

*Transmitted via Electronic Mail*

Mr. Jeremy Pepin  
Environmental Engineer  
Michigan Department of Environment, Great Lakes, and Energy  
Materials Management Division  
Hazardous Waste Section  
Permitting and Program Support Unit  
Constitution Hall, South Tower, 4th Floor, SW Corner  
525 W. Allegan Street  
P.O. Box 30241  
  
Lansing, Michigan 48909-7741

Arcadis U.S., Inc. of Michigan, LLC  
28550 Cabot Drive  
Suite 500  
Novi  
Michigan 48377  
Tel 248 994 2240  
Fax 248 994 2241  
www.arcadis.com

Subject:

Semi-Annual Progress Report No. 5  
Revitalizing Auto Communities Environmental Response (RACER) Trust  
Buick City Site, Flint, Michigan

Reference:

30215500

Date:

July 16, 2024

Dear Mr. Pepin:

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), Arcadis of Michigan, LLC (Arcadis) is submitting this Semi-Annual Progress Report No. 5 to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) for the Buick City Site located in Flint, Michigan (the Site) (**Figure 1**). This report is submitted in accordance with the requirements of Section 8.9.3 of the Corrective Action Consent Order (CACO), MMD Order No. 111-02-2020, which became effective on August 5, 2020.

This Semi-Annual Progress Report No. 5 covers the period of January 1, 2024, through July 1, 2024, and summarizes the work performed, data collected, problems encountered, project schedule, and estimated percent complete for a list of ongoing Site activities. Areas of the Site and specific Site features discussed herein are presented on **Figure 2** (Northend of the site), **Figure 3** (Southend of the Site), and **Figure 4** (Building 04 and Hamilton Avenue Areas).

## WORK PERFORMED

The list below provides a summary of the work conducted from January 1, 2024, to July 1, 2024. Site work included completing seven soil borings and collecting approximately 43 soil samples, 35 groundwater samples, seven surface water/precipitation samples and 31 storm/sanitary sewer samples.

Work completed included:

- In January, the fourth round of baseline Short-term Construction Monitoring (STCM) groundwater sample collection (in the vicinity of the 65-acre parcel north of Leith Street) was completed.
- In January the final round of sampling from the monitoring wells used to evaluate the drift phase for the tracer test investigation were collected from the Building 04 area.
- In January and May, additional PFAS investigation soil and groundwater sampling was completed at the Building 86 (immediately north of Leith Street) area.
- In January, February, March and June groundwater elevations were collected near Hamilton Avenue (**Figures 3 and 4**) and the Lagoon area (**Figure 2**).
- In January total organic carbon samples were collected from nine soil borings from the Building 04 Area to collect data for remedy evaluation.
- In January LNAPL gauging was completed in the Building 12 Area (**Figure 3**).
- In January and March additional storm sewer sampling was completed to evaluate impacts at Outfall 011.
- In February one sample was collected from surface runoff in the Building 04 area.
- In March and April surface water runoff and precipitation samples were collected in the Building 04 area (**Figure 4**).
- In April, a flow study was initiated as part of the Outfall 011 remedy evaluation process.
- In April, samples were collected from the Outfall 003 storm sewer to evaluate the sewer for PFAS impacts.
- In May additional PFAS investigation soil and groundwater sampling was completed at the Building 86/Former Fire Dept (FFD) area (**Figure 2**).
- In May samples were collected from MH 3-9 (**Figure 2**) to establish baseline conditions.

- In June groundwater samples were collected from the lagoon area to evaluate the lagoon remedy.
- Two hundred and eight-seven monitoring wells were abandoned between Leith Street and Stewart Ave in the Northend of the Site to facilitate redevelopment.
- Completed semi-annual inspection of select surface cover areas.
- Completed quarterly P-trap inspections associated with the French drain flowing into the Outfall 005 storm sewer per the PCB Pollutant Minimization Plan under the NPDES permit.
- Continued maintaining booms at select outfalls.
- Conducted SWPPP semi-annual inspection.
- Prepared and submitted the Annual Wet Weather Trend Report and the Annual PCB PMP Report to EGLE on May 15, 2024.

