



4462 Bretton Court NW, Suite 14
Acworth, Georgia 30101
678-303-2600

Wednesday, July 31, 2024

Mr. James Baker
MAC Bearden LLC
1642 Powers Ferry Road SE, Suite 250
Marietta, Georgia 30067
404-603-8833
j.baker@macallangroup.com

Project Title:	Cassville Road Site ±33 acres (Parcel No. 0059-0089-001)
Project Address:	NWC Cassville Road and Highway 411 Cartersville, Bartow County, Georgia 30120
Rimkus Matter No.:	100263565
Subject:	Report of Aquatic Resource Delineation

Dear James:

Rimkus has completed the authorized Aquatic Resource Delineation on the above referenced site. This report briefly summarizes the findings and recommendations.

GENERAL SITE DESCRIPTION:

The site consists of ±33 acres of land located north of Highway 411, south of Hamilton Boulevard NW, east of Rosen Street, and west of Cassville Road NW in Cartersville, Bartow County, Georgia. The site is currently undeveloped, cleared pastureland with small portions of undeveloped wooded land located within the western, central and southeastern portions of the site. A sewer easement bisects the site from north to south in the north, central, and southern portions of the site. The surrounding land use consists of undeveloped wooded and cleared land with residential and commercial development to the north and east, undeveloped wooded and cleared land with residential development to the south and undeveloped wooded and cleared land with residential development and light commercial and industrial development to the west of the site. A large industrial warehouse is located directly southwest of the site. The nearest named waterbody is Nancy Creek, which is located approximately 1.43-miles north of the site. The central site coordinates are latitude 34.22213 north and longitude -84.85783 west. The site is in the Etowah Watershed - Watershed Hydrologic Unit Code (HUC) 03150104. A Site Map is depicted on the USGS topographic map (Figure 1).

DESCRIPTION OF SITE SOILS:

According to the USDA NRCS Web Soil Survey soils mapped at the site consist of Bloomingdale silt loam, 0 to 2 percent slopes, occasionally flooded (BdA), Capshaw silty clay loam, 0 to 2 percent slopes (CaA), Cunningham silt loam, 2 to 6 percent slopes (CnB), Etowah loam, 2 to 6 percent slopes (EtB), Shady loam, 0 to 2 percent slopes, occasionally flooded (ShA). The soil series descriptions are below:

The **Bloomingdale** series consists of very deep, poorly drained soils that formed in mixed alluvium from shales and limestone. They are on flood plains and in depressions in the Appalachian Ridges and Valleys. Slopes range from 0 to 2 percent.

The **Capshaw** series consists of deep and very deep, moderately well drained soils on stream terraces, in depressions and on upland flats. They formed in a thin layer of loess or old alluvium and in the underlying clayey residuum. Slopes range from 0 to 12 percent.

The **Cunningham** series consists of well drained, deep, slowly permeable soils on uplands. These soils have brown loam A horizons, yellowish red clay and clay loam Bt horizons and C horizons of weathered shale. Slopes range from 2 to 25 percent. Near the type location mean annual temperature is 61 degrees F, and mean annual precipitation is 53 inches.

The **Etowah** series consists of very deep, well drained, moderately permeable soils on high stream terraces, alluvial fans and foot slopes. These soils formed in alluvium or colluvium that is commonly underlain by limestone residuum below 40 inches. The slopes range from 0 to 35 percent.

The **Shady** series consists of very deep, well drained soils. These soils formed on stream terraces in loamy alluvium weathered from sandstone, limestone and shale. Slopes range from 0 to 15 percent.

A USDA Soil Survey map is attached as Figure 3.

FIELD DELINEATION PROCEDURES:

The purpose of this delineation was to identify on-site *waters of the U.S. (WOTUS)*, and “buffered” state waters, which are subject to federal permitting authority under Section 404 of the Clean Water Act (CWA) as well as the Erosion & Sedimentation Control Act of 1975, and Local Issuing Authority (LIA) ordinances that may apply.

“Wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance. For regulatory purposes under the Clean Water Act, the term wetlands mean “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

Also, for your reference, the assessment methodology for the determination of streams or “buffered” state waters included the following field indicators as primary criteria, not necessarily in this order:

- Defined bed and bank geomorphology;
- Natural wretched vegetation within the channel;
- Evidence of sediment sorting within the bed of the channel;
- Presence of an ordinary or mean high water mark;
- Presence of extensive surface water flow or evidence of recent persistent flow;
- Evidence of active subsurface hydrological connection with surrounding streams;
- System must not be entirely confined and retained completely on the property owned by a single entity.

Rimkus assessed the site for potential WOTUS, as defined in the 1987 Corps of Engineers Wetland Delineation Manual, utilizing the Routine Wetland Determination, Level 2 methodology. The wetland delineation fieldwork was completed on July 2, 2024, by Mr. Nicholas Salter (Associate Consultant) and Chase Spotts (Associate Consultant), both qualified and certified wetland delineators.

FEDERAL REGULATORY INFORMATION OVERVIEW:

The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Section 404 of the CWA specifically prohibits the discharge of dredged or fill material into waters of the U.S. (including wetlands, surface water bodies, and drainage channels) without U.S. Army Corps of Engineers (USACE) authorization. The discharge of soil and other fill materials, riprap, backfill, dredged material, or other such material into jurisdictional areas requires a permit pursuant to Section 404 of the CWA.

An integral part of the USACE regulatory program is the concept of general permits for minor activities within waters of the United States, including wetlands. General permits are designed to relieve some of the administrative burden associated with permit processing for both the applicant and regulatory agencies. These permits are based on site-specific activity and/or project location. Nationwide permits (NWP) are a form of general permits issued by the USACE and are commonly used throughout the United States. If conditions that qualify an activity for authorization under one of the several NWPs are met, the specified activity may be able to proceed without a complex Individual Section 404 Permit (IP) or Regional Permit (RP).

For certain NWPs, Pre-Construction Notification (PCN) is required. The PCN process requires the applicant to submit project information to the USACE, including a delineation of aquatic resources boundaries for wetlands and other waters of the U.S., amount of aquatic resources area to be impacted, and background information. The PCN process is designed to be a 45-day review and natural resource agency comment solicitation period. After the review period, a response as to whether the permit is granted or denied is issued by the USACE.

The general acreage threshold limit currently imposed by the USACE Nationwide Permit program is **0.05 acre of stream channel** and **0.50-acre of wetland (or total area of aquatic resources impact)**. If greater than 0.05 acre of stream channel or 0.50-acre of jurisdictional wetland is anticipated to be impacted by the proposed development, a more complex federal permit known as a Section 404 Individual Permit (IP) under the CWA would likely be required to be obtained prior to commencing site work. The IP process, depending on controversy and opposition encountered, may require 12 to 15 months to complete.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS:

Results of this delineation identified the following aquatic resources on the site:

Perennial Stream 1 (P1): P1 consists of the bed and bank of a south-southeasterly trending perennial stream channel located in the northern, central, southern, and southeastern portions of the site. P1 flows onsite via an embedded culvert where it continues south flowing through a series of embedded plastic culverts and eventually loses bed and bank morphological characteristics as it becomes temporarily inundated by W1 (described below) in the southern portion of the site. P1 regains bed and bank morphological characteristics in the southeastern portion of the site where it flows southeast traveling parallel with the southern site boundary before continuing offsite in the southeastern portion of the site. Using the guidelines within USACE Regulatory Guidance Letter No. 05-05 dated December 7, 2005 (RGL 05-05), physical characteristics that occur within P1 include, bed and bank, water staining, changes in character of the soil, destruction of terrestrial vegetation, wracking, vegetation absent, sediment sorting, leaf litter that is disturbed or washed away, scour, and depositions. P1 ranges from approximately 4 to 6 feet in width with substrate consisting of sand, silt, and gravel. P1 is listed by the National Wetland Inventory as a riverine and a freshwater emergent wetland. P1 is classified as R3UB (*Riverine, Upper Perennial, and Unconsolidated Bottom*). **P1 totals 1,333.68 linear feet (lf).**

Wetland 1 (W1) / Wetland 2 and Wetland 3 (W2 and W3): W1 consists of a partially linear, forested and emergent wetland located in the western, southwestern, southern, and southeastern portions of the site. Hydrophytic vegetation and low chroma/hydric soils were present throughout this wetland. Furthermore, this wetland appears to be influenced by seasonal groundwater fluctuation. W1 drains into P1 and is classified as both PFO6B (*Palustrine, Forested, Deciduous, Saturated*) and PEM2B (*Palustrine, Emergent, Nonpersistent, Saturated*). **W1 totals 0.543 acre.**

