ECS Florida, LLC

Results for Ecological Due Diligence

Hawthorne Road Additional Parcel
SE Hawthorne Road, Gainesville, Florida 32641

For: Garden Street Communities Southeast, LLC

100 W Garden Street, 2nd Floor, Pensacola, Florida 32502

ECS Project Number 55:7163

February 24, 2025

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Mr. Gerald Cyr

Garden Street Communities Southeast, LLC
100 W Garden Street
2nd Floor
Pensacola, Florida 32502

ECS Project No. 55:7163

Reference: Results for Ecological Due Diligence, Hawthorne Road Additional Parcel, SE Hawthorne Road, Gainesville, Alachua County, Florida

Dear Mr. Cyr:

ECS Florida, LLC (ECS) is pleased to provide you with results of our Ecological Due Diligence for the Hawthorne Road Additional Parcel. ECS services were provided in general accordance with ECS Proposal No. 55:12446 authorized on December 16, 2024.

If there are questions regarding this report, or a need for further information, please contact the undersigned.

ECS Florida, LLC

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INTRODUCTION

ECS completed an Ecological Due Diligence for the Hawthorne Road Additional Parcel, located at SE Hawthorne Road in Gainesville, Alachua County, Florida. An aerial view of the subject property is provided in **Appendix I**. The field portion of the survey was conducted on Multiple dates from December 17th through December 23rd and February 20, 2025.

The purpose of the field visit was to evaluate the site for the occurrence and/or potential for occurrence of jurisdictional wetlands and/or protected wildlife species (and their habitats).

The following report (and referenced exhibits) describes relevant ecological conditions observed on the site during the field investigation and the results of documented literature regarding the presence of protected wildlife species and/or habitat on the site and its relevant surroundings.

SITE LOCATION AND DESCRIPTION

The site is located in the physiographic area known as the Ocala Uplift District. The site is an approximately 81.17-acre property located at SE Hawthorne Road in Gainesville, Alachua County, Florida and is identified by the Alachua County Property Appraiser as parcel identification number 16184-000-000, 16185-000-000, 16194-000-000, 16194-001-000, 16201-004-000, and 16194-002-000 and owned by BENTLEY PROPERTIES INC and GATOR COUNTRY LLC (**Figure 1**).

The site is classified by Alachua County as undeveloped land. At the time of this survey, the site was observed to be occupied by primarily forested land (**Figure 2**).

The upland canopy vegetation is dominated by live oak (*Quercus virginiana*) and loblolly pine (*Pinus taeda*) and includes species such as hickory (*Carya glabra*) and southern magnolia (*Magnolia grandiflora*). The upland herbaceous layer includes species such as saw palmetto (*Serenoa repens*), beauty berry (*Callicarpa americana*), coral ardisia (*Ardisia crenata*), and air-potato (*Dioscorea bulbifera*).

The wetland canopy vegetation is dominated by water oak (*Quercus nigra),* laurel oak (*Quercus laurifolia*) and sweetgum (*Liquidambar styraciflua)* with a sub canopy dominated by laurel oak. The wetland herbaceous vegetation includes woodoats (*Chasmanthium spp*), cinnamon fern (*Osmundastrum cinnamomeum),* Virginia chain fern (*Woodwardia virginica*), arrowhead vine (*Syngonium podophyllum),* coral ardisia, and sphagnum *(Sphagnum spp).*

Site photographs taken at the time of this survey are included in **Appendix II**.

Soils

Eight (8) general soil types were identified by the Natural Resource Conservation Service's (NRCS) S*oil Survey of* Alachua County*, Florida*. The following soil units and descriptions were mapped by the soil survey on the site:

- **Unit 8 - Millhopper sand** consists of moderately well drained soils that form from sandy and loamy marine deposits. These soils are found in knolls on marine terraces and ridges on marine terraces. Slopes range from 0 to 5 percent. Millhopper sand is classified as non-hydric. These soils cover approximately 29.8% of the site by area.
- **Unit 19 - Monteocha loamy sand** consists of very poorly drained soils that form from sandy and loamy marine deposits. These soils are found in depressions on marine terraces. Slopes range from 0 to 2 percent. Monteocha sand is classified as hydric. These soils cover approximately 0.3% of the site by area.
- **Unit 20 - Tavares sand** consists of moderately well drained soils that form from eolian or sandy marine deposits. These soils are found in knolls on marine terraces, ridges on marine terraces, and flats on marine terraces. Slopes range from 0 to 5 percent. Tavares sand is classified as non-hydric. These soils cover approximately 52.7% of the site by area.
- **Unit 21 - Newnan sand** consists of somewhat poorly drained soils that formed from sandy and loamy marine deposits. These soils are found in flats on marine terraces. Slopes range from 0 to 2 percent. Newnan sand is classified as non-hydric. These soils cover approximately 4.3% of the site by area.
- **Unit 25 - Pomona sand, depressional,** consists of very poorly drained soils that form from sandy and loamy marine deposits. These soils are found in depressions on marine terraces. Slopes range from 0 to 2 percent. Pomona sand, depressional, is classified as hydric. These soils cover approximately 8.1% of the site by area.
- **Unit 28 - Chipley sand** consists of somewhat poorly drained soils that formed from sandy marine deposits. These soils are found in knolls on marine terraces, rises on marine terraces, and flats on marine terraces. Slopes range from 0 to 2 percent. Chipley sand is classified as non-hydric. These soils cover approximately 0.2% of the site by area.
- **Unit 51 - Plummer fine sand** consists of poorly drained soils that formed from sandy and loamy marine deposits. These soils are found in flats on marine terraces. Slopes range from 0 to 2 percent. Plummer fine sand is classified as non-hydric. These soils cover approximately 0.1% of the site by area.
- **Unit 72 - Lochloosa fine sand** consists of somewhat poorly drained soils that formed from sandy and loamy marine deposits. These soils are found in knolls on marine terraces, and ridges on marine terraces. Slopes range from 5 to 8 percent. Lochloosa fine sand is classified as non-hydric. These soils cover approximately 4.6% of the site by area.

Figure 3 shows the site and soils as mapped by the Soil Survey.

Vegetative Communities and Land Uses

Prior to the field visit, Geographic Information System (GIS) data from the St. Johns River Florida Water Management District (SJRWMD) was reviewed to identify documented vegetative communities and land uses on the property. Current site conditions are documented using the Florida Land Use, Cover and Forms Classification System (FLUCCS, Florida Department of Transportation, 1999) (**Figure 4**). FLUCCS classifications for the land covers and uses (as adapted from SJRWMD coverages) on the property are as follows: **1100: Residential, low density - less than 2 dwelling units/acre, 1400: Commercial & Services, 4230: Oak-Pine-Hickory, 4340: Upland Mixed Coniferous/ Hardwood, 5120: Drainage Ditch, 6100: Wetland Hardwood Forests, 6150: Bottomland Forested.**

PRELIMINARY WETLANDS DETERMINATION METHODS

A Preliminary Wetlands Determination/Jurisdictional Flagging was performed on Multiple dates from December 17th through December 23rd and February 20, 2025 via visual transect in the field to establish potential wetlands on-site. On-site soils, hydrology indicators, and plant communities were generally observed in the field. The wetland determination and flagging were completed in accordance with the 1987 Wetland Delineation Manual and the Atlantic and Gulf Coastal Plain Regional Supplement, Version 2.0, November 2010 and Chapter 62-340, Florida Administrative Code.

Results and Discussion

Based on field observations and a review of FLUCCS classifications and the U.S. Fish and Wildlife Service's National Wetland Inventory (NWI) online mapper, ECS confirmed the presence of a jurisdictional wetland feature present on the site.

An area in the northern portion of the site is mapped by the NWI as "Freshwater Forested/Shrub Wetlands" (**Figure 5**).

ECS observed five wetlands and one Other Surface Water (OSW) feature onsite:

Wetland A is a ±0.07-acre forested wetland located in the southeastern portion of the site that appears to connect to an offsite wetland system. Dominant canopy species include loblolly pine and water oak.

Wetland B is a ±0.29-acre forested wetland located along the eastern boundary of the site that connects to a larger offsite wetland system via an upland-cut ditch. Dominant canopy species include sweetgum, blackgum (*Nyssa sylvatica*), and chinese tallow (*Triadica sebifera*).

Wetland C is a ±6.47-acre forested wetland located in the northern portion of the site. This feature connects to an offsite wetland system to the north and east. The wetland was historically channelized and the ditch conveys water from northwest to east. The wetland has been hydrologically impacted by the channelization, upstream landuse, and stormwater conveyance from NE 51st Street. Dominant canopy species include water oak, laurel oak, and sweetgum. The portion of Wetland C that extends west toward OSW A is dominated by arrowhead vine in the groundcover stratum and the species also extends up many trees.

Wetland D is a ±0.28-acre forested wetland located in the north-central portion of the site that connects hydrologically to wetland C via a culvert. Dominant canopy species include water oak, maple (*Acer rubrum*), and ironwood (*Carpinus caroliniana*).

Wetland E is a ±0.58-acre forested wetland located along the southwestern boundary of the site that extends offsite to the south and appears isolated. Wetland E receives stormwater from Hawthorne Road to the south but is otherwise hydrologically isolated. Dominant canopy species include water oak and sweetgum. The wetland offsite has a permanent water pool and species transition to a dominant canopy of loblolly bay (*Gordonia lasianthus*).

OSW A was observed as a ±0.04-acre upland-cut ditch that connects to the west side of Wetland C and flows easterly from a stormwater culvert located at SE 51st Street along the western property boundary. Air potato (*Dioscorea bulbifera*) is present along the ditch bank.

Please refer to **Figure 6** for the approximate delineation line flagged by ECS at the time of this survey.

ECS performed a jurisdictional flagging of the wetland feature identified on the site. With the jurisdictional flagging complete, ECS can coordinate a jurisdictional wetland determination with the SJRWMD and United States Army Corps of Engineers (USACE).

PRELIMINARY THREATENED AND ENDANGERED SPECIES METHODS

A protected wildlife species survey and habitat assessment were conducted over the property on Multiple dates from December 17th through December 23rd and February 20, 2025. Protected wildlife species are defined as those listed as Threatened, Endangered, or Species of Special Concern by the U.S. Fish and Wildlife Service (USFWS) and/or the Florida Fish and Wildlife Conservation Commission (FWC). Random locations throughout the site were sampled for potential threatened and endangered species of Alachua County, Florida.

Results of Survey

Federal and state listed threatened and endangered species for Alachua County were reviewed from the USFWS North Florida Ecological Services Office website and the Florida Natural Areas Inventory (FNAI) website prior to the site visit (**Appendix III**). Biota was broken down into six categories:

Amphibians

The Project area appears to be located outside of the FWC's Range Map for the frosted flatwoods salamander (*Ambystoma cingulatum*). Additionally, no potential habitat or individuals were observed onsite.

No additional threatened or endangered amphibian species or their habitats were encountered during the time of this survey.

Birds

ECS reviewed the FWC's Historical Bald Eagle Nesting Areas online database. The nearest documented bald eagle (*Haliaeetus leucodephalus*) nest is located approximately 1,494 feet (0.28 miles) northeast of the site (**Figure 7a**). This nest is located outside of the FWC recommended buffer distance of 660 feet.

ECS reviewed the USFWS' map of wood stork (*Mycteria americana*) Nesting Colonies and Core Foraging Areas Active Within 2010-2019. The site appears to be located outside a Core Foraging Area, and no individuals were observed on the site at the time of this survey.

The site is located outside the historical range of the Florida scrub jay (*Aphelocoma coerulescens*). No individuals were directly observed, and no suitable potential habitat was noted by the FWC Terrestrial Resources GIS database on or in the immediate vicinity of the site.

The eastern black rail's (*Laterallus jamaicensis ssp, jamaicensis*) expected range overlaps the site area, but no critical habitat has been designated for this species according to FWS IPaC resource list. The eastern black rail requires marsh habitat with dense overhead cover and soils that are moist or saturated, which is often found along the fringe of gently sloping wetlands adjacent to higher wetland/upland areas with high vegetative cover. No evidence of the eastern black rail was observed on the site. The wetlands onsite are not marsh-like with dense overhead cover. Due to the lack of habitat on or adjacent to the project site, the proposed project will not result in adverse impacts to the eastern black rail.

The site location is in the expected range of the Everglades snail kite (*Rostrhamus sociabilis plumbeus*), according to FWS IPaC resource list. While the FWS IPaC resource list shows "final critical habitat" for this the snail kite, the site location does not overlap the critical habitat. No individuals were observed on the site at the time of this survey.

The sandhill crane (*Antigone canadensis pratensis*) was noted on the FNAI query results as a potential species to be affected by site development. The sandhill crane prefers habitats with little canopy cover and shallow herbaceous wetlands. Due to the passerin nature of foraging and no nesting habitat nearby, no impacts are anticipated.

The red-cockaded woodpecker (*Picoides borealis*) expected range overlaps the site area, but no critical habitat has been designated for this species according to FWS IPaC resource list (**Figure 7b**). No individuals were directly observed on the site at the time of this survey. Additionally, the site does not appear to be located within a designated FWC management unit (FWC Red-Cockaded Woodpecker Management Plan, August 2003).

No other threatened or endangered species or their habitats were encountered at the time of this survey.

Fish

No threatened or endangered species were encountered during the time of this survey. No wetlands capable of sustaining a fish community were observed on the subject property.

Mammals

According to the U.S. Fish and Wildlife Service, the tricolored bat (*Perimyotis subflavus*) is a small insectivorous bat that is distinguished by its unique tricolored fur and often appears yellowish to nearly orange. During the spring, summer, and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures. The site falls within the current range for this species, but no critical habitat has been established in Florida. The site contains forested habitat which may be suitable for this species and informal or formal coordination with the USFWS may be required prior to development of the site pending finalization of the USFWS's proposal to list the tricolored bat as endangered in summer 2024.

No other threatened or endangered species or their habitats were encountered during the time of this survey.

Reptiles

ECS observed eleven (11) potentially occupied gopher tortoise (*Gopherus polyphemus)* burrows and one (1) abandoned gopher tortoise burrow within the southern portion of the site at the time of this survey. Please refer to **Figure 7c** for the approximate locations of these burrows. A more detailed survey may be required by FWC during the regulatory permitting review cycle as the habitat is suitable for this species.

The Eastern indigo snake (*Drymarchon corais couperi*) is listed as Federally Threatened. It is considered to have a commensal relationship with gopher tortoises, utilizing gopher tortoise burrows as nesting spots. Due to the potentially occupied gopher tortoise burrows located on the site, potential Eastern indigo snake habitat is considered to be present on the site.

The Project area appears to be located within the FWC's Range Map for the Eastern pine snake (*Pituophis melanoleucus*). However, no potential habitat or individuals were observed onsite.

No other threatened or endangered species or their habitats were encountered during the time of this survey.

Vascular Plants

No threatened or endangered species or their habitats were encountered during the time of this survey.

ALACHUA COUNTY NATURAL RESOURCES CHECKLIST

A copy of the Alachua County Natural Resources Checklist completed for the site has been included in Appendix IV of this report. Items of note are discussed in detail below.

Surface Waters, Wetlands, and Wetland Buffers

The site contains five wetlands and one Other Surface Water (OSW) feature onsite as discussed previously. Please refer to the Results and Discussion of the Preliminary Wetland Determination Methods.

Flood Zones

The project site is located within the FEMA National Flood Hazard Layer FIRM panel 12001C0319D (6/16/2006). A review of FEMA's Flood Insurance Rate Map indicates two flood hazard areas (Zone A) are mapped within the project boundary (**Figure 10**). One of the flood hazard areas (within the southeastern area of the project site) is located in a higher elevation upland area and the other corresponds to the location of Wetland E.

Strategic Ecosystems

Section 406.33 Alachua County Land Use Development Code (LUDC) states "*Strategic ecosystems are identified in the KBN/Golder Associates report, "Alachua County Ecological Inventory Project" (1996), and mapped generally by the KBN/Golder Ecological Inventory Map, which is an overlay to the Future Land Use Map*." The project is located within the East Side Greenway Strategic Ecosystem boundary (**Figure 12a**).

