August Mack
ENVIRONMENTAL

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4401 Rockside Road, Suite 300 ▪ Independence, Ohio 44131

April 18, 2025

Christopher Biro
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Re: Wetland and Downstream Sawmill Creek Sampling Work Plan
Material Sciences Corporation
460 W Main Street
Canfield, Ohio 44406
OHD000810283
August Mack Project Number: JZ0412.372

Dear Mr. Biro,

On behalf of Material Sciences Corporation, August Mack Environmental, Inc. is submitting the attached Wetland and Downstream Sawmill Creek Sampling Work Plan. This submittal was provided upon request of Ohio EPA and prepared in accordance with the Director's Final Findings and Orders, which were effective on December 31, 2024.

Should you have any questions or need any additional information, please do not hesitate to contact us.

Sincerely,

Brandon C. Lewis, CP, CHMM
Regional Director, Ohio Offices

Bryant Hoffer, CHMM, LPG
Senior Manager, Geologist

OBJECTIVE

August Mack Environmental, Inc. (August Mack), on behalf of Material Sciences Corporation (MSC), is proposing to collect soil/sediment and surface water samples from the Wetland and Sawmill Creek downstream of the MSC Canfield property (Site) in Canfield, Ohio. This Wetland and Downstream Sawmill Creek Sampling Work Plan (Work Plan) has been requested by Ohio EPA in advance of the RCRA RFI Workplan. This scope of work is intended to characterize impacts and address potential data gaps in the Wetland and provide a broad overview of conditions in Sawmill Creek. The data collected from this Work Plan will be incorporated into the overall remedial strategy for the Site and used to determine if additional sampling is necessary to further evaluate the Site impacts.

BACKGROUND

The Site is a metal galvanizing and coil coating facility located in Canfield, Ohio. MSC acquired the facility in 2013. In July 2024, brown liquid was visually observed in the ditch by a pedestrian on the bikeway. This brown liquid discharge was believed to be associated with cleaning and pressure washing activities conducted during a routine facility shutdown. Discharges from that incident were contained and collected, however, during the response efforts associated with the July 2024 release, residual impacts from historic facility operations were discovered in soil, surface water, sediment and groundwater at multiple locations in and around the Site. MSC was issued a Notice of Violation (NOV) from the Ohio Environmental Protection Agency (EPA) in October 2024 and the Director's Final Findings and Orders (DFFO) were effective December 2024. The Site is currently undergoing Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) through the RCRA FIRST pathway.

Initial Site investigations were conducted at the Site in 2024, which included assessment of soils, groundwater, and/or surface water on- and off -Site. The Initial Site Investigation report, which summarized the investigation methods and results, was submitted to Ohio EPA on December 9, 2024. The initial investigation identified soil/sediment impacts above United States Environmental Protection Agency (U.S. EPA) Residential and Industrial Regional Screening Levels (RSLs) throughout the Wetland and in certain areas downstream. Surface water samples had detections of Site-related contaminants of concern (COCs) but were below Non-drinking Surface Water Human Health Criteria.

As part of the DFFO, this Work Plan outlines the additional investigation approach to further delineate the impacts in soil/sediment and further investigate surface water conditions within the Wetland and Sawmill Creek. The proposed scope of work, investigation locations, and methodologies are detailed below.

SCOPE OF WORK

August Mack proposes the following to address potential data gaps and further delineate soil/sediment[1] within the Wetland and soil/sediment/surface water within Sawmill Creek.

- Collect up to 19 samples within the Wetland to characterize soil/sediment impacts
  - 11 locations on the perimeter of the Wetland area
  - Five (5) locations within the interior of the Wetland area
  - Three (3) locations adjacent to previously installed soil borings SB-23, SB-27, and SB-32 for vertical delineation
- Collection of sediment samples and surface water (if present) from Sawmill Creek at nine locations in which the creek crosses public roads, where samples can safely be collected.
- Collection of a surface water and sediment sample from one location upstream of the Site to determine background conditions of Sawmill Creek.

The Quality Assurance/Quality Control (QA/QC) samples will also be collected during the Wetland and Creek Work Plan at the minimum frequency described below:

Soil/Sediment Samples:

- One (1) duplicate sample per 10 samples
- One (1) Matrix Spike/Matrix Spike Duplicate (MS/MSD) sample per 20 samples
- One (1) equipment blank (EB) and one rinse blank (RB) per event.

Surface Water Samples:

- One (1) duplicate sample per 10 samples
- One (1) MS/MSD sample per 20 samples

The proposed sampling locations for the Wetland are shown on **Figure 1** and for Sawmill Creek on **Figure 2[2].** The investigation methodologies are detailed below. This Wetland and Creek Work Plan will not be implemented during or immediately following precipitation events.