****Refer to Figure 2: Aquatic Resource Delineation Map. For the purposes of clarity and precision in the Appendix, W1a, W1b, and W1c are distinctly labeled. However, these segments are collectively classified as W1. **** W2 and W3 consist of two [2] partially linear, emergent wetlands located in the central portion of the site. Hydrophytic vegetation and low chroma/hydric soils were present throughout these wetlands. Furthermore, these wetlands appear to be influenced by seasonal groundwater fluctuation. These wetlands both drain into P1 and are classified as PEM2B (*Palustrine, Emergent, Nonpersistent, Saturated*). **W2 totals 0.088 acre. W3 totals 0.009 acre.**

Open Water 1 (OW1) / Intermittent Stream 1 (I1): OW1 consists of an open water pond located in the central portion of the site. OW1 drains into I1 and is listed by the National Wetland Inventory as a Freshwater Pond. OW1 is classified as PUBHh (*Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded*). **OW1 totals 0.285 acre.** I1 consists of the bed and bank of an easterly trending intermittent stream channel located within the central portion of the site. I1 begins within the eastern portion of OW1 where it flows east for a short reach before forming confluence with P1 in the central portion of the site. Using the guidelines within RGL 05-05, physical characteristics that occur within I1 include: bed and bank, water staining, destruction of terrestrial vegetation, vegetation absent, leaf litter that is disturbed/washed away, and depositions. I1 ranges from approximately 1 to 2 feet in width and is classified as R4SB (*Riverine, Intermittent, Streambed*). **I1 totals 185.47 lf.**

Aquatic resources described above (P1, W1, W2, W3, OW1, and I1) are direct components of the Etowah Watershed (HUC 03150104); therefore, consist of *WOTUS*, and regulated under Section 404 of the CWA. Furthermore, the on-site stream channels (I1 and P1), and open water pond (OW1) consists of “buffered” State Waters requiring protective buffer setbacks as per Georgia Environmental Protection Division (GA EPD) requirements and locally administered under LIA

ordinances. Refer to Attachment A for photographic documentation of the delineated aquatic resources on the site.

****Non-WOTUS (non-regulated features) ****

Man-Made Stormwater Detention Basin: This detention basin is located within the northeastern portion of the site and drains from east to west through an outlet control structure (OCS) within the western portion of the basin. Please refer to the depicted feature noted as detention basin on Figure 2: Aquatic Resource Delineation Map. It is our professional opinion that this feature does not constitute WOTUS (as regulated under Section 404 of the CWA) and/or “buffered” State Water (as regulated under the Erosion, Sedimentation, and Control Act of 1975 and locally administered under the LIA ordinances). According to historical photographs, the detention basin appears to have been constructed within the years 2014 and 2017.

Refer to Figure 2: Aquatic Resource Delineation Map. Boundaries of the on-site wetlands (W1 through W3) were field marked with pink surveyor’s tape with black wetland boundary print. Additionally, the ordinary high-water marks (OHWM) along both sides of the on-site stream channels (I1 and P1), and open water pond (OW1) were field marked with blue/white striped surveyor’s tape. All on-site aquatic resources were subsequently field located by Rimkus using a Trimble TDC600 GPS unit.

Please be advised that a state buffer variance (regulated by the GA EPD under the Erosion and Sedimentation Act), required for activities encroaching into the vegetated buffer adjacent to streams within the state is not a Federal Section 404 permit regulated by the USACE. The state buffer variance is an entirely separate process. Likewise, a Section 404 permit is not a permit to encroach within the state-protected stream buffer, and receipt of a Section 404 permit does not make a buffer variance easier to obtain. During the plan routing process through the LIA, you may have been informed whether a stream buffer variance would be required for your project. Local agency representatives are the primary point of contact for final jurisdictional state waters determination as indicated in any formal guidance they may provide you during their site inspection. Therefore, we suggest submitting the enclosed materials in a request for an Aquatic Resource Review (ARR) to the USACE to best safeguard that any future site development will have the benefit of a final appraisal of the extent of regulated features present on the site property.

