

# ATTACHMENTS

**CERTIFICATE OF APPROVAL FOR RECORDING**  
 I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS FOR GEORGETOWN COUNTY, SOUTH CAROLINA WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS ARE NOTED IN THE FOOTNOTES OF THE PLANNING COMMISSION AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE CLERK OF COURT.

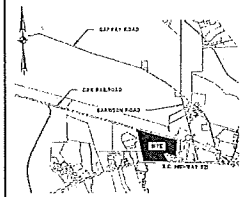
DATE: 4/11/24  
 SIGNATURE: Justin Bankard  
 GEORGETOWN COUNTY PLANNING AND COMMUNITY DEVELOPMENT  
 DATE: 4/11/24  
 SIGNATURE: [Signature]  
 GEORGETOWN COUNTY PLANNING AND COMMUNITY DEVELOPMENT

**CERTIFICATE OF OWNERSHIP AND DEDICATION**  
 THE UNDERSIGNED HEREBY ACKNOWLEDGE THAT I DO (WE AND) THE OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON, AND THAT I (WE) HEREBY ACCEPT THIS PLAN OF DEVELOPMENT (PLAT) WITH AN (OUR) FREE CONSENT AND THAT I (WE) HEREBY SECURE ALL ITEMS AS SPECIFICALLY SHOWN OR NOT SHOWN ON SAID PLAT.

SIGNATURE: Angela Christian  
 NAME (PRINT): Angela Christian / Hutton  
 SIGNATURE: \_\_\_\_\_  
 NAME (PRINT): \_\_\_\_\_ DATE: \_\_\_\_\_

- NOTES**
1. TAX MAP NO. 02-0208-005-00-00
  2. ACCORDING TO FIRM MAP NO. 45841C, PANELS 0330 & 0335, DATED MAY 9, 2023 THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN FLOOD HAZARD ZONE "X", SHOWN BY "X" ZONE.
  3. COORDINATES AND DIRECTIONS SHOWN ON THIS SURVEY ARE BASED ON SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM (NAD83) DISTANCES SHOWN ARE GRID DISTANCES, NOT GRID DISTANCES.
  4. THIS SURVEY IS VALID ONLY IF THE PARTY OF SAME HAS THE ORIGINAL SIGNATURE AND ENGROSSED SEAL OF THE LAND SURVEYOR.
  5. A TITLE SEARCH WAS NOT PERFORMED BY THOMAS & HUTTON ENGINEERING CO. AT THE TIME OF THIS SURVEY.
  6. THE PROPERTY PLATTED HEREON IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
  7. THE PORTION OF UNDERGROUND UTILITIES SHOWN ON THIS DRAWING IS BASED UPON THE LOCATION OF SURFACE APPURTENANCES AND/OR SURFACE MARKERS AND SHOULD BE CONFIRMED APPROXIMATE.
  8. CURRENT OWNER GEORGETOWN COUNTY  
 PO BOX 48220  
 GEORGETOWN, SC 29540
  9. CURRENT ZONING: FA (PER GEORGETOWN COUNTY GIS)

**REFERENCE MAPS:**  
 1. "WETLAND SURVEY OF A 332-45 ACRE TRACT OWNED BY GEORGETOWN COUNTY, PREPARED FOR GEORGETOWN COUNTY" DATED APRIL 21, 2010 BY THIS OFFICE.  
 2. "BOUNDARY SURVEY OF A 332-45 ACRE TRACT OWNED BY GEORGETOWN COUNTY, PREPARED FOR GEORGETOWN COUNTY" DATED APRIL 9, 2010 BY THIS OFFICE.



**VICINITY MAP** not to scale

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- LEGEND**
- 5/8" REBAR SET
  - 1/2" P.C.E. FOUND (SEE NOTES)
  - 1/2" REBAR FOUND (SEE NOTES)



I HEREBY STATE THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE MANUAL FOR SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN.

MATTHEW D. SVEC, SURVEYOR  
 SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR  
 LICENSE NO. 21233

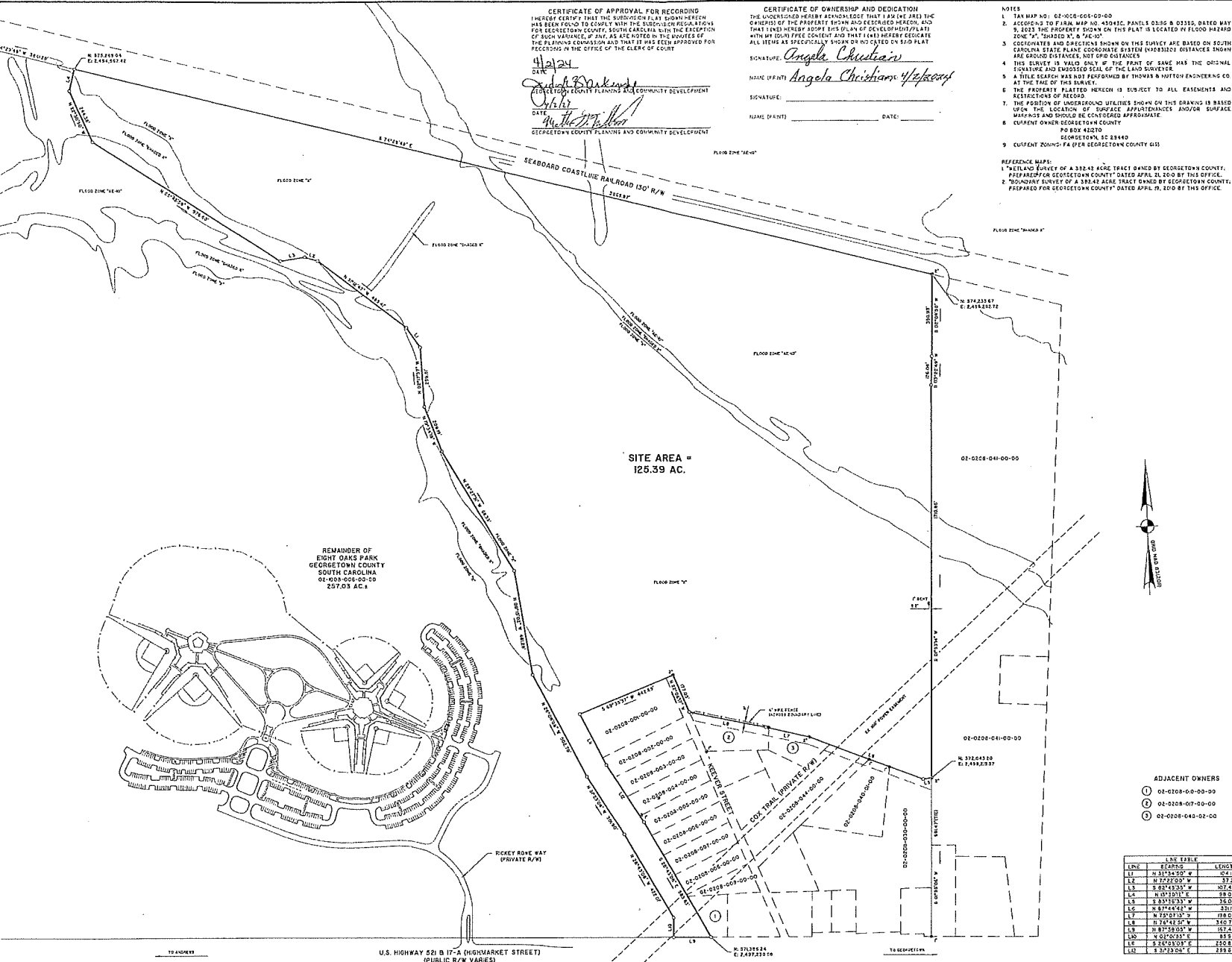
**SUBDIVISION PLAT OF**  
**A PORTION OF THE EIGHT OAKS PARK GEORGETOWN COUNTY CONTAINING 125.39 AC.**

GEORGETOWN COUNTY SOUTH CAROLINA  
 prepared for  
 GEORGETOWN COUNTY

**THOMAS & HUTTON**  
 611 Burroughs & Chapin Blvd. • Suite 202  
 Myrtle Beach, SC 29577 • 843.839.3545  
 www.thomasandhutton.com



Plot Date: 3/14/2024  
 Drawn By: JED  
 Revised By: MDS  
 Date: 3/13/2024  
 Scale: CDH



- ADJACENT OWNERS**
- ① 02-0208-00-00-00
  - ② 02-0208-007-00-00
  - ③ 02-0208-040-02-00

LINE	BEARING	LENGTH
L1	N 35° 44' 30" W	64.48
L2	N 72° 22' 00" W	37.72
L3	S 82° 48' 30" W	107.43
L4	S 01° 10' 15" E	78.21
L5	S 85° 16' 33" W	34.07
L6	N 87° 44' 45" W	23.19
L7	N 72° 07' 15" E	114.03
L8	S 74° 42' 30" W	340.72
L9	S 87° 58' 30" W	107.43
L10	S 01° 02' 30" E	88.94
L11	S 82° 48' 30" W	274.82
L12	S 35° 44' 30" E	238.84

TO ADJACENT U.S. HIGHWAY 52 B 17-A (HIGHWAY STREET) (PUBLIC R/W VARIES) TO GEORGETOWN

# Current Zoning Map

## Legend

County Parcels

Streets

## Zoning Districts

### DISTRICT

MHP

HI

LI

R5

PA

R1/2

FA

GR

R10

MR10

VR10

R1/2AC

R1AC

RS

GRR

CP

PD

FDD

FA/R

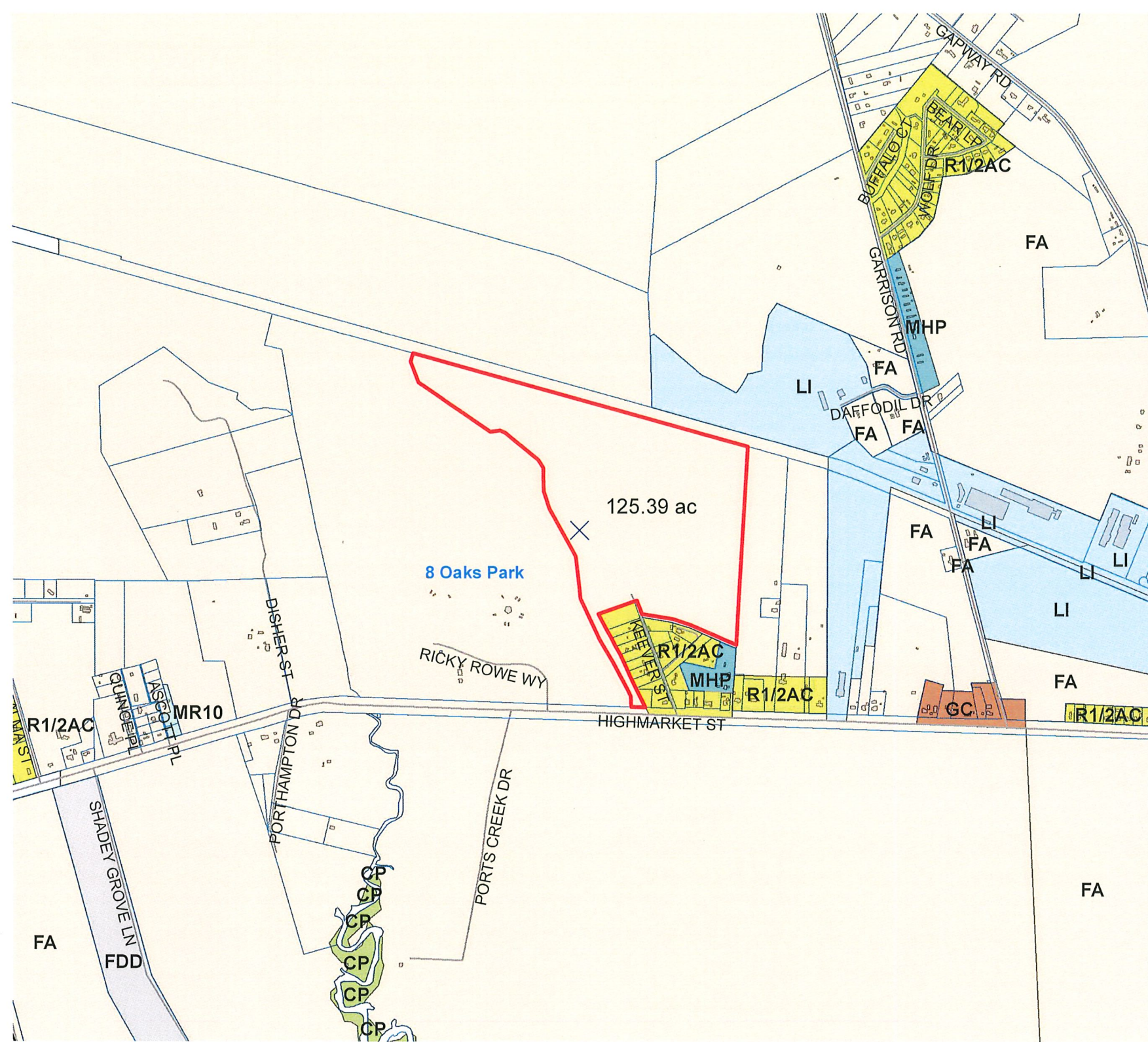
GC

NC



DISCLAIMER: This map is a geographical representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Georgetown County disclaims all responsibility and liability of the use of this map.

0 235 470 940 1,410 1,880 Feet





# Current Zoning Map

## Legend

County Parcels

Streets

## Zoning Districts

### DISTRICT

MHP

HI

LI

RC

R5

PA

R1/2

FA

GR

R10

MR10

VR10

R1/2AC

R1AC

RR

RS

GRR

CP

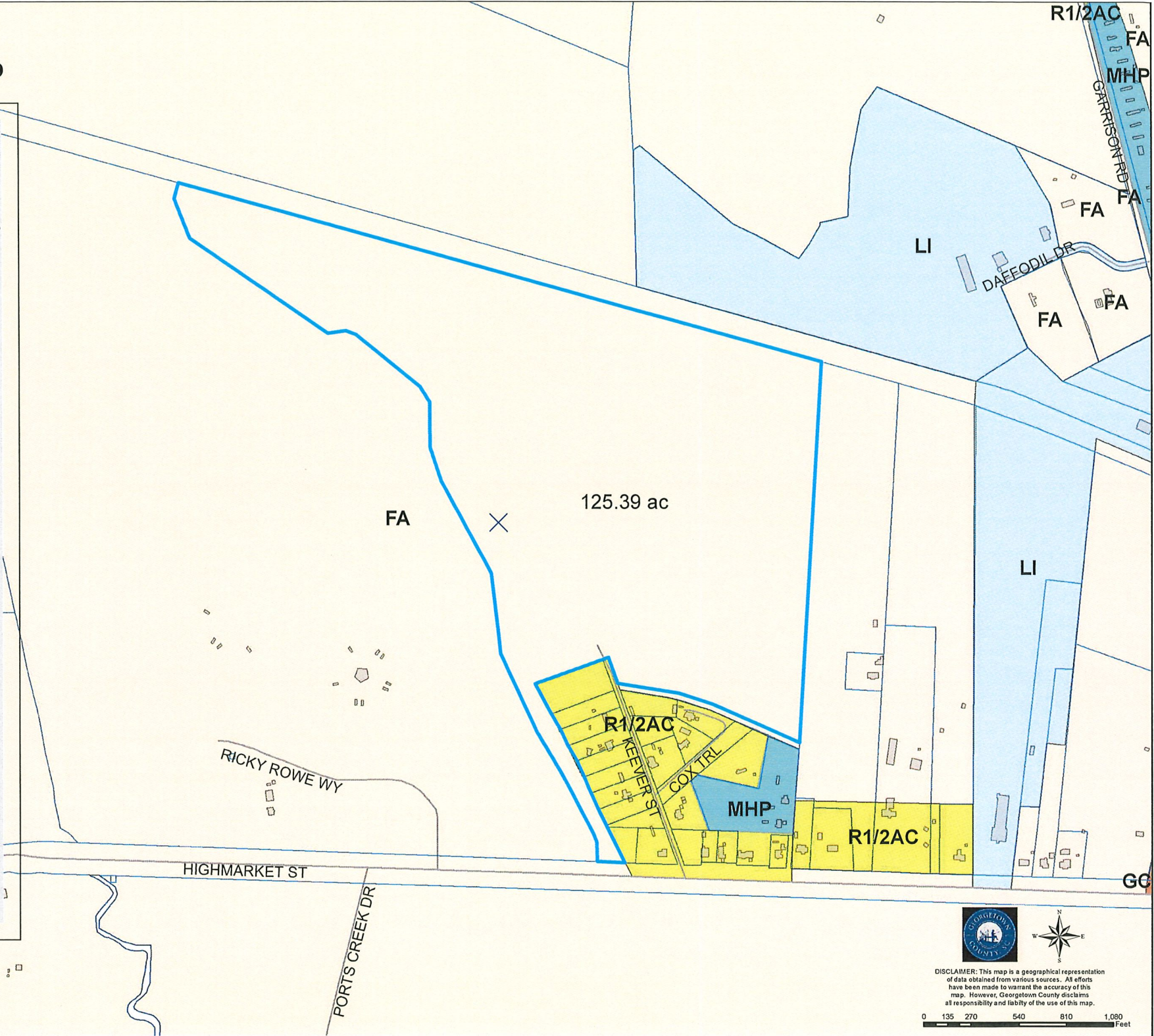
PD

MD

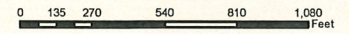
FA/R

GC

NC



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125.39 ac

DASHER ST

RICKY ROWE WY

KEEVER ST

COX TRL

DAFFODIL DR

GARRISON RD

NORTHAMPTON DR

HIGHMARKET ST

PORTS CREEK DR



DISCLAIMER: This map is a geographical representation of data obtained from various sources. An effort has been made to warrant the accuracy of this map. However, Georgetown County disclaims all responsibility and liability of the use of this map.