[1] For the purpose of this assessment, material within the first 0.5-feet (ft) will be considered sediment if it is a) within the boundary of the delineated wetland, and b) within the creek base water line.

[2] Final sampling locations within the Creek will be dependent upon field reconnaissance and will be discussed with Ohio EPA personnel prior to commencement.

METHODOLOGY

Wetland Sampling

August Mack will collect samples from 19 locations within the Wetland as depicted on **Figure 1.**

- To the extent practical, private and public utility locate will be conducted to verify that all utilities have been identified prior to any drilling activities.
- August Mack will utilize a hand auger and/or slide hammer (as practicable, additional tools such as a trowel, shovel, etc. may be used to supplement the effort in order to collect the sample) to collect up to 19 samples within the Wetland to a maximum depth of 4-feet-below-grade (ft bg).
    - Soil will be continuously logged and visually inspected (staining and/or odor).
    - At each location, samples will be collected from 0-0.5-ft, 0.5-1.0 ft, 1.0-2.0-ft, 2.0-3.0-ft, and 3.0-4.0-ft.
    - The non-disposable equipment will be decontaminated in between each sampling location and sampling interval and decontamination fluids will be containerized for characterization and disposal.
    - Upon completion of the sampling, locations will be backfilled with soil cuttings and/or bentonite.
- Wetland soil/sediment samples will be submitted to a certified laboratory and analyzed for:
    - Total Cyanide via U.S. EPA Method SW-846 Method 9012,
    - Free Cyanide via U.S. EPA SW-846 Method OIA-1677,
    - Zinc via U.S. EPA SW-846 Method 6010, and
    - Hexavalent Chromium via U.S. EPA Method 7196.

Sawmill Creek Sampling

August Mack will collect samples from Sawmill Creek at nine locations as depicted on **Figure 2**. Sample activities will commence at the point furthest downstream and progress upstream working toward the Site. In addition, a sediment and surface water sample will be collected from one location upstream of the Site[3].

Prior to the initiation of sampling activities, August Mack and Ohio EPA personnel will conduct reconnaissance of the sample locations to determine the most appropriate sampling methodology/apparatus. At this time, it is anticipated that field personnel will not enter the creek and all samples will be collected from the crossroad due to safety

[3] The upstream sample location will be dependent upon field reconnaissance and will be discussed with Ohio EPA personnel prior to sampling.

considerations, access requirements, ingress/egress terrain conditions, and unknown creek conditions.