## DATA COLLECTED

The samples collected as part of Site investigation or monitoring activities during this reporting period are presented below. A flat file of the Site analytical data, a CADD file including sampling locations, and recently completed boring logs and well abandonment logs will be uploaded before the end of July to the EGLE SharePoint Site.

### Storm Sewer Water Samples

Storm sewer samples were collected from multiple storm sewers and analyzed as part of various investigation and/or monitoring activities at the Site as follows:

Month	Storm Sewer Sample Location	Number of Samples	Analytes
January	Outfall 011 and select manholes	7	PFAS
	Outfall 005 P-traps	2	VOCs, SVOCs, metals, PFAS, PCBs
March	Outfall 011 and select manholes	18	PFAS
April	Outfall 003	5	PFAS
May	MH 3-9	1	PCBs, PAL VOCs, PAL SVOCs, PAL Metals (dissolved and total), PFAS, LL Hg

### Groundwater Samples

Groundwater samples were collected at the Site as part of various investigation and/or monitoring activities at the Site as follows:

Month	Factory Area	Number of Samples	Number of Locations	Analytes
January	STCM	29	29	VOCs, SVOCs, PCBs, metals, and/or PFAS
January	Bldg. 86	6	6	PFAS
January	Bldg. 04	20	12	Dye
May	Former Fire Dept	1	1	PFAS
June	Lagoon	11	10	PFAS

### Surface Water Runoff and Precipitation Samples

Surface water and precipitation samples were collected at the Site as part of investigation activities at the Site as follows:

Month	Factory Area	Number of Samples	Number of Locations	Analytes
February	Hamilton Ave	1	1	PFAS
March	Bldg. 04	3	3	PFAS
April	Bldg. 04	3	3	PFAS

### Soil Samples

Soil samples were collected at the Site as part of investigation activities at the Site as follows:

Month	Factory Area	Number of Samples	Number of Locations	Analytes
January	Bldg. 86	30	6	PFAS
January	Bldg. 04	11	8	Total organic carbon
May	Bldg 86/FFD	10	3	PFAS

## PROBLEMS ENCOUNTERED

### Hamilton Ave /Outfall 011 Impacts

Recent storm sewer samples have shown a fluctuation in the PFAS concentrations in Outfall 011. An increase in concentrations of PFAS were also detected downgradient of Hamilton Avenue in the Outfall 011 storm sewer. Remedies to address PFAS infiltration in the Outfall 011 storm sewer in Hamilton Avenue from Industrial Avenue to the railroad tracks are currently being evaluated. Remedy options include lining the existing storm sewer and replacing manholes or re-routing the upgradient flow from Outfall 011 into Outfall 013.

### Hamilton Area Surface Runoff

In late 2023 and early 2024, surface water runoff was found to be leaving the site and making its way to Hamilton Avenue. In 2023 an east-west aligned trench was cut into the concrete between the surface water runoff collection area (**Figure 4**) and Hamilton Avenue to allow the runoff to infiltrate the ground surface to prevent it from entering the street. However, this measure has proved insufficient to prevent all runoff during times of increased snow melt and/or heavier precipitation events. A berm will be installed downgradient of this trench during the third quarter of 2024 to provide an additional interim measure to redirect surface runoff on site and help prevent it from entering Hamilton Avenue.

### Outfall 005

On June 5, 2024, a significant precipitation event prompted a routine outfall inspection. A small area (measuring approximately 1-foot by 2-feet) of sheen was observed outside of the Outfall 005 containment booms in the Flint River. Containment booms were adjusted to ensure proper working capacity and Young's Environmental was called to perform response actions. Notifications were made to the appropriate agencies.

Maintenance activities performed included replacing the existing booms and removing accumulated debris and sheen. Additional booms were added as a precautionary measure. No further evidence of sheen was observed following completion of these maintenance activities. Inspection of the upgradient bulkheads is planned for the third quarter of 2024.