The documented Meeting Minutes from the KBN/Golder 1996 report describes decisions made in regards to boundary determinations and that boundaries such as section lines, quarter sections, and property boundaries would make purchasing the Strategic Ecosystems (SE) easier. According to the Alachua County's Upland Resource Protection Guide, *Strategic ecosystems are communities that have the potential to promote connectivity and minimize fragmentation of **natural systems**, and to protect wetlands, floodplains, and associated uplands in a broad systems context through resource-based planning across multiple parcels rather than on an individual parcel basis.*

LUDC Section 406.33, requires ground-truthing of strategic ecosystem resources. The code states: "*The specific location and extent of regulated strategic ecosystem resources shall be determined through ground-truthing using the KBN/Golder Associates report as a guide to determine the location and extent of the ecological community or communities described generically, in the KBN/Golder report or of other natural resources generally consistent with the pertinent site summary in the KBN/Golder report*." The Upland Resource Protection Guide states the SE preservation (Set-Aside) area is based on several factors including the following:

- ***Native** biodiversity within or across natural ecological communities, ecological integrity, rarity, and functional connectedness with other communities;*
- ***Plant and animal species habitat** that is documented for listed species and species with large home ranges, and habitat that is a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering, high in vegetation quality and species diversity, and low in non-native invasive species; and*
- ***Size, shape, and landscape features that allow the ecosystem to be restored** to, or maintained in, good condition with regular management activities, such as prescribed burning, removal of exotic vegetation, or hydrological restoration.*

East Side Greenway

The KBN/Golder 1987 report does not identify the East Side Greenway, but it is later described in the 1996 report. The earlier report includes Palm Point Hill and Gum Root Swamp which are later incorporated into the East Side Greenway described in the later report. According to the 1996 report, the purpose of the East Side Greenway was to maintain connectivity between Paynes Prairie State Preserve, Morningside Nature Center, Gum Root Swamp, and several streams along Newnans Lake (at Sunland Park at Palm Point, points further south by the greenways, Palm Point Hill, and several large swamps). This expansive system totals approximately 3,221 acres and the boundaries are irregular in shape.

The 1996 report describes ecological mapping (i.e. digitized boundaries) of the Strategic Ecosystems was completed using aerials from 1986, 1994, and 1995, USGS topographic quadrangle maps, and the inventory data determined by qualitative observations. Strategic Ecosystems were defined as those areas that were uncleared and undeveloped. The qualitative observations for the East Side Greenway were conducted on two dates (August 8 and 11, 1996) by one person (Bob Simons - KBN Engineering and Applied Sciences, Inc. and Audubon Society Sanctuary Chairman) and represents the evaluation/ scoring for approximately 28 different FNAI vegetative communities within the East Side Greenway.

Of the 28 communities described in the 1996 report and identified at the East Side Gateway, the project site hosts Upland Mixed Forest (Mesic Hammock) and Bottomland Forest and these communities were generally described/ranked as good.

Results

ECS identified five distinct communities within the project area located within the GIS boundary for the East Side Greenway. The dominant wetland community is Bottomland Forest (Wetlands C and D - FLUCCS 6150). A portion of Wetland C, situated on a steep seepage slope, is classified as Wetland Hardwood Forest (FLUCCS 6100). The remaining upland areas are predominantly hardwood-dominated communities (FLUCCS 4230 or 4340). There is also a upland-cut ditch, OSW A, that extends into the Strategic Ecosystem which conveys stormwater from SE 51st St.

A significant area within the western portions of Wetland C, Wetland D, and the uplands between these wetlands contains a groundcover dominated by invasive species, specifically coral ardisia and arrowhead vine (**Figure 13a**). Coral ardisia is distributed across wetlands and uplands (±7.2 acres), with less aerial coverage in its southern extent, but coverage increases northward, where it accounts for approximately 90% of the groundcover stratum in the northwestern portion of the site. Arrowhead vine is primarily confined to Wetland D (±1.1 acres), where it covers approximately 90% of the groundcover stratum and extends up numerous trees. These invasive species present a substantial risk to the long-term ecological succession of the affected communities by shading out potential recruitment trees and suppressing native vegetation.

Section 406.33 of the LUDC states: "*Those areas found not to contain strategic ecosystem resources shall be eligible for consideration for development as part of a development plan or special area plan, provided the ecological integrity of the strategic ecosystem as a whole will be sufficiently protected*."

ECS completed ground-truthing of Significant Habitat, native and natural communities (**Figure 13b**). Confirming the areas of Significant Habitat support efforts to understand the portions of the Strategic Ecosystem which should be included in the Set-Aside. Pursuant to Alachua County's Upland Resource Protection Guidance, "*A field investigation is necessary to determine the specific location and extent of strategic ecosystem resources, and to select the portion of the resources, if any, that shall be permanently preserved*."

The Set-Aside preservation areas of the Strategic Ecosystem are evaluated for:

1. Native biodiversity within or across natural ecological communities, ecological integrity, rarity, and functional connectedness with other communities;

2. Plant and animal species habitat that is documented for listed species and species with large home ranges, and habitat that is a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering, high in vegetation quality and species diversity, and low in non-native invasive species; and
3. Size, shape, and landscape features that allow the ecosystem to be restored to, or maintained in, good condition with regular management activities, such as prescribed burning, removal of exotic vegetation, or hydrological restoration

Section 406.33 of the LUDC states: "*Those areas found not to contain strategic ecosystem resources shall be eligible for consideration for development as part of a development plan or special area plan, provided the ecological integrity of the strategic ecosystem as a whole will be sufficiently protected*."

Significant Plant and Wildlife Habitat

Chapter 406, Article 3 of the Alachua County Land Use Development Code (LUDC) states, "***Significant plant and wildlife habitat*** *includes natural upland plant communities which have the potential to maintain healthy and diverse populations of plants or wildlife. All developments shall protect significant plant and wildlife habitat that occurs on site, and up to 25% of the upland portion of the project area may be required to be set aside. The habitat to be conserved shall be selected based on its uniqueness, quality and viability. In particular, conserved habitat shall be located and maintained in areas with intact canopy, understory and groundcover, in functional, clustered arrangement that maximizes use by wildlife and maintains the long-term viability of native upland plant communities. Linkages to habitat corridors and greenways shall be required where available. The County shall work with the landowner to select the portion of the habitat that will be included in the set aside area.*"

Chapter 78, Article 1 of the LUDC defines Significant Habitat as *contiguous stands of natural upland plant communities which have been documented to support, and which have the potential to maintain, healthy and diverse populations of plants or wildlife*. Identification of Significant Habitat shall be identified by assessment of the following factors:

1. Quality of native ecosystem.
2. Overall quality of biological diversity.
3. Wildlife habitat value.
4. Presence of listed or uncommon species.
5. Grouping, contiguity, compactness of native vegetation.
6. Proximity to other natural preserve areas and corridors.
7. Impact by prohibited and invasive non-native vegetation.

Based on field observations, there are approximately 8.3 acres of invasive exotic plant species that pose an issue to the health and diversity of upland and wetland communities located within the mapped SE boundary. These species, in their current extent and aerial coverage (**Figure 13a**), have already out-competed native vegetation and prohibited recruitment of native species in all stratum

(groundcover, subcanopy, and canopy) and will continue to contribute to diversity decline if not managed. Due to the current coverage and presence of these species in offsite areas abutting the site, management of these plant species will not succeed without a long-term management plan.

Based on the review of onsite habitats during a site survey on February 20, 2024, ECS understands the majority of upland and wetland habitats have been impacted historically. These impacts are evidenced by the presence of successional vegetative communities present, evidence of past earthwork onsite, and a review of historical aerials (**Figures 14a-14f**) which indicate these systems do not currently represent native and natural vegetative communities. The boundaries of limited Significant Habitat (upland and wetland) present onsite are depicted in **Figure 13b**.

Listed Species/Listed Species Habitat

Please refer to the Preliminary Threatened & Endangered Species Survey portion of this report.

High Aquifer Recharge Areas

High Aquifer Recharge Areas are areas where stream-to-sink surface water basins occur and areas where the Floridan aquifer system is vulnerable or highly vulnerable. According to the Alachua County Floridan Aquifer High Recharge Area Map, the site is located in an area with a rating of "Vulnerable." The Alachua County Floridan Aquifer High Recharge Area Map is included as **Figure 8**.

Soils

Please refer to the site soil descriptions included in this report.

Mineral Resource Areas

According to the University of Florida's Mineral Resources of Alachua County Map (dated 1990), the site is located in a undifferentiated mineral resource area. The University of Florida's Mineral Resources of Alachua County Map is included as **Figure 9**.

Topography/Steep Slopes

Site topography ranges from 75 ft to 105 ft NAVD with the highest elevations along the western boundary and falling to the east toward Newnan's Lake. Wetland C bisects the northern extent from the northwest boundary to the eastern boundary.

OFFSITE WETLANDS DETERMINATION

Based on communication with Alachua EPD staff, ECS understands the limits of offsite wetlands were required to determine appropriate upland buffer requirements for these features. Since ECS was not authorized to evaluate offsite wetlands in the field, a desktop determination was conducted. This determination was crucial to understanding development restrictions due to upland buffer requirements to any offsite resources such as wetlands.

Methodology

To support this effort, ECS employed ArcGIS Pro software to perform a desktop delineation using 2018 NOAA LiDAR data (**Figure 15**). This high-resolution elevation data provided detailed insights into site hydrology and topographic features critical for identifying potential wetland boundaries. Additionally, ECS analyzed five historical aerials dating back to 1937 and the SJRWMD Statewide Land Use data (FLUCCS) to assess historical land use changes, vegetation patterns, and wetland evolution (**Figure 16A-16F**).

Results

As a result of the desktop delineation of offsite wetland features, ECS identified additional buffer requirements to consider in future development. These additional buffers expand the buffer areas adjacent to Wetland A. All other buffer requirements for offsite wetlands along the eastern property boundary can be met with the upland buffers required to existing wetlands onsite. This desktop methodology and suggested buffers should only be used for planning purposes. Additional regulatory review will be required prior to permit issuance.

PRELIMINARY ON-SITE HABITAT PROTECTION AND SET-ASIDE DETERMINATION

Section 406.35, LUDC provides the framework for determining set-aside limitations for on-site habitat protection. Those areas to be protected in the set-aside include:

- No more than 50 percent of the upland portion of a parcel may be required to be preserved because it is or includes strategic ecosystem;
- The Entire Strategic Ecosystem if the strategic ecosystem in combination with Significant Geologic Features equal less than 50 percent of the upland portion of the planning parcels;
- Significant Geologic Features;
- Portions of the SE as approved by the County based on limitations and factors in 406.97; and,
- Portions of the SE if the SE in combination with Significant Geologic Features equal more than 50 percent of the upland portion of the planning parcels based on 406.03(b)(1) and (2).

The set-aside shall be determined for areas with intact canopy, understory and groundcover, in functional, clustered arrangement that maximizes use by wildlife and maintains the long-term viability of native upland plant communities.

Set-Aside Results

Based on field surveys conducted on Multiple dates from December 17th through December 23rd and February 20, 2025, ECS determined:

- No significant geologic features were present.
- The Strategic Ecosystem does not accurately represent the boundaries for Significant Habitat, but it has been groundtruthed to identify the extent of Significant Upland Habitat and Significant Wetland Habitat (**Figure 13b**).

- Most areas identified as Non-Significant Upland Habitat (uplands outside the identified Significant Habitat boundary) within the Strategic Ecosystem are still included in the proposed preliminary Set-Aside.
- The proposed preliminary Set-Aside includes wetlands, other surface water (upland-cut ditch), 75-foot buffers to wetlands, non-Significant Upland Habitat and Significant Upland Habitat (**Figures 17a**).

Figure 17a depicts the proposed preliminary Set-Aside which includes 6.6 acres of wetlands and uplands that meet the definition of Significant Habitat which is less than 20% of the total Set-Aside. There is limited Significant Habitat onsite due to past land practices, including land clearing for pasture, earthwork for roads in wetlands, and channelization of wetlands. Approximately 34.72% (±25.5 acres) of the uplands within the total planning parcel area is proposed for upland Set-Aside while 65.28% (±47.94 acres) of the uplands are planned to be utilized for the proposed development (**Figure 17c**). Approximately 9.53% (7.74 acres) of the total planning parcel is made up of wetlands and other surface waters (an upland-cut ditch).

DESKTOP CULTURAL RESOURCES ASSESSMENT

ECS confirmed the Florida Master Site File (FMSF) (with Florida's Division of Historical Resources) has evidence of three previously recorded archaeological sites within the subject property (**Figure 18**). Further assessment and onsite surveys are recommended.

CONCLUSIONS

Wetlands

Based on field observations and a review of FLUCCS classifications and the U.S. Fish and Wildlife Service's National Wetland Inventory (NWI) online mapper, ECS confirmed the presence of a jurisdictional wetland feature present on the site.

An area in the northern portion of the site is mapped by the NWI as "Freshwater Forested/Shrub Wetlands" (**Figure 5**).

ECS observed five wetlands and one Other Surface Water (OSW) feature onsite. **Wetland A** is a ±0.07 acre forested wetland located in the southeastern portion of the site that appears to connect to a large offsite wetland system. **Wetland B** is a ±0.29 forested wetland located along the eastern boundary of the site that connects to a larger offsite wetland system via upland-cut ditches. **Wetland C** is a ±6.47 acre forested wetland located in the northern portion of the site. This feature appears to connect to a large offsite wetland system to the north and east. **Wetland D** is a forested ±0.28 acre wetland located in the north-central portion of the site that connects hydrologically to wetland C via a culvert. **Wetland E** is a ±0.58 acre forested wetland located along the southwestern boundary of the site that appears to extend offsite to the south. **OSW A** was observed as a ±0.04 acre ditch that connects to the west side of Wetland C and flows towards the western boundary. Please refer to **Figure 6** for the approximate delineation line flagged by ECS at the time of this survey.

ECS performed a jurisdictional flagging of the wetland feature identified on the site. With the jurisdictional flagging complete, ECS can coordinate a jurisdictional wetland determination with the SJRWMD and United States Army Corps of Engineers (USACE).

Species

FWC Gopher Tortoise Permitting Guidance

The FWC may request additional measures be taken by an applicant during regulatory permit review of this property as a result of the presence of suitable potential gopher tortoise habitat and potentially occupied gopher tortoise burrows observed on the site at the time of this due diligence investigation.

- A permit is required for any site preparation activity conducted as a precursor to development that disturbs vegetation or the ground which impacts gopher tortoises or their burrows at the time of or as a result of development. To conduct these activities without a permit is a violation of Rule 68A27.003, F.A.C.
- On sites where tortoises are present and burrows (active or inactive) are present, most site preparation activities require a permit. These activities include building construction, bulldozing, paving, clearing, or grading.
- The FWC has several requirements in order to receive a gopher tortoise relocation permit including, 1) Authorized Agent, which is someone authorized by FWC to survey, capture, transport, and release tortoises and 2) Recipient Site Reservation Letter, which authorizes the use of designated sites meeting specific criteria as recipient areas for tortoises. These requirements are utilized in obtaining the site-specific relocation permit, which authorizes capturing and relocation of tortoises either within the boundaries of the area being impacted (onsite) or from the area being impacted to a permitted recipient site (off-site).
- ECS recommends a 100% Gopher Tortoise Survey be conducted prior to construction.
- If gopher tortoises are present, ECS recommends a gopher tortoise relocation permit application be submitted no earlier than 90 days prior to construction as per the FWC and Rule 68A27.003, F.A.C. Upon your request, ECS can proceed with a proposal for incidental take and relocation mitigation activities.
- Relocation of gopher tortoises to a recipient site is preferred to onsite relocation or habitat protection due to the stringent requirement for recipient sites to provide long-term protection and monitoring of gopher tortoise habitat to ensure habitat requirements are sustained.

Indigo Snake General Permitting Guidance

The FWC may request additional measures be taken by an applicant during regulatory permit review of this property as a result of the presence of suitable potential indigo snake habitat observed on the site at the time of this due diligence investigation. An eastern indigo snake protection/education plan (Plan) has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least 30 days prior to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented. As long as the signatory of the e-mail certifies compliance with the USFWS Plan no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project. ECS can provide this documentation support on your behalf for future permit applications.