# THE BRIGMAN COMPANY

March 19, 2024

U.S. Army Corps of Engineers  
Conway Regulatory Field Office  
1949 Industrial Park Road, Room 140  
Conway, SC 29526

Attention: Mr. Rob Huff

**Reference: 8 Oakes Tract  
Georgetown, Georgetown County, SC  
Portion of SAC-2010-00654-3JY**

Dear Mr. Huff:

We have completed a routine wetland determination/delineation of the above referenced project. Based on a field reconnaissance conducted on March 18, 2024, the approximate 125.42-acre subject property was determined to contain approximately 41.621 acres of wetland areas and 9,361 linear feet of Non-Wetland Waters. The wetland delineation line did not differ from the previously approved wetland delineation line that was approved under SAC-2010-00654-3JY Acting as agent for the applicant, we hereby request this determination be reviewed by your office and a verification letter be issued after having concurred with our findings.

To facilitate the review and approval process, please find the following attached information:

- Delineation Concurrence Exhibit dated March 19, 2024
- USACE Jurisdictional Determination (JD) / Delineation form
- Exhibit 1 -Vicinity Map
- Exhibit 2 - USGS Topographic Map Exhibit
- Exhibit 3 – Aerial Photograph with Data Point Locations
- Exhibit 4 - Soil Survey Exhibit
- Exhibit 5 – USF&WS National Wetland Inventory Exhibit
- Exhibit 6 – LiDAR Exhibit
- Representative Site Photographs
- Data Sheets

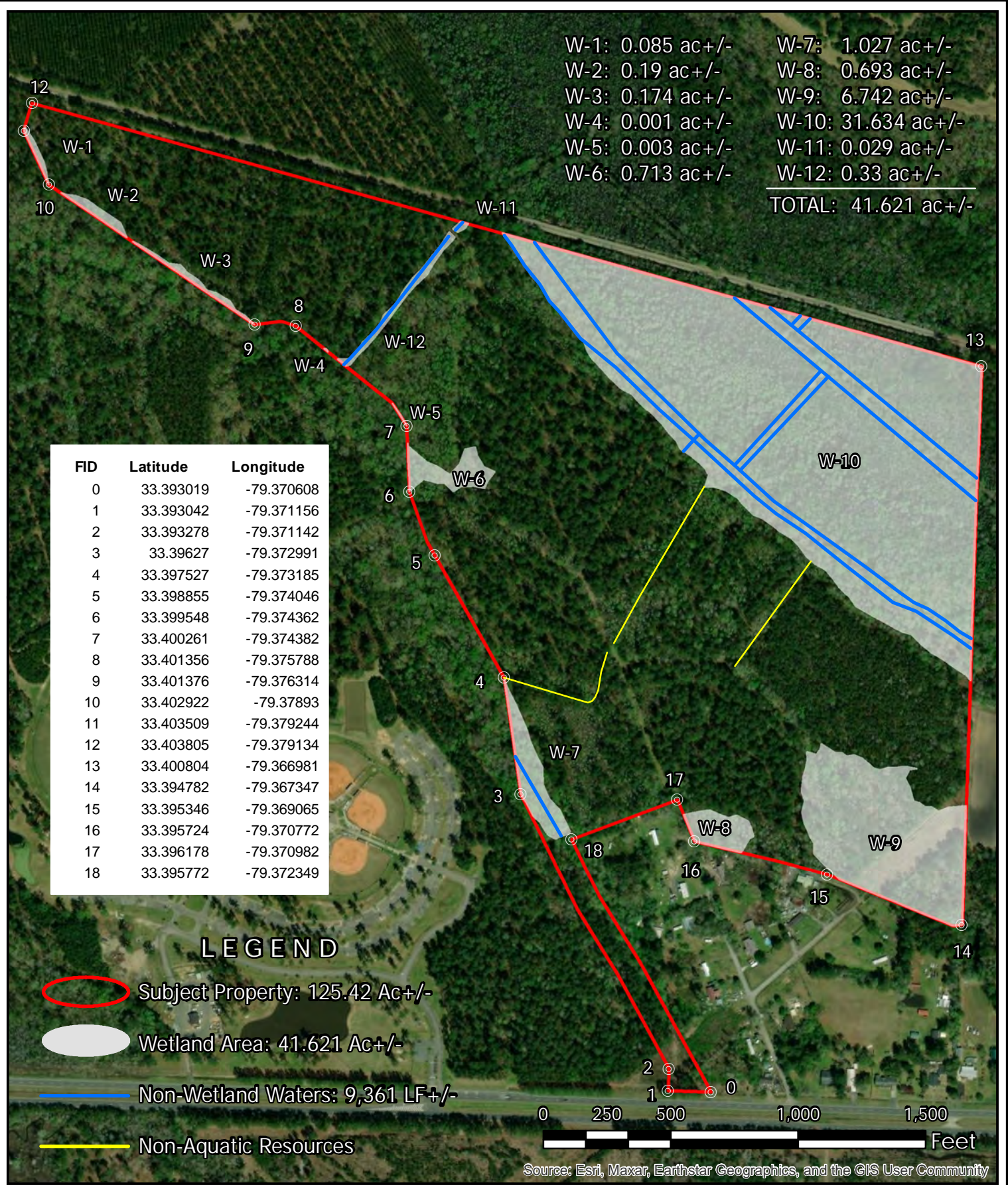
Please notify us when you schedule your on-site inspection so we can be available to accompany you. Should you have any questions or require additional information to facilitate your review, please advise.

Sincerely,

Partner / Project Manager


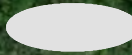
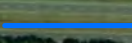



W-1: 0.085 ac+/-      W-7: 1.027 ac+/-  
 W-2: 0.19 ac+/-      W-8: 0.693 ac+/-  
 W-3: 0.174 ac+/-      W-9: 6.742 ac+/-  
 W-4: 0.001 ac+/-      W-10: 31.634 ac+/-  
 W-5: 0.003 ac+/-      W-11: 0.029 ac+/-  
 W-6: 0.713 ac+/-      W-12: 0.33 ac+/-  
 TOTAL: 41.621 ac+/-



FID	Latitude	Longitude
0	33.393019	-79.370608
1	33.393042	-79.371156
2	33.393278	-79.371142
3	33.39627	-79.372991
4	33.397527	-79.373185
5	33.398855	-79.374046
6	33.399548	-79.374362
7	33.400261	-79.374382
8	33.401356	-79.375788
9	33.401376	-79.376314
10	33.402922	-79.37893
11	33.403509	-79.379244
12	33.403805	-79.379134
13	33.400804	-79.366981
14	33.394782	-79.367347
15	33.395346	-79.369065
16	33.395724	-79.370772
17	33.396178	-79.370982
18	33.395772	-79.372349

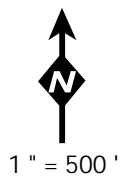
**LEGEND**

-  Subject Property: 125.42 Ac+/-
-  Wetland Area: 41.621 Ac+/-
-  Non-Wetland Waters: 9,361 LF+/-
-  Non-Aquatic Resources

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Delineation Concurrence Exhibit  
 8 Oaks Tract  
 Portion of TMS# 02-1008-006-00-00  
 Georgetown County, SC  
 March 19, 2024





U.S. Army Corps of Engineers – Charleston District - Regulatory Division  
**REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD) / DELINEATION**  
 (For Jurisdictional Status and Identifying Wetlands and Other Aquatic Resources)

The Regulatory Division is now offering paperless/electronic documents as a primary means of accepting project submittals and responding to requests. While electronic submittals are preferred, we will continue to accept paper documents that meet our file requirements in order to accommodate those with limited computer access. Depending on the project location, requests should be submitted to the appropriate office below. Please visit <https://www.sac.usace.army.mil/Missions/Regulatory/Electronic-Submittals/> for additional information on electronic submittals.

<b>Charleston Office:</b> 69A Hagood Avenue Charleston, SC 29403 843-329-8044 SAC.RD.Charleston@usace.army.mil	<b>Columbia Office:</b> 1519 Taylor Street Columbia, SC 29201 803-253-3444 SAC.RD.Columbia@usace.army.mil	<b>Conway Office:</b> 1949 Industrial Park Road, Room 140 Conway, SC 29526 843-365-4239 SAC.RD.Conway@usace.army.mil	<b>Greenville Office:</b> 750 Executive Center Dr, Suite 103 Greenville, SC 29615 864-609-4326 SAC.RD.Greenville@usace.army.mil
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**I. PROPERTY AND AGENT INFORMATION**

**A. Site Details/Location:**

Site Name: 8 Oaks Tract Date: March 19, 2024  
 City/Township/Parish: Georgetown County: Georgetown  
 Latitude/Longitude: 33.399 / -79.371 Acreage: 125.42 ac+/-  
 Tax Map Sequence (TMS) #(s): Portion of 02-1008-006-00-00  
 Property Address(es): Highway 521 (please see the attached exhibit for location of the subject property).

An accurate depiction of the review area must be provided (survey, tax map, **OR** GPS coordinates). Tax maps may only be used if the site includes the entire tax map parcel. **See the attached Checklist for information that should be submitted for a complete and proper submittal.**

**B. Requestor of Jurisdictional Determination/Delineation (if there are multiple property owners, please attach additional pages)**

Name: Sean Flynn, PE Company Name (if applicable): Thomas & Hutton  
 Address: 611 Burroughs & Chapin Blvd., Suite 202, Myrtle Beach, SC 29577  
 Phone: (843) 839-8426 Email: flynn.s@tandh.com  
 Check one:  I currently own this property  I plan to purchase this property  Other: Project Engineer

**C. Agent/Environmental Consultant Acting on Behalf of the Requestor (if applicable):**

Consultant/Agent Name: Charles C. Oates, Jr.  
 Company Name: The Brigman Company  
 Address: PO Box 1532, Conway, SC 29528 Phone: (843) 450-1331  
 Email: coates@thebrigmancompany.com

**II. REASON FOR REQUEST (check all that apply):**

- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all aquatic resources.
- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps, and the Jurisdictional Determination would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps; this request is accompanied by my permit application and the jurisdictional determination is to be used in the permitting process.
- I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is subject to the ebb and flow of the tide.
- A Corps jurisdictional determination is required in order to obtain my local/state authorization.
- I intend to contest jurisdiction over a particular aquatic resource and the request the Corps to confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- I believe that the site may be comprised entirely of dry land.
- Other: \_\_\_\_\_

\*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.  
 Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.  
 Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.  
 Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.



**III. TYPE OF REQUEST:**

<sup>1</sup>Delineation Concurrence (DC) – A DC provides concurrence that the delineated boundaries of wetlands on a property are a reasonable representation of the aquatic resources on-site. A DC does not address the jurisdictional status of the aquatic resources. (NOTE: A DC is generally the quickest type of standalone request for the Corps to review and process.)

<sup>2</sup>Approved – An AJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, an AJD is used to indicate that this office has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status. AJDs are valid for 5 years.

<sup>3</sup>Preliminary – A PJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, a PJD is used to indicate that this office has identified the approximate location(s) and boundaries of wetlands and/or other aquatic resources on a site that are presumed to be subject to regulatory jurisdiction of the Corps of Engineers. Unlike an AJD, a PJD does not represent a definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a site, and does not have an expiration date.

<sup>4</sup> “No Permit Required” (NPR) Letter- A NPR letter may be provided by the Corps to notify the requestor that an activity will not require a permit (authorization) from the Corps; this letter can only be used if the proposed activity is not a regulated activity, regardless of where the activity may occur. A NPR letter cannot be used to indicate the presence or absence of wetlands and/or other aquatic resources, nor can it be used to determine their jurisdictional status.

**NOTE 1: Pre-approved Delineations and/or JDs are NOT a pre-requisite for submitting a DA permit application. Requests for JDs and/or DCs that are not associated with a DA permit application (Standalone Delineation / JD requests) will be reviewed and processed as time allows and based on available resources.**

**NOTE 2: Although not a requirement, it is recommended that Standalone requests be prepared and submitted by an environmental consultant to expedite the review process.**

**Select the Appropriate Request:**

**Pre-Construction Notification or Department of the Army permit application**

- with Delineation only (no written concurrence of delineation)
- with Delineation Concurrence<sup>1</sup>
- with Preliminary Jurisdictional Determination (PJD)<sup>3</sup>
- with Approved Jurisdictional Determination (AJD)<sup>2</sup>

**Standalone Delineation / Jurisdictional Determination**

*Standalone Delineation / Jurisdictional Determination requests will be reviewed and processed as time allows and based on available resources.*

- Delineation Concurrence<sup>1</sup>
- Preliminary Jurisdictional Determination (PJD)<sup>3</sup>
- Approved Jurisdictional Determination (AJD)<sup>2</sup>

I request that the **Corps delineate** the wetlands and/or other aquatic resources that may be present on my property.

*These requests have historically been conducted as a courtesy for private property owners for minor actions. Due to current workload and priorities, the Charleston District Regulatory Division will only provide this service on a limited basis for private individuals on small tracts of land (typically 1 acre or less).*

- with the attached Pre-Construction Notification or Department of the Army permit application  
*(This may delay processing times. The review of the permit application will not start until the delineation has been completed by the Corps.)*
- with a Delineation Only, an AJD or PJD

**“No Permit Required” (NPR) Letter** as I believe my proposed activity is not regulated<sup>4</sup>

**Unclear** and require additional information to inform my decision.

**IV. LEGAL RIGHT OF ENTRY**

By signing below, I am indicating that I have the authority, or am acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant U.S. Army Corps of Engineers personnel right of entry to legally access the property(ies) subject to this request for the purposes of conducting on-site investigations (e.g., digging and refilling shallow holes) and issuing a jurisdictional determination. I acknowledge that my signature is an affirmation that I possess the requisite property rights to request a jurisdictional determination on the properties subject to this request.

PO Box 1532, Conway, SC 29528

Mailing Address

coates@thebrigmancompany.com

Email Address

Charles C. Oates, Jr. Digitally signed by Charles C. Oates, Jr.  
Date: 2024.03.19 14:16:09 -04'00'

\*Signature:

Hwy 521 / 02-1008-006-00-00

Property Address / TMS #(s)

(843) 450-1331

Daytime Phone Number

Charles C. Oates, Jr / March 19, 2024

Printed Name and Date

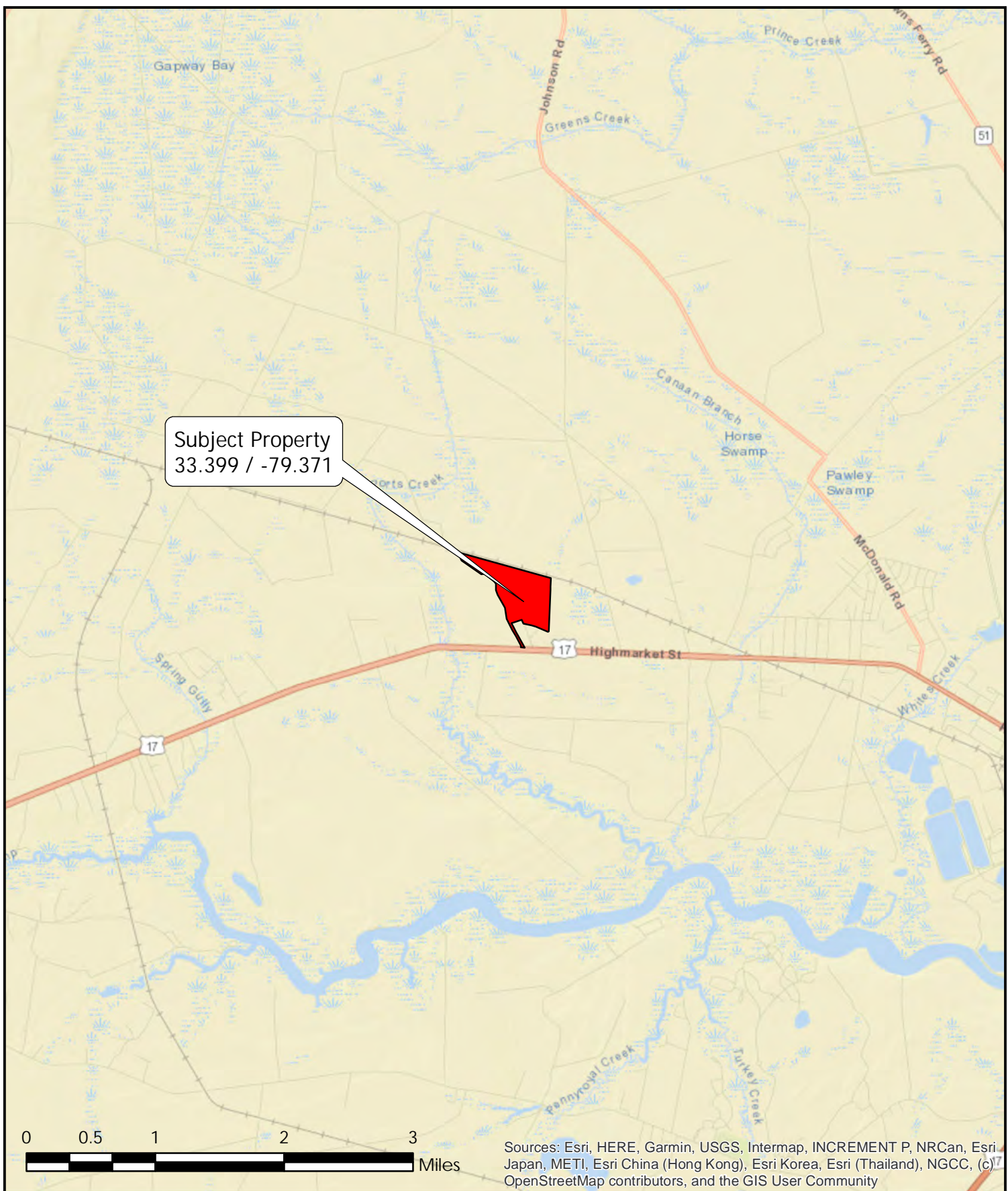
\*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.





