measures under a Resource Conservation and Recovery Act (RCRA) Administrative Order on Consent (RCRA-05-2011-0023).

RACER previously performed an ecological risk assessment at IU G, as the PCB-impacted area within IU G is currently inundated and has been determined to be a wetland by the State of Michigan. Because the activities may include sediments that are not eligible for the self-implementing procedures in 40 C.F.R. § 761.61(a), EPA is reviewing the proposal for sampling, cleanup, and disposal of PCB remediation waste under the risk-based disposal approval provisions of 40 CFR § 761.61(c). EPA has determined that the proposed cleanup measures, and the nature of any post-removal, residual PCB concentrations will not present unreasonable risk of

injury to ecological health or the environment and is approving RACER's cleanup and disposal of these PCB Remediation Wastes under 40 CFR § 761.61(c) with the following conditions:

1) RACER will remove IU G PCB impacted soils for off-site disposal in accordance with Sections 3.1.5 and 3.1.7, Figures 1.2 and 2.1 of the IMWP.

2) PCB remediation waste, previously characterized and shown to be at concentrations of < 50 mg/kg PCB, will be disposed of off-site based on in-situ concentrations in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(ii) and (a)(5)(v)(A).

3) The excavated area will be backfilled with clean material and re-seeded per Section 3.1.9 of the IWMP.

RACER is responsible for ensuring continued compliance with this approval, all applicable provisions of TSCA and the federal PCB regulations. Any departure from the conditions set forth in this letter or the sections of the July 9, 2020 IWMP, referenced above, must receive prior written authorization from the Remediation Branch of the Land, Chemicals, and Redevelopment Division. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by RACER are authorized to conduct the activities set forth in the IMWP. RACER is responsible for ensuring that it has selected transporters and disposal facilities that are authorized to conduct these activities in accordance with all applicable federal, state, and local statues and regulations. This letter does not relieve RACER from compliance with any other federal, state or local regulation and does not preclude EPA from initiating any enforcement action, including an action seeking civil penalties for any violation of federal regulations.

If you have any questions regarding this matter, please contact Zachary Sasnow of my staff at (312) 886-0258.

Sincerely,

Edward Nam 9/2/2020

Edward Nam
Director
Land, Chemicals and Redevelopment Division

Appendix B
Analytical Laboratory Reports

Appendix B.1
Waste Characterization

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-133601-1
Client Project/Site: 11208041, RACER Nodular Iron

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
7/28/2020 7:06:12 AM

Denise Heckler, Project Manager II
(330)966-9477
Denise.Heckler@Eurofinset.com

Table of Contents

Case Narrative

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Job ID: 240-133601-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-133601-1

Comments
No additional comments.

Receipt
The sample was received on 7/17/2020 10:00 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method 8260B: Batch 240-443994 is reported without a matrix spike/matrix spike duplicate (MS/MSD), because the MS/MSD parent sample was reported in another batch. The MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-133601-1	S-58507-071320-SSH-0520	Solid	07/13/20 11:15	07/17/20 10:00	

Detection Summary

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Client Sample ID: S-58507-071320-SSH-0520

Lab Sample ID: 240-133601-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0055	J	0.050	0.0041	mg/L	1		6010B	TCLP
Barium	0.17	J B	0.50	0.0013	mg/L	1		6010B	TCLP
Cadmium	0.00074	J	0.050	0.00020	mg/L	1		6010B	TCLP
Chromium	0.011	J B	0.050	0.00063	mg/L	1		6010B	TCLP
Lead	0.0068	J	0.050	0.0028	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1311	TCLP Extraction	SW846	TAL CAN
3010A	Preparation, Total Metals	SW846	TAL CAN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
7470A	Preparation, Mercury	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: S-58507-071320-SSH-0520
Date Collected: 07/13/20 11:15
Date Received: 07/17/20 10:00

Lab Sample ID: 240-133601-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00019	mg/L			07/24/20 00:33	1
1,2-Dichloroethane	0.025	U	0.025	0.00021	mg/L			07/24/20 00:33	1
2-Butanone (MEK)	0.25	U	0.25	0.0012	mg/L			07/24/20 00:33	1
Benzene	0.025	U	0.025	0.00013	mg/L			07/24/20 00:33	1
Carbon tetrachloride	0.025	U	0.025	0.00026	mg/L			07/24/20 00:33	1
Chlorobenzene	0.025	U	0.025	0.00014	mg/L			07/24/20 00:33	1
Chloroform	0.025	U	0.025	0.00013	mg/L			07/24/20 00:33	1
Tetrachloroethene	0.025	U	0.025	0.00015	mg/L			07/24/20 00:33	1
Trichloroethene	0.025	U	0.025	0.00010	mg/L			07/24/20 00:33	1
Vinyl chloride	0.025	U	0.025	0.00020	mg/L			07/24/20 00:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*74 - 124*		*07/24/20 00:33*	*1*
4-Bromofluorobenzene (Surr)	*93*		*77 - 120*		*07/24/20 00:33*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/24/20 00:33*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*07/24/20 00:33*	*1*

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: S-58507-071320-SSH-0520
Date Collected: 07/13/20 11:15
Date Received: 07/17/20 10:00

Lab Sample ID: 240-133601-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00033	mg/L		07/22/20 09:45	07/24/20 21:49	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.0020	mg/L		07/22/20 09:45	07/24/20 21:49	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.0018	mg/L		07/22/20 09:45	07/24/20 21:49	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.0021	mg/L		07/22/20 09:45	07/24/20 21:49	1
Hexachlorobenzene	0.00080	U	0.00080	0.00016	mg/L		07/22/20 09:45	07/24/20 21:49	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00054	mg/L		07/22/20 09:45	07/24/20 21:49	1
Hexachloroethane	0.0040	U	0.0040	0.00040	mg/L		07/22/20 09:45	07/24/20 21:49	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00019	mg/L		07/22/20 09:45	07/24/20 21:49	1
2-Methylphenol	0.0040	U	0.0040	0.00021	mg/L		07/22/20 09:45	07/24/20 21:49	1
Nitrobenzene	0.0040	U	0.0040	0.00051	mg/L		07/22/20 09:45	07/24/20 21:49	1
Pentachlorophenol	0.016	U	0.016	0.0031	mg/L		07/22/20 09:45	07/24/20 21:49	1
Pyridine	0.0040	U	0.0040	0.00036	mg/L		07/22/20 09:45	07/24/20 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*39 - 120*	*07/22/20 09:45*	*07/24/20 21:49*	*1*
2-Fluorophenol (Surr)	*60*		*10 - 120*	*07/22/20 09:45*	*07/24/20 21:49*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*33 - 120*	*07/22/20 09:45*	*07/24/20 21:49*	*1*
Nitrobenzene-d5 (Surr)	*60*		*33 - 120*	*07/22/20 09:45*	*07/24/20 21:49*	*1*
Phenol-d5 (Surr)	*52*		*10 - 120*	*07/22/20 09:45*	*07/24/20 21:49*	*1*
Terphenyl-d14 (Surr)	*86*		*36 - 122*	*07/22/20 09:45*	*07/24/20 21:49*	*1*

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: S-58507-071320-SSH-0520
Date Collected: 07/13/20 11:15
Date Received: 07/17/20 10:00

Lab Sample ID: 240-133601-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0055**	**J**	0.050	0.0041	mg/L		07/22/20 14:00	07/23/20 21:52	1
Barium	**0.17**	**J B**	0.50	0.0013	mg/L		07/22/20 14:00	07/23/20 21:52	1
Cadmium	**0.00074**	**J**	0.050	0.00020	mg/L		07/22/20 14:00	07/23/20 21:52	1
Chromium	**0.011**	**J B**	0.050	0.00063	mg/L		07/22/20 14:00	07/23/20 21:52	1
Lead	**0.0068**	**J**	0.050	0.0028	mg/L		07/22/20 14:00	07/23/20 21:52	1
Selenium	0.050	U	0.050	0.0060	mg/L		07/22/20 14:00	07/23/20 21:52	1
Silver	0.050	U	0.050	0.00062	mg/L		07/22/20 14:00	07/23/20 21:52	1

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: S-58507-071320-SSH-0520
Date Collected: 07/13/20 11:15
Date Received: 07/17/20 10:00

Lab Sample ID: 240-133601-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		07/22/20 15:00	07/23/20 17:18	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

GC/MS VOA

Leach Batch: 443785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	1311	
LB 240-443785/1-A MB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 443994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	8260B	443785
LB 240-443785/1-A MB	Method Blank	TCLP	Solid	8260B	443785
LCS 240-443994/29	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 443585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	1311	

Prep Batch: 443713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	3510C	443585
MB 240-443713/12-A	Method Blank	Total/NA	Solid	3510C	
LCS 240-443713/13-A	Lab Control Sample	Total/NA	Solid	3510C	

Analysis Batch: 444158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	8270C	443713
MB 240-443713/12-A	Method Blank	Total/NA	Solid	8270C	443713

Analysis Batch: 444408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-443713/13-A	Lab Control Sample	Total/NA	Solid	8270C	443713

Metals

Leach Batch: 443585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	1311	
LB 240-443585/1-B	Method Blank	TCLP	Solid	1311	
LB 240-443585/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 443693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	3010A	443585
LB 240-443585/1-B	Method Blank	TCLP	Solid	3010A	443585
MB 240-443693/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 240-443693/3-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 443695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	7470A	443585
LB 240-443585/1-C	Method Blank	TCLP	Solid	7470A	443585
MB 240-443695/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 240-443695/3-A	Lab Control Sample	Total/NA	Solid	7470A	

QC Association Summary

Client: GHD Services Inc.
Job ID: 240-133601-1
Project/Site: 11208041, RACER Nodular Iron

Metals

Analysis Batch: 443964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	6010B	443693
LB 240-443585/1-B	Method Blank	TCLP	Solid	6010B	443693
MB 240-443693/2-A	Method Blank	Total/NA	Solid	6010B	443693
LCS 240-443693/3-A	Lab Control Sample	Total/NA	Solid	6010B	443693

Analysis Batch: 444127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-133601-1	S-58507-071320-SSH-0520	TCLP	Solid	7470A	443695
LB 240-443585/1-C	Method Blank	TCLP	Solid	7470A	443695
MB 240-443695/2-A	Method Blank	Total/NA	Solid	7470A	443695
LCS 240-443695/3-A	Lab Control Sample	Total/NA	Solid	7470A	443695

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 240-443994/29
Matrix: Solid
Analysis Batch: 443994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.00	1.04		mg/L		104	80 - 128
1,2-Dichloroethane	1.00	0.904		mg/L		90	67 - 125
2-Butanone (MEK)	2.00	2.09		mg/L		105	55 - 127
Benzene	1.00	1.16		mg/L		116	80 - 122
Carbon tetrachloride	1.00	0.841		mg/L		84	67 - 126
Chlorobenzene	1.00	1.01		mg/L		101	80 - 120
Chloroform	1.00	1.05		mg/L		105	80 - 120
Tetrachloroethene	1.00	0.831		mg/L		83	76 - 120
Trichloroethene	1.00	0.956		mg/L		96	77 - 120
Vinyl chloride	1.00	1.10		mg/L		110	60 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 124*
4-Bromofluorobenzene (Surr)	*105*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*93*		*80 - 120*