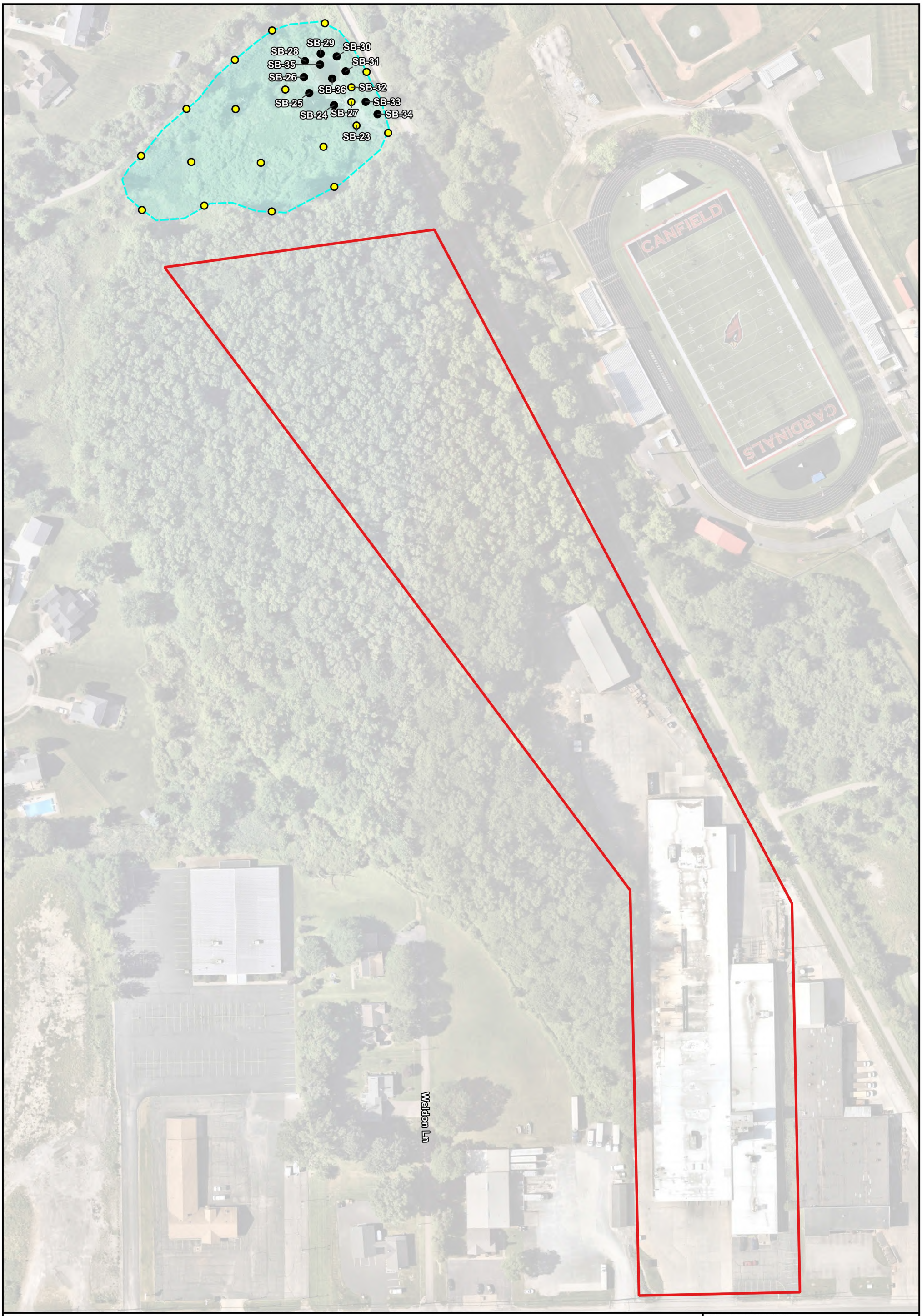
- Prior to sediment sample collection, surface water samples will be collected (if present) with a sampling apparatus appropriate for the location (dedicated disposable bailer, syringe, dipper sampler, etc.). Field filtering techniques will be utilized where appropriate.
    - Surface water samples will be transferred to clean, labeled sample containers (provided by the laboratory) and placed on ice in a cooler for preservation in the field.
    - The non-disposable equipment will be decontaminated in between each sampling location and decontamination fluids will be containerized for characterization and disposal.
    - Surface water pH concentrations will be field measured at each sampled location.
- At each sample location, August Mack will utilize a sampling apparatus (stainless steel spoons or scoops, hand auger, Ponar dredge, etc.) appropriate for the conditions to collect sediment samples from 0-0.5-feet below the sediment-water interface.
    - Sampling locations will be biased toward the collection of fine-grained (silts and clay) sediments and within the stream channel[4] displaying the thickest sediment deposits.
    - A surveying staff will be utilized to estimate the sediment thickness and depth of water at each sampling location.
    - Samples will be logged in the field and GPS coordinates will be recorded for each sample location.
    - The non-disposable equipment will be decontaminated in between each sampling location and decontamination fluids will be containerized for characterization and disposal.
- Surface water and sediment samples will be submitted to a certified laboratory and analyzed for:
    - Total Cyanide via U.S. EPA Method SW-846 Method 9012 and
    - Free Cyanide via U.S. EPA SW-846 Method OIA-1677.

Data collected from this Wetland and Creek Work Plan will be provided in an upcoming Status Report following implementation and receipt of laboratory data.

[4] Based on potential seasonal fluctuation of the water level, the stream channel may or may not have running water over the entirety of the streambed. If the thickest sediment is located within a section of the stream channel that is not covered by water, a sediment sample will be collected from that location.

FIGURES

Figure 1A: Proposed Wetland Sampling Location Map (Zoomed Out)
Figure 1B: Proposed Wetland Sampling Location Map (Zoomed In)
Figure 2: Downstream Sample Location Map



Subject Property
Wetland Area
Proposed Soil and Surface Water Sample Location
Previous Soil Sample Location