Subject Property  
33.399 / -79.371



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Site Vicinity Map  
8 Oaks Tract  
Portion of TMS# 02-1008-006-00-00  
Georgetown County, SC  
March 2024





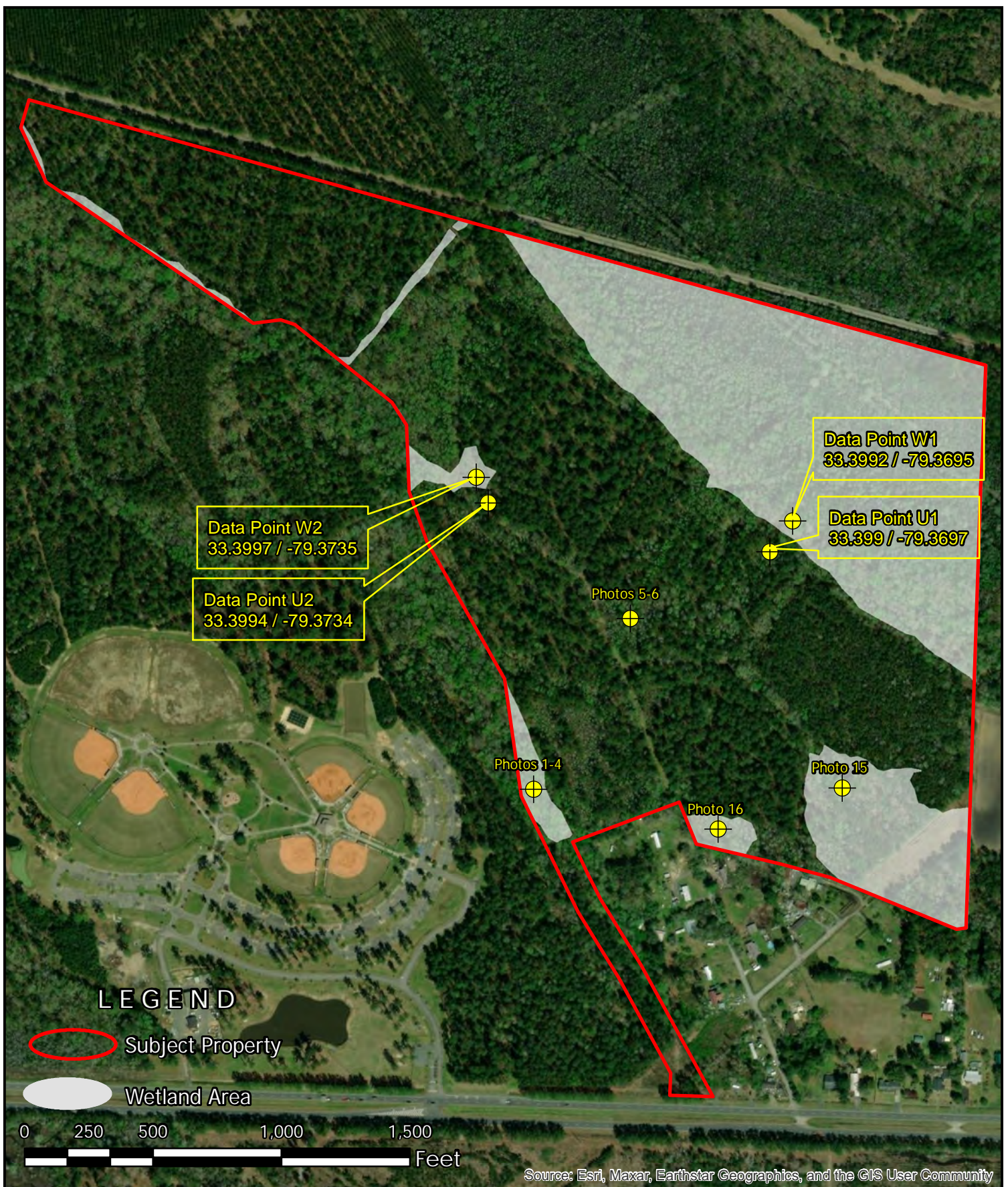


USGS 7.5-Min. Topographic Map  
 8 Oaks Tract  
 Portion of TMS# 02-1008-006-00-00  
 Georgetown County, SC  
 March 2024



1" = 1,000'





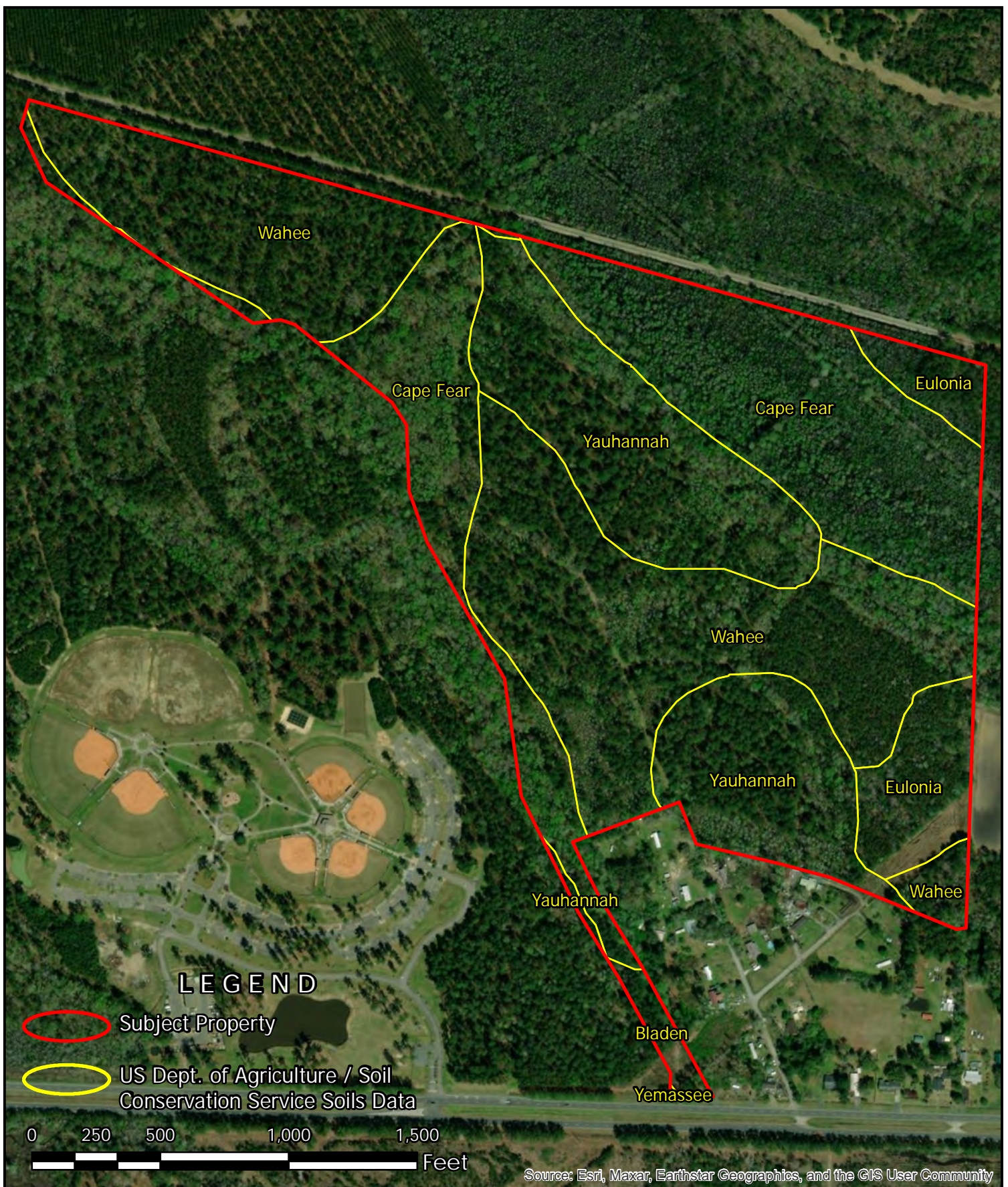
**TBC**  
THE BRIGMAN CO.

Site Photograph and Data Point Location Exhibit  
8 Oaks Tract  
Portion of TMS# 02-1008-006-00-00  
Georgetown County, SC  
March 2024



1" = 500'





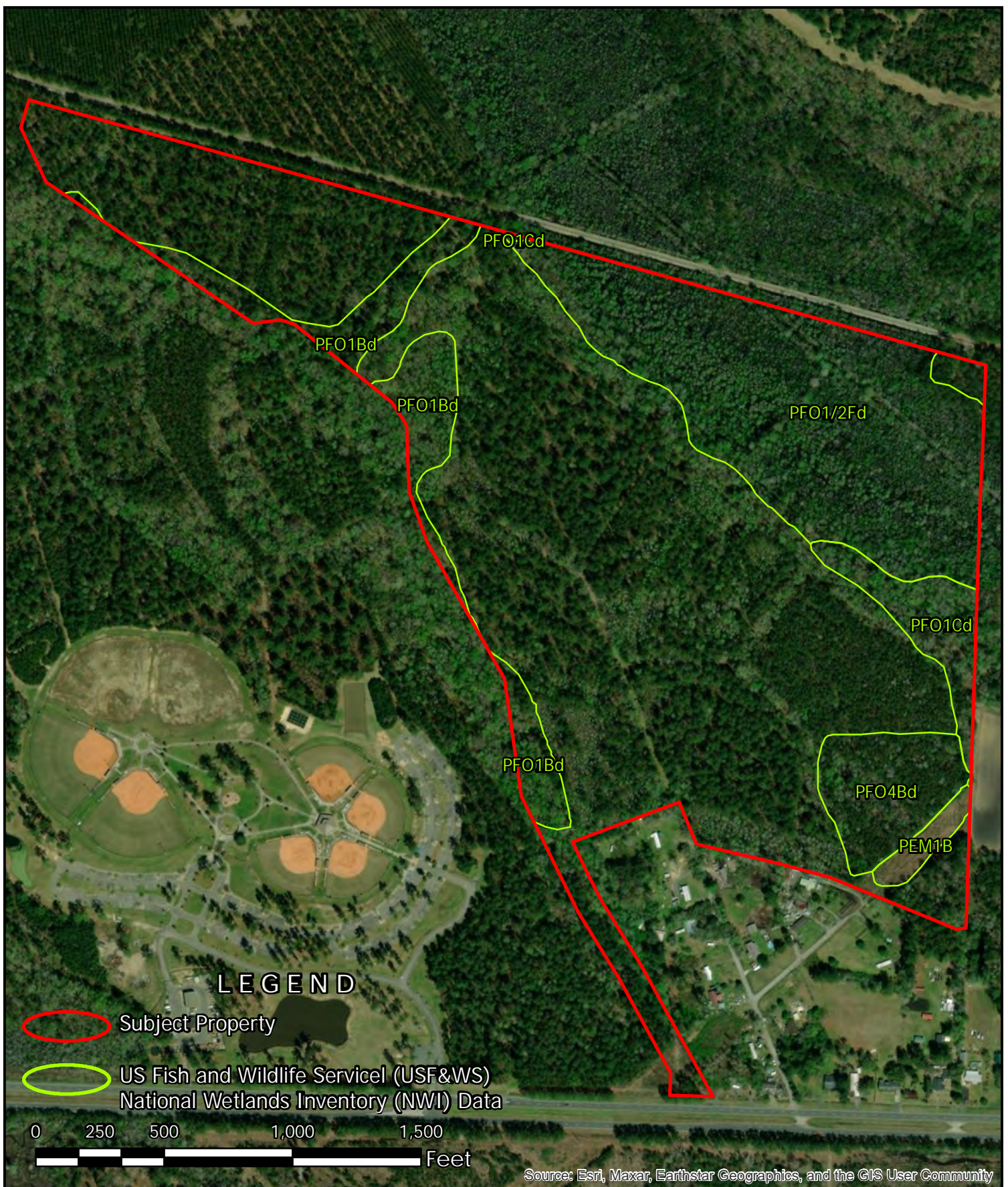
**TBC**  
THE BRIGMAN CO.

USDA / SCS Soils Map  
8 Oaks Tract  
Portion of TMS# 02-1008-006-00-00  
Georgetown County, SC  
March 2024



1" = 500'





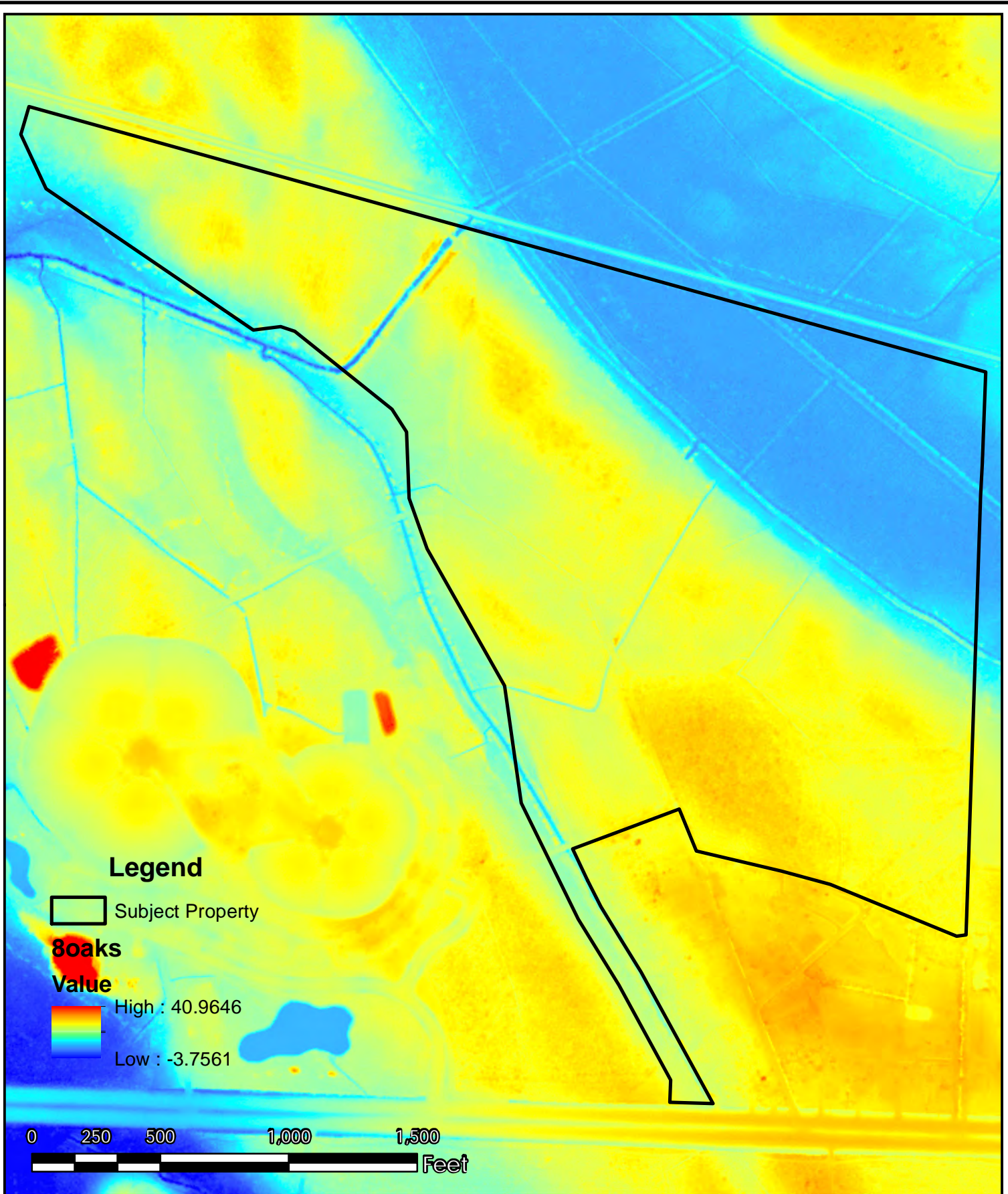
**TBC**  
THE BRIGMAN CO.

USF&WS NWI Map  
8 Oaks Tract  
Portion of TMS# 02-1008-006-00-00  
Georgetown County, SC  
March 2024



1" = 500'





LIDAR Imagery  
 8 Oaks Tract  
 Portion of TMS# 02-1008-006-00-00  
 Georgetown County, SC  
 March 2024







1 View of ditch facing north.



2 View of ditch facing south.



3 Upland hardwoods-facing east.



4 Upland Hardwoods-facing west.



Site Photographs  
8 Oaks Tract  
Georgetown County, SC

Project No.: 00692-24061

Taken by: JV

Date Taken: 03/18/24





5 Loblolly pines-facing north.



6 Loblolly pines-facing south.



7 Upland Data Point 1-Soil Sample.



8 Upland Data Point 1-facing south.



Site Photographs  
8 Oaks Tract  
Georgetown County, SC

Project No.: 00692-24061

Taken by: JV

Date Taken: 03/18/24





9 Wetland Data Point 1-Soil Sample.



10 Wetland Data Point 1-facing east.



11 Upland Data Point 2-Soil Sample.



12 Upland Data Point 2-facing south.





13 Wetland Data Point 2-Soil Sample.



14 Wetland Data Point 2-facing north.



15 Wetland area-facing north.



16 Wetland area-facing west.



Site Photographs  
8 Oaks Tract  
Georgetown County, SC

Project No.: 00692-24061

Taken by: JV

Date Taken: 03/18/24



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: 8 Oaks Tract City/County: Georgetown/Georgetown Sampling Date: 2024-03-18  
 Applicant/Owner: Thomas & Hutton State: South Carolina Sampling Point: Upland 1  
 Investigator(s): JV Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): T 153A Lat: 33.397821 Long: -79.368383 Datum: WGS 84  
 Soil Map Unit Name: Wahee NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks:   	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) _____ <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b> <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: <b>Saturation is greater than 24".</b>	



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: Upland 1

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Pinus taeda</u>	<u>75</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>75</u> = Total Cover 50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>					<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:right;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>380</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.30</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>115</u> (A)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>80</u>	x 3 = <u>240</u>																	
FACU species <u>35</u>	x 4 = <u>140</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>115</u> (A)	<u>380</u> (B)																	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Liquidambar styraciflua</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
<b>Herb Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Eupatorium capillifolium</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Pteridium aquilinum</u>	<u>5</u>		<u>FACU</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
<u>35</u> = Total Cover 50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.														
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____					<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____													
Remarks: (If observed, list morphological adaptations below).																		