Lab Sample ID: LB 240-443785/1-A MB
Matrix: Solid
Analysis Batch: 443994

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00019	mg/L			07/23/20 21:10	1
1,2-Dichloroethane	0.025	U	0.025	0.00021	mg/L			07/23/20 21:10	1
2-Butanone (MEK)	0.25	U	0.25	0.0012	mg/L			07/23/20 21:10	1
Benzene	0.025	U	0.025	0.00013	mg/L			07/23/20 21:10	1
Carbon tetrachloride	0.025	U	0.025	0.00026	mg/L			07/23/20 21:10	1
Chlorobenzene	0.025	U	0.025	0.00014	mg/L			07/23/20 21:10	1
Chloroform	0.025	U	0.025	0.00013	mg/L			07/23/20 21:10	1
Tetrachloroethene	0.025	U	0.025	0.00015	mg/L			07/23/20 21:10	1
Trichloroethene	0.025	U	0.025	0.00010	mg/L			07/23/20 21:10	1
Vinyl chloride	0.025	U	0.025	0.00020	mg/L			07/23/20 21:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 124*		*07/23/20 21:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*77 - 120*		*07/23/20 21:10*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/23/20 21:10*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*07/23/20 21:10*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-443713/12-A
Matrix: Solid
Analysis Batch: 444158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00033	mg/L		07/22/20 09:45	07/24/20 14:33	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.0020	mg/L		07/22/20 09:45	07/24/20 14:33	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-443713/12-A
Matrix: Solid
Analysis Batch: 444158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.0018	mg/L		07/22/20 09:45	07/24/20 14:33	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.0021	mg/L		07/22/20 09:45	07/24/20 14:33	1
Hexachlorobenzene	0.00080	U	0.00080	0.00016	mg/L		07/22/20 09:45	07/24/20 14:33	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00054	mg/L		07/22/20 09:45	07/24/20 14:33	1
Hexachloroethane	0.0040	U	0.0040	0.00040	mg/L		07/22/20 09:45	07/24/20 14:33	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00019	mg/L		07/22/20 09:45	07/24/20 14:33	1
2-Methylphenol	0.0040	U	0.0040	0.00021	mg/L		07/22/20 09:45	07/24/20 14:33	1
Nitrobenzene	0.0040	U	0.0040	0.00051	mg/L		07/22/20 09:45	07/24/20 14:33	1
Pentachlorophenol	0.016	U	0.016	0.0031	mg/L		07/22/20 09:45	07/24/20 14:33	1
Pyridine	0.0040	U	0.0040	0.00036	mg/L		07/22/20 09:45	07/24/20 14:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*39 - 120*	*07/22/20 09:45*	*07/24/20 14:33*	*1*
2-Fluorophenol (Surr)	*71*		*10 - 120*	*07/22/20 09:45*	*07/24/20 14:33*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*33 - 120*	*07/22/20 09:45*	*07/24/20 14:33*	*1*
Nitrobenzene-d5 (Surr)	*71*		*33 - 120*	*07/22/20 09:45*	*07/24/20 14:33*	*1*
Phenol-d5 (Surr)	*63*		*10 - 120*	*07/22/20 09:45*	*07/24/20 14:33*	*1*
Terphenyl-d14 (Surr)	*95*		*36 - 122*	*07/22/20 09:45*	*07/24/20 14:33*	*1*

Lab Sample ID: LCS 240-443713/13-A
Matrix: Solid
Analysis Batch: 444408

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0543		mg/L		68	46 - 120
2,4,5-Trichlorophenol	0.0800	0.0586		mg/L		73	61 - 120
2,4,6-Trichlorophenol	0.0800	0.0590		mg/L		74	63 - 120
2,4-Dinitrotoluene	0.0800	0.0580		mg/L		73	66 - 120
Hexachlorobenzene	0.0800	0.0628		mg/L		79	57 - 120
Hexachlorobutadiene	0.0800	0.0527		mg/L		66	39 - 120
Hexachloroethane	0.0800	0.0571		mg/L		71	40 - 120
3 & 4 Methylphenol	0.0800	0.0589		mg/L		74	45 - 120
2-Methylphenol	0.0800	0.0561		mg/L		70	50 - 120
Nitrobenzene	0.0800	0.0566		mg/L		71	56 - 120
Pentachlorophenol	0.160	0.102		mg/L		64	32 - 120
Pyridine	0.160	0.0778		mg/L		49	18 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*68*		*39 - 120*
2-Fluorophenol (Surr)	*64*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*81*		*33 - 120*
Nitrobenzene-d5 (Surr)	*70*		*33 - 120*
Phenol-d5 (Surr)	*57*		*10 - 120*
Terphenyl-d14 (Surr)	*84*		*36 - 122*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-443693/2-A
Matrix: Solid
Analysis Batch: 443964

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0041	mg/L		07/22/20 14:00	07/23/20 20:48	1
Barium	0.50	U	0.50	0.0013	mg/L		07/22/20 14:00	07/23/20 20:48	1
Cadmium	0.050	U	0.050	0.00020	mg/L		07/22/20 14:00	07/23/20 20:48	1
Chromium	0.050	U	0.050	0.00063	mg/L		07/22/20 14:00	07/23/20 20:48	1
Lead	0.050	U	0.050	0.0028	mg/L		07/22/20 14:00	07/23/20 20:48	1
Selenium	0.050	U	0.050	0.0060	mg/L		07/22/20 14:00	07/23/20 20:48	1
Silver	0.050	U	0.050	0.00062	mg/L		07/22/20 14:00	07/23/20 20:48	1

Lab Sample ID: LCS 240-443693/3-A
Matrix: Solid
Analysis Batch: 443964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.13		mg/L		106	50 - 150
Barium	2.00	1.94		mg/L		97	50 - 150
Cadmium	1.00	1.01		mg/L		101	50 - 150
Chromium	1.00	0.994		mg/L		99	50 - 150
Lead	1.00	0.921		mg/L		92	50 - 150
Selenium	2.00	2.05		mg/L		102	50 - 150
Silver	0.100	0.103		mg/L		103	50 - 150

Lab Sample ID: LB 240-443585/1-B
Matrix: Solid
Analysis Batch: 443964

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 443693

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0041	mg/L		07/22/20 14:00	07/23/20 20:44	1
Barium	0.00248	J	0.50	0.0013	mg/L		07/22/20 14:00	07/23/20 20:44	1
Cadmium	0.050	U	0.050	0.00020	mg/L		07/22/20 14:00	07/23/20 20:44	1
Chromium	0.00138	J	0.050	0.00063	mg/L		07/22/20 14:00	07/23/20 20:44	1
Lead	0.050	U	0.050	0.0028	mg/L		07/22/20 14:00	07/23/20 20:44	1
Selenium	0.050	U	0.050	0.0060	mg/L		07/22/20 14:00	07/23/20 20:44	1
Silver	0.050	U	0.050	0.00062	mg/L		07/22/20 14:00	07/23/20 20:44	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-443695/2-A
Matrix: Solid
Analysis Batch: 444127

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		07/22/20 15:00	07/23/20 16:46	1

Lab Sample ID: LCS 240-443695/3-A
Matrix: Solid
Analysis Batch: 444127

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00503		mg/L		101	80 - 120

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LB 240-443585/1-C
Matrix: Solid
Analysis Batch: 444127

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 443695

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		07/22/20 15:00	07/23/20 16:44	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208041, RACER Nodular Iron

Job ID: 240-133601-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(74-124)	(77-120)	(80-120)	(80-120)
LCS 240-443994/29	Lab Control Sample	87	105	104	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(74-124)	(77-120)	(80-120)	(80-120)
240-133601-1	S-58507-071320-SSH-0520	95	93	100	99
LB 240-443785/1-A MB	Method Blank	93	94	99	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(39-120)	(10-120)	(33-120)	(33-120)	(10-120)	(36-122)
LCS 240-443713/13-A	Lab Control Sample	68	64	81	70	57	84
MB 240-443713/12-A	Method Blank	79	71	84	71	63	95

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(39-120)	(10-120)	(33-120)	(33-120)	(10-120)	(36-122)
240-133601-1	S-58507-071320-SSH-0520	68	60	71	60	52	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: GHD Services Inc.
Job ID: 240-133601-1
Project/Site: 11208041, RACER Nodular Iron

PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Lab Chronicle

Client: GHD Services Inc.
Job ID: 240-133601-1
Project/Site: 11208041, RACER Nodular Iron

Client Sample ID: S-58507-071320-SSH-0520
Lab Sample ID: 240-133601-1

Date Collected: 07/13/20 11:15
Matrix: Solid
Date Received: 07/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			443785	07/22/20 16:05	DRJ	TAL CAN
TCLP	Analysis	8260B		1	443994	07/24/20 00:33	TJL1	TAL CAN
TCLP	Leach	1311			443585	07/21/20 16:30	DRJ	TAL CAN
TCLP	Prep	3510C			443713	07/22/20 09:45	MDH	TAL CAN
TCLP	Analysis	8270C		1	444158	07/24/20 21:49	MRU	TAL CAN
TCLP	Leach	1311			443585	07/21/20 16:30	DRJ	TAL CAN
TCLP	Prep	3010A			443693	07/22/20 14:00	MRL	TAL CAN
TCLP	Analysis	6010B		1	443964	07/23/20 21:52	WKD	TAL CAN
TCLP	Leach	1311			443585	07/21/20 16:30	DRJ	TAL CAN
TCLP	Prep	7470A			443695	07/22/20 15:00	MRL	TAL CAN
TCLP	Analysis	7470A		1	444127	07/23/20 17:18	SLD	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 240-133601-1
Project/Site: 11208041, RACER Nodular Iron

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

MICHIGAN 190

Chain of Custody Record 459850

eurofins | Environment Testing TestAmerica

50139

Address:

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: JF Pardys	Site Contact: JF Pardys	Date: 7/13/2020	COC No: 459850
Company Name: GHD	Tel/Email: 226 339 2769	Lab Contact: D. Heltzel	Carrier: FedEx	1 of 1 COCs
Address: 26850 Haggerty Rd	Analysis Turnaround Time			Sampler: S. Hovemeyer
City/State/Zip: Farmington Hills, MI	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below			Walk-in Client:
Fax: 248 893 3400	☒ 2 weeks			Lab Sampling:
Project Name: RacyTrust Nodular	☐ 1 week			
Site: 11208041-A01-001420	☐ 2 days			Job / SDG No.:
PO # 34043100	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCLP VOCs	TCLP SVOCs	TCLP metals	Sample Specific Notes:
S-58502-071320-SSH-0520	7/13/20	1115	G	SO	3	N	N	X	X	X	

SSH

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

240-133601 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for Months

Special Instructions/QC Requirements & Comments:

7.2/7.6

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 119812 119813 | Cooler Temp. (°C): Obs'd: Corr'd: Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	GHD	7/13/20 1500			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TN	7/16/20		ETA	7/17/20 1000
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				7-15-2020/0933	

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 133601

Client GLFD Site Name

Cooler Received on 7/17/20 Opened on 7/17/20

Cooler unpacked by: Amount

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # ETA Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-10 (CF **+0.7** °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN #IR-11 (CF **+0.9**°C) Observed Cooler Temp. 3.0 °C Corrected Cooler Temp. 3.9 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC911298
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
16. Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

Appendix B.2
Wipe Sample

Fibertec
environmental
services

Friday, September 18, 2020

Fibertec Project Number:	98031
Project Identification:	200517 /200517
Submittal Date:	09/17/2020

Mr. Thomas Holdeman
Job Site Services
4395 Wilder Road
Bay City, MI 48706

Dear Mr. Holdeman,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sharon Rakow at 4:18 PM, Sep 18, 2020