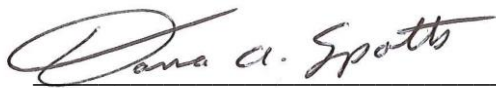
Closing:

We appreciate the opportunity to provide our Natural Resource Consulting services to MAC Bearden LLC. If you have any questions regarding this report or if we may be of further service to you, please call our office at (678) 303-2600.

Sincerely,



Chase A. Spotts
Associate Consultant III
Natural Resource Services
chase.spotts@rimkus.com



Dana A. Spotts, REPA, EP
Consultant - Natural Resources Services
Natural Resource Services
Dana.spotts@rimkus.com

FIGURES:

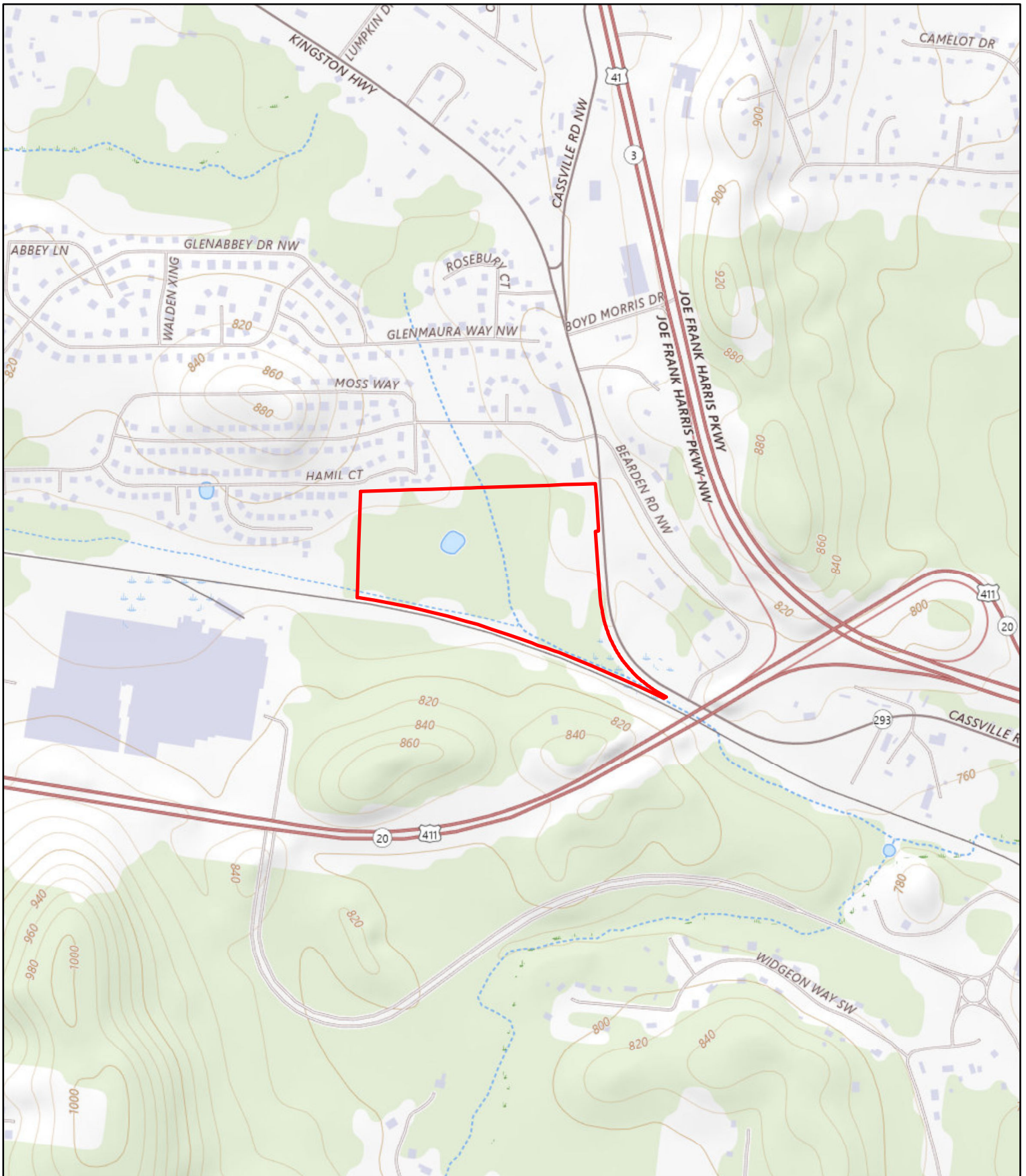
1. Site Location Map
2. Aquatic Resource Delineation Map
3. USDA Soil Survey Map
4. National Wetlands Inventory (NWI) Map
5. FEMA Flood Insurance Rate Map (FIRM)