Nearmap Aerial Imagery:
June 15, 2024

Material Sciences Corporation
Canfield

Proposed Soil Boring Location Map

460 West Main Street
Canfield, Ohio 44406

N

0 50 100 ft

4401 Rockside Road, Suite 300
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(330) 576-3229

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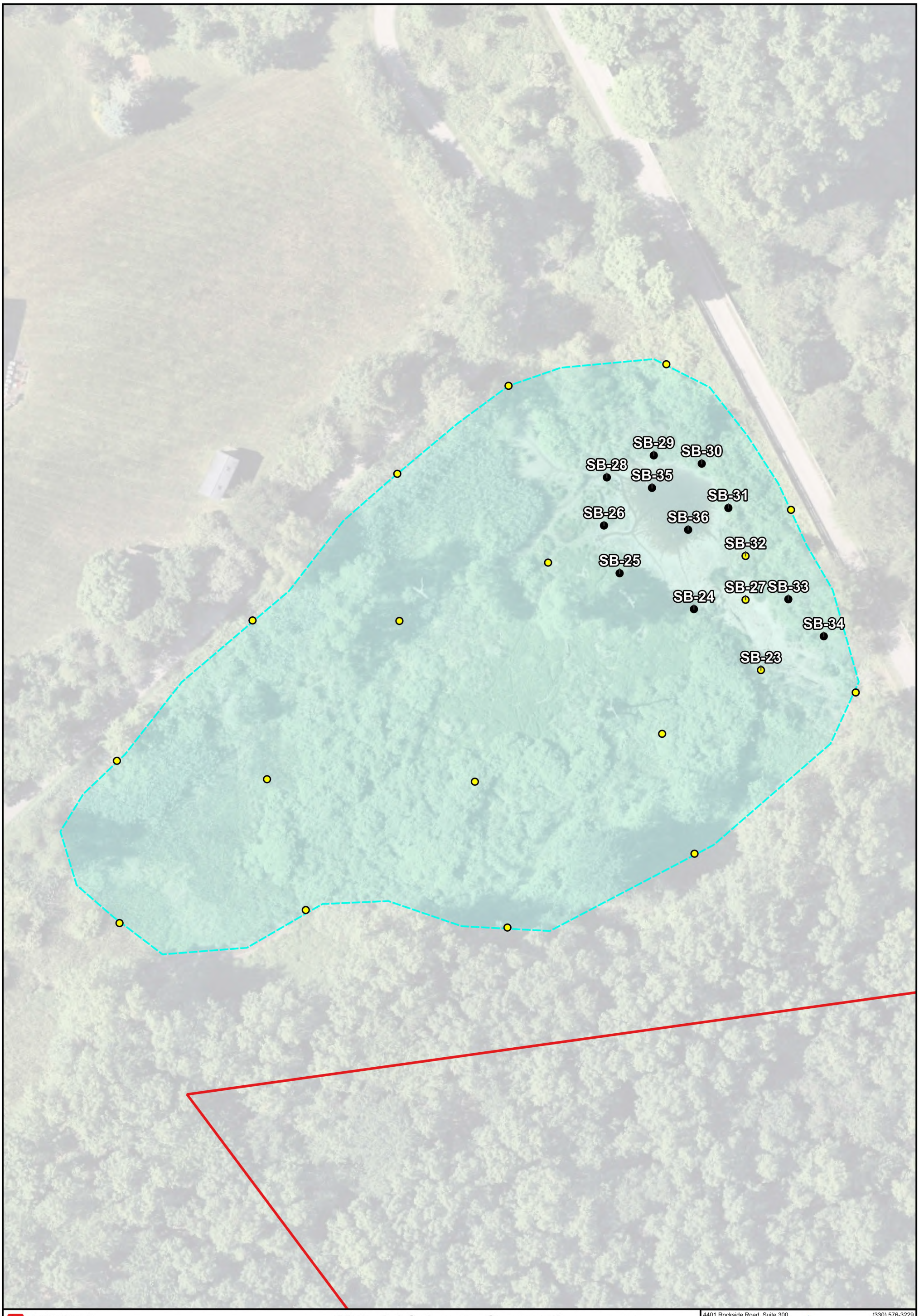
PROJECT NO.: JZ0412.372	DATE: 04/18/2025
	SCALE: 1:1,500
FIGURE: 1A	CREATED BY: CC



Subject Property
Wetland Area
Proposed Soil and Surface Water Sample Location
Previous Soil Sample Location