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Job Site Services**	Sample Description:	**WP-091720-01**	Chain of Custody:	**192944**
Client Project Name:	**200517**	Sample No:	**WP-01**	Collect Date:	**09/17/20**
Client Project No:	**200517**	Sample Matrix:	**Wipe**	Collect Time:	**09:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 98031-001** **Matrix: Wipe**
Method: FES S-130/EPA 8082A **Description: WP-091720-01**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Aroclor-1016	U	L+	µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
	2. Aroclor-1221	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
	3. Aroclor-1232	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
	4. Aroclor-1242	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
	5. Aroclor-1248	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
	6. Aroclor-1254	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
	7. Aroclor-1260	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
‡	8. Aroclor-1262	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA
‡	9. Aroclor-1268	U		µg/100 cm2	5.0	0.50	09/17/20	PS20I17G	09/18/20	SF20I18B	BDA

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Appendix C
Permit Documentation

Appendix C.1
EGLE Water Resources Division Permit – WRP019885 V.1

EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
WATER RESOURCES DIVISION
PERMIT

Issued To:

David Favero
1505 Woodward Ave Ste 200
Detroit, MI 48226

Permit No:	**WRP019885 v.1**
Submission No.:	**HNT-09MT-RQM1E**
Site Name:	**RACER-Saginaw Nodular Indust**
Issued:	**January 16, 2020**
Revised:	
Expires:	**January 16, 2025**

This permit is being issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division, under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); specifically:

- ☐ **Part 301, Inland Lakes and Streams**
- ☒ **Part 303, Wetlands Protection**
- ☐ **Part 315, Dam Safety**
- ☐ **Part 323, Shorelands Protection and Management**
- ☐ **Part 325, Great Lakes Submerged Lands**
- ☐ **Part 353, Sand Dunes Protection and Management**
- ☒ **Part 31, Water Resources Protection (Floodplain Regulatory Authority)**

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Authorized Activity:

Removal of 60 linear feet by 20 linear feet of hazardous waste requested by EPA. Fill 60 linear feet by 20 linear feet with sand once project is done. Excavate 45 cubic yards of material and place up to 45 cubic yards of fill within the 100-year floodplain of the Saginaw River, in accordance with the attached plans and specifications of this permit.

Waterbody Affected: Emergent Wetland and Saginaw Floodplain
Property Location: Saginaw County, City of Saginaw, T 12 N/R 05 E/Section 05

Authority granted by this permit is subject to the following limitations:

A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31 of the NREPA.

C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.
G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
I. Permittee shall notify EGLE within one week after the completion of the activity authorized by this permit by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
J. This permit shall not be assigned or transferred without the written approval of EGLE.
K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31 of the NREPA, and wetlands).
M. In issuing this permit, EGLE has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, EGLE may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, EGLE may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from EGLE. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by EGLE prior to being implemented.
Q. This permit may be transferred to another person upon written approval of EGLE. The permittee must submit a written request to EGLE to transfer the permit to the new owner. The new owner must also submit a written request to EGLE to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties that includes all the above information may be provided to EGLE. EGLE will review the request and, if approved, will provide written notification to the new owner.
R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.

S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).
U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the water body are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the Michigan Department of Natural Resources, Fisheries Division.
Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:
    1. Authority granted by this permit does not waive permit or program requirements under Part 91 of the NREPA or the need to acquire applicable permits from the CEA. To locate the Soil Erosion Program Administrator for your county, visit www.mi.gov/eglestormwater and select "Soil Erosion and Sedimentation Control Program" under "Related Links."
    2. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state, or federal approval or authorization necessary to conduct the activity.
    3. No fill, excess soil, or other material shall be placed in any wetland, floodplain, or surface water area not specifically authorized by this permit, its plans, and specifications.
    4. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
    5. The permit placard shall be kept posted at the work site in a prominent location at all times for the duration of the project or until permit expiration.
    6. Prior to the initiation of any permitted construction activity, a sedimentation barrier shall be installed along the entire route of the disturbed wetland area and maintained in good working order until permanent stabilization and re-vegetation of all disturbed areas has occurred. The sedimentation barrier shall be removed after re-vegetation.
    7. Construction must be undertaken and completed during the dry period of the wetland, or when frozen.
    8. If the area does not dry out or freeze, construction shall be done on equipment mats to prevent compaction of the soil.
    9. Upon completion of the project, the disturbed wetland areas shall be restored to the original contour elevation, revegetated and reseeded with species native to Michigan appropriate to the site, and mulched to prevent erosion.
    10. All fill/backfill shall consist of clean inert material which will not cause siltation nor contain soluble chemicals, organic matter, pollutants, contaminants or **broken concrete**. All fill shall be contained in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be stabilized with sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.
    11. The design flood or 1% annual chance (100-year) floodplain elevation at this location on the Saginaw River is 589.3 feet NGVD29 (588.5 feet NAVD88).
    12. Fill within the 100-year floodplain is limited to 45 cubic yards.

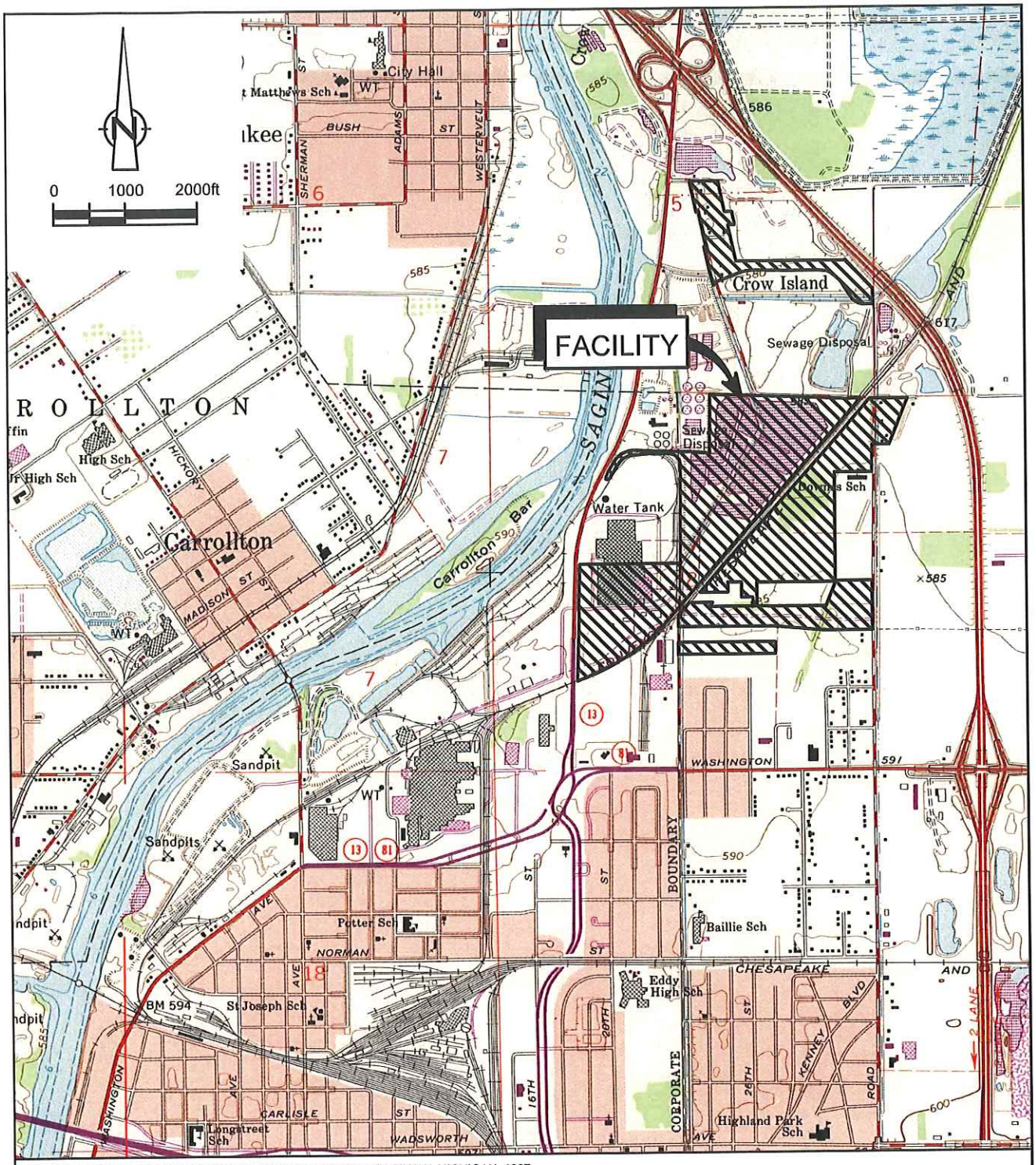
13. The compensating cut (excavations) for floodplain fill, as authorized by this permit, shall be completed prior to, or concurrently with, the placement of the fill. The compensating cut and fill areas shall be properly stabilized to prevent soil erosion and off site sedimentation in conformance with Part 91, Soil Erosion and Sedimentation Control, of the NREPA.
14. Fill shall not be placed to prevent surface water drainage across the site. Site runoff shall be directed to public or natural drainage ways and not unnaturally discharged onto adjacent properties.
15. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
16. All fill/backfill shall consist of clean inert material that will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fill shall be contained in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be stabilized with sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.
17. Unless specifically stated under the "Permitted Activity" of this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a floodplain are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
18. Under Appendix G of the Michigan Building Code 2009, a local building permit is required for development located in flood hazard areas.
19. The project is located within a community that participates in the National Flood Insurance Program (NFIP). As a participant in the NFIP, the community must comply with the Michigan Building Code (including Appendix G and listed supporting materials); the Michigan Residential Code; and Title 44 of the Code of Federal Regulations, Part 60, Criteria for Land Management and Use. The community is also responsible to ensure that its floodplain maps and studies are maintained to show changes to flood elevations and flood delineations as described in 44 CFR, Part 65, Identification and Mapping of Special Hazard Areas.
20. This permit is limited to authorizing the construction as specified above and carries with it no assurances or implications that associated lake, stream, wetland or floodplain areas can be developed and serviced by the structures authorized by this permit.
21. The permittee is hereby notified that portions of the parcel, not covered by this permit, fall under the regulatory authority of Part 301, Inland Lakes and Streams, and/or Part 31, Floodplain Regulatory Authority/Water Resources Protection, and/or Part 303, Wetlands Protection, of the NREPA. A permit from the EGLE Water Resources Division may be required for certain regulated activities. Failure to comply with the requirements of the NREPA may subject the owner to compliance actions as provided by statute.
22. Historic artifacts could occur on or near this project site and may be impacted by your activities. If during the course of construction artifacts are encountered, immediately contact the Office of the State Archaeologist, at 517-373-6358.

23. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by EGLE, will be for a five-year period beginning on the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.

Issued By:

Whitney Hoppes
Environmental Quality Analyst
Bay City District Office
Water Resources Division
989-355-4959

Attached; Plans
cc: City of Saginaw Clerk
Saginaw County Drain Commissioner
Saginaw County CEA
City of Saginaw Building Official/Floodplain Administrator
John-Eric Pardys- Agent



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE; SAGINAW, MICHIGAN 1967

figure 1.1

SITE LOCATION
REVITALIZING AUTOMOTIVE COMMUNITY
ENVIRONMENTAL RESPONSE
Saginaw, Michigan

58502-T02(014)GN-WA005 SEP 26, 2016

NOTE

CONTOURS CREATED USING 2011 SAGINAW BAY LiDAR DATASET AND GHD UAV LiDAR DATASET GENERATED ON MAY 3, 2016.