Preliminary Set-Aside

The proposed preliminary Set-Aside includes wetlands, other surface water (upland-cut ditch), 75-foot buffers to wetlands, non-Significant Upland Habitat and Significant Upland Habitat (**Figures 17a, 17b, and 17c**).

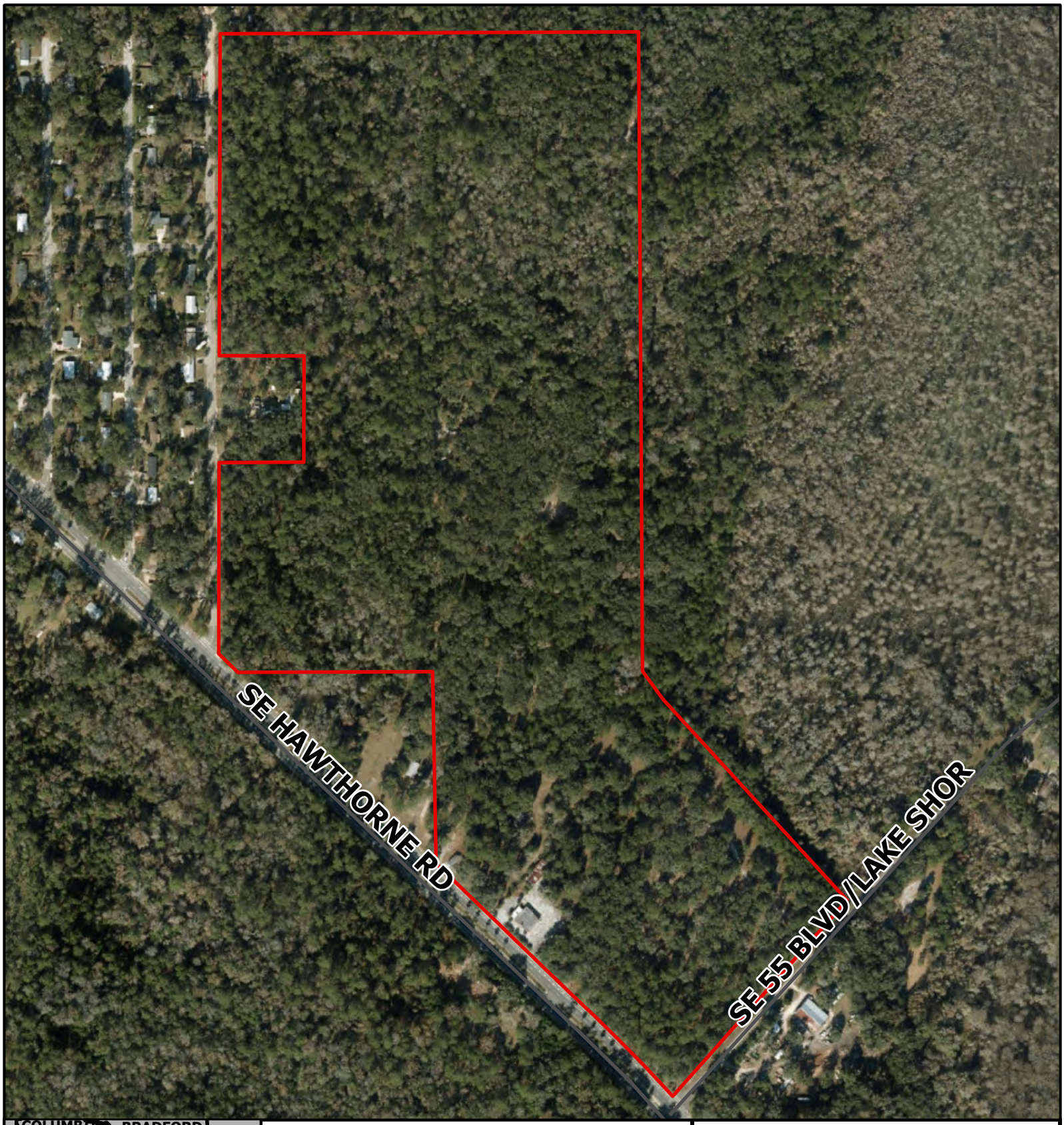
Additional assessment of the site may be required by the appropriate regulatory agencies.

LIMITATIONS OF THIS REPORT

It is important to note that the conclusions of this report are necessarily based on the conditions observed on the day of the field investigation, as well as our scientific judgment of the site's potential to support wetlands or protected species (based on each species' optimal habitat requirements). Due to this "snapshot" view of the site, the results presented in this report may not accurately reflect changing site conditions and/or potential wetland or wildlife species' temporal and spatial locations.

This report is provided for the exclusive use of the listed client. This report is not intended to be used or relied upon in conjunction with other projects or by other unidentified third parties. The use of this report by any undesignated party will be at such party's sole risk and ECS disclaims liability for any such third party use or reliance.

Appendix I: Figures



Alachua County, Florida

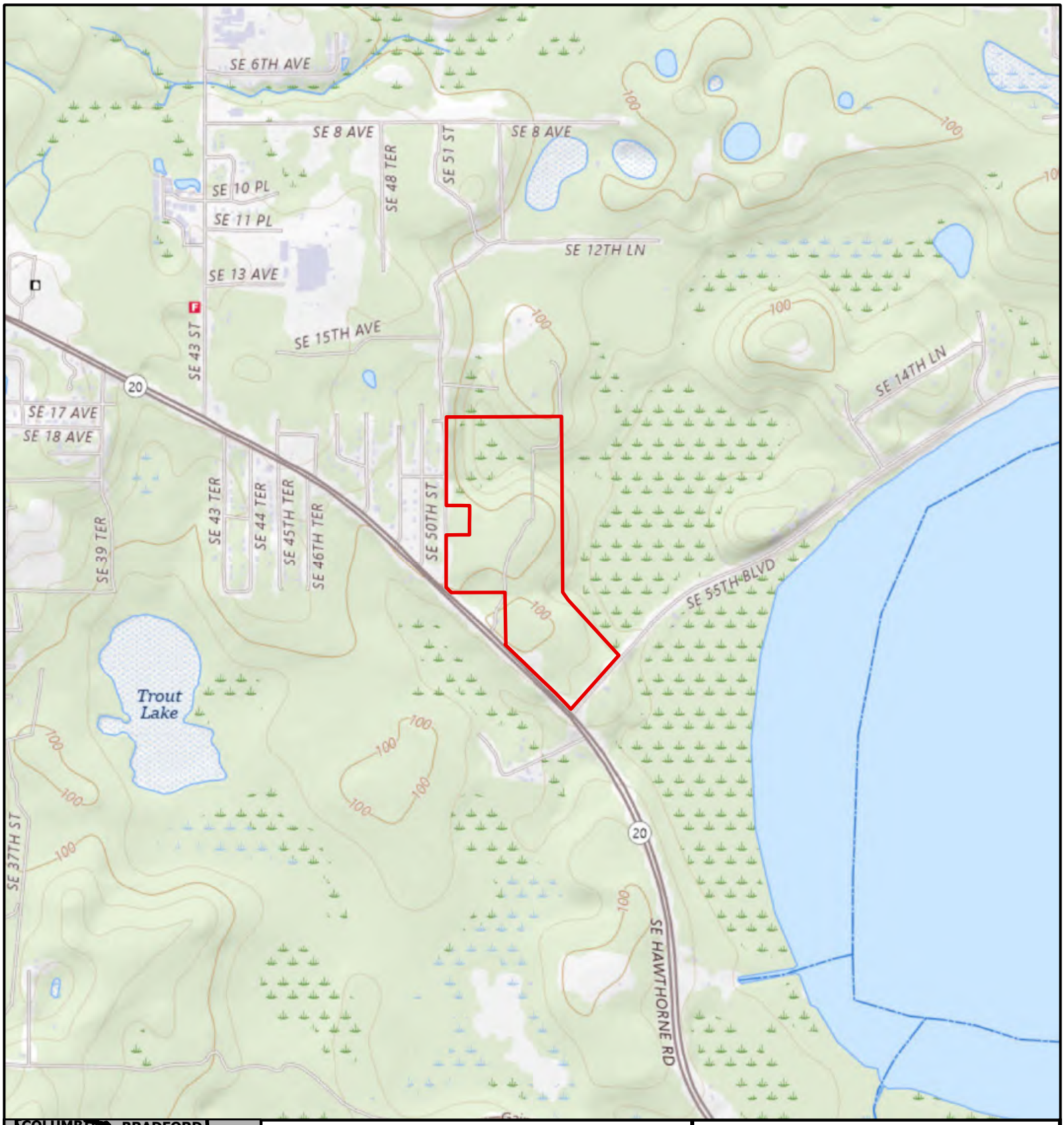
Figure 1: Aerial Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

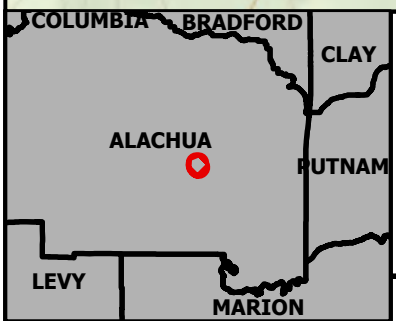
N
W E
S

0 175 350 700 Feet

Project Boundary

Created by: Nico Martinez
December 2024





Alachua County, Florida

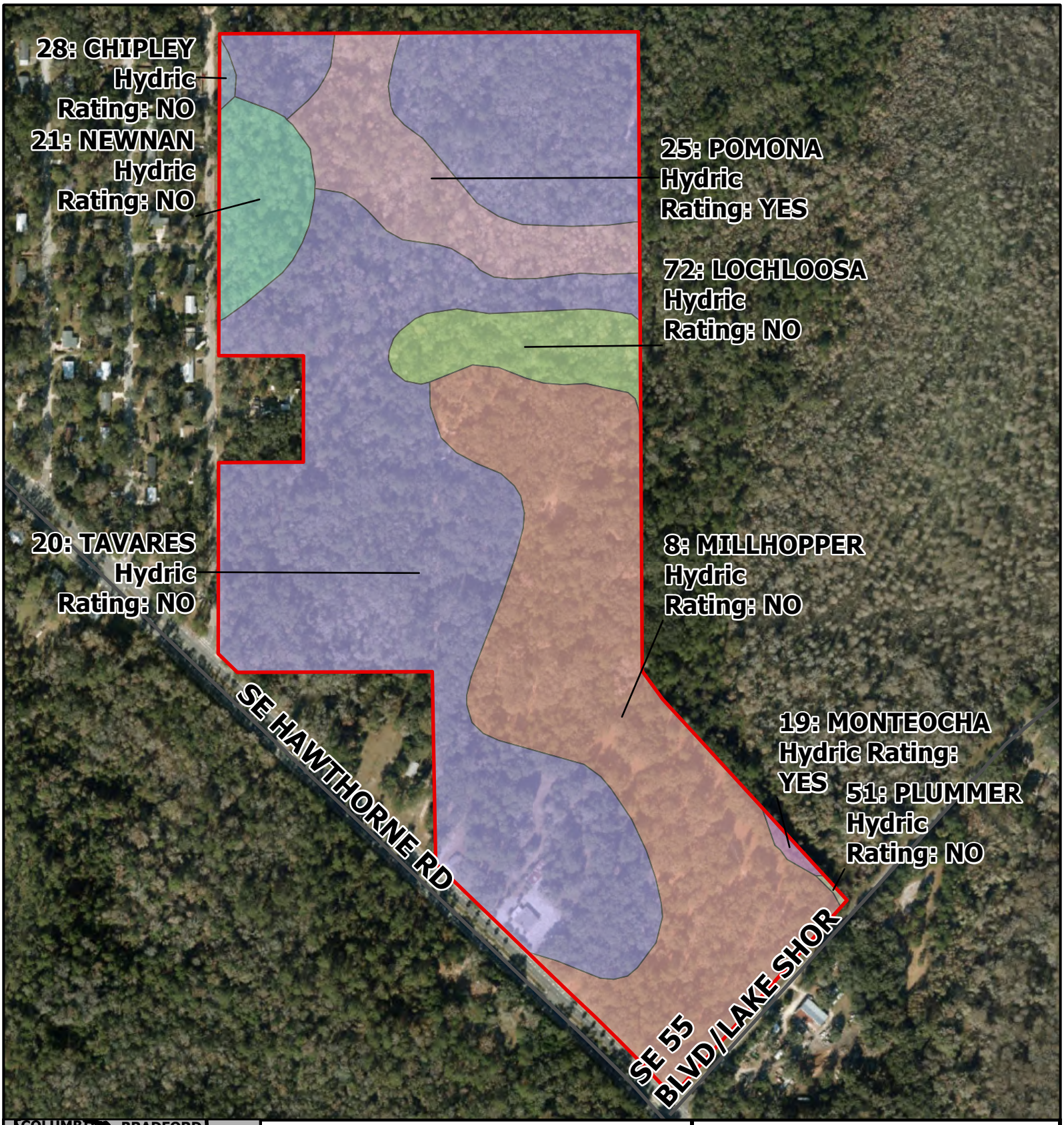
Figure 2: Topographic Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 500 1,000 2,000 Feet

Project Boundary

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 3: Soils Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

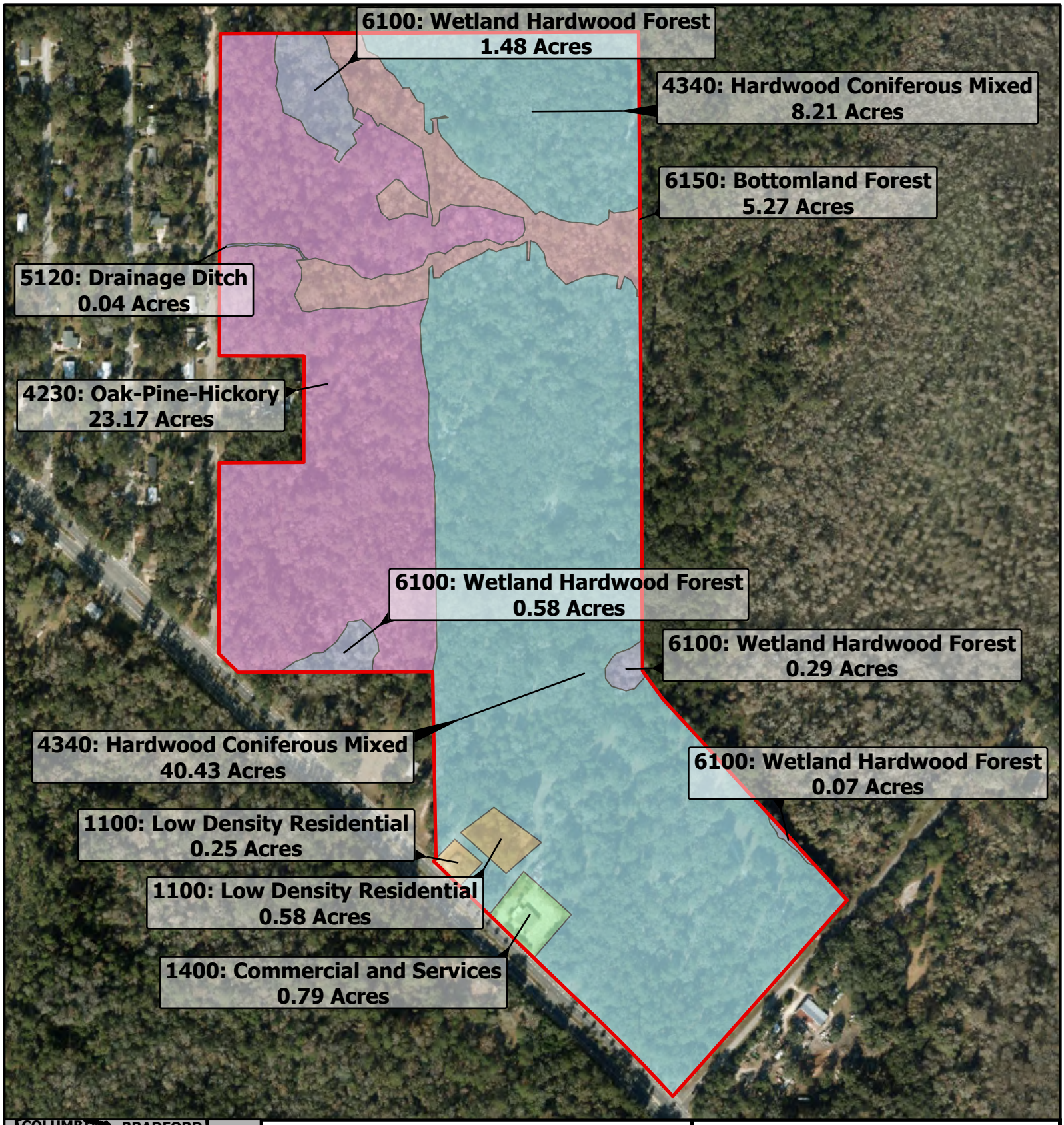
Project Boundary

Soil Type

- CHIPLEY
- LOCHLOOSA
- MILLHOPPER
- MONTEOCHA
- NEWNAN
- PLUMMER
- POMONA
- TAVARES

ECS

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 4: FLUCCS Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