ATTACHMENTS:

- A. Site Photographs

FIGURE 1

Site Location Map



Produced By:



**FIGURE 1: SITE LOCATION MAP
7.5 MIN USGS TOPOGRAPHIC QUAD**

Cassville Road Site
Bartow County, Georgia
For
MAC Bearden LLC
100263565
July 30, 2024

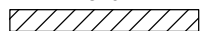
LEGEND

 Property Boundary

N



820



Feet

FIGURE 2

Aquatic Resource Delineation Map

NOTE: For the purposes of clarity and precision in the Appendix, W1a, W1b, and W1c are distinctly labeled. However, these segments are collectively classified as W1.



Produced By:



FIGURE 2: AQUATIC RESOURCE DELINEATION MAP

Cassville Road Site
 Bartow County, Georgia
 For
 MAC Bearden LLC
 100263565
 July 30, 2024

LEGEND

- Property Boundary
- Perennial Stream
- Intermittent Stream
- Wetland
- Open Water
- Detention Basin
- Culvert

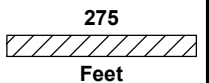


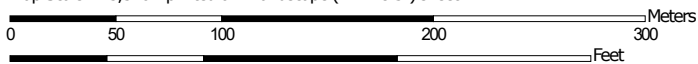
FIGURE 3

USDA Soil Survey Map

Soil Map—Bartow County, Georgia
(Property Boundary)



Map Scale: 1:3,570 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84




Soil Map—Bartow County, Georgia
(Property Boundary)


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils





 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features




-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bartow County, Georgia
Survey Area Data: Version 15, Aug 25, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 14, 2022—Jun 21, 2022