**SOIL**

Sampling Point: Upland 1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 8	10YR 4/1	100					Sandy Loam	
8 - 12	10YR 6/3	90	10YR 6/2	10	D	M	Sandy Loam	
12 - 16	2.5Y 5/3	90	5YR 5/8	10	C	M	Clay Loam	
16 - 24	2.5Y 5/2	90	7.5YR 6/8	10	C	M	Clay Loam	
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: 8 Oaks Tract City/County: Georgetown/Georgetown Sampling Date: 2024-03-18  
 Applicant/Owner: Thomas & Hutton State: South Carolina Sampling Point: Upland 2  
 Investigator(s): \_\_\_\_\_ Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: 33.398927 Long: -79.3727 Datum: WGS 84  
 Soil Map Unit Name: Wahee NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>18</u>	<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: Upland 2

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Pinus taeda</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Quercus virginiana</u>	<u>10</u>		<u>FACU</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>60</u> = Total Cover																		
50% of total cover: <u>30.00</u>		20% of total cover: <u>12.00</u>																
<b>Sapling/Shrub Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Liquidambar styraciflua</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>105</u></td> <td>x 3 = <u>315</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>355</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.08</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>105</u>	x 3 = <u>315</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>115</u> (A)	<u>355</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>105</u>	x 3 = <u>315</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>115</u> (A)	<u>355</u> (B)																	
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>5</u> = Total Cover																		
50% of total cover: <u>2.50</u>		20% of total cover: <u>1.00</u>																
<b>Herb Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Andropogon virginicus</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
<u>50</u> = Total Cover																		
50% of total cover: <u>25.00</u>		20% of total cover: <u>10.00</u>																
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover																		
50% of total cover: _____		20% of total cover: _____																
				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
Remarks: (If observed, list morphological adaptations below).																		



**SOIL**

Sampling Point: Upland 2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 8	10YR 4/1	100					Sandy Loam	
8 - 12	10YR 6/3	90	10YR 6/2	10	D	M	Sandy Loam	
12 - 24	2.5Y 5/3	90	5YR 5/8	10	C	M	Clay Loam	
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: 8 Oaks Tract City/County: Georgetown/Georgetown Sampling Date: 2024-03-18  
 Applicant/Owner: Thomas & Hutton State: South Carolina Sampling Point: Wetland 1  
 Investigator(s): JV Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): T 153A Lat: 33.398119 Long: -79.368103 Datum: WGS 84  
 Soil Map Unit Name: Wahee NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"><input checked="" type="checkbox"/> Surface Water (A1)</td> <td style="width:50%; border: none;"><input type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> High Water Table (A2)</td> <td style="border: none;"><input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b></td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> Saturation (A3)</td> <td style="border: none;"><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> Water Marks (B1)</td> <td style="border: none;"><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Sediment Deposits (B2)</td> <td style="border: none;"><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Drift Deposits (B3)</td> <td style="border: none;"><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td style="border: none;"><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Iron Deposits (B5)</td> <td style="border: none;"><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td></td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> Water-Stained Leaves (B9)</td> <td></td> </tr> </table>	<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b>	<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input checked="" type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)																				
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<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)																					
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)																					
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>12</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____																				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																					
Remarks:																					



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: Wetland 1

	Absolute % Cover	Dominant Species?	Indicator Status																																																	
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																																																				
1. <u>Nyssa biflora</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)																																																
2. <u>Acer rubrum</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>																																																	
3. <u>Taxodium distichum</u>	<u>10</u>		<u>OBL</u>																																																	
4. <u>Quercus laurifolia</u>	<u>10</u>		<u>FACW</u>																																																	
5. _____																																																				
6. _____																																																				
7. _____																																																				
8. _____																																																				
<u>60</u> = Total Cover 50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;"><u>60</u></td> <td style="text-align:right;">Multiply by:</td> <td style="text-align:center;"><u>1</u></td> <td style="text-align:center;">=</td> <td style="text-align:center;"><u>60</u></td> </tr> <tr> <td>OBL species</td> <td style="text-align:center;"><u>60</u></td> <td>x</td> <td style="text-align:center;"><u>1</u></td> <td>=</td> <td style="text-align:center;"><u>60</u></td> </tr> <tr> <td>FACW species</td> <td style="text-align:center;"><u>35</u></td> <td>x</td> <td style="text-align:center;"><u>2</u></td> <td>=</td> <td style="text-align:center;"><u>70</u></td> </tr> <tr> <td>FAC species</td> <td style="text-align:center;"><u>35</u></td> <td>x</td> <td style="text-align:center;"><u>3</u></td> <td>=</td> <td style="text-align:center;"><u>105</u></td> </tr> <tr> <td>FACU species</td> <td style="text-align:center;"><u>0</u></td> <td>x</td> <td style="text-align:center;"><u>4</u></td> <td>=</td> <td style="text-align:center;"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td style="text-align:center;"><u>0</u></td> <td>x</td> <td style="text-align:center;"><u>5</u></td> <td>=</td> <td style="text-align:center;"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align:center;"><u>130</u></td> <td></td> <td></td> <td></td> <td style="text-align:center;"><u>235</u></td> </tr> <tr> <td colspan="6">Prevalence Index = B/A = <u>1.80</u></td> </tr> </table>	Total % Cover of:	<u>60</u>	Multiply by:	<u>1</u>	=	<u>60</u>	OBL species	<u>60</u>	x	<u>1</u>	=	<u>60</u>	FACW species	<u>35</u>	x	<u>2</u>	=	<u>70</u>	FAC species	<u>35</u>	x	<u>3</u>	=	<u>105</u>	FACU species	<u>0</u>	x	<u>4</u>	=	<u>0</u>	UPL species	<u>0</u>	x	<u>5</u>	=	<u>0</u>	Column Totals:	<u>130</u>				<u>235</u>	Prevalence Index = B/A = <u>1.80</u>					
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<b>Sapling/Shrub Stratum</b> (Plot size: <u>30 ft r</u> )																																																				
1. <u>Lyonia lucida</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																																
2. <u>Liquidambar styraciflua</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>																																																	
3. <u>Cyrilla racemiflora</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>																																																	
4. _____																																																				
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<u>35</u> = Total Cover 50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>					<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.																																															
<b>Herb Stratum</b> (Plot size: <u>30 ft r</u> )																																																				
1. <u>Woodwardia areolata</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>OBL</u>																																																	
2. _____																																																				
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11. _____																																																				
12. _____																																																				
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____																																																
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																																																				
1. <u>Vitis rotundifolia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>																																																	
2. _____																																																				
3. _____																																																				
4. _____																																																				
5. _____																																																				
<u>10</u> = Total Cover 50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																																																				
Remarks: (If observed, list morphological adaptations below).																																																				



**SOIL**

Sampling Point: Wetland 1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 2/1	100					Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No \_\_\_\_\_

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: 8 Oaks Tract City/County: Georgetown/Georgetown Sampling Date: 2024-03-18  
 Applicant/Owner: Thomas & Hutton State: South Carolina Sampling Point: Wetland 2  
 Investigator(s): JV Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): T 153A Lat: 33.399101 Long: -79.372897 Datum: WGS 84  
 Soil Map Unit Name: Wahee NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"><input type="checkbox"/> Surface Water (A1)</td> <td style="width:50%; border: none;"><input type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> High Water Table (A2)</td> <td style="border: none;"><input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b></td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> Saturation (A3)</td> <td style="border: none;"><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Water Marks (B1)</td> <td style="border: none;"><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Sediment Deposits (B2)</td> <td style="border: none;"><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Drift Deposits (B3)</td> <td style="border: none;"><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td style="border: none;"><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Iron Deposits (B5)</td> <td style="border: none;"><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td></td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> Water-Stained Leaves (B9)</td> <td></td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b>	<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>
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<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>10</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>6</u>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____																				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																					
Remarks:																					



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: Wetland 2

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Quercus laurifolia</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Quercus michauxii</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Acer rubrum</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>75</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:right;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>85</u></td> <td>x 2 = <u>170</u></td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = <u>195</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>175</u> (A)</td> <td><u>390</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.22</u>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>85</u>	x 2 = <u>170</u>	FAC species <u>65</u>	x 3 = <u>195</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>175</u> (A)	<u>390</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>25</u>	x 1 = <u>25</u>																	
FACW species <u>85</u>	x 2 = <u>170</u>																	
FAC species <u>65</u>	x 3 = <u>195</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>175</u> (A)	<u>390</u> (B)																	
50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>																		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Sabal minor</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>25</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>																		
<b>Herb Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Chasmanthium sessiliflorum</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.														
2. <u>Carex glaucescens</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
<u>75</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
50% of total cover: <u>37.50</u> 20% of total cover: <u>15.00</u>																		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).																		

**SOIL**

Sampling Point: Wetland 2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 16	10YR 2/1	100					Loam	
16 - 24	10YR 4/1	100					Clay Loam	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

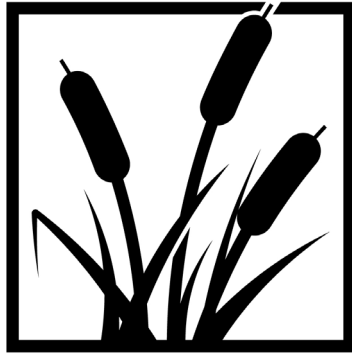
Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No \_\_\_\_\_

Remarks:





Biological Evaluation  
8 Oaks Tract  
Georgetown, Georgetown County, South Carolina  
Project No. 00692-24061

PREPARED FOR:

**Thomas & Hutton**  
**611 Burroughs and Chapin Boulevard, Suite 202**  
**Myrtle Beach, South Carolina 29577**

PREPARED BY:

**The Brigman Company**  
**Post Office Box 1532**  
**Conway, South Carolina 29526**

**March 22, 2024**



# THE BRIGMAN COMPANY

March 22, 2024

Thomas & Hutton  
611 Burroughs & Chapin Boulevard, Suite 202  
Myrtle Beach, South Carolina 29577

Attention: Mr. Sean Flynn

Reference: **Biological Evaluation**  
**8 Oaks Tract**  
Georgetown, Georgetown County, South Carolina  
Project No. 00692-24061

Dear Mr. Flynn:

The Brigman Company (TBC) is pleased to submit this report detailing our findings for the 8 Oaks (i.e. the Property) located on US ALT 17/US 521 (Highmarket Street) near the City of Georgetown, Georgetown County, South Carolina. This work was performed in accordance with TBC's Professional Services Contract, authorized on March 4, 2024. Photos and observations are included in this report. This report and the on-site pedestrian survey have been conducted to assess the potential for the presence of federally protected species or habitat to support federally protected species prior to future development of the Property.

The Property is comprised of a tract of land (Georgetown County TMS# 02-1008-006-00-00 portion of) totaling approximately 125.39 acres. Exhibit 1 of this report presents the approximate location of the Property. The Property is identified on a portion of the U.S. Geological Survey (USGS) 7.5-minute North Georgetown and Olin, SC topographic quadrangle maps dated 1980. Exhibit 2 of this report depicts the approximate location of the Property overlaid on the referenced topographic quadrangles.

## Site and Habitat Descriptions

The Property is located in central Georgetown County within the Coastal Plain Physiographic Province of South Carolina. The USGS topographic quadrangle (Exhibit 2) depicts the Property as approximately half forested/cleared in 1980. The surrounding properties consist of undeveloped wooded land and residential homes. The northern boundary of the Property is bounded by CSX Railroad. Exhibit 3 of this report depicts the Property overlaid on an aerial photograph. The uplands on the property consists of two timber types, planted loblolly pine (*Pinus taeda*) plantation and mix loblolly pine and hardwoods. The dominating hardwoods include sweetgum (*Liquidambar styraciflua*), live oak (*Quercus virginiana*) and tulip poplar (*Liriodendron tulipifera*). The understory is sparsely populated and consists of wax myrtle (*Morella cerifera*) and American beauty-berry (*Callicarpa americana*) in the uplands and fetterbush (*Lyonia lucida*) and ty ty (*Cyrilla racemiflora*) in the wetlands.

## Protected Species

The U.S. Fish & Wildlife Service (USF&WS) *South Carolina List of At-risk, Candidate, Endangered, and Threatened Species – Georgetown County*, the USF&WS Information for Planning and Conservation (IPaC) website, and the





South Carolina Department of Natural Resources (SCDNR) *Rare, Threatened, and Endangered Species and Communities Known to Occur in Georgetown County, SC* were consulted regarding current federally protected species within Georgetown County. The information was reviewed prior to conducting the site visit, to determine if known locations of protected species were located on or near the Property. The information was reviewed prior to conducting the site visit, to determine if known locations of protected species were located on or near the Property. The USF&WS database has fourteen (14) federally protected species listed for Georgetown County, South Carolina and one (1) candidate species. However, nine (9) of these species are dependent on either beach/sand dunes ecosystems, a marine ecosystem, or large rivers, which the Property does not contain or border. The remaining five (5) protected species and one candidate species include:

Common Name	Scientific Name	Survey Window	Status
Bald Eagle	<i>Haliaeetus leucocephalus</i>	October 1 – May 15 (nesting season)	Bald & Golden Eagle Protection Act
Red-Cockaded Woodpecker	<i>Picoides borealis</i>	March 1 – July 31 (nesting season)	Endangered
American Wood Stork	<i>Mycteria americana</i>	February 15 – September 1 (nesting season)	Threatened
Black Rail	<i>Laterallus jamaicensis</i>	April 1-June 30	Threatened
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Year round	Threatened
Monarch Butterfly	<i>Danaus plexippus</i>	August-December	Candidate

The South Carolina State listed species for Georgetown County that are not included in the federal threatened and endangered species list and **not** dependent on maritime or large riverine systems are listed below, however, while the Bald Eagle is federally protected under the Bald and Golden Eagle Protection Act, it is listed in South Carolina as Threatened.

Common Name	Scientific Name	Survey Window	State Status
Spotted Turtle	<i>Clemmys guttata</i>	February-April	Threatened
Rafinesque's Big-eared Bat	<i>Corynorhinus rafinesquii</i>	Year round	Endangered
Swallow-tailed Kite	<i>Elanoides forficatus</i>	March-September	Endangered
Bald Eagle	<i>Haliaeetus leucocephalus</i>	October 1-May 15 (nesting season)	Threatened
Common Ground Dove	<i>Columbina passerina</i>	Year round	Threatened
Carolina Pigmy Sunfish	<i>Elassoma boehlkei</i>	Year round	Threatened
Southern Hog-nosed Snake	<i>Heterodon simus</i>	May-June/October-November	Threatened

A pedestrian field review was performed for protected species and suitable habitats to support protected species on March 18, 2024 by Mr. Jeffery Vereen of TBC. The results of the pedestrian field review are included in the following sections of this report, as well as a discussion of the above species, where applicable.



## Plants:

## No Effect

American chaffseed typically grows in sandy, acidic, seasonally moist to dry soils in open moist pine flatwoods, pine/wiregrass savannas, and transitional areas between peaty wetlands and xeric sandy soils. Suitable habitat for this species was not observed on the Property.

Canby's dropwort typically grows in seepage bogs, swampy depressions, and margins of flooded wetlands/ponds. This species flowers in August and September, sometimes lasting until October. There are no wetlands or suitable habitat on the Property.

Pondberry is associated with wetland habitats such as bottomland hardwoods and the margins of sinks, ponds, and other depressions in the coastal plain. As with the above species, no suitable habitat exists on the Property due to the lack of wetlands.

## Vertebrates:

## Not Likely to Adversely Affect

### *Birds:*

Even though the bald eagle was taken off of the threatened species list, it is still offered protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940. The bald eagle requires mature trees for nesting that are in close proximity to large bodies of water to feed. Site observations revealed that suitable nesting habitat does not exist on the Property. No nests were observed on the Property, nor were any bald eagles observed during the site reconnaissance.

The red-cockaded woodpecker requires mature longleaf pines or loblolly pine with an open understory that does not exceed 15' in height, and evenly spaced trees with an open, park-like stand. While suitable foraging habitat could be present in the thinned out portions of the planted pine plantation, the remaining trees are too young for nesting for the red-cockaded woodpecker. In addition, no known colonies are within a one mile radius of the Property and the proposed project will have no effect on the red-cockaded woodpecker.

The wood stork typically requires coastal areas, tidal waters, marshes, swamps, streams and mangroves for nesting and feeding. While the wood stork could potentially forage and nest in the existing large wetland on the northern portion of the Property, there are no proposed wetland impacts to any of the on-site wetlands, the proposed project may affect, but not likely to adversely affect the wood stork.

The Swallow-tailed kite is distinctive with its long, pointed wings and long forked tail and its black and white coloration. They spend much of their day in flight and feeds year round on insects, and small vertebrates that they glean from vegetation while in flight. It prefers to nest in tall, dominate loblolly pines within or on the edges of wetland forests. As with the wood stork, the property does have suitable nesting or foraging habitat on the property for the Swallow-tailed kite, but due to the lack of proposed wetland impacts, the proposed project may affect, but not likely to adversely affect Swallow-tailed kite.