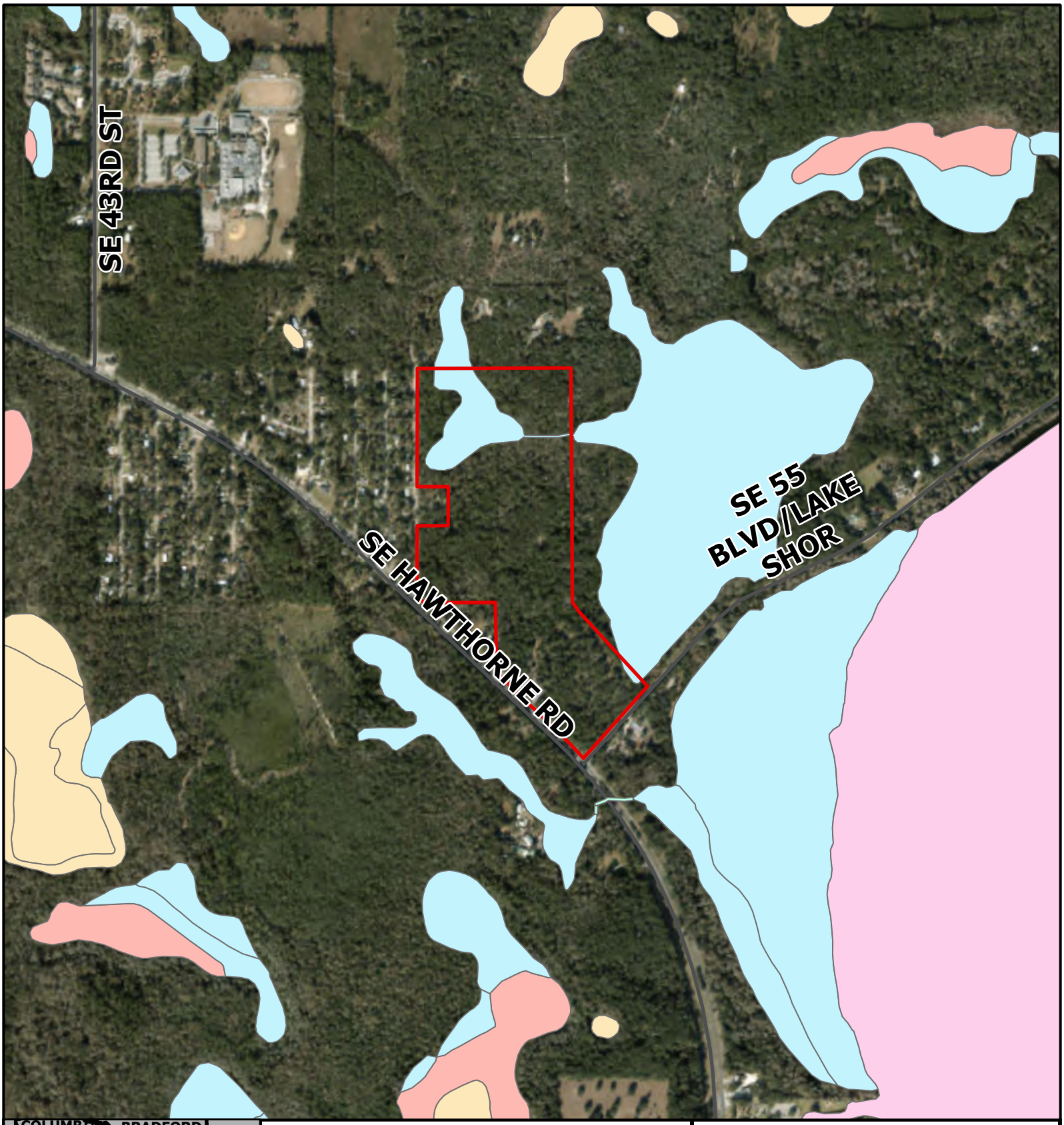
N
W E
S

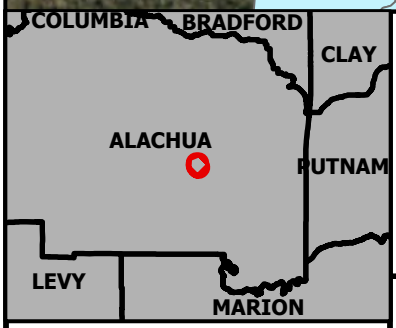
0 175 350 700 Feet

- Project Boundary
- FLUCCS
- Bottomland Forest
- Commercial and Services
- Drainage Ditch
- Hardwood Coniferous Mixed
- Low Density Residential
- Oak-Pine-Hickory
- Wetland Hardwood Forest

ECS

Created by: Nico Martinez
December 2024





Alachua County, Florida

Figure 5: NWI Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 485 970 1,940 Feet

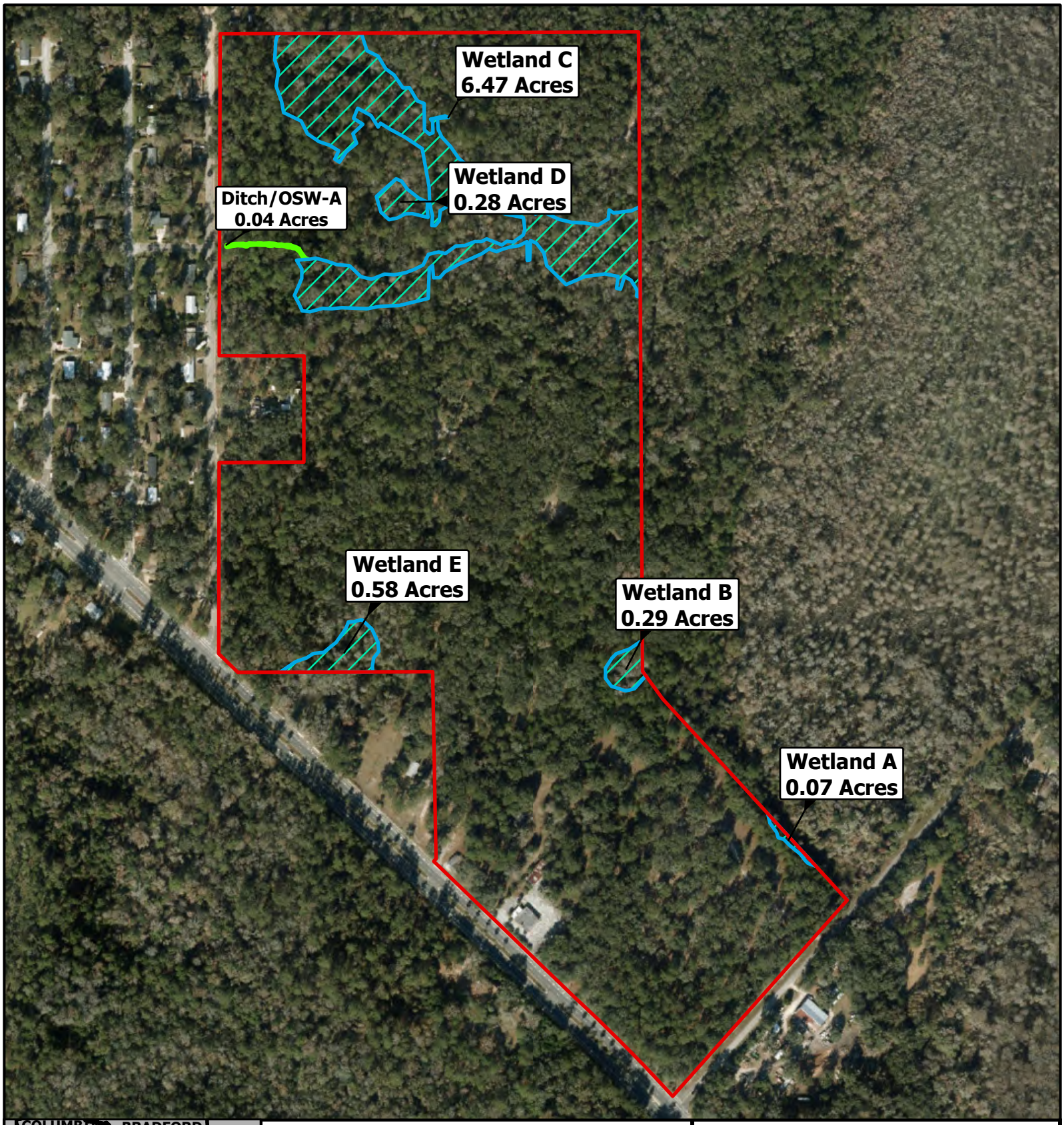
Project Boundary

Wetland Type

- FRESHWATER EMERGENT WETLAND
- FRESHWATER FORESTED/SHRUB WETLAND
- FRESHWATER POND
- LAKE
- RIVERINE

ECS

Created by: Nico Martinez
December 2024



Alachua County, Florida

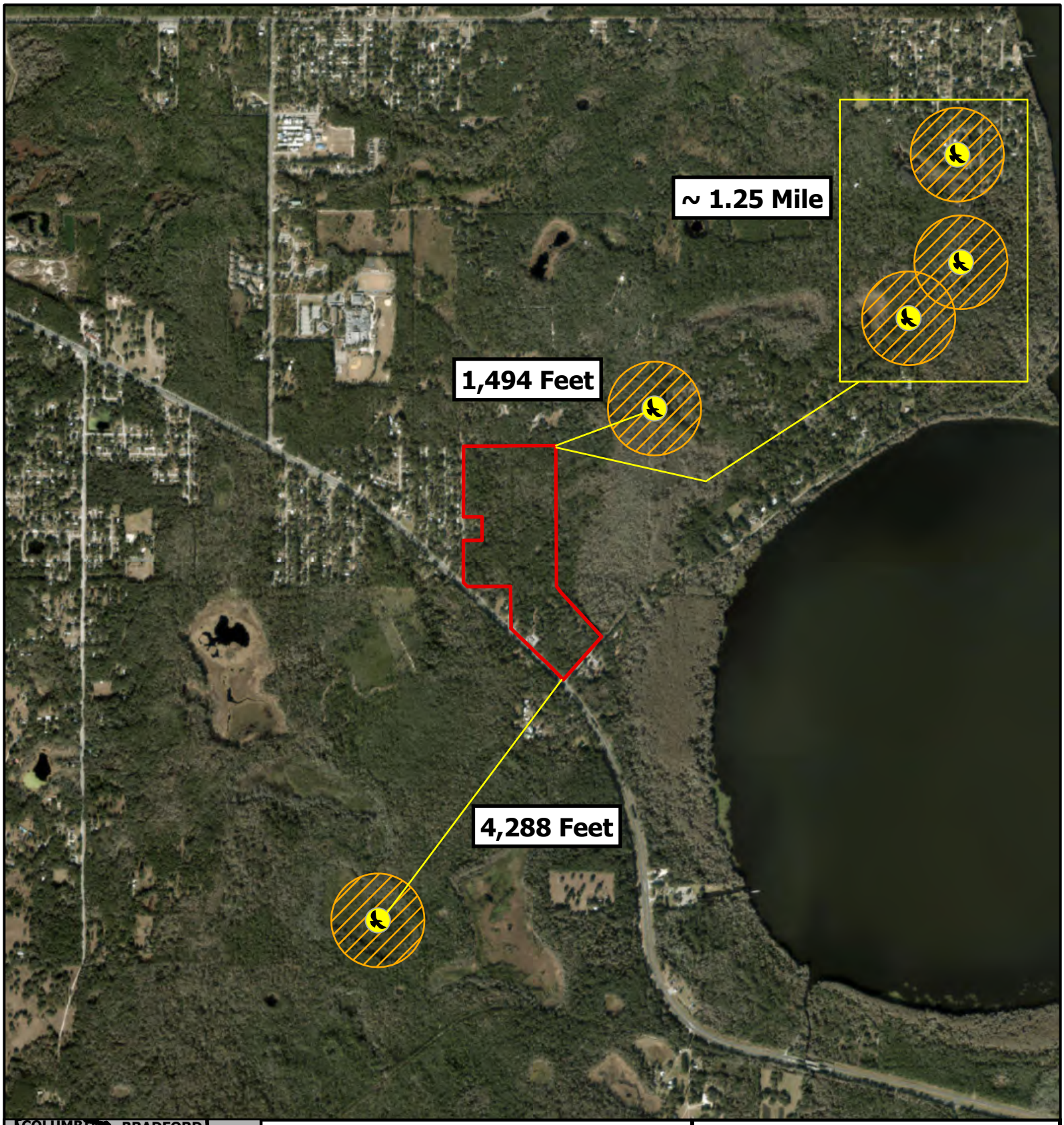
Figure 6: Wetlands Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Project Boundary
Wetland
Ditch

Created by: Nico Martinez
December 2024



Alachua County, Florida

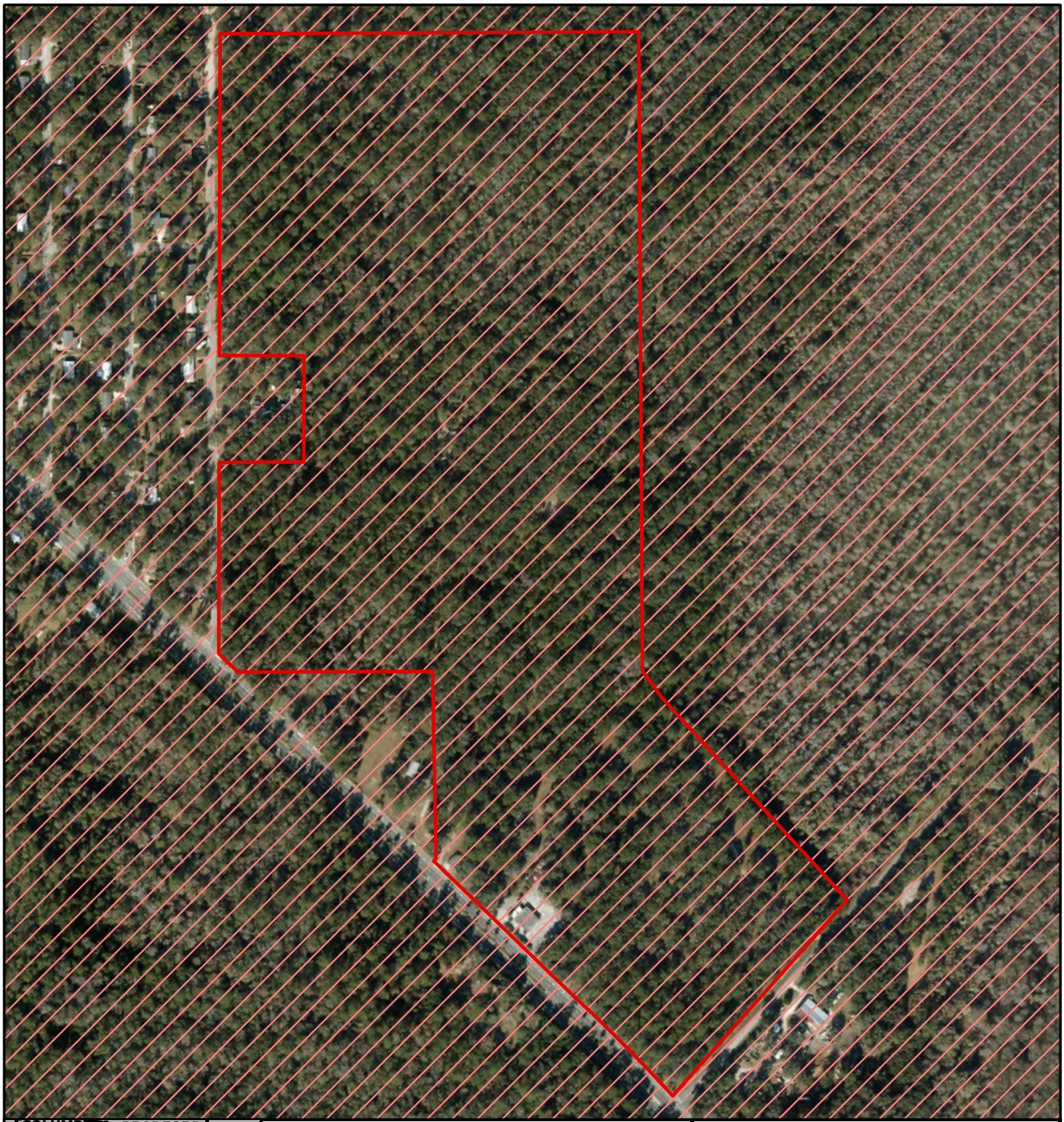
Figure 7A: Threatened & Endangered Species Map - Eagle
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