Source: 2011 SAGINAW BAY, MICHIGAN LIDAR DATASET AND GHD UAV FLIGHT MAY 3, 2016

0 200 500ft

Coordinate System:
MICHIGAN SOUTH NAD83
INTERNATIONAL FEET

LEGEND

- APPROXIMATE LIMITS OF RACER PROPERTY
- MINOR CONTOUR INTERVAL (1 FOOT)
- MAJOR CONTOUR INTERVAL (5 FEET)
- ESTIMATED FLOODPLAIN CONTOUR (590 FEET)

CAD File: 20160504_ MichganS NAD83 IntFt NAVD83.dwg

GHD

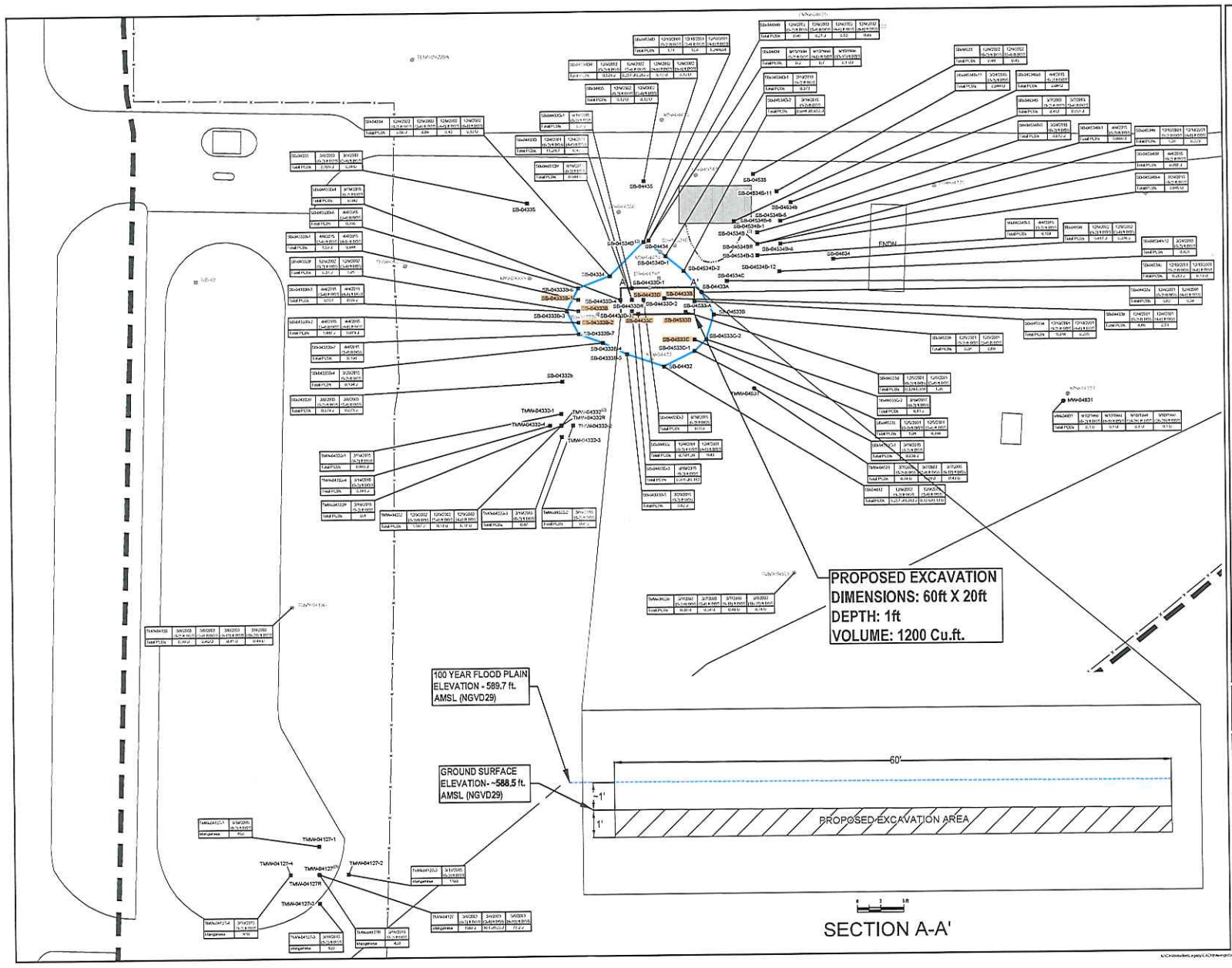
REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE (RACER)

58502-T02

Jul 28, 2016

LiDAR GENERATED SITE CONTOURS AND UAV ORTHOIMAGERY - MAY 3, 2016

FIGURE 1



LEGEND

- INVESTIGATIVE UNIT BOUNDARY AND IDENTIFIER
- MONITORING WELL LOCATION - RFI
- SOIL BORING LOCATION - RFI
- SAMPLE LOCATION - NO REPORTED DATA
- PCBs GREATER THAN 1ppm
- DELINEATION BOUNDARY
- AREA OF STANDING WATER (~10 FEET DEEP IN SOME SPOTS)
- EXISTING CONCRETE SLAB FROM HISTORICAL OIL HOUSE STORAGE UNIT

SAMPLE LOCATION		
SB-04634	12/9/02	12/9/02 — SAMPLE DATE
	(5.3-6 ft bgs)	(5.48 ft bgs) — SAMPLE DEPTH
Total PCBs	0.357 J	0.271 J — RESULT (mg/kg)
	PARAMETER	

NOTES:

1. TOTAL PCBs WERE SUMMED BY ADDING THE POSITIVE DETECTIONS PLUS HALF THE QUANTITATION LIMITS FOR NON-DETECT RESULTS OF AROCLORS DETECTED ELSEWHERE IN THIS AREA. IF QUANTITATION LIMITS ARE NOT AVAILABLE, HALF THE REPORTING LIMITS ARE USED FOR NON-DETECTED VALUES.
2. THE MOST RECENT SAMPLE RESULTS REPORTED PCB RESULTS BELOW 1 mg/kg (TSCA - CLEANUP LEVEL FOR BULK REMEDIATION WASTE IN HIGH-OCCUPANCY AREA WITHOUT FURTHER CONDITIONS) AT ALL DEPTH INTERVALS. THEREFORE, NO ADDITIONAL ACTIVITIES ARE PROPOSED FOR THIS LOCATION.
3. THE MOST RECENT SAMPLE RESULTS REPORTED MANGANESE RESULTS BELOW 1,600 mg/kg (MDQ PART 201 NONRESIDENTIAL PARTICULATE INHALATION CRITERIA) AT ALL DEPTH INTERVALS. THEREFORE, NO ADDITIONAL ACTIVITIES ARE PROPOSED FOR THIS LOCATION.

KEY MAP

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

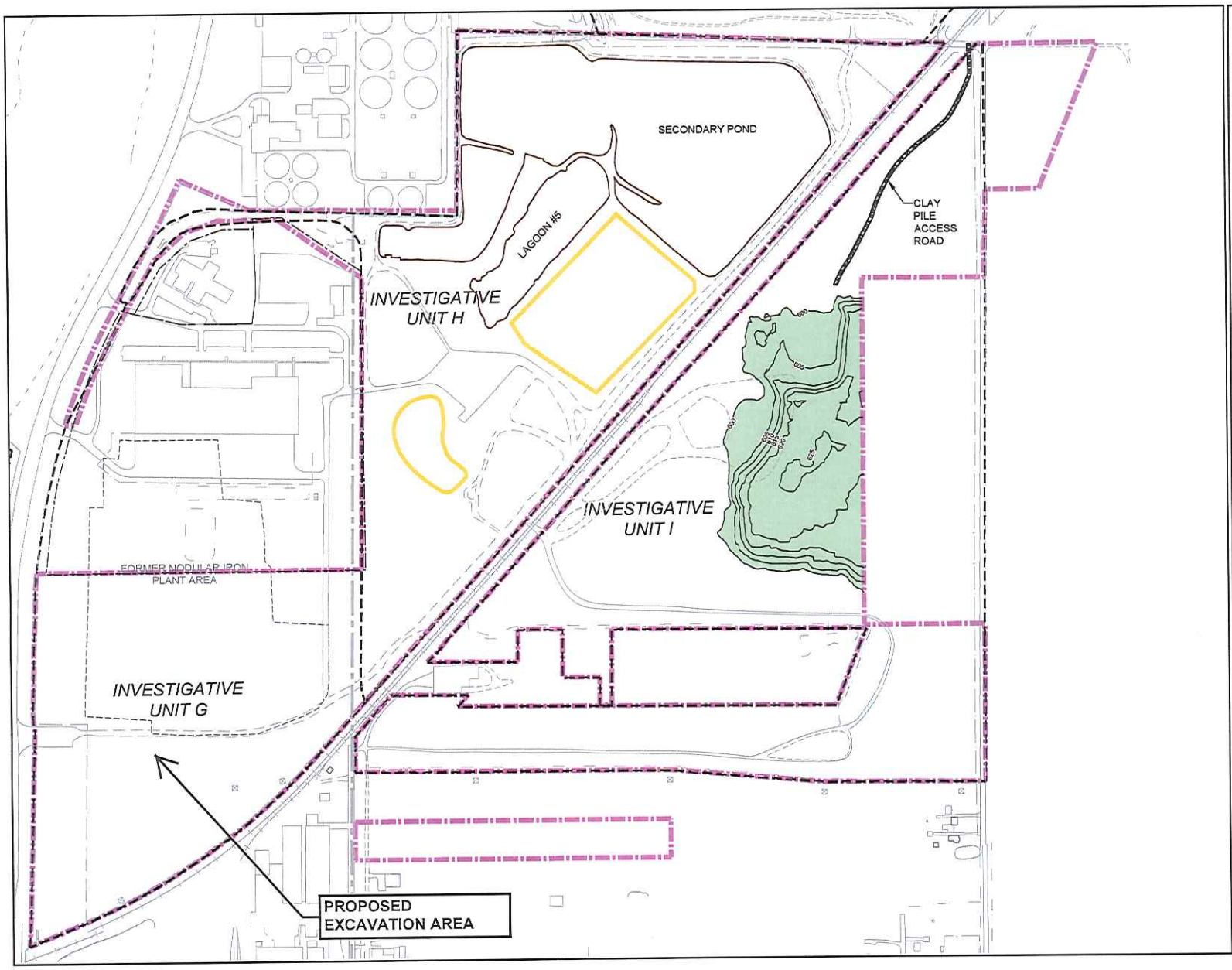
RACER
SAGINAW NODULAR IRON INDUSTRIAL LAND
SAGINAW, MICHIGAN

PROPOSED EXCAVATION DIMENSIONS AND DELINEATION RESULTS

GHD

Source Reference:
MICHIGAN STATE PLANE SOUTH, NAD 83 USING INTERNATIONAL FEET, NGVD 88
TOPO = SANBORN, 1996

Project Manager:	Reviewed By:	Date:
L.R.	M.T.	SEPTEMBER 2015
Scale: 1" = 40'	Project No.: 58502-T01	Report No.: PRES015 — Drawing No.: figure 2



0 100 200 ft

LEGEND
- INVESTIGATIVE UNIT BOUNDARY
- RACER TRUST PROPERTY
- CLEAN BACKFILL LOCATION
- CLAY PILE EXTENTS
- 605 CLAY PILE CONTOUR

KEY MAP

SCALE VERIFICATION

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RACER TRUST

SAGINAW, MICHIGAN

CLEAN BACKFILL STOCKPILES

GHD

Source Reference:
MICHIGAN STATE PLANE SOUTH, NAD 83 USING INTERNATIONAL FEET, NGVD 83
SPICER SURVEY, OCTOBER 2009.