The Common Ground-dove is one of the smallest doves, measuring roughly 17 cm (0.39 in.) and weighing 30 g (1.06 oz.) (Sibley 2000). Typically, this is a stocky dove with a scaled effect on its head and breast and a short tail. Bright chestnut primaries and wing linings are visible in flight (NGS 1999). Linnaeus first described the Common Ground-dove in 1758 (NatureServe 2005). Common Ground-Doves are sandy brown overall, with large, dark spots on the wing coverts. In flight the wings show rich rufous patches. Males have a pinkish wash on the head, neck, and chest, and bluish crowns; females are duller. Both sexes have fine, dark scaling on the neck and chest, and pinkish-red bills with a dark tip. Their habitat includes open or shrubby areas with tall grasses or groves of trees, including riparian corridors and open savannas. They also live in towns and suburbs, where they frequent yards and hedges.<sup>1</sup> The Property does contain suitable habitat for the Common Ground-dove, however, no Common Ground-doves were observed and the SC Heritage Trust report stated that there is no reports of them within one mile of the Property, therefore, the proposed project may affect, but not likely to adversely affect the Common Ground-dove.

#### *Reptiles and Amphibians:*

#### **Not Likely to Adversely Affect**

The only federally protected species of reptiles or amphibians listed for Georgetown County are associated with the marine ecosystem, and the Property does not adjoin the Atlantic Ocean.

South Carolina has listed the Spotted Turtle as threatened in the state, including Georgetown County. The wetlands on the Property do contain suitable habitat for the Spotted Turtle, but again, the wetlands are not proposed to be impacted by any road construction or site development so the proposed project may affect, but not likely to adversely affect the Spotted Turtle.

The Southern Hog-nosed snake is listed as threatened in South Carolina and is the smallest of the hognose snakes. It is associated with xeric longleaf pine savannah, flatwoods, and sandhills from southeastern North Carolina, South Carolina, Georgia, Florida, and west to Alabama and Mississippi. They occupy upland habitat with well-drained, sandy soils, characterized by pine-dominated or pine-oak woodland where the canopy is open with a grassy understory. The southern hognose snake is diurnal, with peak activity occurring in the late morning to early afternoon (Beane, et al., 2014, p. 173). Frogs and toads have been reported to make up the largest portion of the southern hognose snake diet, but they are also known to eat small lizards (Ernst & Ernst, 2003, p. 153; Beane, et al., 1998, p. 45; Ashton & Ashton, 1981, p. 85). Specific ecological needs that are essential to the survival and reproductive success of individuals include well-drained soils, suitable vegetation structure and composition, and presence of prey.<sup>2</sup> While the uplands on the Property could potentially provide habitat for the Southern Hog-nosed snake, the past timber management practices make it unlikely that the animal is present, In addition, the SCDNR Heritage Trust database did not find any documented locations on or within one mile of the property, therefore, the proposed project may affect, but is unlikely to adversely affect the Southern Hog-nosed snake.

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<sup>1</sup> Cornell Lab-All About Birds

<sup>2</sup> Species Status Assessment Report for the Southern Hognose Snake (*Heterodon simus*) Version 1.1, April 2019



*Fish and Marine Species:*

**No Effect**

There is no suitable habitat on or adjacent to the Property to support federally protected species of fish or marine species listed for Georgetown County.

The Carolina Pigmy Sunfish has been listed as Threatened in South Carolina as only a few populations of Carolina Pigmy Sunfish have been identified within the state. One population exists in Big Pine Tree Creek in the Santee River Basin near Camden, South Carolina. A few populations are known from the Waccamaw River with one or two populations in the upper Waccamaw River in Georgetown County, South Carolina. Another population is known to occur in the ditches of abandoned rice fields near Georgetown, South Carolina. The only other known occurrences for this species are in North Carolina where two population centers have been identified in the upper Waccamaw River drainage. The Carolina Pigmy Sunfish inhabits slow-moving acidic waters of ponds, ditches, and streams in the coastal plain. This species is generally associated with abundant aquatic vegetation and shallow water (Rohde et al. 1994).<sup>3</sup> The SCDNR Heritage Trust database did not find any documented habitat locations on or within one mile of the property.

*Mammals:*

**May affect, but is not likely to adversely affect**

The northern long-eared bat is a medium-sized bat approximately three to 3.7 inches, with a wingspan of nine to 10 inches. Fur color ranges from medium to dark brown on the back and tawny to pale brown on the underside. It is distinguished by its long ears in relation to other bats in the genus *Myotis*, which means mouse-eared. The northern long-eared bat uses caves and abandoned mines as winter hibernacula. It is found from Maine to North Carolina on the Atlantic Coast, westward to eastern Oklahoma, and north through the Dakotas. In summer, this bat will roost in small colonies or alone underneath bark or in cavities or crevices of both live trees and dead trees. The USFWS considers any live or dead tree with loose or exfoliating bark with a diameter-at-breast-height (DBH) greater than three inches to be potential summer roosting habitat. The trees on the Property range from approximately 3 inches to 10 inches DBH and could potentially provide summer roosting habitat for this species.

In recent coordination with the USF&WS (IPaC) and SCDNR Natural Heritage Trust Program in regard to northern long-eared bat occurrences on or in the vicinity of the Property, the USF&WS and SCDNR stated that there are no known NLEB maternity roosts or hibernacula located near the project area. Accordingly, future development of the Property may affect, but is not likely to adversely affect this species. The Northern Long-eared bat determination key was used in the IPaCs website and a letter from USF&WS was generated that concurs with this finding. It is attached to this report in the Appendices and no further action is required from USF&WS.

Rafinesque's Big-eared Bat (*Corynorhinus rafinesquii*) is a state endangered listed species that is noted for its large ears which, when laid back, are about half the length of the animal's body. Rafinesque's big-eared bats inhabit the southeastern United States, west to Louisiana and north to Kentucky and North Carolina. In South Carolina they are permanent residents of the coastal plain and hibernate rather than move south during winter months. Big-eared bats characteristically roost in dilapidated buildings or tree cavities near water. The breeding season in this

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<sup>3</sup> Supplemental Volume: Species of Conservation Concern/SC SWAP 2015





species extends from late fall to early winter. During this time, both males and females occupy the same roost. For the remainder of the winter and on to early spring, the bats hibernate. In some portions of their range, hibernating bats are found in caves, wells, and similar habitats. Males are solitary or gather in small groups during summer months, whereas females congregate in maternity colonies of up to 100 individuals. In May-June females give birth to one hairless young, which can fly at 3 weeks of age and attains adult size by August or early September. Rafinesque's big-eared bats feed exclusively on moths but will eat other insects if moths are not available.

The roosting and hibernacula requirements are similar to the NLEB, therefore, proposed project also may affect, but is not likely to adversely affect this species.

The remaining federally protected species of mammals listed for Georgetown County are marine species and the Property does not adjoin the Atlantic Ocean.

## **Invertebrate:**

## **No Effect**

### *Insects:*

The Monarch butterfly (*Danaus plexippus*) originates in North America where an eastern and western population undertake extensive migrations. For overwintering monarchs, habitat with a specific microclimate is needed for protection from the elements, as well as moderate temperatures to avoid freezing. These conditions vary between populations. For the eastern North American population, most monarchs overwinter in Oyamel fir (*Abies religiosa*) tree roosts located in mountainous regions in central Mexico at an elevation of 2,400 to 3,600 meters. Monarchs living west of the Rocky Mountain range in North America primarily overwinter in California at sites along the Pacific Coast, roosting in eucalyptus (*Eucalyptus spp.*), Monterey pines (*Pinus radiata*) and Monterey cypress (*Hesperocyparis macrocarpa*) trees. Whether it's a field, roadside area, open area, wet area or urban garden, milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers during breeding and migration, but they can only lay eggs on milkweed plants. During the site reconnaissance, no monarch butterflies or milkweed were observed on or directly adjacent to the Property, therefore should have no effect on this species.

### *Freshwater Mussels:*

There are no federally protected species of freshwater mussel listed for Georgetown County.

## **Methodology**

TBC reviewed the SCDNR and the USF&WS databases for records of protected species known to occur within Georgetown County. The purpose of the search was to identify current and historic documented occurrences of protected species located within this county. Additionally, TBC personnel reviewed available supporting information including the USGS topographic quadrangle and applicable soil survey data. The purpose of reviewing this supporting information was to identify drainage features and soil types in the site area that may be suitable habitat for protected species. During field reconnaissance, TBC personnel integrated the information obtained from this supporting documentation with field evaluation for the presence of protected species or potential protected species habitat.



## Biological Evaluation

### 8 Oaks Tract

Georgetown, Georgetown County, South Carolina

Project No. 00692-24061

## Summary and Conclusions

Based on the literature review, habitat assessment, and pedestrian field review of the Property, it is our opinion that future land clearing activities associated with proposed development on the Property will have no effect on federally listed protected plants or candidate species for Georgetown County and may affect, but is not likely to adversely affect the Northern long-eared bat or Rafinesque's Big-eared Bat or any birds listed for Georgetown County. The determination key for the listed species for South Carolina was also used in the IPaCs website and a letter from USF&WS was generated that concurs with this finding. It is attached to this report in the Appendices and no further action is required from USF&WS.

## Closure

TBC appreciates the opportunity to be of service to you by performing this Biological Evaluation for the Property. Please contact us at (843) 248-9388 with questions regarding this report, or if you require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeffrey Vereen'.

Jeffrey Vereen  
Project Manager

[jvereen@TheBrigmanCompany.com](mailto:jvereen@TheBrigmanCompany.com)



## **Appendices**

Exhibit 1: Vicinity Map

Exhibit 2: USGS Topographic Map Exhibit

Exhibit 3: Aerial Exhibit

Exhibit 4: USDA/SCS Soil Survey Exhibit

Site Photographs

USF&WS IPaC Report

Northern Long-eared Bat Consistency Letter from USF&WS

South Carolina Listed Species Consistency Letter from USF&WS

SCDNR Heritage Trust Request for Threatened and Endangered Species Consultation Report



**TBC**  
THE BRIGMAN CO.

**Site Vicinity Map**

8 Oaks Tract  
Portion of TMS# 02-1008-006-00-00  
Georgetown County, SC  
March 2024



1" = 1 miles





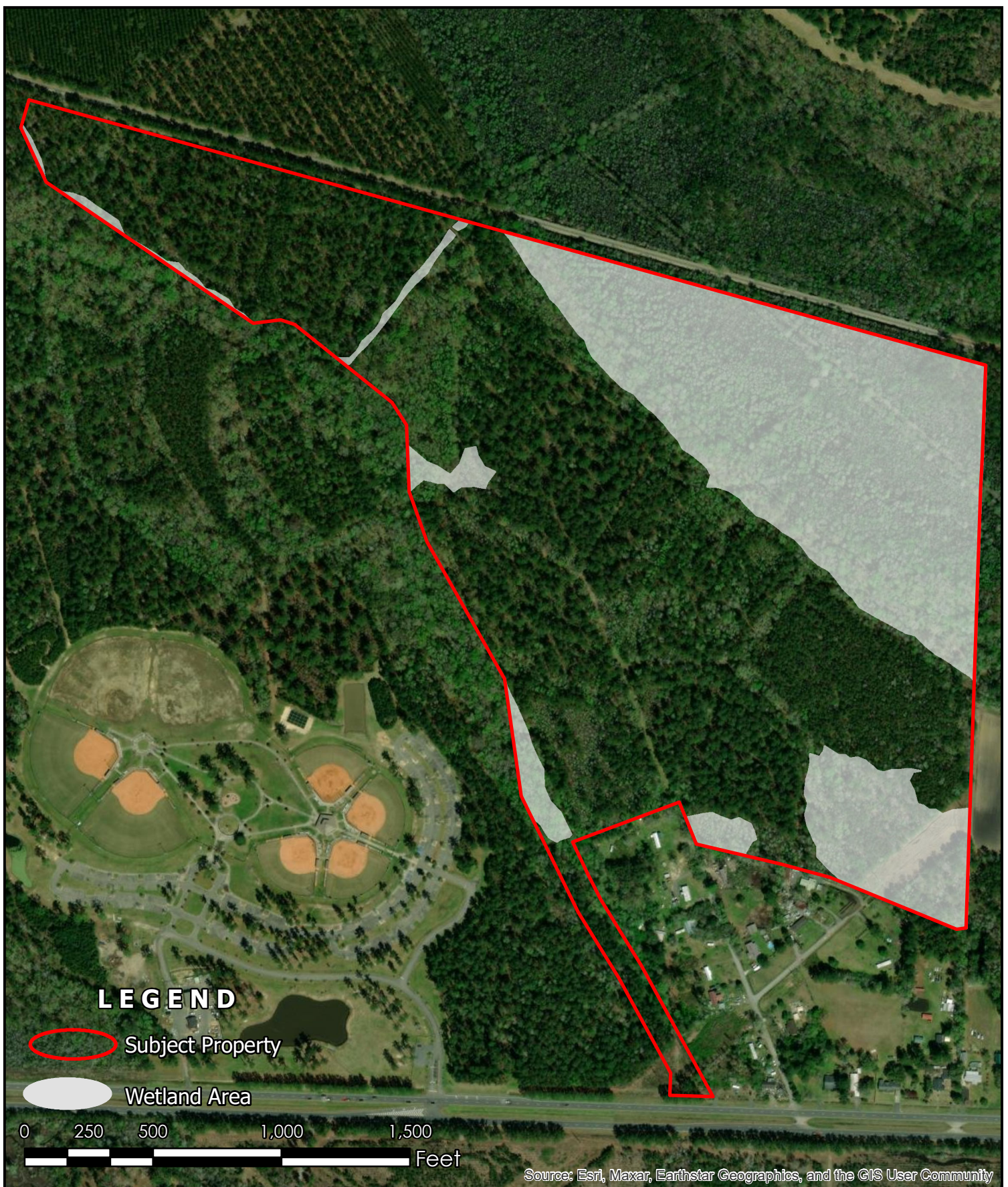
**TBC**  
THE BRIGMAN CO.

**USGS 7.5-Min. Topographic Map**  
8 Oaks Tract  
Portion of TMS# 02-1008-006-00-00  
Georgetown County, SC  
March 2024


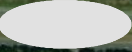


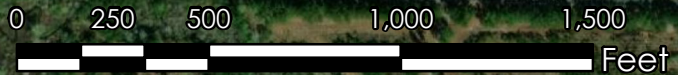
1" = 1,000'





**LEGEND**

-  Subject Property
-  Wetland Area



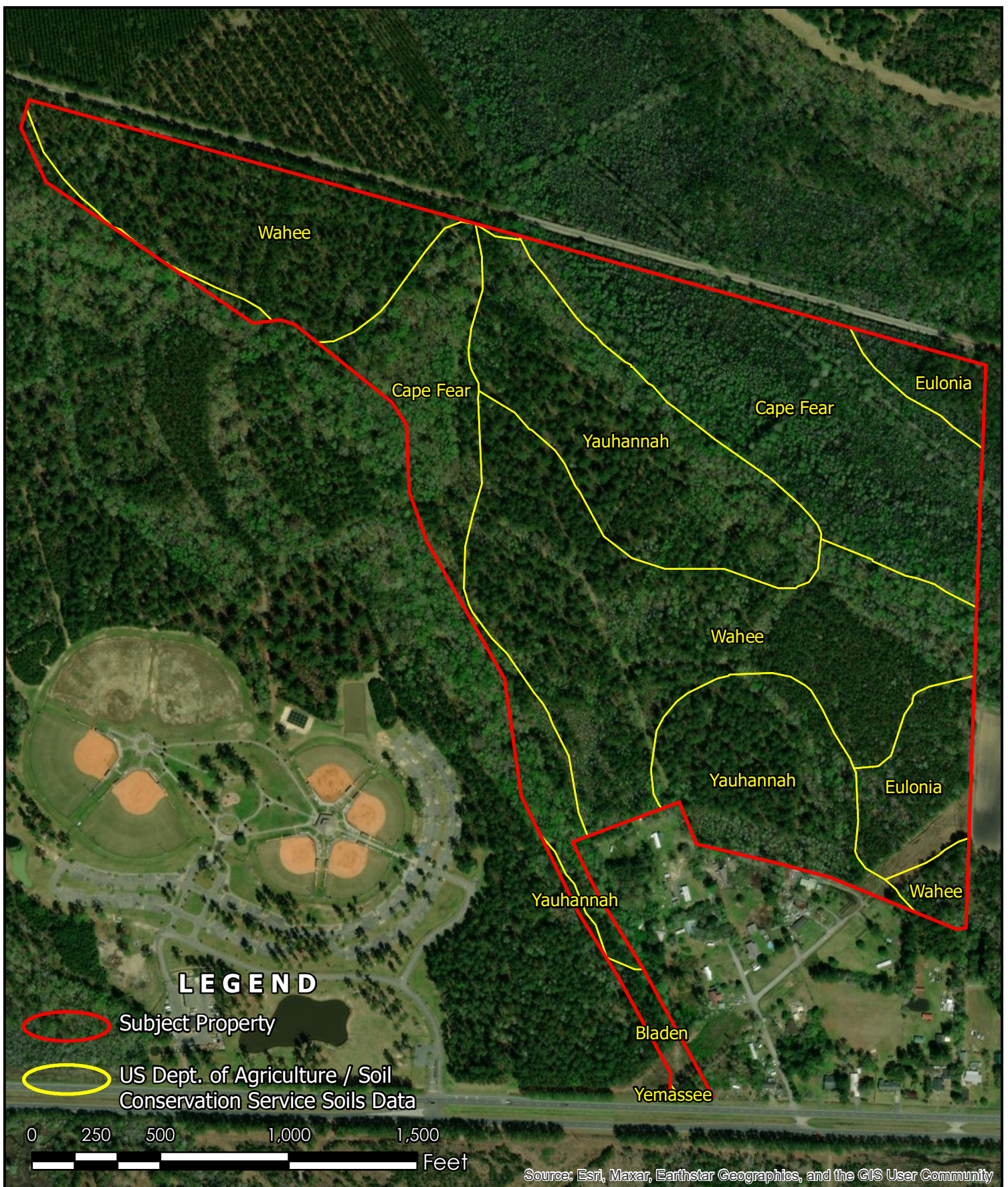
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Aerial Photograph Exhibit**  
 8 Oaks Tract  
 Portion of TMS# 02-1008-006-00-00  
 Georgetown County, SC  
 March 2024

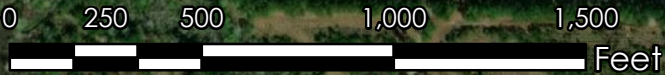






**LEGEND**

-  Subject Property
-  US Dept. of Agriculture / Soil Conservation Service Soils Data



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**TBC**  
THE BRIGMAN CO.