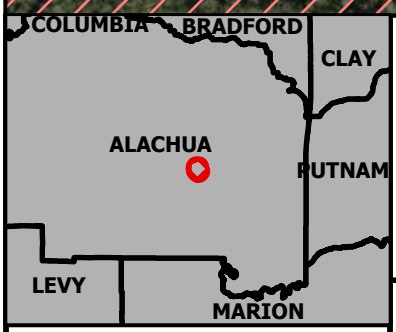
N
W E
S

0 500 1,000 2,000 Feet

- Project Boundary
- Eagle Nesting
- Eagle Nesting Buffer (660ft)

Created by: Nico Martinez
December 2024





Alachua County, Florida

Figure 7B: Threatened & Endangered Species Map - Red-cockaded Woodpecker
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

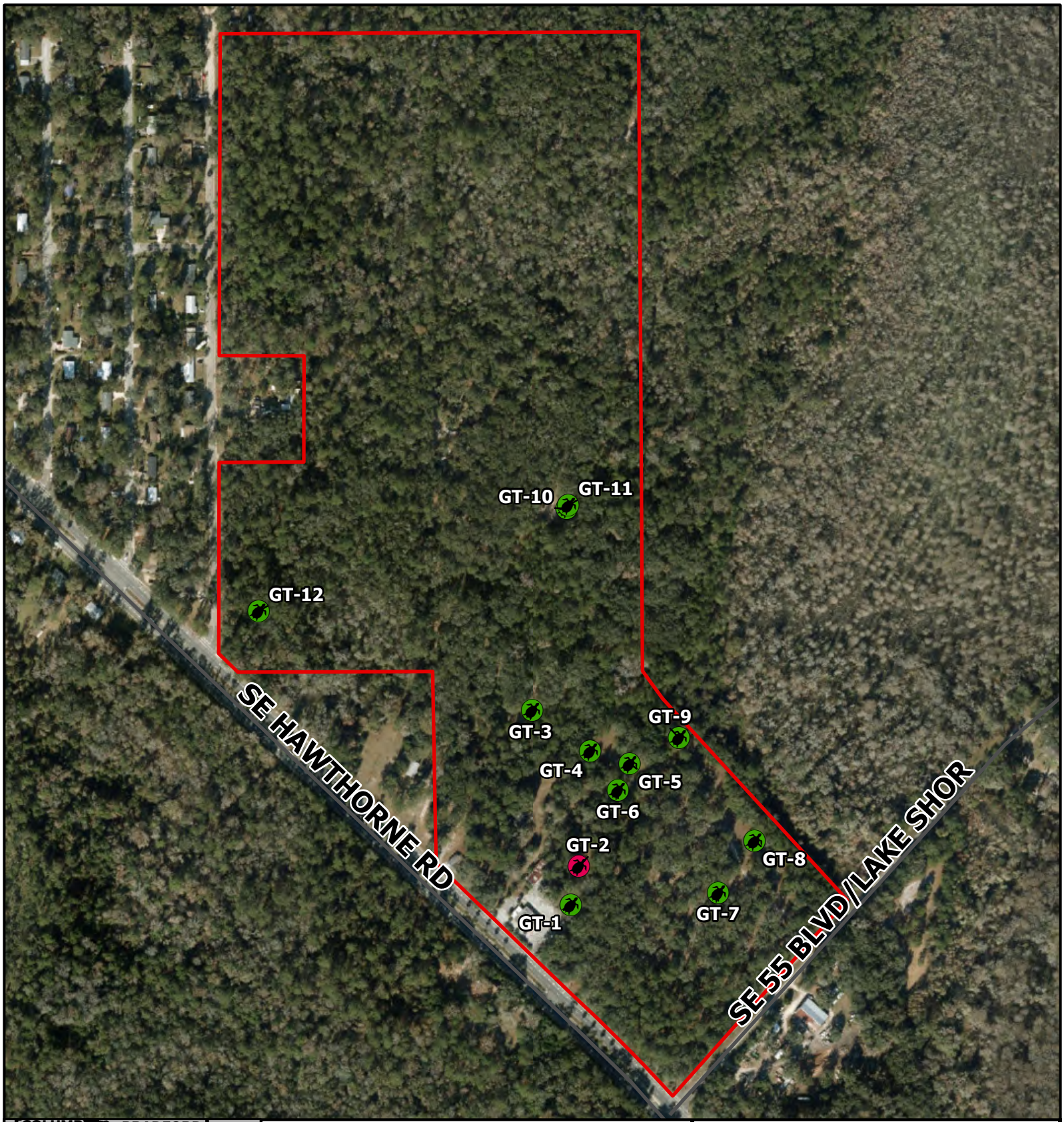
N
W E
S

0 175 350 700 Feet

Project Boundary

Red-cockaded Woodpecker

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 7C: Threatened & Endangered Species Map - Gopher Tortoise
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

Created by: Nico Martinez
December 2024

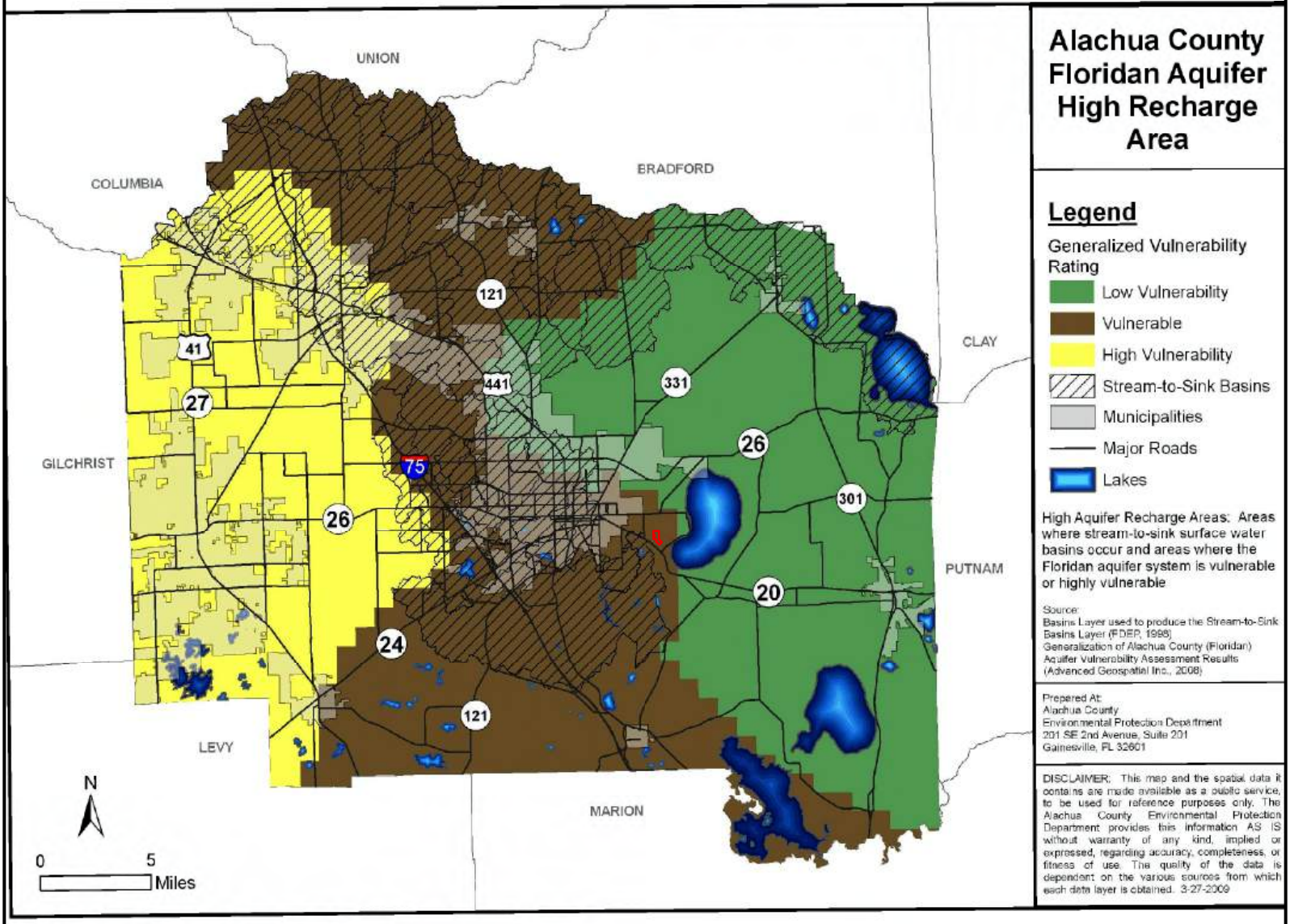
N
W E
S

0 175 350 700 Feet

Project Boundary

Gopher Tortoise Burrow

- Potentially Occupied
- Abandoned



Alachua County Floridan Aquifer High Recharge Area

Legend

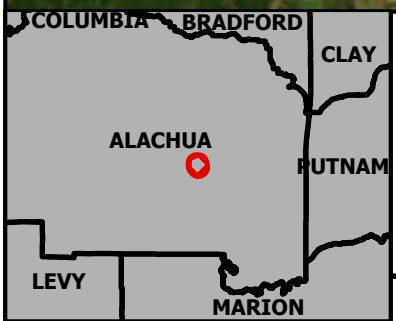
Generalized Vulnerability Rating

- Low Vulnerability
- Vulnerable
- High Vulnerability
- Stream-to-Sink Basins
- Municipalities
- Major Roads
- Lakes

High Aquifer Recharge Areas: Areas where stream-to-sink surface water basins occur and areas where the Floridan aquifer system is vulnerable or highly vulnerable

Source:
Basins Layer used to produce the Stream-to-Sink Basins Layer (FDEP, 1998)
Generalization of Alachua County (Floridan) Aquifer Vulnerability Assessment Results (Advanced Geospatial Inc., 2008)

Prepared At:
Alachua County
Environmental Protection Department
201 SE 2nd Avenue, Suite 201
Gainesville, FL 32601



Alachua County, Florida

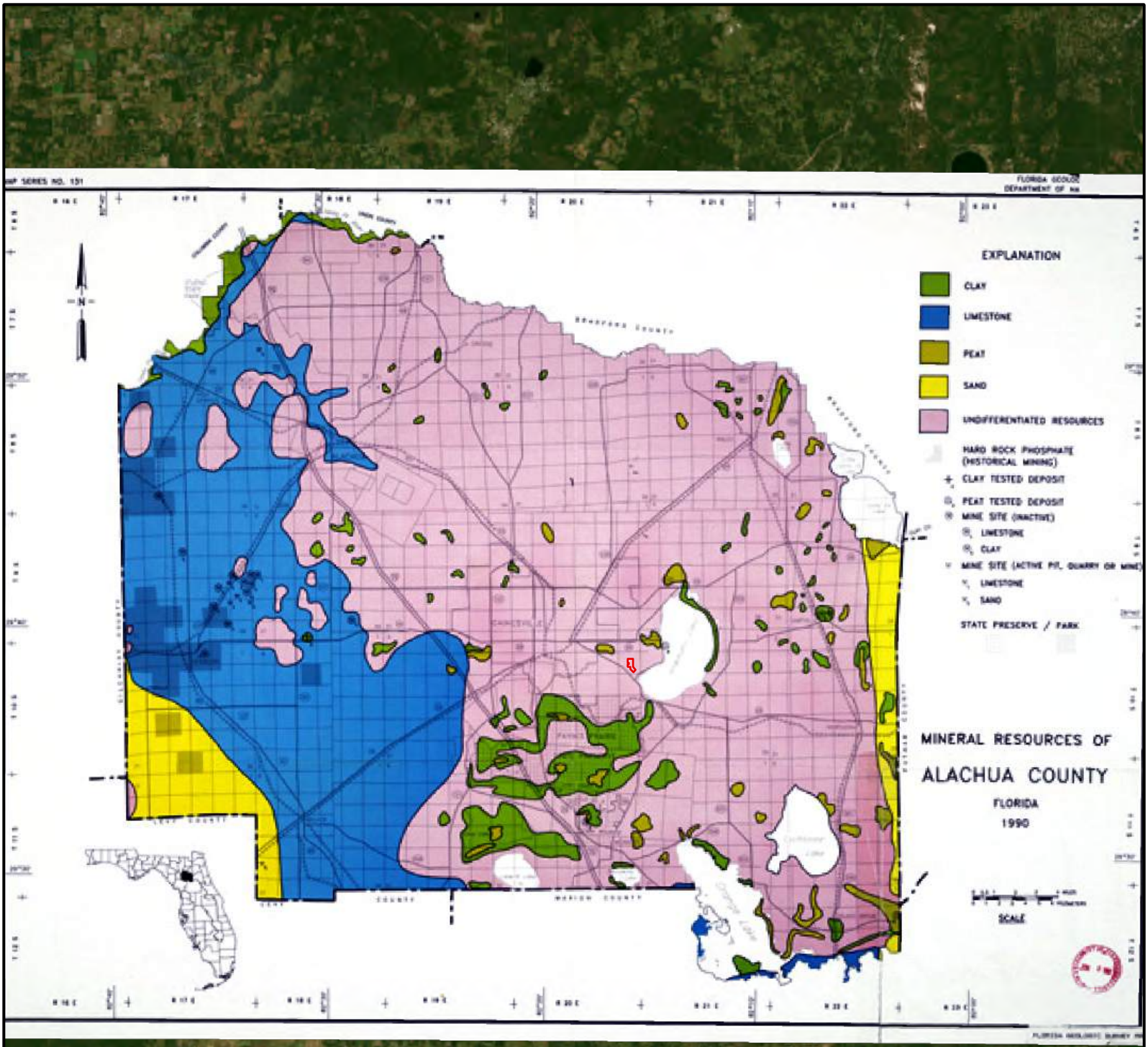
Figure 8: Aquifer Recharge Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 2.5 5 10 Miles