Project Manager:	Reviewed By:	Date
LR.	J.E.P.	OCTOBER 2010

Scale:	Project No:	Report No:	Drawing No:
1:200	58502-T02	015	figure 2

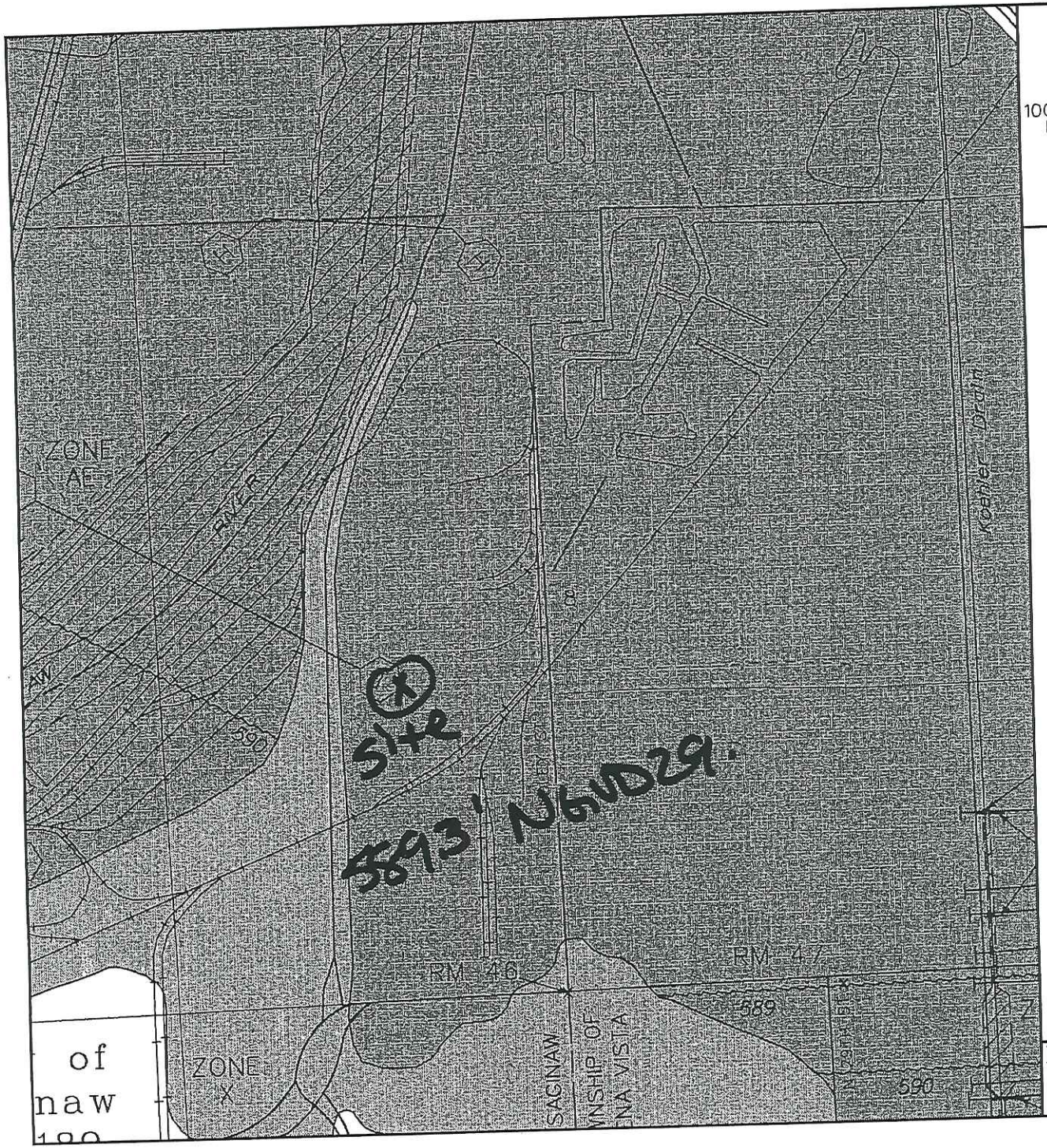
Figure 1. Wetland Location Map

NE 1424 Racer Trust Industrial Park
Client: Menard, Inc.
38.86-Acre Property at 2100 Veterans Memorial Parkway
Section 8 of Buena VistaTwp., Saginaw Co., MI (T12N, R5E)
Delineation Date: July 15 & 16, 2015
Map Created: July 16, 2015

Feet 0 100 200 400

N W E S

NISWANDER ENVIRONMENTAL
9436 Maltby Road, Brighton, MI 48116
810.225.0539 *office* | 810.225.0653 *fax*



Site
5893' NGVD29

APPROXIMATE SCALE
1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAGINAW COUNTY, MICHIGAN (ALL JURISDICTIONS)

PANEL 85 OF 360

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BUENA VISTA, CHARTER TOWNSHIP OF	260499	0085	D
CARROLLTON, TOWNSHIP OF	260187	0085	D
KOCHVILLE, TOWNSHIP OF	260501	0085	D
SAGINAW, CITY OF	260189	0085	D
ZILWAUKEE, CITY OF	260285	0085	D
ZILWAUKEE, TOWNSHIP OF	260286	0085	D

Notice to User: The MAP NUMBER shown below should be used when placing map orders; the COMMUNITY NUMBER shown above should be used on insurance applications for the subject community.

MAP NUMBER
26145C0085 D

EFFECTIVE DATE:
OCTOBER 16, 1997

Federal Emergency Management Agency

NOTES TO USERS

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Coastal base flood elevations apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD), and include the effects of wave action. These elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

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Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

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For community map revision history prior to countywide mapping, see section 6.0 of the Flood Insurance Study Report.

For purposes of map panels are separately printed Map Index.

DIGITAL DATA AVAILABILITY: Digital files containing the thematic floodplain information shown on these maps are published by the Federal Emergency Management Agency in DLG-3 Optional format on CD-ROM. Requests for data should include the full name of the community or county and the Flood Insurance Rate Map panel numbers covered by the request. Contact the Federal Emergency Management Agency, Map Service Center, 6730 Santa Barbara Court, Baltimore, Maryland 21227-5832. Telephone 1-800-358-9616.

NOTE: The coordinate system used for the production of this Flood Insurance Rate Map (FIRM) is Universal Transverse Mercator (UTM), North American Datum of 1927 (NAD27), Clarke 1866 spheroid. Corner coordinates shown on the FIRM are in latitude and longitude referenced to the Universal Transverse Mercator projection, NAD27. Differences in the datum and spheroid used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of the information shown on the FIRM.

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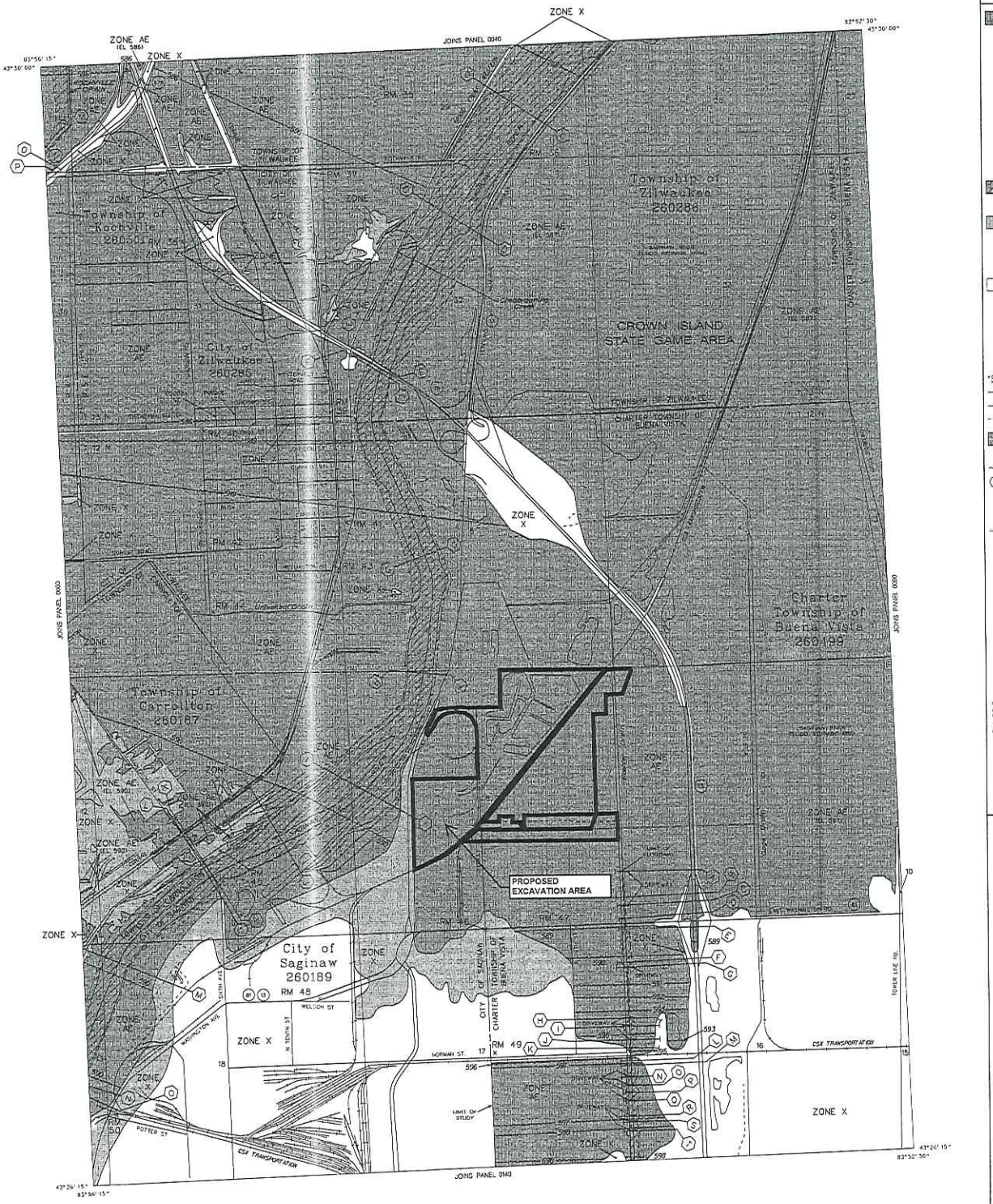
Vertical Network Branch, N/CG13
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