Nearmap Aerial Imagery:
June 15, 2024

Material Sciences Corporation
Canfield

Proposed Soil Boring Location Map

460 West Main Street
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N

0 25 50 ft

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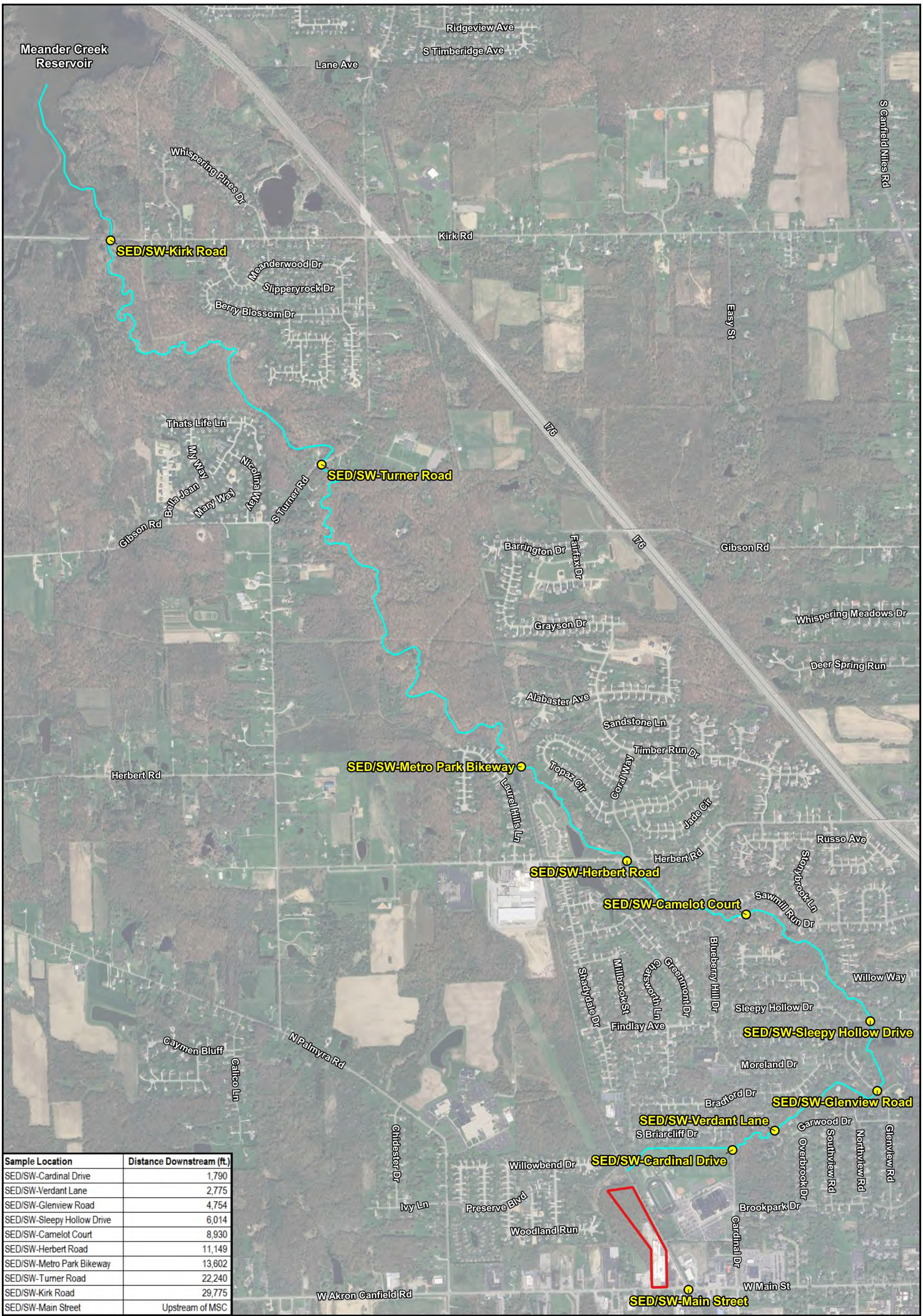
PROJECT NO.: JZ0412.372	DATE: 04/18/2025
	SCALE: 1:500
FIGURE: 1B	CREATED BY: CC



Sample Location	Distance Downstream (ft.)
SED/SW-Cardinal Drive	1,790
SED/SW-Verdant Lane	2,775
SED/SW-Glenview Road	4,754
SED/SW-Sleepy Hollow Drive	6,014
SED/SW-Camelot Court	8,930
SED/SW-Herbert Road	11,149
SED/SW-Metro Park Bikeway	13,602
SED/SW-Turner Road	22,240
SED/SW-Kirk Road	29,775
SED/SW-Main Street	Upstream of MSC

Subject Property
Sawmill Creek
Sediment and Surface Water Sample Location

Note: Distance downstream is measured from the intersection of Sawmill Creek Tributary and Mill Creek Metro Park Bikeway, north of the Site.

Google Satellite Imagery:
April 26, 2024

Material Sciences Corporation
Canfield

Downstream Sample Plan

460 West Main Street
Canfield, Ohio 44406

N

0 750 1,500 ft

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PROJECT NO.: JZ0412.372	DATE: 04/18/2025
	SCALE: 1:16,000
FIGURE: 2	CREATED BY: CC