Project Boundary

Created by: Nico Martinez
December 2024



Alachua County, Florida

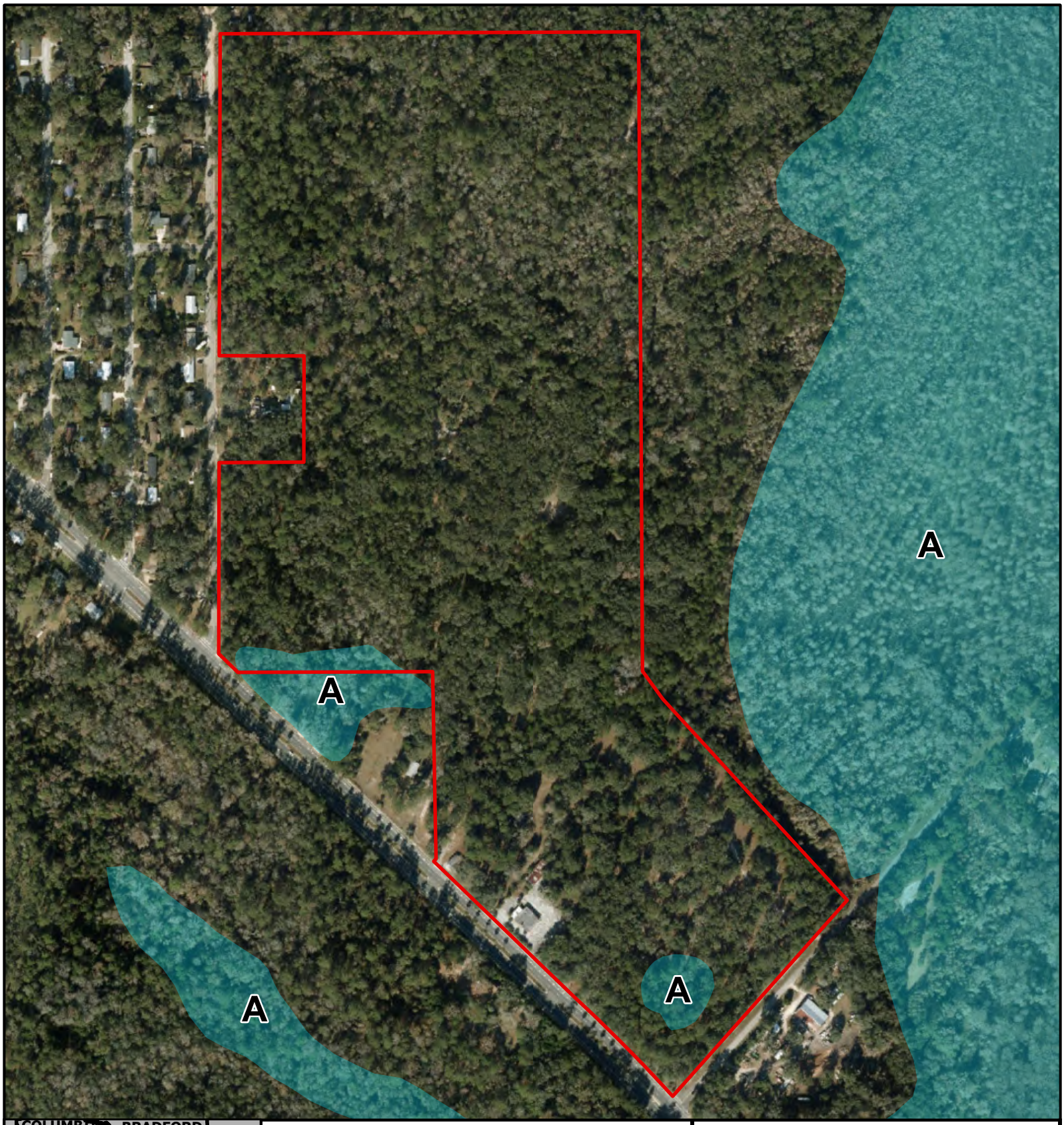
Figure 9: Mineral Resource Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 2.25 4.5 9 Miles

Project Boundary

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 10: FEMA Flood Zone Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

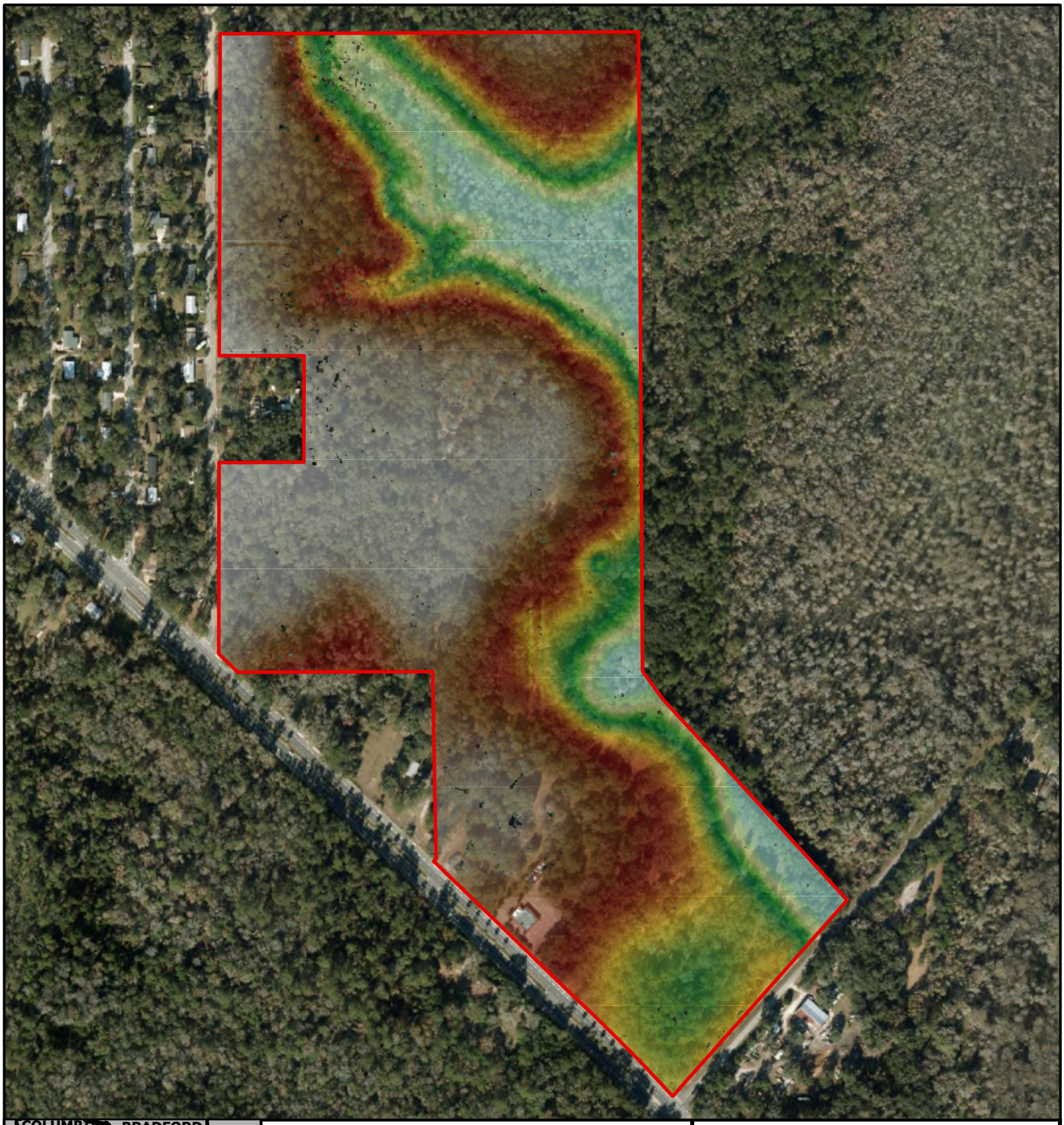
0 175 350 700 Feet

Project Boundary

Flood Hazard Zones

A

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 11: LiDAR Map
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

ECS

Created by: Nico Martinez
December 2024

N
W E
S

0 175 350 700 Feet

Project Boundary

2018 LiDAR

Elevation (ft)

108.132
70.24

Alachua County, Florida

Figure 12a: Strategic Ecosystem
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

Created by: Nico Martinez
December 2024

N
W E
S

0 175 350 700 Feet

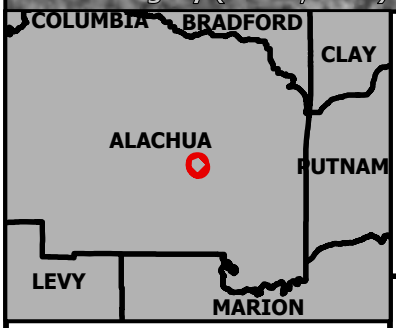
Strategic Ecosystems

EAST SIDE GREENWAY

Project Boundary

Credits: ACEPD, 2023

Credits: Strategic Ecosystems (ACEPD, 2023); Aerial Imagery (USDA,1937)



Alachua County, Florida

Figure 12b: 1937 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

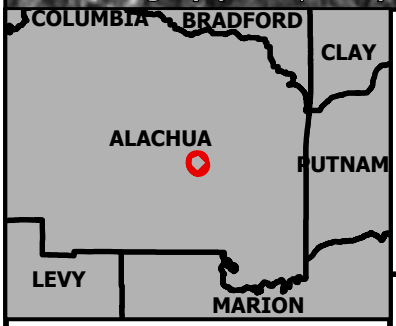
N
W E
S

0 175 350 700 Feet

Strategic Ecosystems
EAST SIDE GREENWAY
Project Boundary

Created by: Nico Martinez
December 2024

Credits: Strategic Ecosystems (ACEPD, 2023); Aerial Imagery (USDA,1949)



Alachua County, Florida

Figure 12d: 1949 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

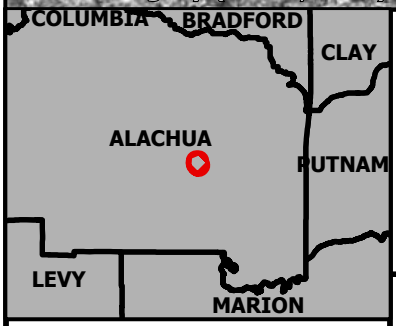
N
W E
S

0 175 350 700 Feet

Strategic Ecosystems
EAST SIDE GREENWAY
Project Boundary

Created by: Nico Martinez
December 2024

Credits: Strategic Ecosystems (ACEPD, 2023); Aerial Imagery (USDA,1949)



Alachua County, Florida

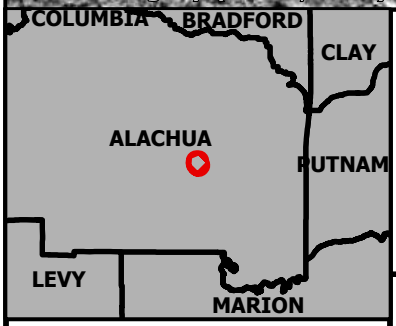
Figure 12e: 1968 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Strategic Ecosystems
EAST SIDE GREENWAY
Project Boundary

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 12f: 1974 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

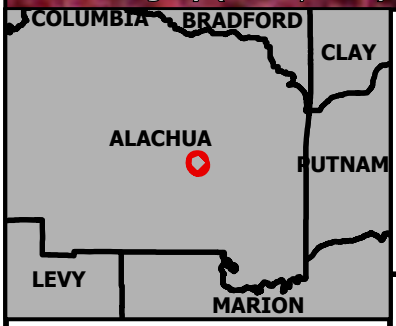
N
W E
S

0 175 350 700 Feet

Strategic Ecosystems
EAST SIDE GREENWAY
Project Boundary

Created by: Nico Martinez
December 2024

Credits: Strategic Ecosystems (ACEPD, 2023); Aerial Imagery (USDA,1949)



Alachua County, Florida

Figure 12f: 1984 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

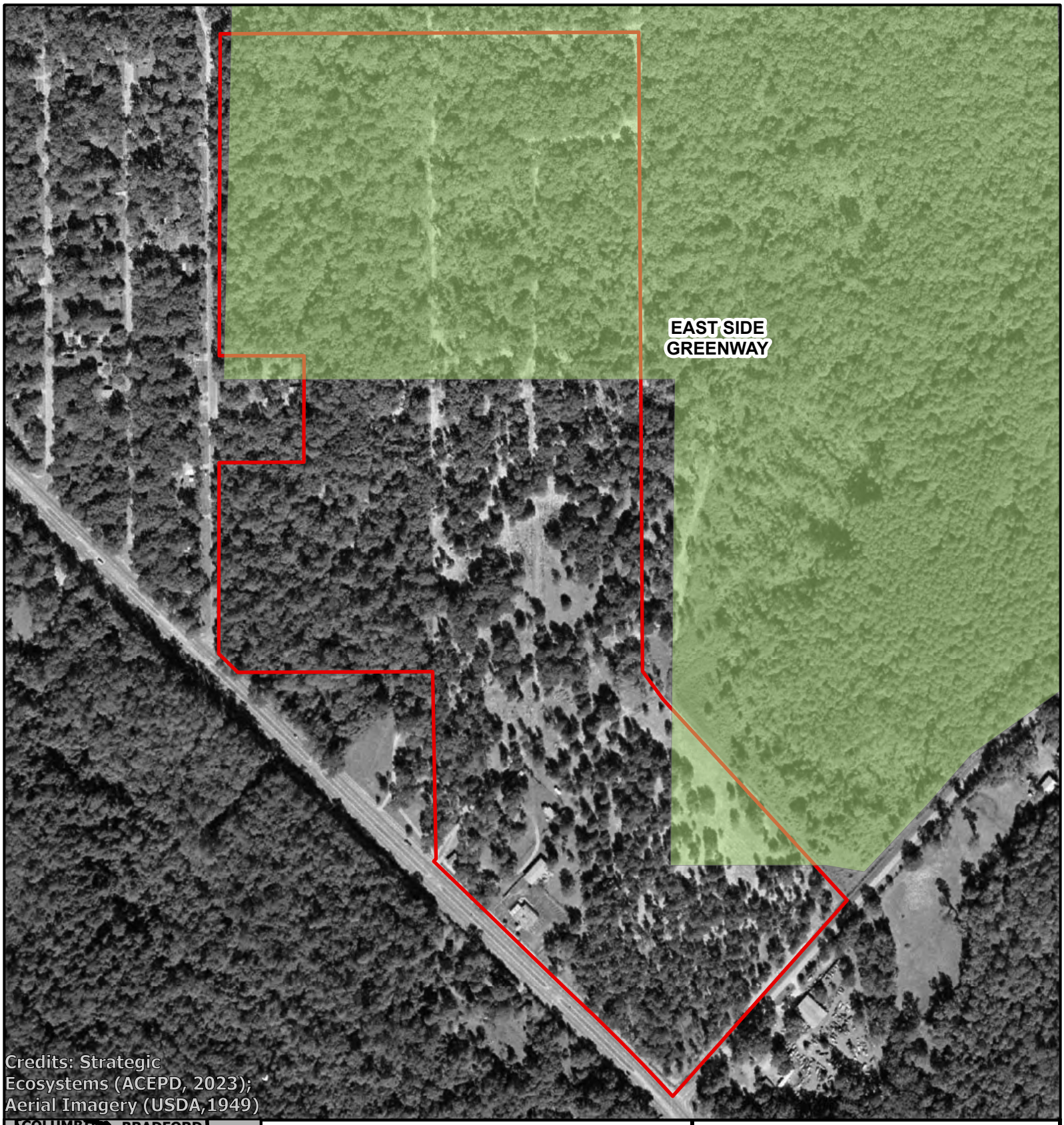
0 175 350 700 Feet

Strategic Ecosystems

EAST SIDE GREENWAY

Project Boundary

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 12g: 1994 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Strategic Ecosystems

EAST SIDE GREENWAY

Project Boundary

Created by: Nico Martinez
December 2024

Alachua County, Florida

Figure 12h: SE Habitat Types
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

Created by: Nico Martinez
December 2024

N
W E
S

0 160 320 640 Feet

Project Boundary
Strategic Ecosystems
EAST SIDE GREENWAY
HabitatType
OSW (0.04 acres)
Upland (24.47 acres)
Wetland (6.75 acres)

Credits: ACEPD, 2023

Alachua County, Florida

Figure 13a: Invasive Exotic Plants
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Project Boundary

Invasive Exotic Plant Species

Arrowhead vine (15 - 90% aerial cover)

Coral ardisia (90% aerial cover)