**USDA / SCS Soils Map**

8 Oaks Tract  
Portion of TMS# 02-1008-006-00-00  
Georgetown County, SC  
March 2024

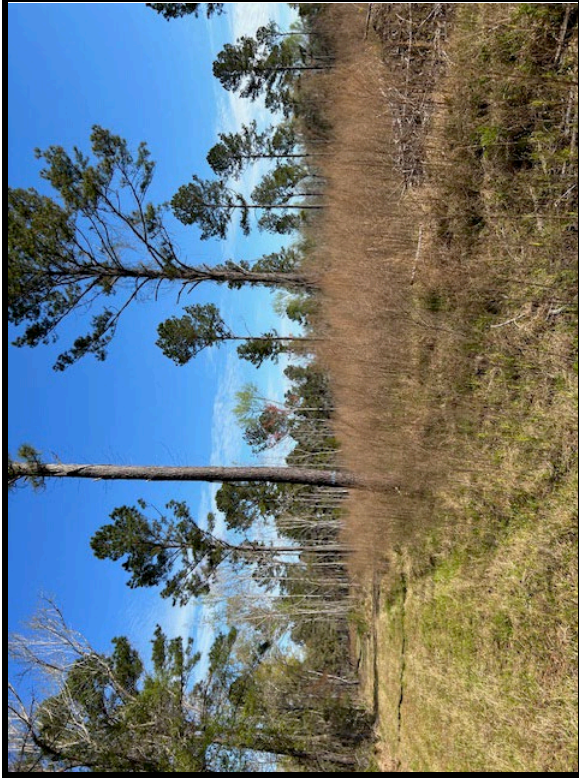


1" = 500'





1 Upland hardwood stand on the Property.



2 Thinned loblolly pine plantation.



3 Wetlands on the northern portion of the Property.



4 Site wetlands on the eastern portion of the Property.



**Site Photographs  
8 Oaks Tract  
Georgetown County, SC**

Project No.: 00692-24061

Taken by: JV

Date Taken: 03/18/24





# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Carolina Ecological Services  
176 Croghan Spur Road, Suite 200  
Charleston, SC 29407-7558  
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To:  
Project Code: 2024-0057526  
Project Name: 8 Oaks Tract

March 04, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

## To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List



# OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**South Carolina Ecological Services**

176 Croghan Spur Road, Suite 200

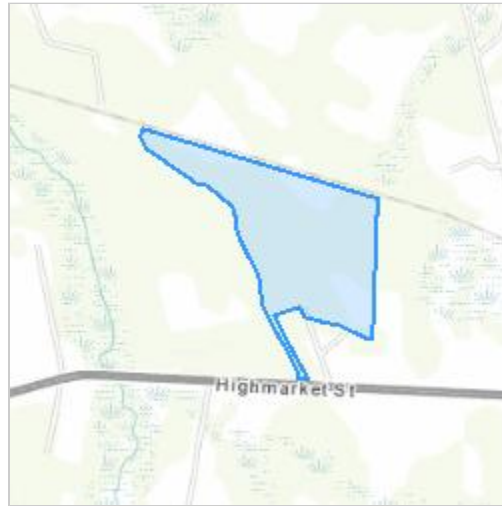
Charleston, SC 29407-7558

(843) 727-4707

## PROJECT SUMMARY

Project Code: 2024-0057526  
Project Name: 8 Oaks Tract  
Project Type: Recreation - New Construction  
Project Description: Project site is to be used as public park expansion.  
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.39841855,-79.37045012795673,14z>



Counties: Georgetown County, South Carolina



## ENDANGERED SPECIES ACT SPECIES

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

**BIRDS**

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a>	Threatened
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7614">https://ecos.fws.gov/ecp/species/7614</a>	Endangered
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened

**REPTILES**

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: North Atlantic DPS There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a>	Threatened
Kemp's Ridley Sea Turtle <i>Lepidochelys kempii</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5523">https://ecos.fws.gov/ecp/species/5523</a>	Endangered
Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a>	Endangered
Loggerhead Sea Turtle <i>Caretta caretta</i> Population: Northwest Atlantic Ocean DPS There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a>	Threatened

**INSECTS**

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate



## FLOWERING PLANTS

NAME	STATUS
American Chaffseed <i>Schwalbea americana</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1286">https://ecos.fws.gov/ecp/species/1286</a>	Endangered
Canby's Dropwort <i>Oxypolis canbyi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7738">https://ecos.fws.gov/ecp/species/7738</a>	Endangered
Pondberry <i>Lindera melissifolia</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1279">https://ecos.fws.gov/ecp/species/1279</a>	Endangered

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Jeffery Vereen  
Address: 607 Main Street  
Address Line 2: 607 Main Street  
City: Conway  
State: SC  
Zip: 29526  
Email: jvereen@thebrigmancompany.com  
Phone: 8432489388





# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Carolina Ecological Services  
176 Croghan Spur Road, Suite 200  
Charleston, SC 29407-7558  
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To:  
Project code: 2024-0057526  
Project Name: 8 Oaks Tract

03/19/2024 19:19:05 UTC

Federal Nexus: no  
Federal Action Agency (if applicable):

**Subject:** Technical assistance for '8 Oaks Tract'

Dear Jeffery Vereen:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on March 19, 2024, for '8 Oaks Tract' (here forward, Project). This project has been assigned Project Code 2024-0057526 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

### **Ensuring Accurate Determinations When Using IPaC**

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

### **Determination for the Northern Long-Eared Bat**

Based upon your IPaC submission and a standing analysis, your project is not reasonably certain to cause incidental take of the northern long-eared bat. Unless the Service advises you within 15 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

## Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- American Chaffseed *Schwalbea americana* Endangered
- Canby's Dropwort *Oxypolis canbyi* Endangered
- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Green Sea Turtle *Chelonia mydas* Threatened
- Kemp's Ridley Sea Turtle *Lepidochelys kempii* Endangered
- Leatherback Sea Turtle *Dermochelys coriacea* Endangered
- Loggerhead Sea Turtle *Caretta caretta* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Piping Plover *Charadrius melodus* Threatened
- Pondberry *Lindera melissifolia* Endangered
- Red-cockaded Woodpecker *Picoides borealis* Endangered
- Rufa Red Knot *Calidris canutus rufa* Threatened
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species and/or critical habitat listed above. Note that if a new species is listed that may be affected by the identified action before it is complete, additional review is recommended to ensure compliance with the Endangered Species Act.

## Next Steps

Coordination with the Service is complete. This letter serves as technical assistance. All conservation measures should be implemented as proposed. Thank you for considering federally listed species during your project planning.

We are uncertain where the northern long-eared bat occurs on the landscape outside of known locations. Because of the steep declines in the species and vast amount of available and suitable forest habitat, the presence of suitable forest habitat alone is a far less reliable predictor of their presence. Based on the best available information, most suitable habitat is now expected to be unoccupied. During the interim period, while we are working on potential methods to address this uncertainty, we conclude take is not reasonably certain to occur in areas of suitable habitat where presence has not been documented.

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively)



federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place before project implements any changes which are final or commits additional resources.

If you have any questions regarding this letter or need further assistance, please contact the South Carolina Ecological Services and reference Project Code 2024-0057526 associated with this Project.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

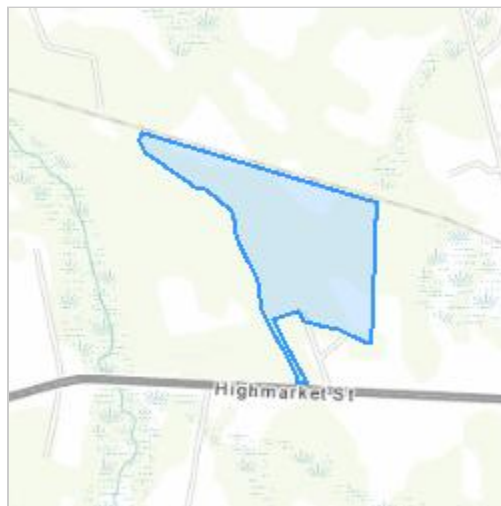
8 Oaks Tract

**2. Description**

The following description was provided for the project '8 Oaks Tract':

Project site is to be used as public park expansion.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.39841855,-79.37045012795673,14z>





## DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect, but not likely to adversely affect” for the Endangered northern long-eared bat (*Myotis septentrionalis*).

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

**Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Your project overlaps with an area where northern long-eared bats may be present year-round. Time-of-year restrictions may not be appropriate for your project due to bats being active all year.

Do you understand that your project may impact bats at any time during the year and time-of-year restrictions may not apply to your project?

Yes

3. The action area does not overlap with an area for which U.S. Fish and Wildlife Service currently has data to support the presumption that the northern long-eared bat is present. Are you aware of other data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed NLEB acoustic detections. Data on captures, roost tree use, and acoustic detections should post-date the year when white-nose syndrome was detected in the relevant state. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

No

4. Does any component of the action involve construction or operation of wind turbines?

**Note:** For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

*No*



# PROJECT QUESTIONNAIRE

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Jeffery Vereen  
Address: 607 Main Street  
Address Line 2: 607 Main Street  
City: Conway  
State: SC  
Zip: 29526  
Email: [jvereen@thebrigmancompany.com](mailto:jvereen@thebrigmancompany.com)  
Phone: 8432489388





# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Carolina Ecological Services  
176 Croghan Spur Road, Suite 200  
Charleston, SC 29407-7558  
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To:  
Project code: 2024-0057526  
Project Name: 8 Oaks Tract

03/19/2024 19:23:31 UTC

Subject: Consistency letter for '8 Oaks Tract' for specified federally threatened and endangered species and designated critical habitat that may occur in your proposed project area consistent with the South Carolina Ecological Services Field Office (ESFO) Determination Key (DKey) for project review and guidance for federally listed species.

Jeffery Vereen:

The U.S. Fish and Wildlife Service (Service) received on **March 19, 2024** your effect determination(s) for the '8 Oaks Tract' (the Action) using the South Carolina ESFO DKey for project review and guidance for federally-listed species within the Information for Planning and Consultation (IPaC) application. The Service developed this application in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's South Carolina ESFO DKey, you made the following effect determination(s) for the proposed Action:

<b>Species</b>	<b>Listing Status</b>	<b>Determination</b>
American Chaffseed ( <i>Schwalbea americana</i> )	Endangered	No effect
Canby's Dropwort ( <i>Oxypolis canbyi</i> )	Endangered	No effect
Eastern Black Rail ( <i>Laterallus jamaicensis ssp. jamaicensis</i> )	Threatened	No effect
Green Sea Turtle ( <i>Chelonia mydas</i> )	Threatened	No effect
Kemp's Ridley Sea Turtle ( <i>Lepidochelys kempii</i> )	Endangered	No effect
Leatherback Sea Turtle ( <i>Dermochelys coriacea</i> )	Endangered	No effect
Loggerhead Sea Turtle ( <i>Caretta caretta</i> )	Threatened	No effect
Piping Plover ( <i>Charadrius melodus</i> )	Threatened	NLAA
Pondberry ( <i>Lindera melissifolia</i> )	Endangered	No effect
Red-cockaded Woodpecker ( <i>Picoides borealis</i> )	Endangered	No effect
Rufa Red Knot ( <i>Calidris canutus rufa</i> )	Threatened	NLAA

**Coordination with the Service is complete** Thank you for considering federally listed species during your project planning.

The following species and/or critical habitats may also occur in your project area and **are not** covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

Please note the Service shares jurisdiction with the Fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries) over sea turtles. The Service exerts jurisdiction when sea turtles are nesting on coastal beaches while NOAA Fisheries has jurisdiction when sea turtles inhabit coastal and offshore waters.

In-water activities may require consultation with NOAA Fisheries. Please visit the NOAA Fisheries website at <https://www.fisheries.noaa.gov/topic/endangered-species-conservation#conservation-&-management> to review their consultation requirements. Also, NOAA Fisheries should be contacted if you think your project will affect Atlantic and/or shortnose sturgeon.

Please note that due to obligations under the ESA, potential impacts of this project must be reconsidered if: (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action. If any of the above conditions occurs, additional consultation with the South Carolina ESFO should take place before project changes are final or resources committed.

**Bald and Golden Eagle Protection Act (BGEPA):** Bald and golden eagles are not included in this section 7(a)(2) consultation and this information does not constitute a determination of effects by the Service. The Service developed the [National Bald Eagle Management Guidelines](#) to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of the BGEPA may apply to their activities. The guidelines should be consulted prior to conducting new or intermittent activity near an eagle nest.

If the Federal Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) may be required. Please contact Ulgonda Kirkpatrick (phone: 321/972-9089, e-mail: [ulgonda\\_kirkpatrick@fws.gov](mailto:ulgonda_kirkpatrick@fws.gov)) with any questions regarding potential impacts to bald or golden eagles.



**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

8 Oaks Tract

**2. Description**

The following description was provided for the project '8 Oaks Tract':

Project site is to be used as public park expansion.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.39841855,-79.37045012795673,14z>



## QUALIFICATION INTERVIEW

1. Does the proposed project involve research or other actions that include the collection, capture, handling, or harassment of any individual federally listed threatened, endangered or proposed species?  
*No*
2. Is the action authorized, funded, or being carried out by a Federal agency?  
*No*
3. Is the project an existing structure that requires maintenance, repair, or replacement?  
*No*
4. Does the project intersect the piping plover AOI?  
**Automatically answered**  
*Yes*
5. Will the proposed action impact docks, piers, and/or bulkheads?  
*No*
6. Will the project affect shorebird resting/foraging behavior, foraging habitat (i.e., ), AND/OR roosting habitat?  
*No*
7. Does the project intersect the red knot AOI?  
**Automatically answered**  
*Yes*
8. Will the proposed action impact docks, piers, and/or bulkheads?  
*No*
9. Does the project intersect the red-cockaded woodpecker AOI?  
**Automatically answered**  
*Yes*
10. Is the action area located within suitable Red-cockaded woodpecker [foraging habitat](#) (pine or pine/hardwood stands in which 50% or more of the dominant trees are pines and the dominant pine trees are 30 years of age or older or >10-inches diameter breast height (dbh) and the midstory height does not exceed 12 feet)?  
*Yes*
11. Is the action area located within suitable Red-cockaded woodpecker nesting habitat (pine or pine/hardwood stands that contain pines 60 years in age or older or >10-inches dbh)?  
*No*
12. Does suitable nesting habitat occur within 0.5 miles of suitable foraging habitat that would be impacted by the project?  
*No*

13. Is the action area on a sandy beach above the mean high-water line?

*No*

14. Does the project intersect the loggerhead sea turtle AOI?

**Automatically answered**

*Yes*

15. Does the project intersect the leatherback sea turtle AOI?

**Automatically answered**

*Yes*

16. Does the project intersect the Kemp's Ridley sea turtle AOI?

**Automatically answered**

*Yes*

17. Does the project intersect the green sea turtle AOI?

**Automatically answered**

*Yes*

18. Does the project intersect the pondberry AOI?

**Automatically answered**

*Yes*

19. Is there suitable pondberry habitat (e.g., pond margins, swampy depressions, sandy sinks, and seasonally flooded wetlands) for pondberry located within the project area?

*Yes*

20. Will the project impact suitable pondberry habitat?

*No*

21. Does the project intersect the American chaffseed AOI?

**Automatically answered**

*Yes*

22. Is there suitable habitat for American chaffseed located within the project area?

**Note:** American Chaffseed occurs in sandy (sandy peat, sandy loam), acidic, seasonally moist to dry soils. It is generally found in early successional habitats described as open, moist pine flatwoods, fire-maintained savannas, ecotonal areas between peaty wetlands and xeric (dry) sandy soils, bog borders, and other open grass-sedge systems. American Chaffseed is dependent on factors such as fire and mowing to maintain the open to partly open conditions that it requires. They can be found in habitat that is managed for the red-cockaded woodpecker. The species appears to be shade intolerant. American Chaffseed occurs in species-rich plant communities where grasses, sedges, and savanna dicots are numerous. For more information see: American Chaffseed (Schwalbea americana) Recovery Plan. ECOS: [https://ecos.fws.gov/docs/recovery\\_plan/950929c.pdf](https://ecos.fws.gov/docs/recovery_plan/950929c.pdf)

*No*

23. Does the project intersect the Canby's dropwort AOI?

**Automatically answered**

*Yes*



24. Is there suitable habitat for Canby's dropwort located within the project area?

**Note:** Canby's Dropwort can be found in a variety of coastal plain habitats, including natural ponds dominated by pond cypress, grass-sedge-dominated Carolina bays, wet pine savannas, shallow pineland ponds and cypress-pine swamps or sloughs. The largest and most vigorous populations have been found in open bays or ponds that are wet throughout most of the year, but which have little or no canopy cover. Soils are sandy loams or acidic peat mucks underlain by clay layers which, along with the slight gradient of the areas, result in the retention of water.

*No*

25. Does the project intersect the eastern black rail AOI?

**Automatically answered**

*Yes*

26. Will the project impact suitable habitat for the eastern black rail?

**Note:** suitable eastern black rail habitat consists of consistently shallow (moist soil to 1-3cm deep pools) wetlands with dense emergent herbaceous plant cover, hydric soil, and/or wetland upland transition zones with dense herbaceous plant cover adjacent to these wetlands. Go [here](#) for more information on eastern black rail habitat.

*No*

27. This determination key does not cover the Northern long-eared bat. Have you or will you complete the Determination Key for the Northern long-eared bat?