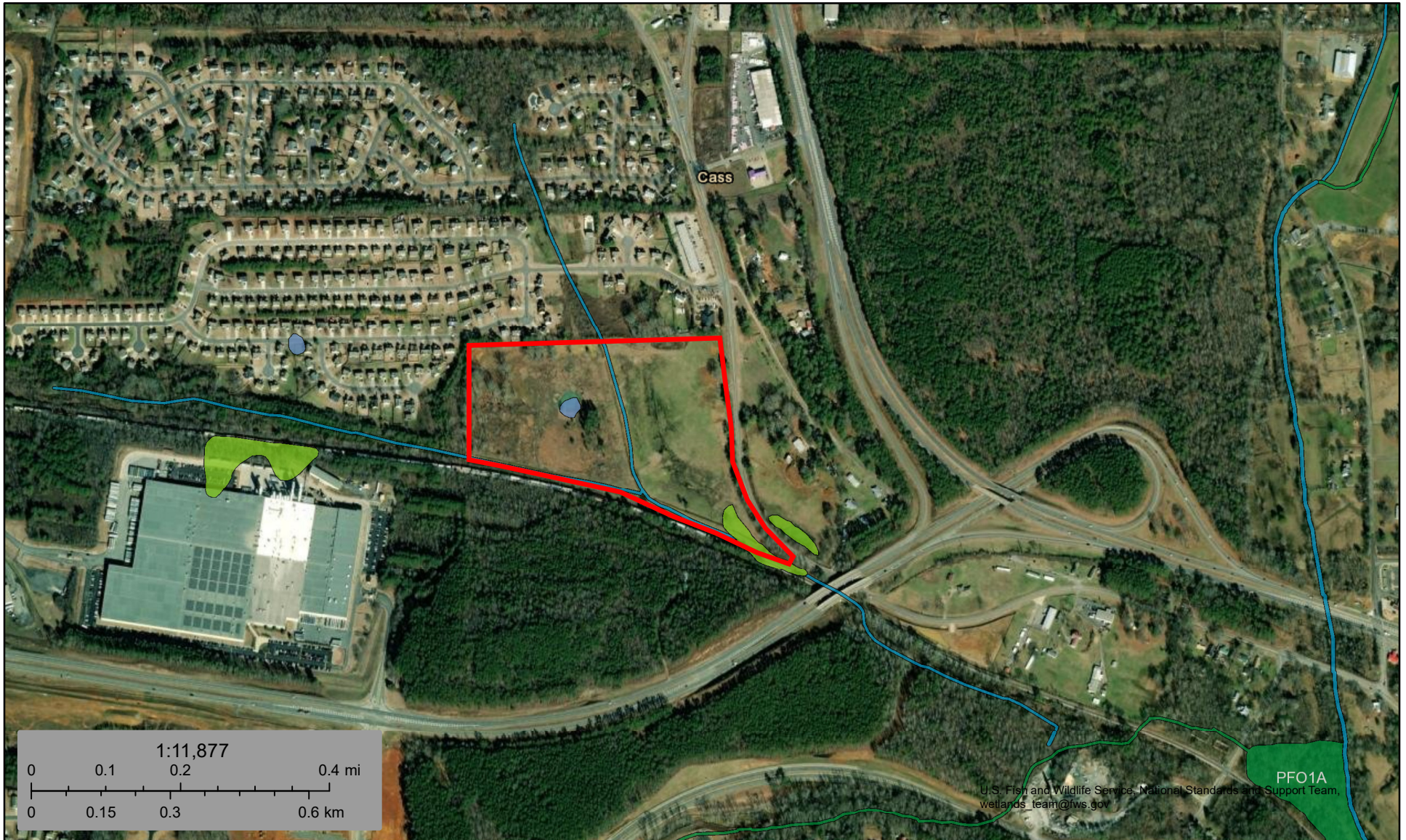
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BdA	Bloomington silt loam, 0 to 2 percent slopes, occasionally flooded	23.9	71.7%
CaA	Capshaw silty clay loam, 0 to 2 percent slopes	5.1	15.3%
CnB	Cunningham silt loam, 2 to 6 percent slopes	1.9	5.6%
EtB	Etowah loam, 2 to 6 percent slopes	2.4	7.3%
ShA	Shady loam, 0 to 2 percent slopes, occasionally flooded	0.1	0.2%
Totals for Area of Interest		33.3	100.0%









FIGURE 4

National Wetlands Inventory (NWI) Map



July 19, 2024

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

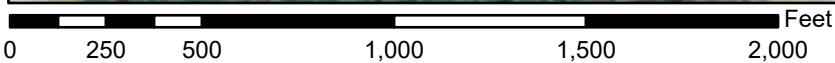
FIGURE 5

FEMA Flood Insurance Rate Map (FIRM)

National Flood Hazard Layer FIRMette



84°51'46"W 34°13'35"N



1:6,000

84°51'18"W 34°13'5"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **7/19/2024 at 3:39 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

ATTACHMENT A

Site Photographs



PHOTOGRAPH 1
Northern portion of W1a, facing east



PHOTOGRAPH 2
Linear portion of W1a, facing south



PHOTOGRAPH 3
W1a soil profile



PHOTOGRAPH 4
W1b, facing north



PHOTOGRAPH 5
W1b soil profile



PHOTOGRAPH 6
Linear portion of W1c, facing north



PHOTOGRAPH 7

Typical view of linear portion of W1c soil profile



PHOTOGRAPH 8

Northern portion of W1c, facing north



PHOTOGRAPH 9

Typical view of northern portion of W1c soil profile



PHOTOGRAPH 10

W2, facing northeast



PHOTOGRAPH 11
Typical view of W2 soil profile



PHOTOGRAPH 12
W3, facing east



PHOTOGRAPH 13
Typical view of W3 soil profile



PHOTOGRAPH 14
Southeastern reach of P1, facing northwest



PHOTOGRAPH 15
Northern reach of P1, facing south



PHOTOGRAPH 16
I1, facing west



PHOTOGRAPH 17
Linear portion of W1, facing northwest



PHOTOGRAPH 18
Linear portion of W1, facing southeast