BASE MAP SOURCE: Planimetric base map files were provided in digital format by the Detroit District of the U.S. Army Corps of Engineers (USACE). These files were compiled from aerial photographs dated 1982 to 1987 provided by the USACE and digital U.S. Geological Survey 7.5-Minute Series Topographic Maps at a scale of 1:24,000 provided by the Michigan Department of Natural Resources. Additional information may have been derived from other sources. Users of this FIRM should be aware that minor adjustments may have been made to specific base map features.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT., (NGVD)*	DESCRIPTION OF LOCATION
RM 35	585.02	A railroad spike in the west side of a power pole, approximately 900 feet east from Easterwell Road along Nashville Road and approximately 1,400 feet northeast from Nashville Road along a farm lane, approximately 15 feet southeast of the farm lane. Johnson & Anderson.
RM 36	587.82	A bronze disk, stamped Sand- 36 feet west of the west edge of the Veteran's Memorial Parkway pavement, approximately 1.25 miles north of southbound Interstate 75. Johnson & Anderson.
RM 37	586.78	A chiseled cross on the top west bolt on the hydrant flange, 27 feet west and approximately 75 feet south of the intersection of Easterwell and Nashville Road. Johnson & Anderson.
RM 38	584.00	A railroad spike in the southwest side of a power pole, 33 feet west of the centerline of Sherman Road, approximately 1,500 feet south of the intersection of Sherman and Nashville Roads. Johnson & Anderson.
RM 39	589.69	A brass cut in the concrete on top of the southwest footing of the transmission tower, 0.9 foot from the south face and 1.0 foot from the west face, on the east of Fitzhughessee Street. Johnson & Anderson.
RM 40	586.77	A railroad spike in the west side of a power pole at the southeast corner of the intersection of Sherman Road and Fitzhughessee Streets. Johnson & Anderson.
RM 41	585.47	A railroad spike in the east side of a power pole, approximately 18 feet east of the centerline of Easterwell Road, approximately 100 feet south of the intersection of Easterwell Road and Capital Streets. Johnson & Anderson.
RM 42	589.03	A chiseled cross on the top of the east bolt on the hydrant flange on the northeast corner of the intersection of Sherman Road and Schust Road. Johnson & Anderson.
RM 43	587.16	A railroad spike in the east side of power pole, approximately 18 feet east of the centerline of Easterwell Road, approximately 130 feet north of the intersection of Bellingham Street and Easterwell Road. Johnson and Anderson.
RM 44	587.70	Top of arrow over "P" in "Elk" on fire hydrant located on east side of Sherman Road, approximately 100 feet north of Universal Drive.
RM 45	592.79	Bronze disk set vertically in the southeast face of south side lug of group of six on the Huron-Portland Cement Company located approximately 225 feet northeast along the line of Trunk Western from intersection of Grand Trunk Western and Sixth Avenue.
RM 46	592.44	Arrow over "P" in "Elk" on fire hydrant located in southwest corner of intersection of East Washington Road and Findley Street.
RM 47	588.61	Top of east-northeast bolt on fire hydrant located in southeast corner of intersection of North 21th Street and East Washington Road.
RM 48	595.53	A bronze U.S. Lake Survey disk designated "SR 19" set vertically on east face of Chevrolet office building located northeast of intersection of Beach Street and North 10th Street, approximately 2.4 feet from southeast corner of building.
RM 49	596.65	Arrow over "P" in "Burlington" on fire hydrant located in northeast corner of intersection of Findley Street and Norman Street.
RM 50	597.04	A U.S. Geological Survey disk designated "J297" set vertically in north face of CSX Transportation depot located northeast of the intersection of Potter Street and Washington Avenue, approximately 4.0 feet east of northwest corner.

*National Geodetic Vertical Datum of 1929



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A — No base flood elevations determined.
- ZONE AE — Base flood elevations determined.
- ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 500-year floodplain.
- ZONE D — Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS*

- Identified 1983
- Identified 1990
- Otherwise Protected Areas

*Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 — Base Flood Elevation Line; Elevation in Feet*
- A — A — Cross Section Line
- (EL 987) — Base Flood Elevation in Feet where Uniform Within Zone*
- RM7x — Elevation Reference Mark
- •M1.5 — River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

OCTOBER 16, 1997

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

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To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAGINAW COUNTY, MICHIGAN (ALL JURISDICTIONS)

PANEL 85 OF 360

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

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CARROLLTON, TOWNSHIP OF	260187	0085	D
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SAGINAW, CITY OF	260189	0085	D
ZILWAUKEE, CITY OF	260285	0085	D
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ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)†	DESCRIPTION OF LOCATION
RM 35	585.02	A railroad spike in the west side of a power poles, approximately 500 feet east from Westervelt Road along Rochelle Road and approximately 1,400 feet northeast from Rochelle Road along a farm lane, approximately 15 feet southeast of the farm lanes Johnson & Anderson.
RM 36	587.83	A bronze disk, stamped Sand- 36 feet west of the west edge of the Veteran's Memorial Parkway pavement, approximately 1.25 miles north of southbound Interstate 75a Johnson & Anderson.
RM 37	586.76	A chiseled cross on the top west bolt on the hydrant flange; 27 feet west and approximately 75 feet south of the intersection of Westervelt and Rochelle Roads Johnson & Anderson.
RM 38	584.00	A railroad spike in the southwest side of a power pole, 33 feet west of the centerline of Sherman Road, approximately 1,300 feet south of the intersection of Sherman and Rochelle Roads Johnson & Anderson.
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RM 40	586.77	A railroad spike in the west side of a power pole at the southeast corner of the intersection of Sherman Road and Tittabawassee Streets Johnson & Anderson.
RM 41	593.47	A railroad spike in the east side of a power pole, approximately 18 feet east of the centerline of Westervelt Road, approximately 100 feet south of the intersection of Westervelt Road and Capitol Streets Johnson & Anderson.
RM 42	588.03	A chiseled cross on the top of the east bolt on the hydrant flange on the northeast corner of the intersection of Sherman Road and Schust Roads Johnson & Anderson.
RM 43	587.74	A railroad spike in the east side of power poles, approximately 18 feet east of the centerline of Westervelt Road, approximately 100 feet north of the intersection of Pellington Street and Westervelt Roads Johnson and Anderson.
RM 44	587.70	Top of arrow over "M" in "Gas" on fire hydrant located on east side of Sherman Road, approximately 100 feet north of universal Drain.
RM 45	592.78	Bronze disk set vertically in the southeast face of south side in a group of six at the Huron Portland Cement Company located approximately 225 feet northeast along the Grand Trunk Western from intersection of Grand Trunk Western and Sixth Avenue.
RM 46	592.44	arrow over "M" in "GAS" on fire hydrant located in southwest corner of intersection of East Washington Road and Findley Street.
RM 47	588.61	Top of east-northeast bolt on fire hydrant located in southeast corner of intersection of north 29th Street and East Washington Road.
RM 48	595.53	A bronze U.S. Lake Survey disk designated "SB 15" set vertically on east face of Chevrolet office building located northeast of intersection of Welch Street and North 10th Street, approximately 2.4 feet from southeast corner of building.
RM 49	596.65	arrow over "M" in "Michigan" on fire hydrant located in northeast corner of intersection of Findley Street and Norman Street.
RM 50	597.04	A U.S. Geological Survey disk designated "SB 9" set vertically in north face of CSX Transportation pilaster located north and on the intersection of Potter Street and Washington Avenue, approximately 6.8 feet east of northwest corner.

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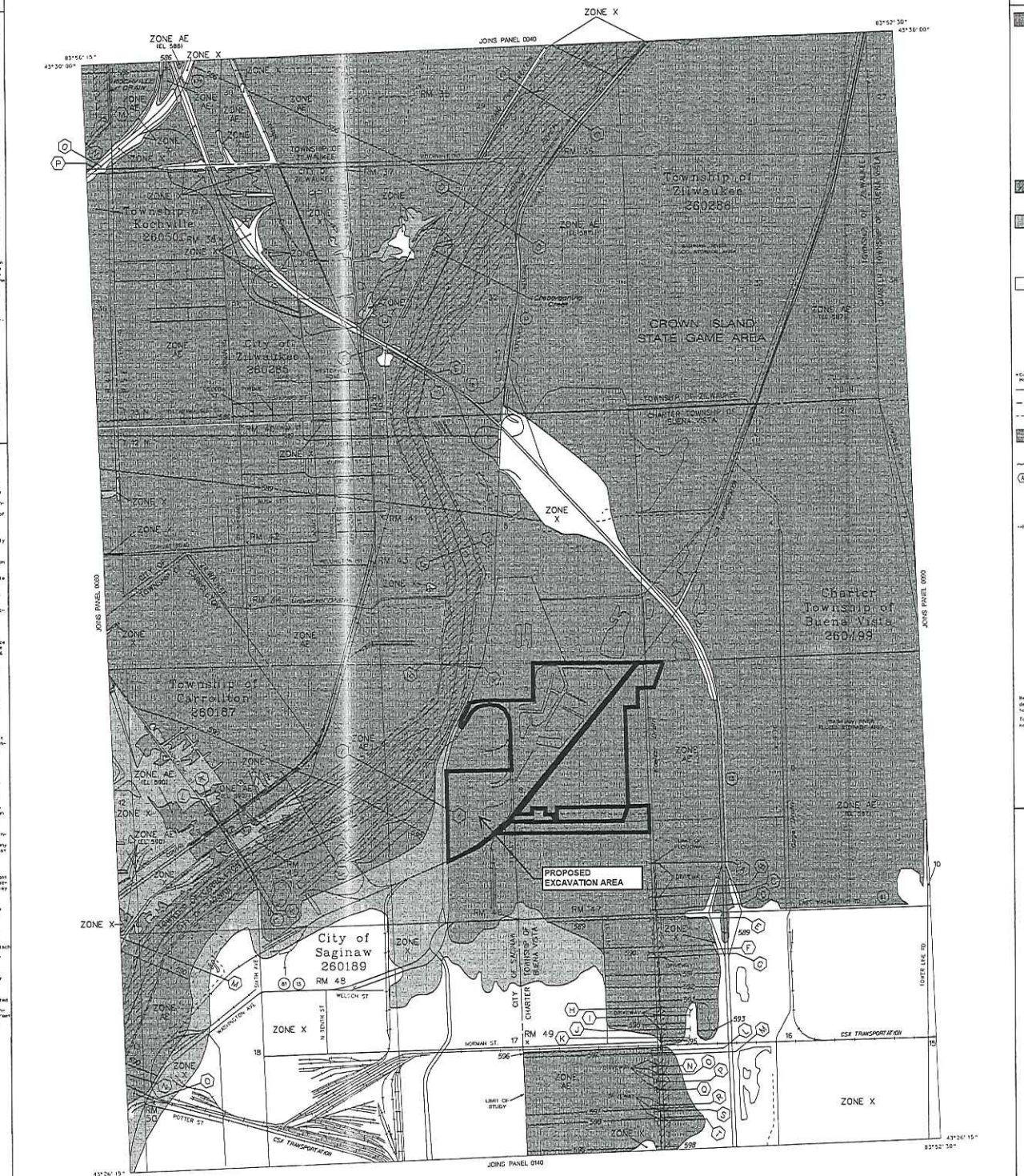

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- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zones*
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- •M1.5 — River Mile

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OCTOBER 16, 1997

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APPROXIMATE SCALE
1000 0 1000 FEET

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FIRM
FLOOD INSURANCE RATE MAP

SAGINAW COUNTY, MICHIGAN (ALL JURISDICTIONS)

PANEL 85 OF 360

(SEE MAP INDEX FOR PANELS NOT PRINTED)

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KOCHVILLE, TOWNSHIP OF	260650	0085	D
SAGINAW, CITY OF	260189	0085	D
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MAP NUMBER
26145C0085 D

EFFECTIVE DATE:
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Federal Emergency Management Agency

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					(FEET NGVD)			
Saginaw River								
A	11.802	923	14,252	4.8	587.2	587.2	587.3	0.1
B	12.569	1,416	20,955	3.3	587.8	587.8	587.9	0.1
C	13.249	1,085	15,405	4.4	588.0	588.0	588.1	0.1
D	13.747	1,195	17,540	3.9	588.3	588.3	588.4	0.1
E	14.385	537	14,224	4.8	588.6	588.6	588.7	0.1
F	14.407	540	10,764	6.4	588.6	588.6	588.6	0.0
G	15.156	713	15,498	4.4	589.1	589.1	589.2	0.1
H	15.612	545	13,361	5.1	589.3	589.3	589.4	0.1
I	16.169	1009	14,687	4.7	589.7	589.7	589.8	0.1
J	16.500	659	16,294	4.2	589.9	589.9	590.0	0.1
K	16.758	447	14,365	4.7	590.0	590.0	590.1	0.1
L	16.776	561	12,181	5.6	590.0	590.0	590.0	0.0
M	17.282	592	14,446	4.7	590.3	590.3	590.4	0.1
N	17.758	450	12,384	5.5	590.5	590.5	590.6	0.1
O	17.791	732	15,750	4.3	590.7	590.7	590.8	0.1
P	18.134	560	13,585	5.0	590.8	590.8	590.9	0.1
Q	18.161	531	12,616	5.4	590.8	590.8	590.8	0.0
R	18.268	518	12,345	5.5	590.8	590.8	590.9	0.1
S	18.335	430	12,428	5.5	590.9	590.9	591.0	0.1
T	18.431	441	10,255	6.6	590.8	590.8	590.9	0.1
U	18.598	435	11,431	5.9	591.1	591.1	591.2	0.1
V	18.871	460	12,171	5.6	591.3	591.3	591.4	0.1
W	18.939	550	11,467	5.9	591.3	591.3	591.4	0.1
X	19.432	510	11,830	5.7	591.7	591.7	591.8	0.1
Y	19.463	575	12,717	5.3	591.9	591.9	592.0	0.1
Z	20.116	510	10,866	6.3	592.2	592.2	592.3	0.1