*Yes*

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Jeffery Vereen  
Address: 607 Main Street  
Address Line 2: 607 Main Street  
City: Conway  
State: SC  
Zip: 29526  
Email: [jvereen@thebrigmancompany.com](mailto:jvereen@thebrigmancompany.com)  
Phone: 8432489388



State of South Carolina  
**Department of Natural Resources**

P.O. Box 167  
Columbia, SC 29202  
803-734-3886

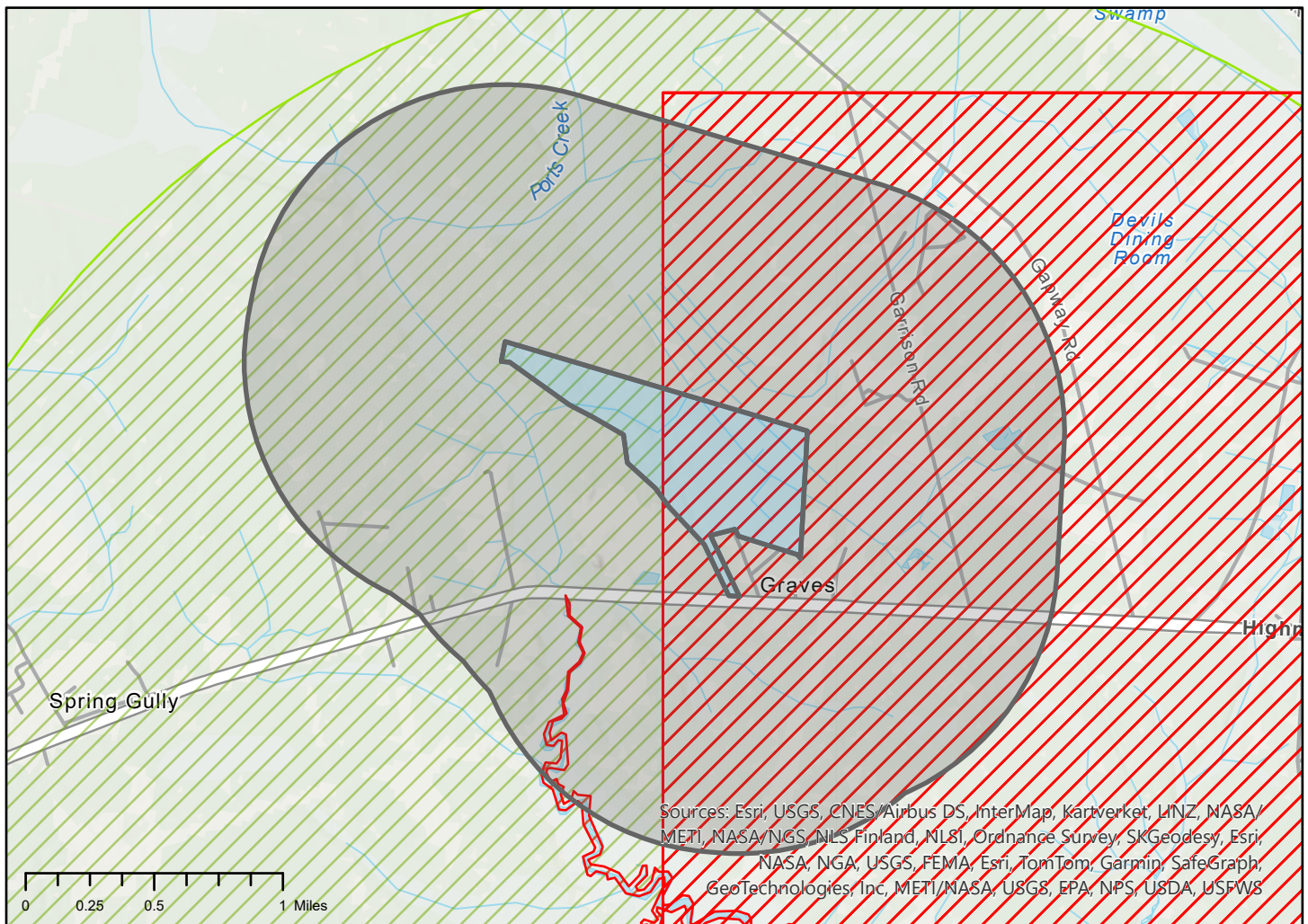
**Robert H. Boyles, Jr.,** *Director*  
**Emily C. Cope,** *Deputy Director, Wildlife and Freshwater Fisheries*

PO Box 167  
Columbia, SC 29202  
(803) 734-1396  
speciesreview@dnr.sc.gov

*Requested on Monday, March 4, 2024 by Jeffery Vereen.*

Re: Request for Threatened and Endangered Species Consultation  
The Brigman Company - 8 Oaks Tract - Timberlands - Georgetown County, South Carolina

The South Carolina Department of Natural Resources (SCDNR) has received your request for threatened and endangered species consultation of the above named project in Georgetown County, South Carolina. The following map depicts the project area and a 1 mile buffer surrounding:







State of South Carolina  
**Department of Natural Resources**

P.O. Box 167  
Columbia, SC 29202  
803-734-3886

**Robert H. Boyles, Jr.**, *Director*  
**Emily C. Cope**, *Deputy Director, Wildlife and Freshwater Fisheries*

This report includes the following items:

- A - A report for species which intersect the project area
- B - A report for species which intersect the buffer around the project area
- C - A list of best management practices relevant to species near to or within the project area
- D - A list of best management practices relevant to the project type
- E - A list of state & federally listed species within the county of the project area
- F - Instructions to submit new species observation records to the SC Natural Heritage Program

Please be advised:

The contents of this report, including all tables, maps, recommendations, and various other text, are produced as a direct result of the information a user provides at the time of submission. The SCDNR assumes that all information submitted by the user represents the project scope as proposed, and recommends that additional reports be requested should the scope deviate from how the project was initially represented to the SCDNR.

The technical comments outlined in this report are submitted to speak to the general impacts of the activities as described through inquiry by parties outside the South Carolina Department of Natural Resources. These technical comments are submitted as guidance to be considered and are not submitted as final agency comments that might be related to any unspecified local, state or federal permit, certification or license applications that may be needed by any applicant or their contractors, consultants or agents presently under review or not yet made available for public review. In accordance with its policy 600.01, Comments on Projects Under Department Review, the South Carolina Department of Natural Resources, reserves the right to comment on any permit, certification or license application that may be published by any regulatory agency which may incorporate, directly or by reference, these technical comments.

Interested parties are to understand that SCDNR may provide a final agency position to regulatory agencies if any local, state or federal permit, certification or license applications may be needed by any applicant or their contractors, consultants or agents. For further information regarding comments and input from SCDNR on your project, please contact our Office of Environmental Programs by emailing [environmental@dnr.sc.gov](mailto:environmental@dnr.sc.gov) or by visiting [www.dnr.sc.gov/environmental](http://www.dnr.sc.gov/environmental). Pursuant to Section 7 of the Endangered Species Act, requests for formal letters of concurrence with regards to federally listed species should be directed to the USFWS.

Should you have any questions or need more information, please do not hesitate to contact our office by email at [speciesreview@dnr.sc.gov](mailto:speciesreview@dnr.sc.gov) or by phone at 803-734-1396.

Sincerely,

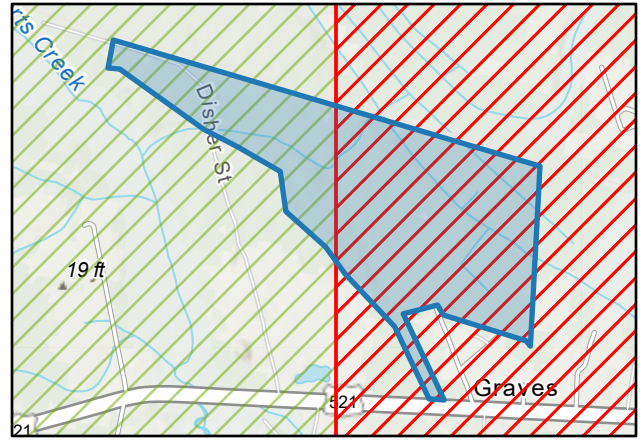
Joseph Lemeris, Jr.  
Heritage Trust Program  
SC Department of Natural Resources

# A. Project Area - Species Report

There are 6 tracked species records found within the project foot print. The following table outlines occurrences found within the project footprint (if any), sorted by listing status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting NatureServe's web page. Please note that certain sensitive species found on site may be listed in this table but are not represented on the map. Please contact [speciesreview@dnr.sc.gov](mailto:speciesreview@dnr.sc.gov) should you have further questions related to sensitive species found within the project area.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



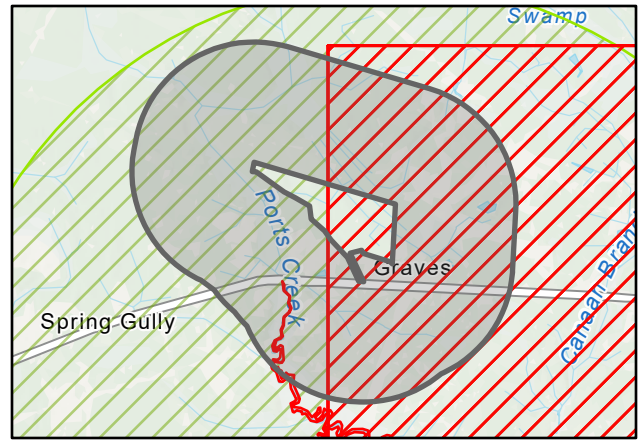
Scientific Name	Common Name	Federal Protection Status	State Protection Status	G Rank	S Rank	SWAP Priority	Last Obs. Date
<i>Falco sparverius</i>	American Kestrel	MBTA: Migratory Bird	Not Applicable	G5	S3	Highest	1992
<i>Ixobrychus exilis</i>	Least Bittern	MBTA: Migratory Bird	Not Applicable	G4G5	S3	Highest	1991
<i>Lanius ludovicianus</i>	Loggerhead Shrike	MBTA: Migratory Bird	Not Applicable	G4	S3	Highest	1991
<i>Passerina ciris</i>	Painted Bunting	MBTA: Migratory Bird	Not Applicable	G5	S3B	Highest	1992
<i>Peucaea aestivalis</i>	Bachman's Sparrow	MBTA: Migratory Bird	Not Applicable	G3	S3	Highest	1991
<i>Thalictrum macrostylum</i>	Small-leaved Meadowrue	Not Applicable	Not Applicable	G3G4	S1S2	High	1939-06-27

## B. Buffer Area - Species Report

The following table outlines rare, threatened or endangered species found within 1 miles of the project footprint, arranged in order of protection status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting NatureServe's web page. Please note that certain sensitive species found within the buffer area may be listed in this table but are not represented on the map.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS



Scientific Name	Common Name	Federal Protection Status	State Protection Status	G Rank	S Rank	SWAP Priority	Last Obs. Date
<i>Dryobates borealis</i>	Red-cockaded Woodpecker	LE: Federally Endangered	SE: State Endangered	G3	S2	Highest	2023
<i>Trichechus manatus</i>	Florida Manatee	LT: Federally Threatened	SE: State Endangered	G2G3	S2S3	Highest	2022
<i>Falco sparverius</i>	American Kestrel	MBTA: Migratory Bird	Not Applicable	G5	S3	Highest	1992
<i>Ixobrychus exilis</i>	Least Bittern	MBTA: Migratory Bird	Not Applicable	G4G5	S3	Highest	1991
<i>Lanius ludovicianus</i>	Loggerhead Shrike	MBTA: Migratory Bird	Not Applicable	G4	S3	Highest	1991
<i>Passerina ciris</i>	Painted Bunting	MBTA: Migratory Bird	Not Applicable	G5	S3B	Highest	1992
<i>Peucaea aestivalis</i>	Bachman's Sparrow	MBTA: Migratory Bird	Not Applicable	G3	S3	Highest	1991
<i>Anguilla rostrata</i>	American Eel	Not Applicable	Not Applicable	G4	S3S4	Highest	1977-07-06
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	Not Applicable	SE: State Endangered	G3G4	S2	Highest	2022-01-11
<i>Orthochilus ecristatus</i>	Spiked Medusa, Smooth-lipped	Not Applicable	Not Applicable	G4	S2	High	1998
<i>Thalictrum macrostylum</i>	Small-leaved Meadowrue	Not Applicable	Not Applicable	G3G4	S1S2	High	1939-06-27

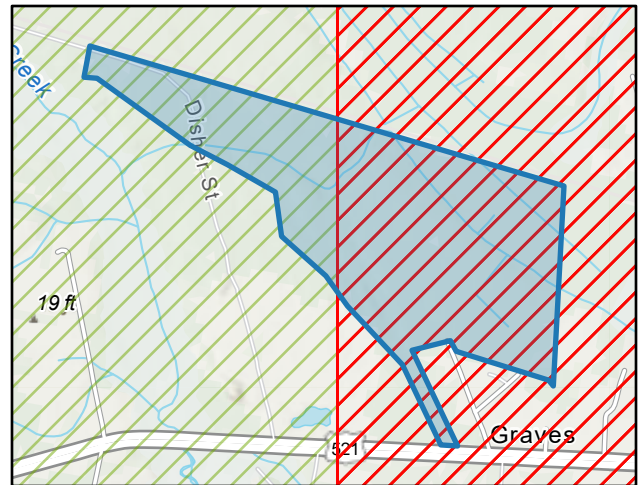


## C. Species Best Management Practices (1 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to species of concern which may be found on or near to the project area. Please contact [speciesreview@dnr.sc.gov](mailto:speciesreview@dnr.sc.gov) should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



One or more occurrences of state listed species are found within or near to your project area. Please note that take of these species are prohibited under S.C. Code of Laws §50-15-30.

To reduce potential construction-related impacts to the manatee to discountable and insignificant levels, the US Fish & Wildlife Service recommends implementing the following Standard Manatee Construction Conditions to all projects affecting the coastal waters of South Carolina (1 of 2):

- The permittee shall instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees. All construction personnel must monitor water-related activities for the presence of manatee(s) during May 1 - November 15. Construction personnel are requested to monitor outside of that timeframe as manatees may be in the area before or after the above dates.
- The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973.
- Any siltation barriers used during the project shall be made of material in which manatees cannot become entangled and must be properly secured, and regularly monitored to avoid manatee entrapment.
- All vessels associated with the project shall operate at “no wake/idle” speeds at all times while in the construction area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

To reduce potential construction-related impacts to the manatee to discountable and insignificant levels, the US Fish & Wildlife Service recommends implementing the following Standard Manatee Construction Conditions to all projects affecting the coastal waters of South Carolina (2 of 2):

- If manatee(s) are seen within 100 yards of the active construction area all appropriate precautions shall be implemented to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet to a manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of that equipment. Activities will not resume until the manatee(s) has departed the project area of its own volition.
- The permittee understands and agrees that all in-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) must be stiff, taut, and non-looping. Examples of such lines are heavy metal chains or heavy cables that do not readily loop and tangle. Flexible in-water lines, such as nylon rope or any lines that could loop or tangle, must be enclosed in a plastic or rubber sleeve/tube to add rigidity and prevent the line from looping and tangling. In all instances, no excess line is allowed in the water. Where appropriate in water wires, cables, should be fitted with PVC sleeve from the surface to the bottom to prevent any potential scraping of the passing manatees.
- Any collision with and/or injury to a manatee shall be reported immediately to the U.S. Fish and Wildlife Service contacts: Melanie Olds, South Carolina Manatee Lead, Charleston Field Office, at 843-727-4707 ext. 205; or Terri Calleson, Manatee Recovery Coordinator, North Florida Field Office, at 904-731-3286.

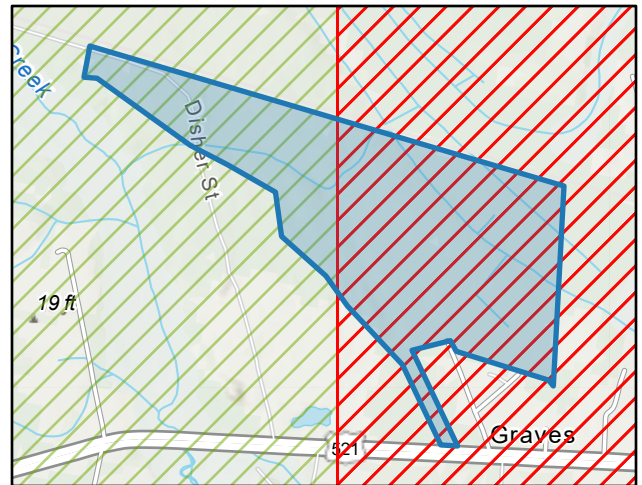
Red-cockaded woodpecker, a federally endangered and state endangered species, is known to occur within or near your project area. Surveys of mature pine trees (50-years or older) to rule out RCW within the project footprint is advised, regardless of habitat condition, and use of heavy machinery is prohibited within 200-feet of a cavity tree during the breeding season (April through July). If RCW are found within the project area, please consult with the U.S. Fish and Wildlife Service before proceeding with any construction activities. Please note the take of this state listed species is prohibited under S.C. Code of Laws §50-15-30.

## C. Species Best Management Practices (2 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to species of concern which may be found on or near to the project area. Please contact [speciesreview@dnr.sc.gov](mailto:speciesreview@dnr.sc.gov) should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SK Geodesy, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



Regarding Rafinesque's big-eared bat (1 of 2): Suitable habitat for Rafinesque's big-eared bat is defined as swamp forests, hardwood or mixed mature bottomlands, maritime forests and black gum (*Nyssa sylvatica*) and water tupelo (*Nyssa aquatic*) stands (Cochran 1999, Hofmann et al. 1999, Lance et al. 2001, Gooding and Langford 2004, Trousdale and Beckett 2005).

If suitable habitat exists within the project, the SCDNR recommends assumption of presence of Rafinesque's big-eared bat within areas of forested wetlands and to further protect these areas, surround them with a 1000-foot buffers and avoid tree clearing from May 1st to July 31st to minimize disturbance and destruction of habitat that may be used by females during gestation or maternal care for pups.