## PROJECT SCHEDULE

### Near-Term Milestone Activities Anticipated During the Next Semi-Annual Period

Site work for the third and fourth quarters of 2024 includes the following ongoing Site Activities:

- Continue to perform inspections and maintenance (as necessary) of Outfalls 002, 003,

004, and 005. Dispose of waste as necessary.

- Continue quarterly P-trap inspections associated with the French drain flowing into the Outfall 005 storm sewer per the PCB Pollutant Minimization Plan under the NPDES permit.
- Continue semi-annual SWPPP inspections.
- Continue inspection of surface covers.

In addition, the following activities are planned to be continued/completed in third and fourth quarters.

- Install berm in Hamilton Avenue area downgradient of interception trench.
- Complete inspection of Outfall 005 bulkheads.
- Complete semi-annual SWPPP Report for the NPDES permit
- Continue delineation of Site PFAS impacts
- Complete Feasibility Study and Interim Measures Workplans for Building 04 Area (**Figure 4**), and Former GM Foam Generation Building (**Figure 2**), pending approval of the CAF submitted November 2020 and revised in October 2021.
- Design, and following agency concurrence, procure contractor and implement remedy at Outfall 011 storm sewer.
- Continue addressing PFAS impact at Outfalls and sanitary sewer.
- Continue CAMU evaluation.
- Submit revised declaration of restrictive covenant.
- Continue STCM monitoring during construction activities, in accordance with STCM plan submitted to EGLE (plans submitted April 2023, March 2024, and June 2024).
- Continue well abandonment activities between Leith Street and Stewart Avenue.
- Complete the summary memorandum for the tracer test performed from November 2022 to January 2024 in the Building 04 area.

## ESTIMATED PERCENT COMPLETE

This section presents a percentage complete for action items outlines in the CACO:

- Reconcile List of AOIs, AOCs, TSCA areas, etc. (Due Nov 3, 2020) – 100%
- Meeting with EGLE to discuss CA objectives, expectations, etc. (Due August 20, 2020) -100%
- Establish public document repository (Due September 4, 2020) – 100%
- Public Involvement/Communications Plan (Due September 4, 2020) – 100%

Mr. Jeremy Pepin  
July 16, 2024

- Corrective Action Framework (Due Nov 3, 2020) – 100%
- List of electronic files submitted to EGLE (Due February 1, 2021) – 100%
- Semi-annual progress reports – ongoing
- Need to identify investigation, further corrective action or EGLE approved institutional control for WMU 2, WMU 3, WMU 4, WMU 5, WMU 7 and WMU 10 – 100%
- CMS workplan (Due 90 days after approval of CAF) – 0%
- CMS field work (to start within 30 days of CAF WP approval) – 0%
- CMS Report (Due 60 days after completion of CMS activities) – 0%
- CM Implementation Plan (Due within 90 days of EGLE approval of the CMS) – 0%
- CA440 Remedy Decision (Due 10/15/22) – 0%
- C550RC Remedy Constructed (Due 12/31/24) – 0%
- CA800YE Ready for Reuse (6/1/24) – 0%
- CA 900Cr Performance Standards Attained (Due 9/30/26) – 0%
- CA750 – Re-Evaluated for PFAS – 0%

If you have any questions, please contact me.