Created by: Nico Martinez
December 2024

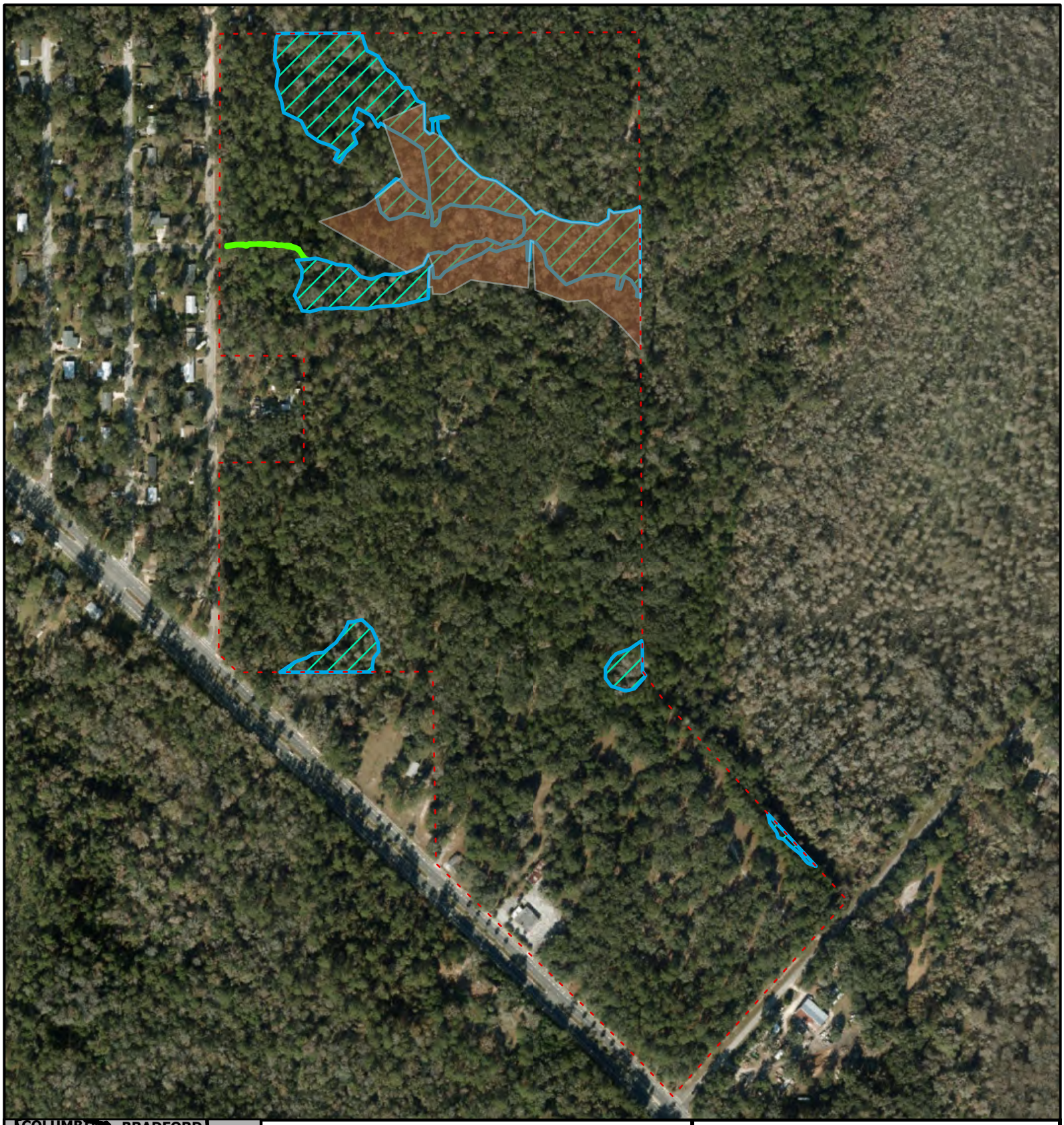


Figure 13b: Significant Habitat
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

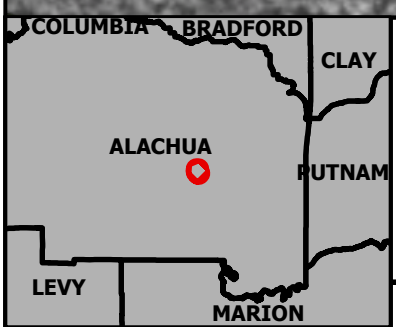
N
W E
S

0 175 350 700 Feet

- Project Boundary (81.17 acres)
- Wetland (7.69 acres)
- Ditch (0.04 acre)
- Significant Habitat (6.6 acres)

ECS

Created by: Chrissy Carr
February 2025



Alachua County, Florida

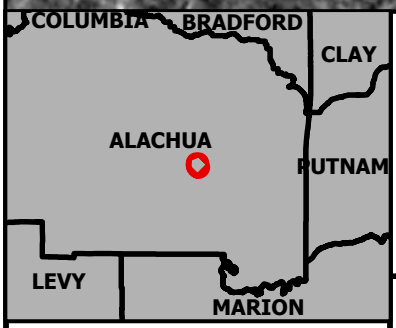
Figure 14A: Historical Aerial Map (1937)
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Project Boundary

Created by: Nico Martinez
December 2024



Alachua County, Florida

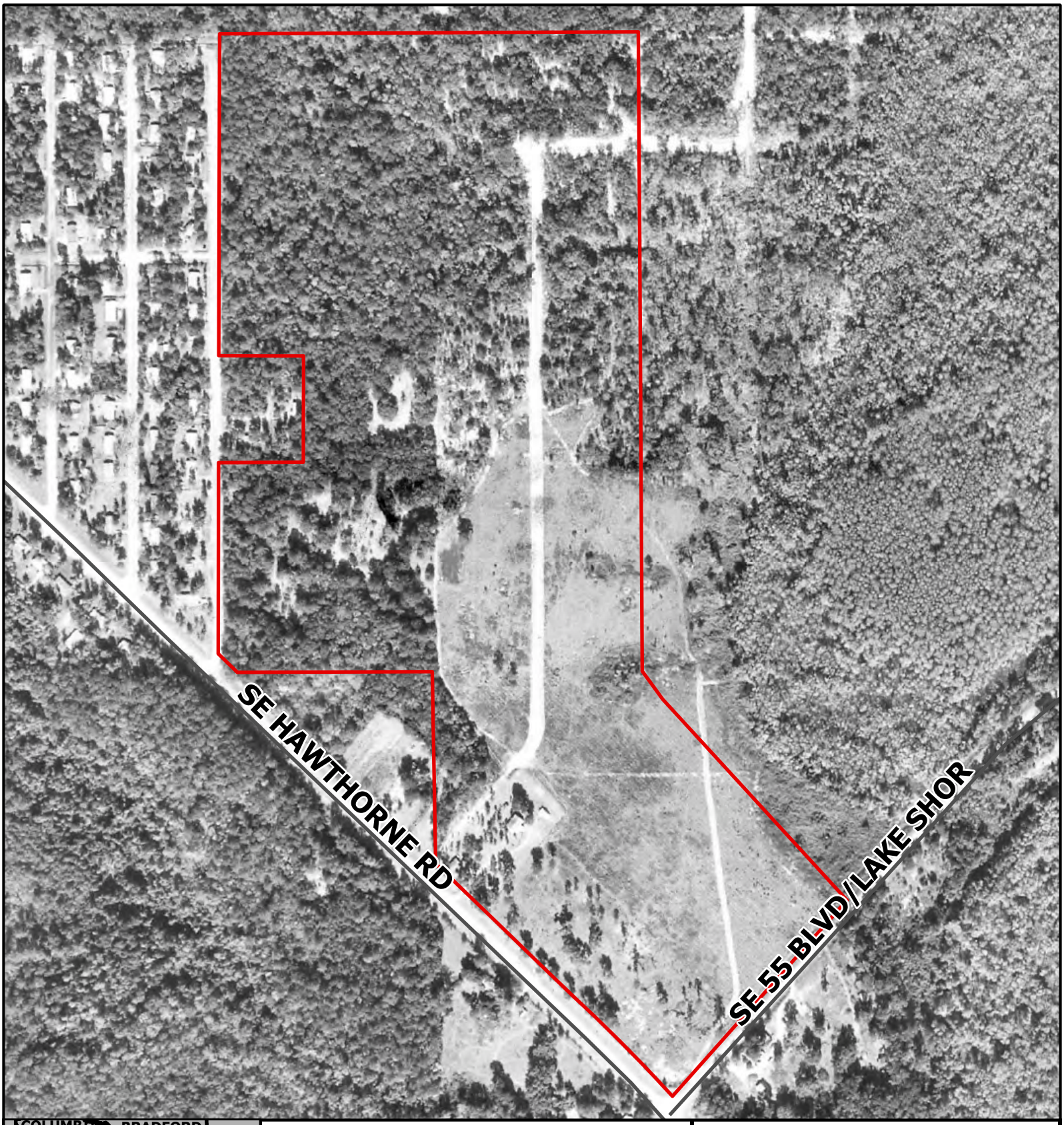
Figure 14B: Historical Aerial Map (1949)
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

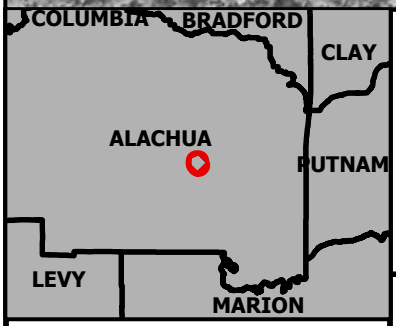
N
W E
S

0 175 350 700 Feet

Project Boundary

Created by: Nico Martinez
December 2024





Alachua County, Florida

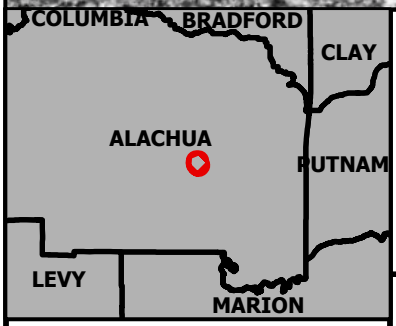
Figure 14C: Historical Aerial Map (1968)
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

Created by: Nico Martinez
December 2024

N
W E
S

0 175 350 700 Feet

Project Boundary



Alachua County, Florida

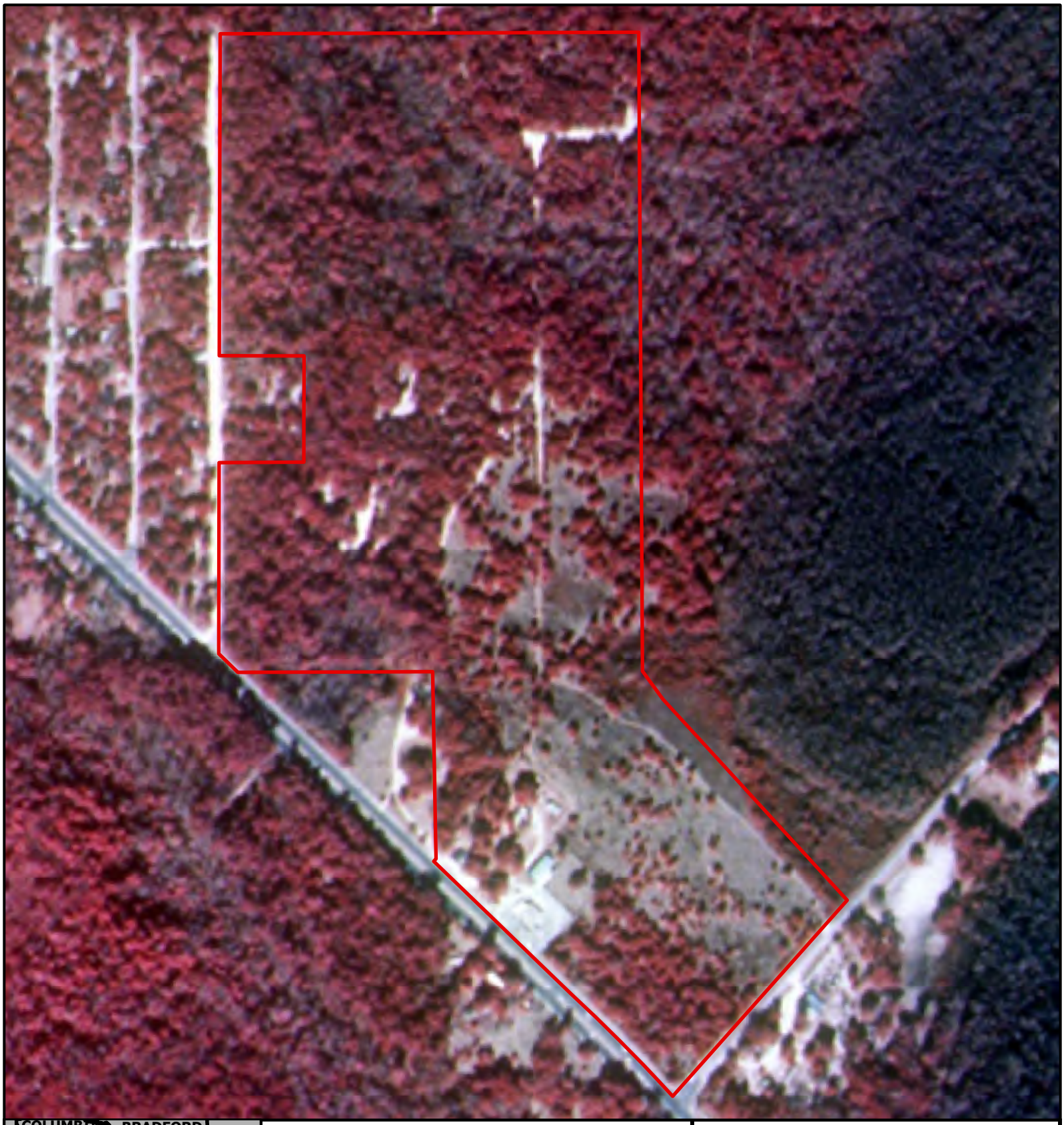
Figure 14D: Historical Aerial Map (1974)
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