All other tree clearing outside of the forested wetlands and its associated buffer may occur in areas that are not wetlands or other aquatic resources in non-Rafinesque's big-eared bat maternity roosting habitat anytime. Where wetlands occur that are not Rafinesque's big-eared bat habitat, but they are spotted turtle habitat, tree clearing should only occur August to December to prevent impacts to spotted turtles during reproduction. However, if wetlands are dry January to June, they may be cleared, but they must be completely dry (no surface water present).

For future right-of-way management (if applicable), use heavy equipment and herbicide treatment for right-of-way vegetation management in wetlands only during the months of July to November. If wetlands are completely dry (no surface water present), heavy equipment may be used January to June, but the wetlands must be completely dry.

Please note that the northern long-eared bat is now listed as federally endangered as of March 31, 2023, making the take of the NLEB prohibited under Section 9 of the Endangered Species Act. Therefore, please consult with the USFWS regarding impacts to this species.

Please note that tricolored bat was proposed for listing by the U.S. Fish and Wildlife Service on September 13, 2022. Therefore, due to the conservation concerns surrounding this species, the SCDNR strongly suggests acoustic surveys be conducted by a qualified individual during the summer months to assess the use of the area to be cleared by tricolored bats. Should the species occur in the proposed area slated for clearing, coordination should occur with SCDNR and USFWS regarding avoidance and minimization measures.

Tricolored bat utilize caves, rock crevices, tree foliage and basal cavities, Spanish moss and man-made structures, such as houses, barns and culverts, as maternity roosts during the summer months and they will use more than one roost location.

If this species are found on-site, please contact the U.S. Fish & Wildlife Service and SCDNR. The SCDNR recommends the assumption of presence of the the species and abide by a clearing moratorium from May 1st to July 31st if suitable habitat for the species is likely or are explicitly identified within the project footprint.

In the interest of preserving plant diversity, the South Carolina Plant Conservation Alliance performs native plant rescues in order to protect and preserve our diversity of native plants. If you are interested in assisting with this important endeavor please contact the SCDNR Botanist at [botany@dnr.sc.gov](mailto:botany@dnr.sc.gov) before any development occurs onsite. There may be plants of interest on the project site that the Alliance would like to preserve.

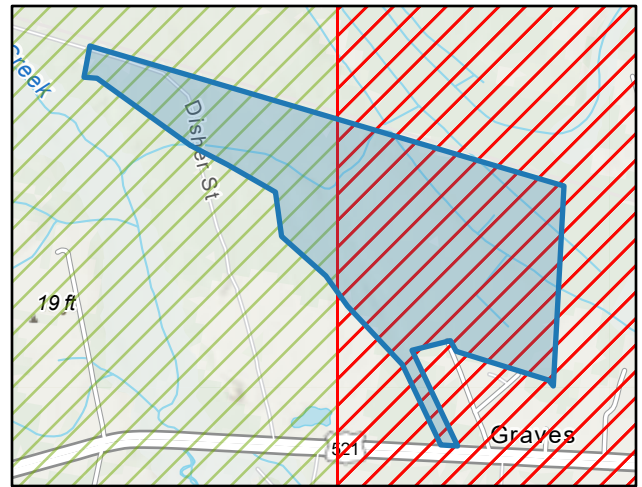
Species in the above table with SWAP priorities of High, Highest or Moderate are designated as having conservation priority under the South Carolina State Wildlife Action Plan (SWAP). SWAP species are those species of greatest conservation need not traditionally covered under any federal funded programs. Species are listed in the SWAP because they are rare or designated as at-risk due to knowledge deficiencies; species common in South Carolina but listed rare or declining elsewhere; or species that serve as indicators of detrimental environmental conditions. SCDNR recommends that appropriate measures should be taken to minimize or avoid impacts to the aforementioned species of concern.

## D. Project Best Management Practices (1 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to natural resources within or surrounding the project area. Please contact our Office of Environmental Programs at [environmental@dnr.sc.gov](mailto:environmental@dnr.sc.gov) should you have further questions with regard to best management practices related to this project area.



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Review of available data, National Wetlands Inventory and hydric soils, indicate that wetlands or waters of the United States are present within your project area. These areas may require a permit from the U.S. Army Corps of Engineers (USACE), as well as a compensatory mitigation plan. SCDNR advises that you consult with the USACE Regulatory to determine if jurisdictional wetlands are present and if a permit and mitigation is required for any activities impacting these areas. For more information, please visit their website at [www.sac.usace.army.mil/Missions/Regulatory](http://www.sac.usace.army.mil/Missions/Regulatory). Additionally, a 401 Water Quality Certification may also be required from the SC Department of Health & Environmental Control. For more information, please visit their website at <https://www.scdhec.gov/environment/water-quality/water-quality-certification-section-401-clean-water-act>.

- If clearing must occur, riparian vegetation within wetlands and waters of the U.S. must be conducted manually and low growing, woody vegetation and shrubs must be left intact to maintain bank stability and reduce erosion.
- Construction activities must avoid and minimize, to the greatest extent practicable, disturbance of woody shoreline vegetation within the project area. Removal of vegetation should be limited to only what is necessary for construction of the proposed structures.
- Where necessary to remove vegetation, supplemental plantings should be installed following completion of the project. These plantings should consist of appropriate native species for this ecoregion and exclude plant species found on the exotic pest plant council list: [https://www.se-eppc.org/southcarolina/SCEPPC\\_LIST2014finalOct.pdf](https://www.se-eppc.org/southcarolina/SCEPPC_LIST2014finalOct.pdf).

Excavation/Construction activities must not occur during fish spawning season from March through June due to its negative impacts on eggs and reproduction activities.

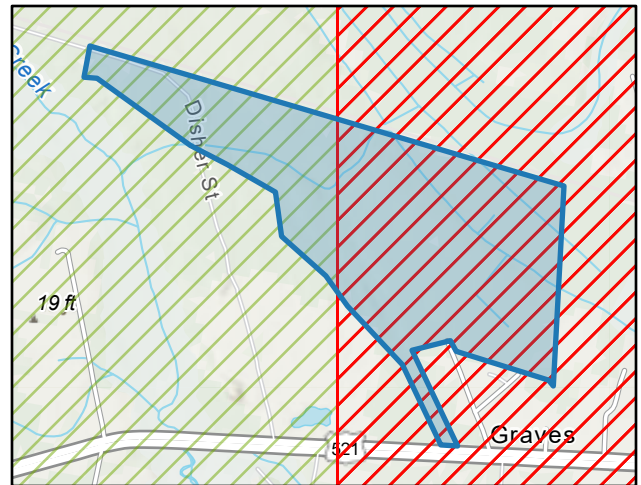


## D. Project Best Management Practices (2 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to natural resources within or surrounding the project area. Please contact our Office of Environmental Programs at [environmental@dnr.sc.gov](mailto:environmental@dnr.sc.gov) should you have further questions with regard to best management practices related to this project area.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



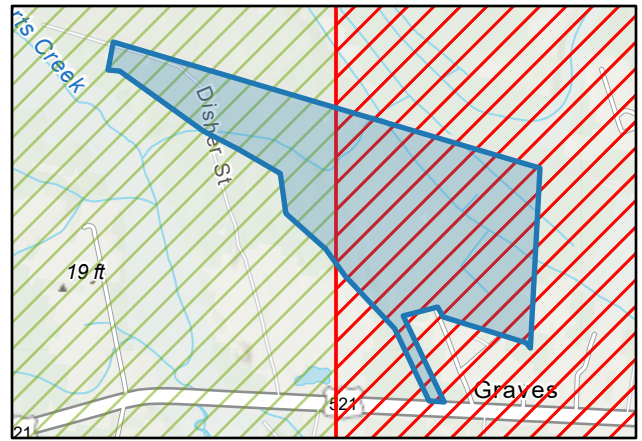
- All necessary measures must be taken to prevent oil, tar, trash and other pollutants from entering the adjacent offsite areas/wetlands/water.
- Once the project is initiated, it must be carried to completion in an expeditious manner to minimize the period of disturbance to the environment.
- Upon project completion, all disturbed areas must be permanently stabilized with vegetative cover (preferable), riprap or other erosion control methods as appropriate.
- The project must be in compliance with any applicable floodplain, stormwater, land disturbance, shoreline management guidance or riparian buffer ordinances.
- Prior to beginning any land disturbing activity, appropriate erosion and siltation control measures (e.g. silt fences or barriers) must be in place and maintained in a functioning capacity until the area is permanently stabilized.
- Materials used for erosion control (e.g., hay bales or straw mulch) will be certified as weed free by the supplier.
- Inspecting and ensuring the maintenance of temporary erosion control measures at least:
  - a. on a daily basis in areas of active construction or equipment operation;
  - b. on a weekly basis in areas with no construction or equipment operation; and
  - c. within 24 hours of each 0.5 inch of rainfall.
- Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts.
- Land disturbing activities must avoid encroachment into any wetland areas (outside the permitted impact area). Wetlands that are unavoidably impacted must be appropriately mitigated.
- Your project may require a Stormwater Permit from the SC Department of Health & Environmental Control, please visit <https://www.scdhec.gov/environment/water-quality/stormwater>
- Your project boundary lies within a coastal county in South Carolina which means you may also need a Coastal Zone Consistency Certification for your project from the SC Department of Health and Environmental Control. For more information, visit: <https://www.scdhec.gov/environment/your-water-coast/ocean-coastal-management/beach-management/coastal-permits/coastal-zone>
- If your project could affect coastal waters, tidelands, beaches and beach/dune systems, you may also need a critical area permit from the SC Department of Health and Environmental Control. For more information, visit: <https://www.scdhec.gov/environment/your-water-coast/ocean-coastal-management/beach-management/coastal-permits/critical-1>

# E. State & Federally Listed Species in Georgetown County

The South Carolina Department of Natural Resources' Heritage Trust Program organizes a database that captures and tracks element of occurrence data for rare, threatened and endangered species, both federal and state. Please keep in mind that this information included within this report is derived from existing databases, and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. If your project requires the assessment of potential threatened or endangered species that could be within the project area, the SCDNR asks that you include a review of the state listed species within the county or watershed in addition to those that may be within the report as being within the project footprint or within 1-mile of the proposed project area. Consideration should be given to the occurrence of suitable habitat onsite, species movement and connectivity of habitat when assessing the likelihood of a state listed species on the project area.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

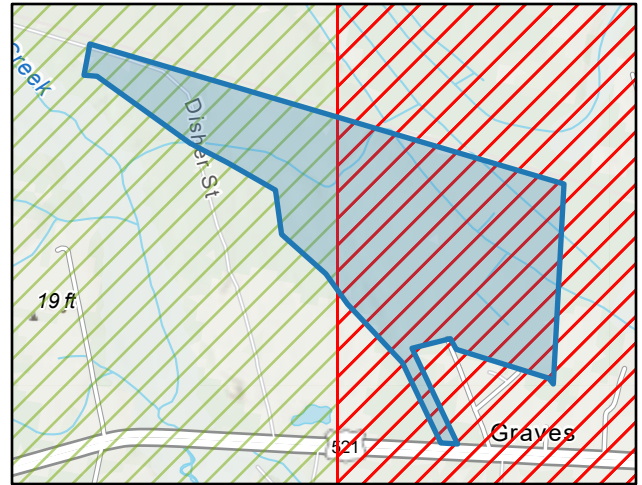


County	Scientific Name	Common Name	G Rank	S Rank	Federal Protection Status	State Protection Status	Group Type
Georgetown	<i>Acipenser brevirostrum</i>	Shortnose Sturgeon	G3	S3	LE: Federally Endangered	SE: State Endangered	Zoological
Georgetown	<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic Sturgeon	G3T3	S3	LE: Federally Endangered	Not Applicable	Zoological
Georgetown	<i>Bombus fraternus</i>	Southern Plains Bumble Bee	G3G4	SNR	ARS: At-Risk Species	Not Applicable	Zoological
Georgetown	<i>Bombus pensylvanicus</i>	American Bumble Bee	G3G4	SNR	ARS: At-Risk Species	Not Applicable	Zoological
Georgetown	<i>Callophrys irus</i>	Frosted Elfín	G3	S2S3	ARS: At-Risk Species	Not Applicable	Zoological
Georgetown	<i>Caretta caretta</i>	Loggerhead Sea Turtle	G3	S3	LT: Federally Threatened	ST: State Threatened	Zoological
Georgetown	<i>Charadrius melodus</i>	Piping Plover	G3	S2N	LT: Federally Threatened	SE: State Endangered	Zoological
Georgetown	<i>Charadrius wilsonia</i>	Wilson's Plover	G5	S3	MBTA: Migratory Bird Treaty Act	ST: State Threatened	Zoological
Georgetown	<i>Chelonia mydas</i>	Green Sea Turtle	G3	S1	LT: Federally Threatened	ST: State Threatened	Zoological
Georgetown	<i>Clemmys guttata</i>	Spotted Turtle	G5	S2	ARS: At-Risk Species	ST: State Threatened	Zoological
Georgetown	<i>Columbina passerina</i>	Common Ground Dove	G5	S3	MBTA: Migratory Bird Treaty Act	ST: State Threatened	Zoological
Georgetown	<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	Not Applicable	SE: State Endangered	Zoological
Georgetown	<i>Danaus plexippus</i>	Monarch Butterfly	G4	S4	C: Candidate	Not Applicable	Zoological
Georgetown	<i>Dermochelys coriacea</i>	Leatherback Sea Turtle	G2	S1	LE: Federally Endangered	SE: State Endangered	Zoological
Georgetown	<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3	S2	LE: Federally Endangered	SE: State Endangered	Zoological
Georgetown	<i>Elanoides forficatus</i>	Swallow-tailed Kite	G5	S2	MBTA: Migratory Bird Treaty Act	SE: State Endangered	Zoological
Georgetown	<i>Elassoma boehlkei</i>	Carolina Pygmy Sunfish	G2	S1	Not Applicable	ST: State Threatened	Zoological
Georgetown	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3B,S3N	Bald & Golden Eagle Protection Act	ST: State Threatened	Zoological
Georgetown	<i>Heterodon simus</i>	Southern Hog-nosed Snake	G2	S1	Not Applicable	ST: State Threatened	Zoological
Georgetown	<i>Laterallus jamaicensis</i>	Black Rail	G3	S1	LT: Federally Threatened	Not Applicable	Zoological
Georgetown	<i>Lepidochelys kempii</i>	Kemp's Ridley Sea Turtle	G1	S1N	LE: Federally Endangered	SE: State Endangered	Zoological
Georgetown	<i>Mycteria americana</i>	Wood Stork	G4	S2	LT: Federally Threatened	SE: State Endangered	Zoological
Georgetown	<i>Myotis septentrionalis</i>	Northern Long-eared Bat	G2G3	S1	LE: Federally Endangered	Not Applicable	Zoological
Georgetown	<i>Perimyotis subflavus</i>	Tricolored Bat	G3G4	S3	LEP: Federally Endangered (Proposed)	Not Applicable	Zoological
Georgetown	<i>Sternula antillarum</i>	Least Tern	G4	S2B	MBTA: Migratory Bird Treaty Act	ST: State Threatened	Zoological
Georgetown	<i>Trichechus manatus</i>	Florida Manatee	G2G3	S2S3	LT: Federally Threatened	SE: State Endangered	Zoological
Georgetown	<i>Amaranthus pumilus</i>	Seabeach Amaranth, Dwarf Amaranth	G2	S1	LT: Federally Threatened	Not Applicable	Botanical
Georgetown	<i>Sporobolus teretifolius</i>	Wireleaf Dropseed	G2	S1	ARS: At-Risk Species	Not Applicable	Botanical

## F. Instructions for Submitting Species Observations

The SC Natural Heritage Dataset relies on continuous monitoring and surveying for species of concern throughout the state. Any records of species of concern found within this project area would greatly benefit the quality and comprehensiveness of the statewide dataset for rare, threatened and endangered species. Below are instructions for how to download the SC Natural Heritage Occurrence Reporting Form through the Survey123 App.

Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



## Conservation Ranks & SWAP Priority Status

The SC Natural Heritage Program assigns S Ranks for species tracked within the state of South Carolina based on ranking methodology developed by NatureServe and its state program network. For information conservation rank definitions, please visit <https://explorer.natureserve.org/AboutTheData/Statuses>

The SCDNR maintains and updates its State Wildlife Action Plan (SWAP) every 10 years. This plan categorizes species of concern by Moderate, High, and Highest Priority. Please visit <https://www.dnr.sc.gov/swap/index.html> for more information about the SC SWAP.

## Important Information Regarding Element Occurrence Data:

The South Carolina Department of Natural Resources' Heritage Trust Program organizes a database that captures and tracks element of occurrence data for rare, threatened and endangered species, both federal and state. Please keep in mind that this information included within this report is derived from existing databases, and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. If your project requires the assessment of potential threatened or endangered species that could be within the project area, the SCDNR asks that you include a review of the state listed species within the county or watershed in addition to those that may be within the report as being within the project footprint or within 1-mile of the proposed project area. Consideration should be given to the occurrence of suitable habitat onsite, species movement and connectivity of habitat when assessing the likelihood of a state listed species on the project area. To view these lists please visit our county and watershed dashboards at our website: <https://schtportal.dnr.sc.gov/portal/apps/sites/#track>

## Instructions for accessing the SC Natural Heritage Occurrence Reporting Form

For use in a browser (on your desktop/PC):

- 1) Follow <https://bit.ly/scht-reporting-form>
- 2) Select 'Open in browser'
- 3) The form will open and you can begin entering data!

This method of access will also work on a browser on a mobile device, but only when connected to the internet. To use the form in the field without relying on data/internet access, follow the steps below.

For use on a smartphone or tablet using the field app:

- 1) Download the Survey123 App from the Google Play store or the Apple Store. This app is free to download. Allow the app to use your location.
- 2) Use the camera app (or other QR Reader app) to scan the QR code on this page from your smartphone or tablet. Click on the 'Open in the Survey123 field app'. This will prompt a window to allow Survey123 to download the SC Natural Heritage Occurrence Reporting Form. Select 'Open.'
- 3) The form will automatically open in Survey123, and you can begin entering data! This form will stay loaded in the app on your device until you manually delete it, and you can submit as many records as you like.