Sincerely,

Arcadis of Michigan, LLC



Micki Maki  
Senior Technical Lead

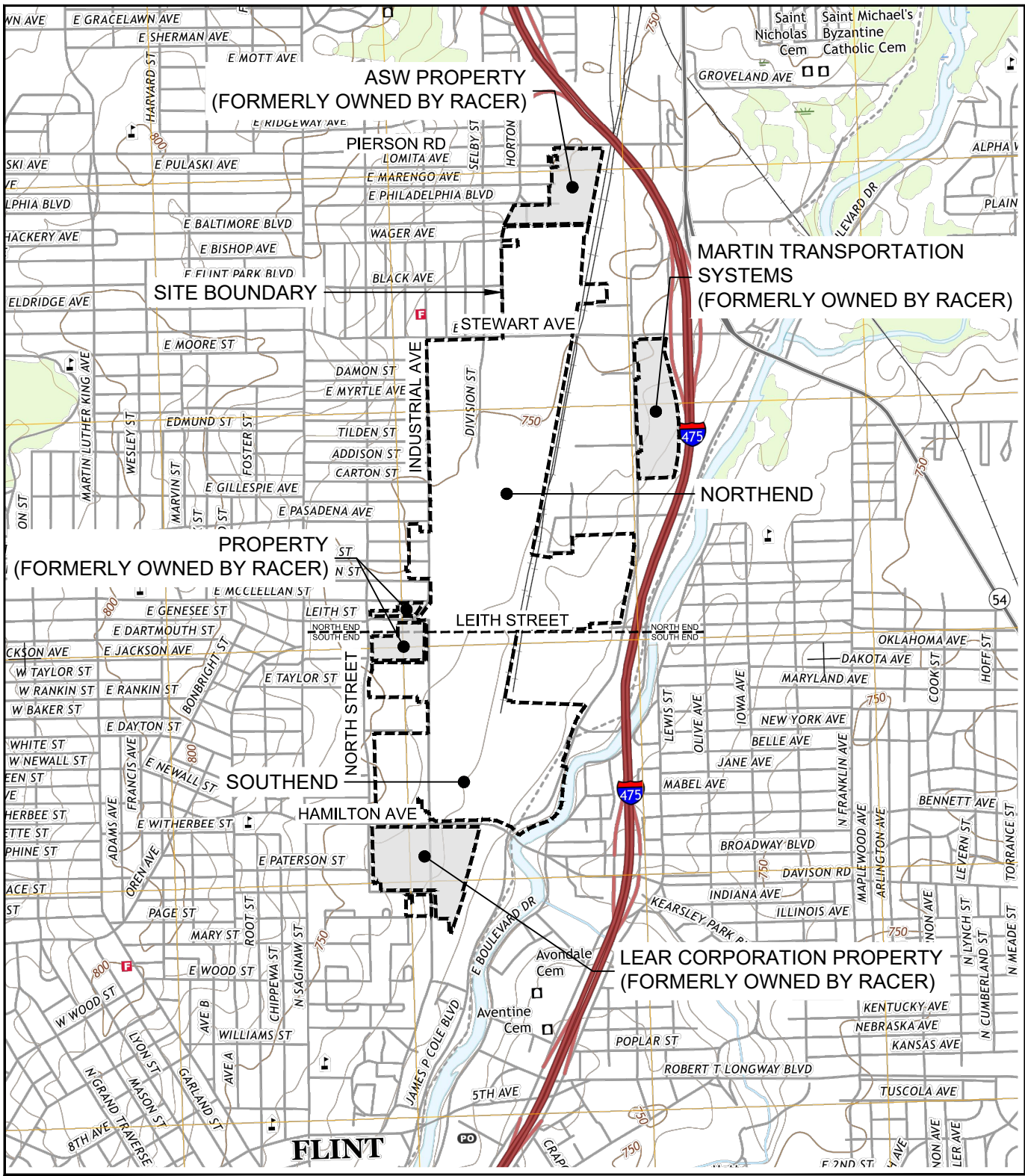
Copies:

Grant Trigger, RACER Trust (via email)  
Brendan Mullen, RACER Trust (via email)  
Flint Public Library

Attachments:

Figure 1 –Site Location Map  
Figure 2 – Northend Work Areas  
Figure 3 – Southend Work Areas  
Figure 4 – Building 04/Hamilton Avenue Work Areas