[1]Miles above mouth

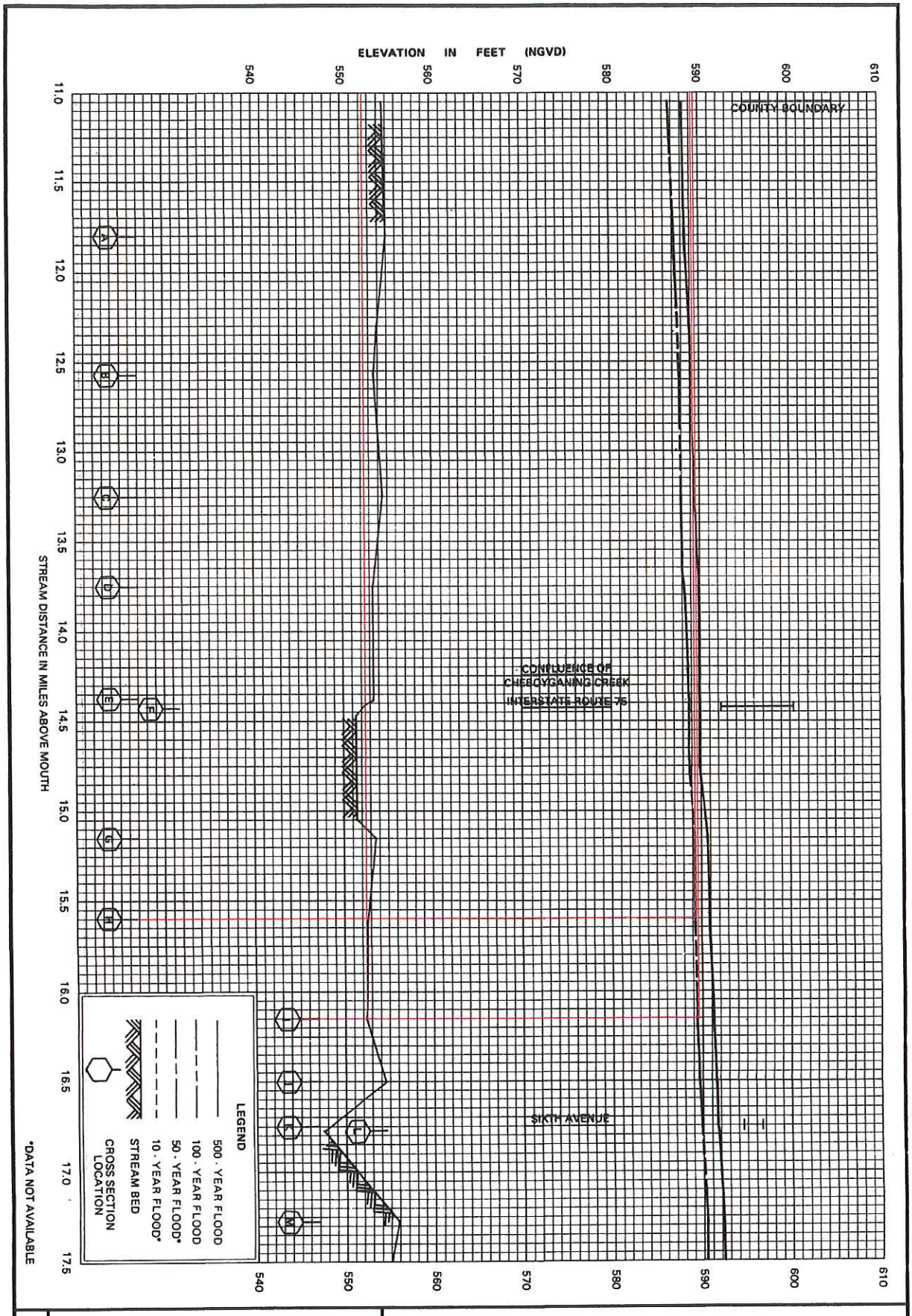
TABLE 7

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAGINAW COUNTY, MI
(ALL JURISDICTIONS)

FLOODWAY DATA

SAGINAW RIVER



17P	FEDERAL EMERGENCY MANAGEMENT AGENCY **SAGINAW COUNTY, MI** (ALL JURISDICTIONS)	**FLOOD PROFILES** **SAGINAW RIVER**

Photo 1 – Proposed Wetland Excavation Area

Photo 2 – Proposed Wetland Excavation Area

Photo 3 – Proposed Wetland Excavation Area

Appendix C.2
City of Saginaw Floodplain Permit

City of Saginaw

ENGINEERING DEPARTMENT

1315 S Washington Ave
Saginaw, MI 48601
(989) 759-1410

PFDPL20-001

Issued: 07/24/2020
Expires:

Flood Plain

07/23/2020

LOCATION	OWNER	CONTRACTOR
2100 VETERANS MEMORIAL PKWY 21 4333 00000 **M-3**	RACER PROPERTIES LLC PO BOX 43859 DETROIT MI 48243 **Phone:** 217-741-6235 **Fax:**	 **Phone:** **Fax:**

Special Notes and Comments

1. Project Description - Remediation (removal and off-Site disposal of impacted soil)

2. Application Signed City Engineer - yes

3. Application Signed Chief Inspector -

4. Final Approved Plans - attached

5. Base Flood Elevation - na

6. Lowest Flood Elevation - na

7. State Permit Obtained/In Process - yes attached

8. Federal Permit Obtained/In Process - na

SEE ATTACHED APPLICATION FOR ALL INFORMATION AND SIGNATURES

UPON COMPLETION OF THE PROJECT ELEVATION CERTIFICATE(S) MUST BE PROVIDED BY THE APPLICANT IN ORDER TO RECEIVE AN OCCUPANCY PERMIT.

PERMISSION IS HEREBY GRANTED TO WORK WITHIN THE FLOOD PLAIN - ONLY AFTER ALL STATE/FEDERAL PERMITS HAVE BEEN APPROVED

Permit Item	Work Type	Fee Basis	Item Total

Fee Total:	$0.00
Amount Paid:	$0.00
Balance Due:	$0.00

FLOOD PLAIN PERMIT

ALL SECTIONS OF THE CITY OF SAGINAW - FLOODPLAIN DISTRICT MUST BE FOLLOWED ~~(153.540 TO 153.556)~~ (153.505 to 153.521)

HOLD HARMLESS AND INDEMNITY

In consideration of the issuance of this permit, undersigned agrees to hold harmless and indemnify the City of Saginaw from all claims, damages, expenses and suits of every kind which may arise by reason of the issuance of this permit and operations performed and maintained there under.

Said applicant agrees to maintain and keep all construction property safeguarded, barricaded and lighted, and further that said applicant be solely responsible of all damages, accidents or loss of life, limb or property, and shall save the City of Saginaw harmless from any and all causes whatsoever and to the fullest extent.

Date: 7/24/2020 **Signature:** David Favero

Printed Name: David Favero, Michigan Deputy Cleanup Manager for RACER Properties LLC

Appendix D
Photographic Log of PCB-impacted Soil Removal Activities

Photo 1 – Track Mats to Access Excavation Area Facing South – September 15, 2020

Photo 2 –Excavation Area – September 15, 2020

Appendix D- Site Photographs

Photo 3 – Eastern Portion of Excavation Area – September 15, 2020

Photo 4 – Loading of Stockpiled Material from Excavation Area – September 15, 2020

Photo 5 – Completed Excavation Area Facing East – September 16, 2020

Photo 7 – Completed Excavation Area Facing Southeast – September 16, 2020

Photo 8 – Straw Mat for Restoration of Disturbed Soil, Facing East – September 17, 2020

Photo 9 – Straw Mat for Restoration of Disturbed Soil, Facing West – September 17, 2020

Photo 10 – Completed Site Restoration, Facing South – September 17, 2020

Appendix E
Waste Disposal Manifests

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of 1	

3. Generator's Mailing Address:
RACER TRUST
2100 VETERANS MEMORIAL PARKWAY
SAGINAW, MI 48601
4. Generator's Phone

Generator's Site Address (If different than mailing):
SAME

A. Manifest Number WMNA 91520-1
B. State Generator's ID

5. Transporter 1 Company Name Jobsite Services
6. US EPA ID Number
C. State Transporter's ID
D. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Peoples Landfill
4143 E. Rathbun
Birch Run, MI 48415
10. US EPA ID Number
G. State Facility ID
H. State Facility Phone 989-539-6111

GENERATOR

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. PCB Impacted Soil and Misc Debris WM Profile # 118569MI	1	OT	20	yards	
b. WM Profile #			19.54		
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above
Color - Brown Physical State – Solid Odor - NO
BILL TO: Job Site Services

K. Disposal Location
Cell | Level
Grid

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.: Dave Favero 734-579-9525

16. GENERATOR'S CERTIFICATE: - Must Be Printed and Signed and Dated by the Generator

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year
Steven S. Hoevemeyer	Racer Trust	9	15	2020

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Eric Spaulding		9	15	2020

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year
		9	15	20

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Blue- GENERATOR #2 COPY
Yellow- GENERATOR #1 COPY
Pink- FACILITY USE ONLY
Gold- TRANSPORTER #1 COPY

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of 2	

3. Generator's Mailing Address:
RACER TRUST
2100 VETERANS MEMORIAL PARKWAY
SAGINAW, MI 48601
4. Generator's Phone

Generator's Site Address (If different than mailing):
SAME

A. Manifest Number WMNA 91520-2
B. State Generator's ID

5. Transporter 1 Company Name Job Site Services
6. US EPA ID Number
C. State Transporter's ID
D. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Peoples Landfill
4143 E. Rathbun
Birch Run, MI 48415
10. US EPA ID Number
G. State Facility ID
H. State Facility Phone 989-539-6111

GENERATOR

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. PCB Impacted Soil and Misc Debris WM Profile # 118569MI	1	DT	20	yards	
b. WM Profile #				21.81	
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above
Color - Brown Physical State – Solid Odor - NO
BILL TO: Job Site Services

K. Disposal Location
Cell | Level
Grid

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.: Dave Favero 734-579-9525

16. GENERATOR'S CERTIFICATE: - Must Be Printed and Signed and Dated by the Generator
I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year
Steven S. Hoevenaar	Racer Trust	9	15	20

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Eric Spankli		9	15	2020

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year
Eileen Furtaw		9	15	20

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY
Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY
Yellow- GENERATOR #1 COPY

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. Manifest Doc No.	2. Page 1 of 3	

3. Generator's Mailing Address:	Generator's Site Address (If different than mailing):	A. Manifest Number WMNA	91520-3
RACER TRUST 2100 VETERANS MEMORIAL PARKWAY SAGINAW, MI 48601 4. Generator's Phone	SAME	B. State Generator's ID	