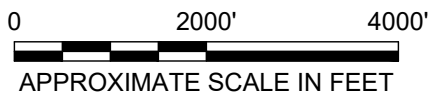
CITY:SYRACUSE,NY DIV:GROUP:ENV DBA:SANJHEZ LD:GMS PIC:C:KIKER TM:C:KIKER LYR:(Opti)ON:"OFF"=REF  
 C:\BIM\drive - ARCADIS\BIM\300 Docs\RACER TRUST\BUICK CITY RCR\2019\1901-DWG\RTBC-F-SITE LOCATION.dwg LAYOUT:1 SAVED:7/31/2019 2:26 PM AG:ADVER:23.05 (LMS TECH) PAGES:SETUP: PLOTTED:7/31/2019 3:09 PM BY:SANJHEZ,ADRIAN  
 XREFS: IMAGES: PROJECTNAME: ---



SOURCE: USGS 7.5 MIN., FLINT NORTH QUADRANGLE, FLINT NORTH 2017



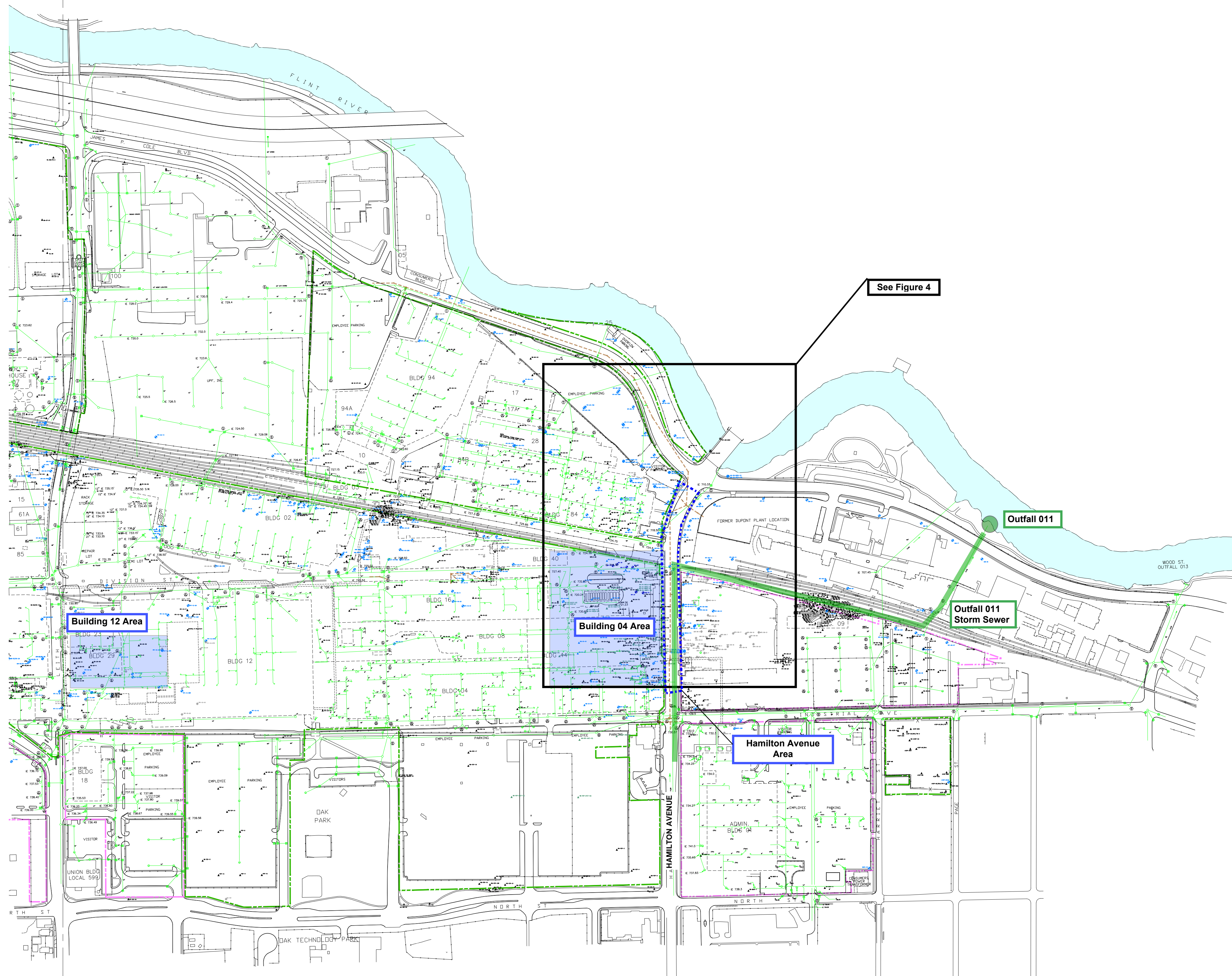
AREA LOCATION  
 MICHIGAN



RACER TRUST BUICK CITY FLINT, MICHIGAN	
<b>SITE LOCATION MAP</b>	
	Design & Consultancy for national and built assets
FIGURE <b>1</b>	



CITY OF FLINT: ENVIRONMENTAL SERVICES DIVISION: 3000 ACADIS BLVD, 3RD FLOOR, FLINT, MI 48906-1000. PROJECT: RACER TRUST BIICK CITY SANITARY SEWER. DATE: 4/14/2021 3:46 PM. DRAWING: SOUTHWEST WORK AREAS. PLOTTED: 4/14/2021 4:03 PM. BY: OBERLANDER, ROSEANNE