5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID
Job Services		D. Transporter's Phone
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID
		F. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility ID
Peoples Landfill 4143 E. Rathbun Birch Run, MI 48415		H. State Facility Phone 989-539-6111

GENERATOR

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. PCB Impacted Soil and Misc Debris WM Profile # 118569MI	1	DT	20	yards	
b. WM Profile #			24.74		
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above
Color - Brown Physical State – Solid Odor - NO
BILL TO: Job Site Services

K. Disposal Location
Cell | Level
Grid

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.: Dave Favero 734-579-9525

16. GENERATOR'S CERTIFICATE: - **Must Be Printed and Signed and Dated by the Generator**
I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year
Steven S. Hoevenaar	Racer Trust	9	15	2020

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Eric Spaudmy		9	15	2020

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year
Colleen Turner	Colleen Turner	9	15	20

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY
Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY
Yellow- GENERATOR #1 COPY

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. Manifest Doc No.	2. Page 1 of 4	

GENERATOR

3. Generator's Mailing Address: RACER TRUST 2100 VETERANS MEMORIAL PARKWAY SAGINAW, MI 48601 4. Generator's Phone	Generator's Site Address (If different than mailing): SAME	A. Manifest Number WMNA 91820-4 B. State Generator's ID
5. Transporter 1 Company Name: Job Site Services	6. US EPA ID Number	C. State Transporter's ID D. Transporter's Phone
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID F. Transporter's Phone
9. Designated Facility Name and Site Address: Peoples Landfill 4143 E. Rathbun Birch Run, MI 48415	10. US EPA ID Number	G. State Facility ID H. State Facility Phone 989-539-6111

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. PCB Impacted Soil and Misc Debris WM Profile # 118569MI	1	OT	20	yards	
b. WM Profile #				20.48	
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above: Color - Brown Physical State – Solid Odor - NO
BILL TO: Job Site Services

K. Disposal Location: Cell ____ Level ____ Grid ____

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.: Dave Favero 734-579-9525

16. GENERATOR'S CERTIFICATE: - **Must Be Printed and Signed and Dated by the Generator**

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year
Steven S. Hoevemeyer	Racer Trust	9	16	20

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Eric Franklin		9	16	20

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year
Colleen Kurtzau	Colleen Kurtzau	9	16	20

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Blue- GENERATOR #2 COPY
Yellow- GENERATOR #1 COPY
Pink- FACILITY USE ONLY
Gold- TRANSPORTER #1 COPY

Appendix F
Certificate of Destruction

WASTE MANAGEMENT

Certificate of Destruction

This certified that your waste, PCB-Impacted Soil and Debris, under waste profile approval number 118569MI has been accepted in to our PEOPLE'S LANDFILL, in Birch Run, MI, and is considered destroyed.

The following documents relate to this disposal:

Profile Number: 118569MI

Manifest Number: 915201/915202/915203/916204

Ticket Number: 391241/391261/391276/391315

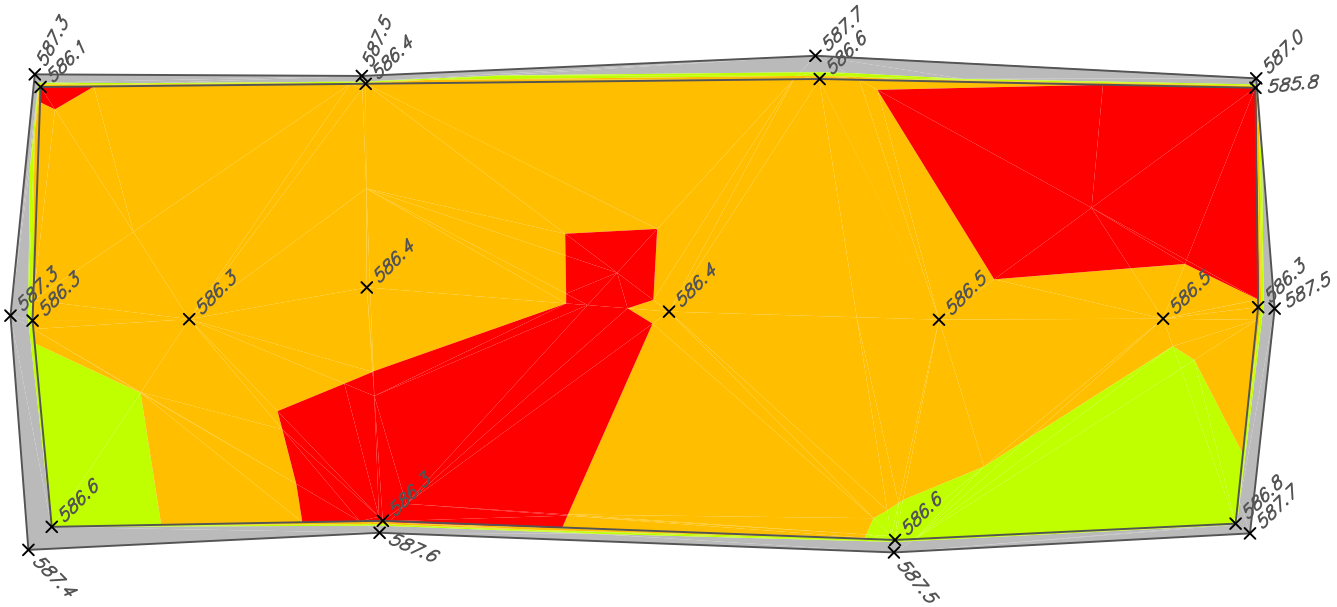
Disposal Date: Sept. 15th and 16th, 2020

Colleen Furtaw — *WM Landfill Representative Signature*

10-14-20 — *Date*

Thank you for choosing Waste Management.
We appreciate your business.

Appendix G
Implementation Verification



Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	0.000	0.800	
2	0.800	0.983	
3	0.983	1.212	
4	1.212	1.431	

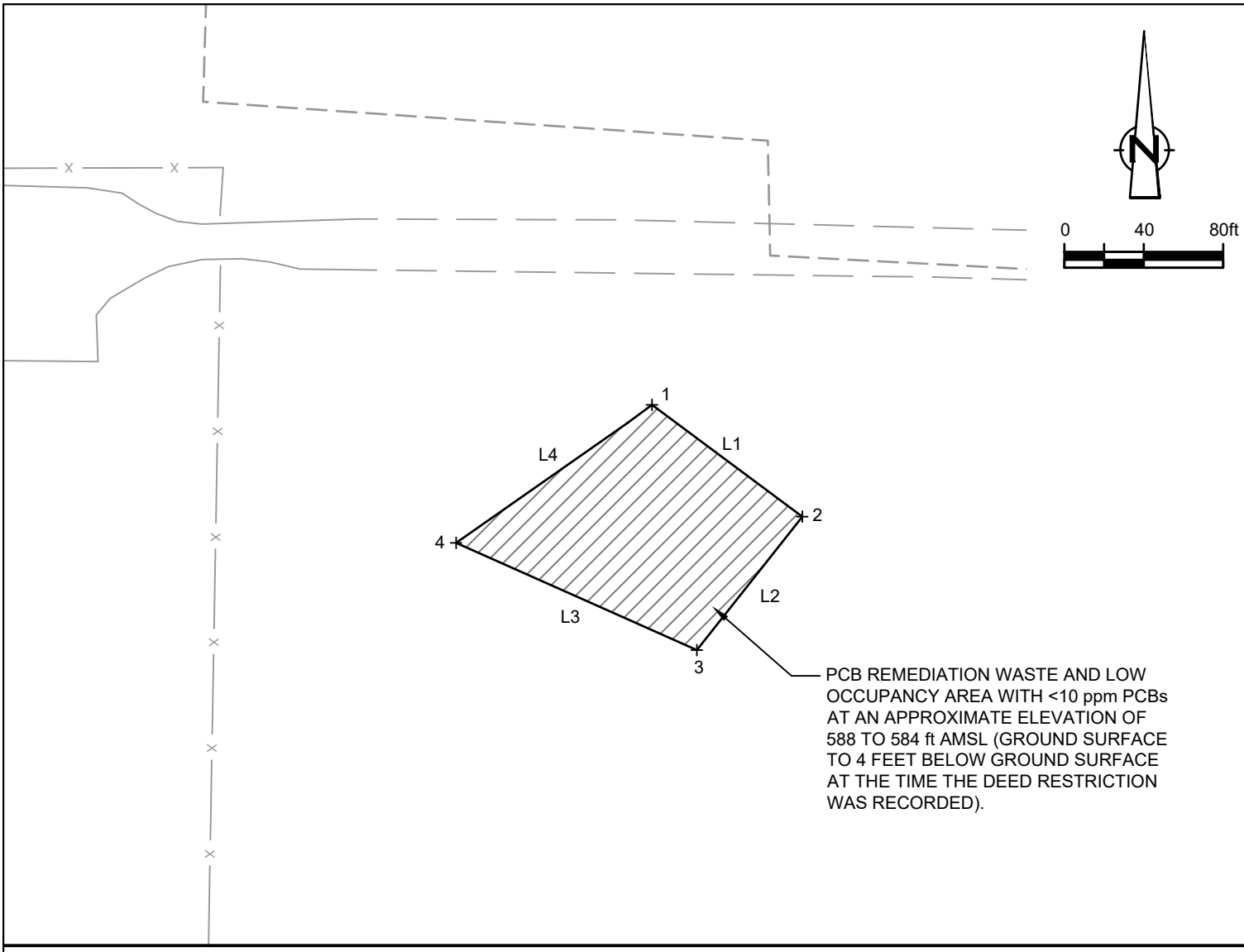
Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Cut Area	full	1.000	1.000	1595.98	0.00	64.52	64.52<Fill>

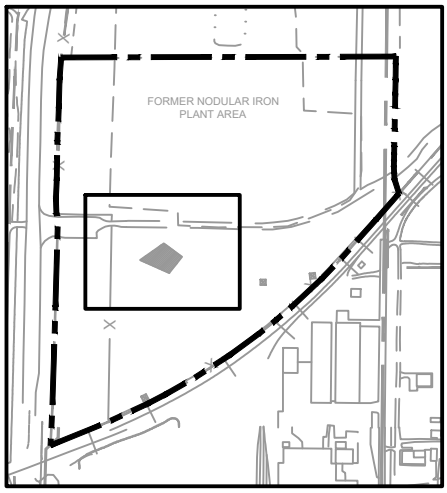
PREPARED BY:
ERIC S. BARDEN
PROFESSIONAL SURVEYOR NO. 54049
230 S. WASHINGTON AVENUE
SAGINAW, MICHIGAN 48607
TEL. 989-754-4717

DRAWN BY: MJ ERRANTE
DATE: SEPTEMBER 2020
JOB NUMBER: 128100SG2019

Appendix H
Draft Exhibit for the Restrictive Covenant – Low-Level PCB Impacted Area



1	X = 13244588.2394, Y = 713414.4580
L1	S 53d22'31" E @ 94.35
2	X = 13244663.9620, Y = 713358.1708
L2	S 38d18'40" W @ 85.66
3	X = 13244610.8616, Y = 713290.9608
L3	N 66d0'7" W @ 132.78
4	X = 13244489.5565, Y = 713344.9646
L4	N 54d50'47" E @ 120.70



KEY MAP
SCALE: 1" = 800'

LEGEND

PCB REMEDIATION WASTE/LOW OCCUPANCY AREA AS DEFINED IN 40 CFR 761

APPROXIMATE PROPERTY BOUNDARY

Exhibit

NOTE:
MICHIGAN SOUTH STATE PLANE COORDINATE SYSTEM
NAD 83, IN U.S. INTERNATIONAL FEET.

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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519.340.4316

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