- LEGEND:
- STORM SEWER
  - CATCH BASIN
  - SANITARY SEWER
  - SANITARY MANHOLE

See Figure 4

Outfall 011

Outfall 011 Storm Sewer

Building 04 Area

Building 12 Area

Hamilton Avenue Area

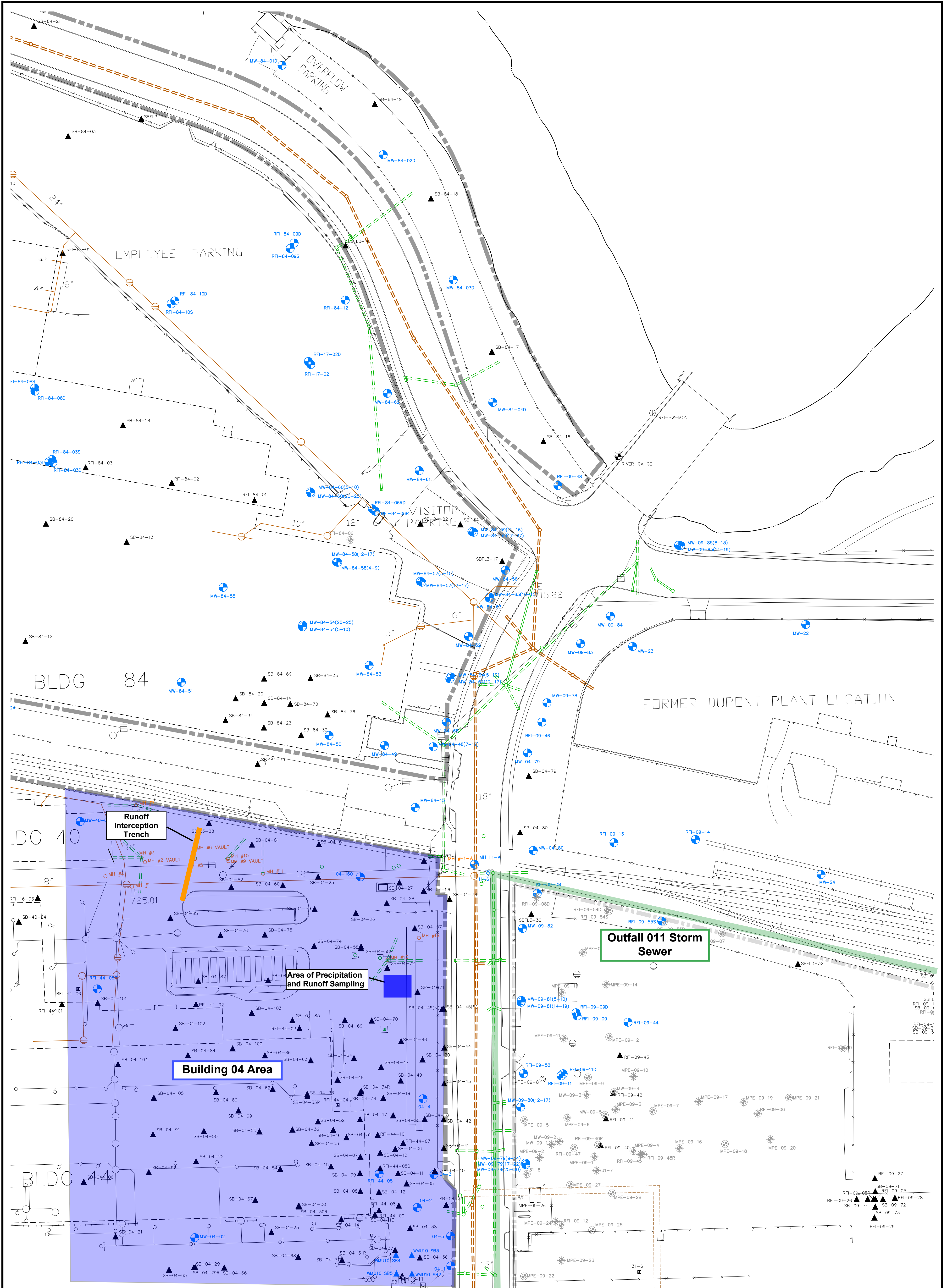
0 250' 500'  
APPROXIMATE SCALE IN FEET

RACER TRUST  
BIICK CITY  
FLINT, MICHIGAN

**SOUTHWEST WORK AREAS**

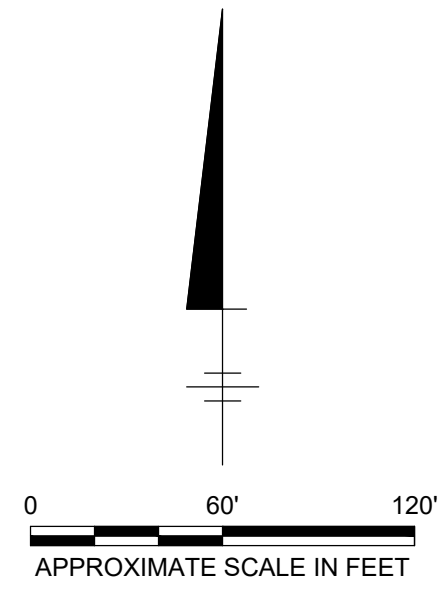
**ARCADIS** Design & Consultancy  
for natural and built assets

FIGURE  
**3**



**LEGEND:**

- |                             |                                 |
|-----------------------------|---------------------------------|
| ▲ SOIL BORING               | ⊗ RIVER GAUGE                   |
| ⊗ ABANDONED MONITORING WELL | ⊗ UNABLE TO LOCATE              |
| ⊕ MONITORING WELL (ACTIVE)  | — HISTORICAL STORM SEWER LINE   |
| ⊖ PIEZOMETER                | — STORM SEWER LINE (2018)       |
| ⊙ RECOVERY WELL             | — SANITARY SEWER LINE           |
| ⊠ SOIL GAS POINT            | --- RACER TRUST PROPERTY FORMER |
| ⊡ SUB-SLAB MONITORING POINT | --- RACER TRUST PROPERTY        |
| ⊙ TRANSECT POINT            |                                 |
| ⊕ SURFACE WATER             |                                 |



RACER TRUST  
 BUICK CITY  
 FLINT, MICHIGAN

**BLDG 04/HAMILTON AVENUE  
 WORK AREAS**

**ARCADIS** Design & Consultancy  
 for natural and  
 built assets

FIGURE  
**4**