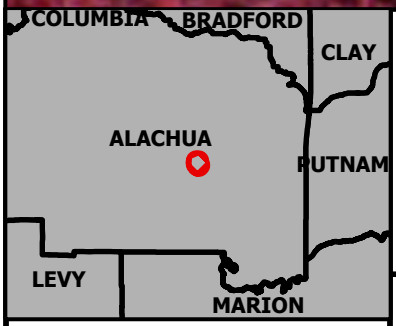
N
W E
S

0 175 350 700 Feet

Project Boundary

Created by: Nico Martinez
December 2024





Alachua County, Florida

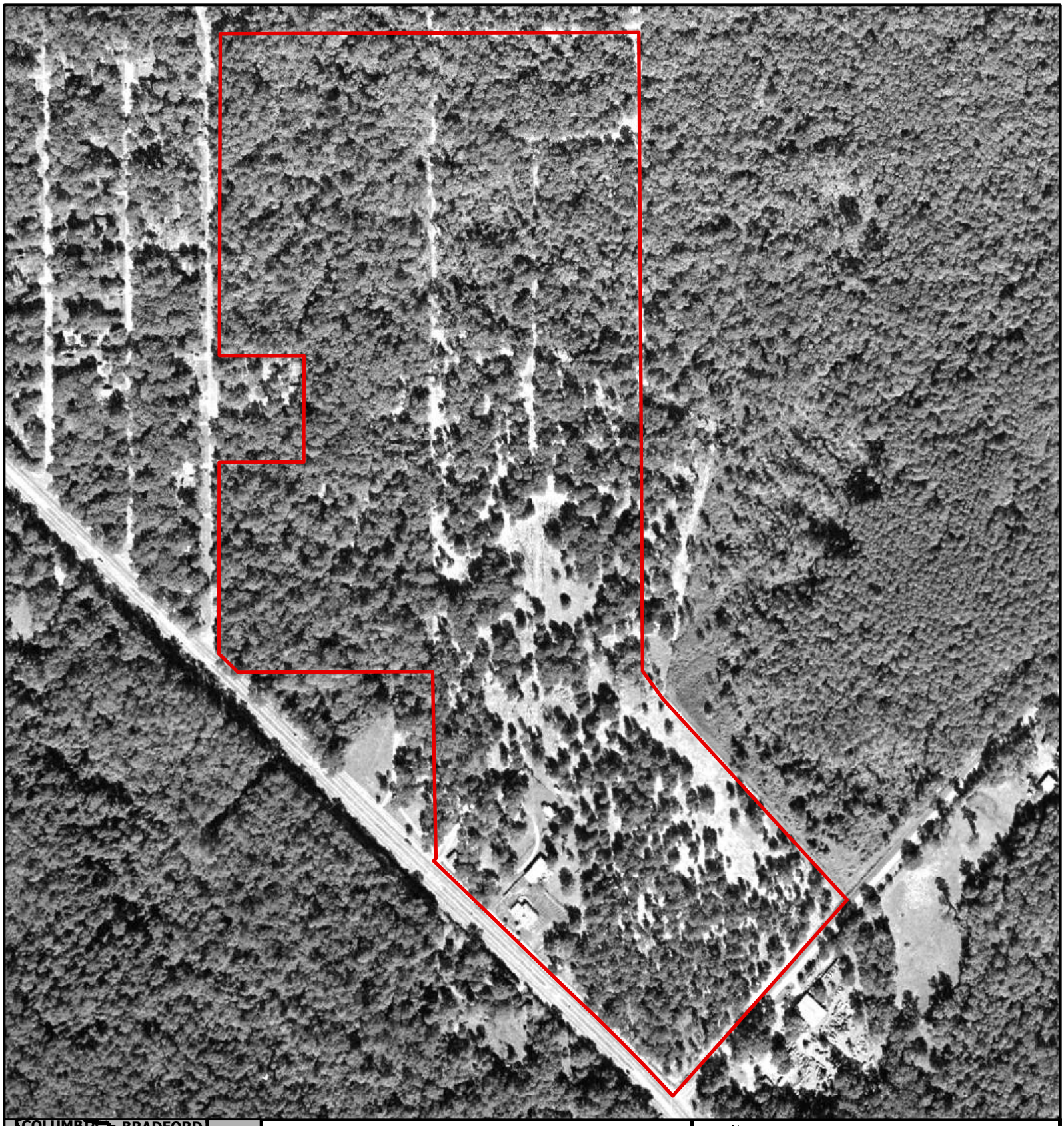
Figure 14E: Historical Aerial Map (1984)
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

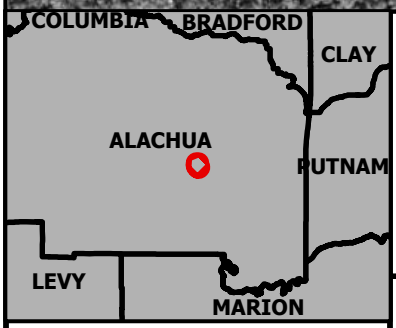
N
W E
S

0 175 350 700 Feet

Project Boundary

Created by: Nico Martinez
December 2024





Alachua County, Florida

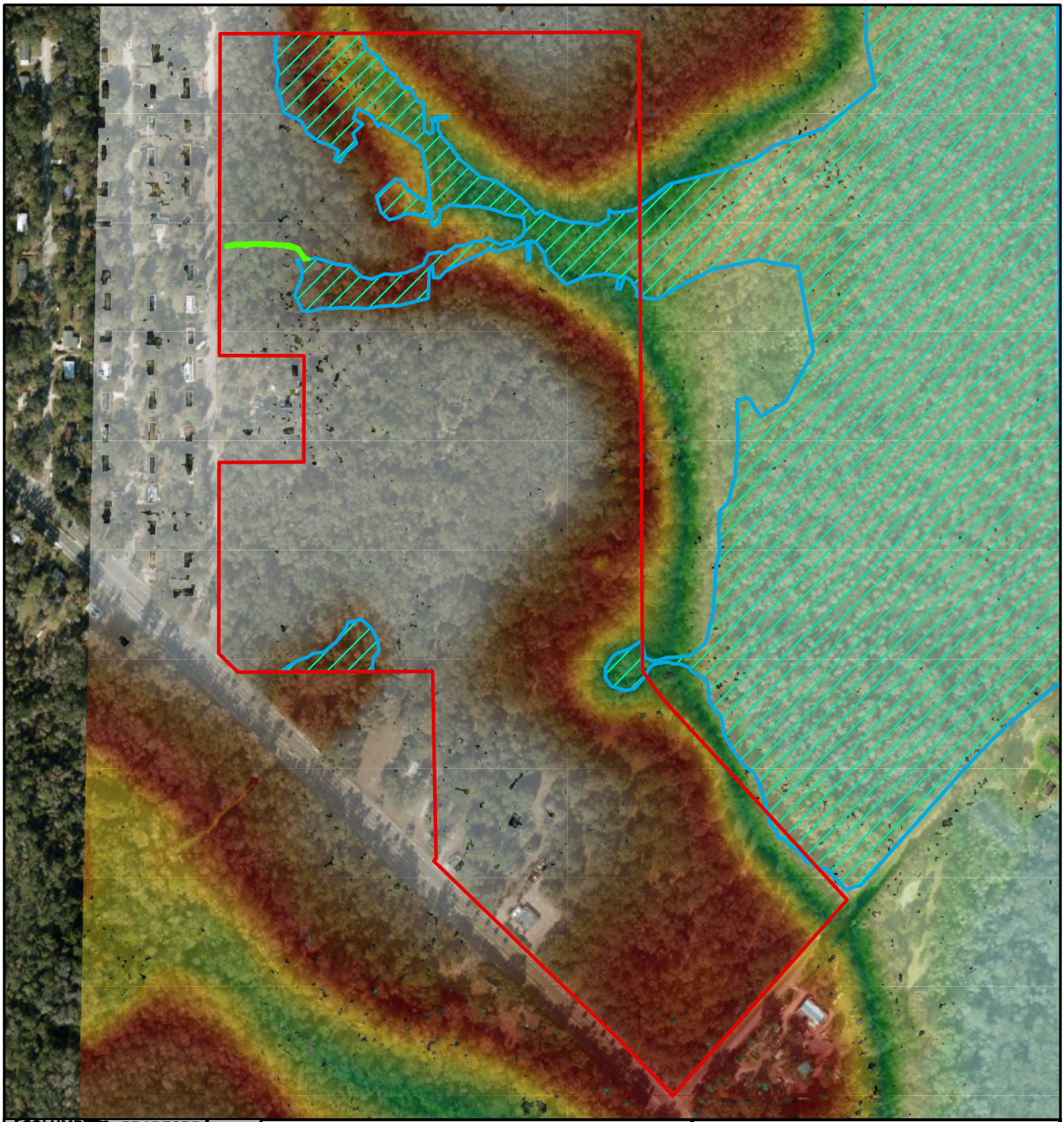
Figure 14F: Historical Aerial Map (1994)
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Project Boundary

Created by: Chrissy Carr
February 2025



Alachua County, Florida

Figure 15: Offsite Wetland Desktop Delineation 2018 LiDAR
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

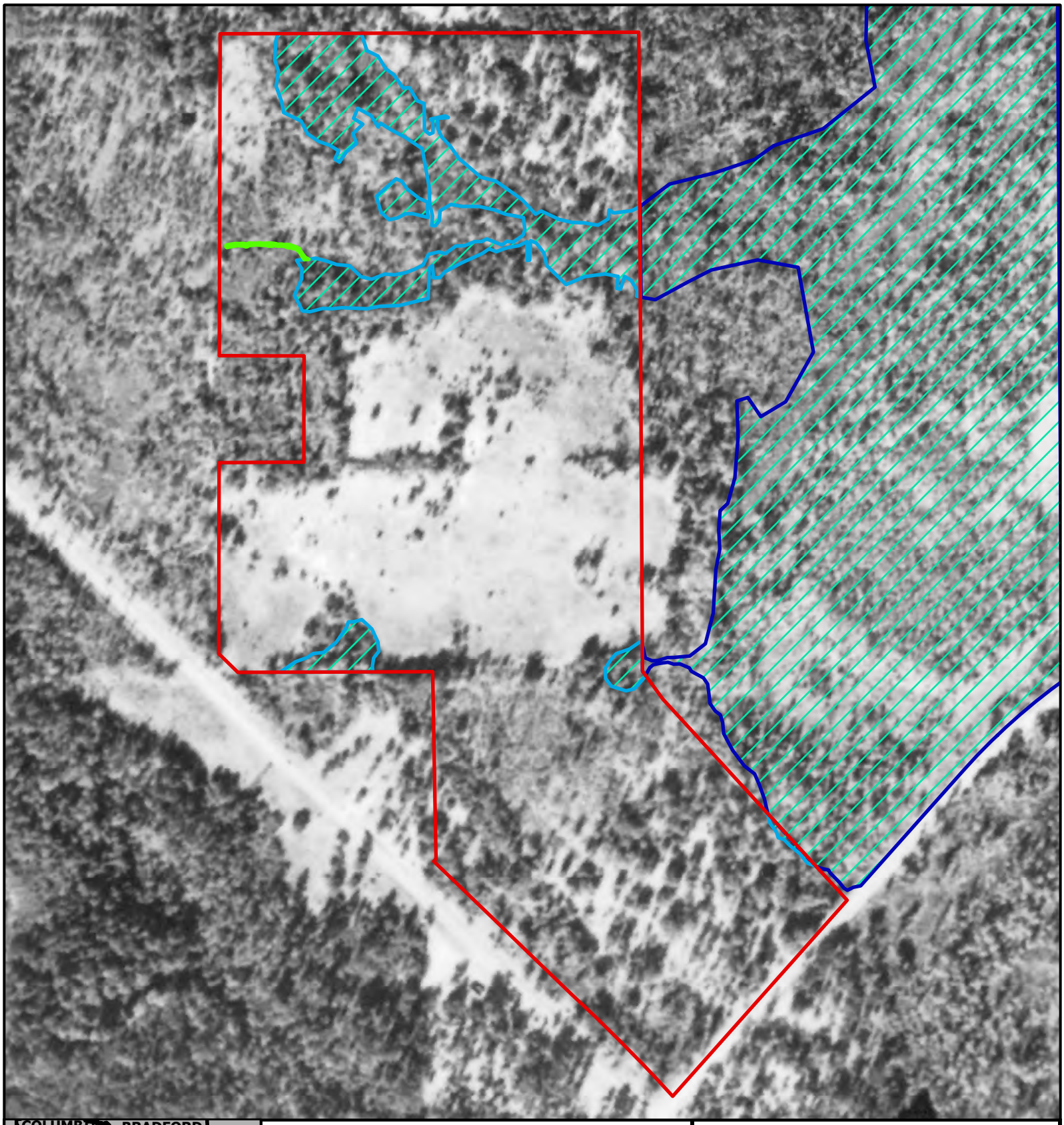
Created by: Nico Martinez
December 2024

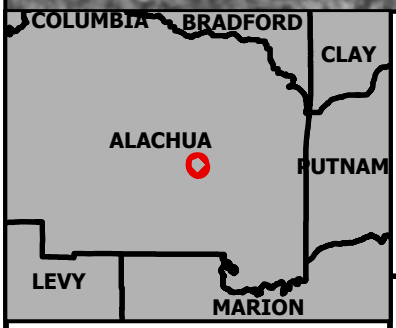
N
W E
S

0 175 350 700 Feet

- Project Boundary
- Wetland
- Ditch
- OffsiteWetland

Elevation (ft - NAVD88)
115.12
64.14





Alachua County, Florida

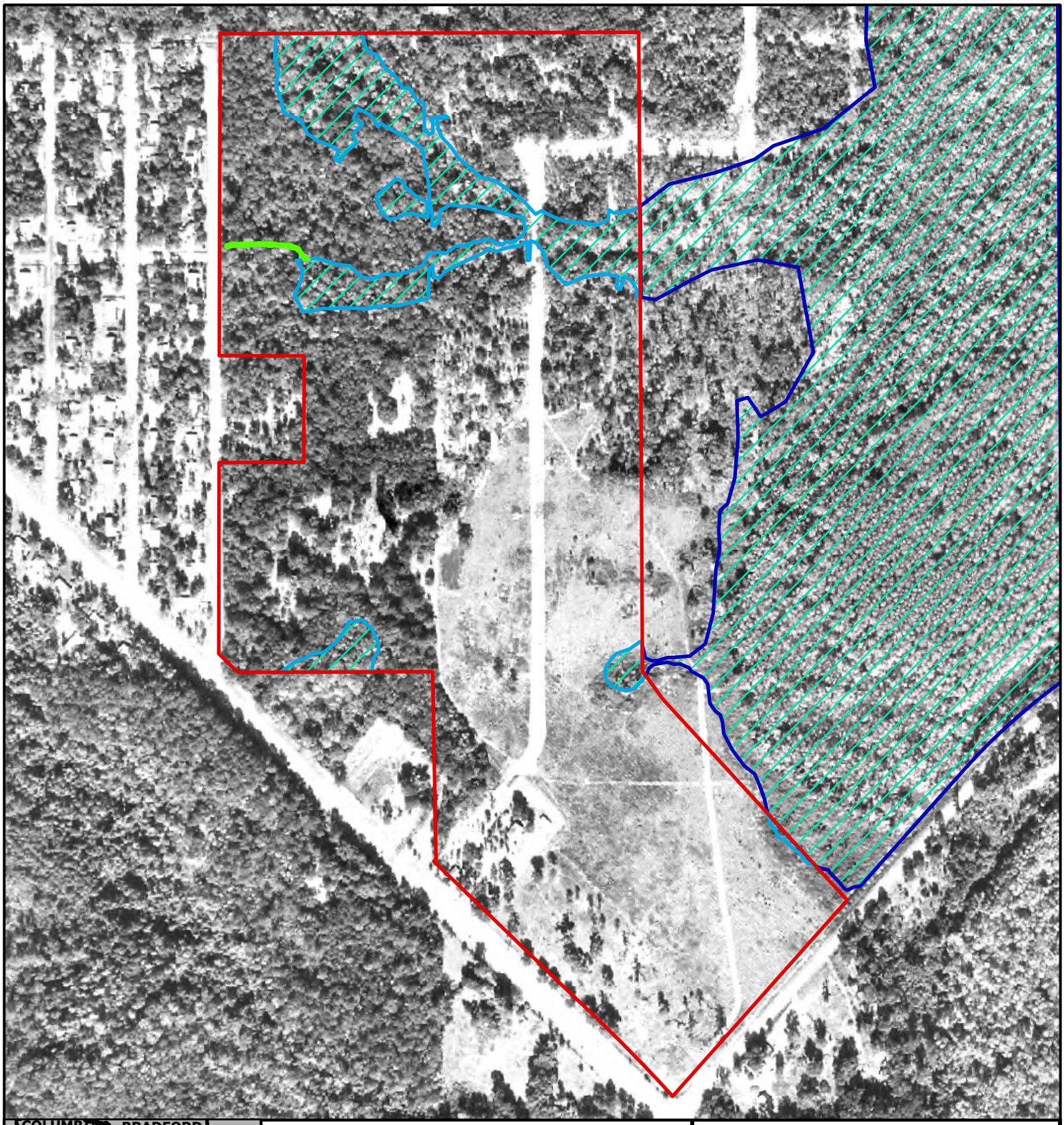
Figure 16a
Offsite Wetland Desktop Delineation
1937 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

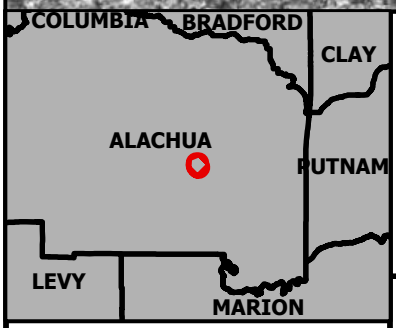
N
W E
S

0 175 350 700 Feet

- Project Boundary
- Wetland
- Ditch
- Offsite Wetland - Desktop Delineation

Created by: Nico Martinez
December 2024





Alachua County, Florida

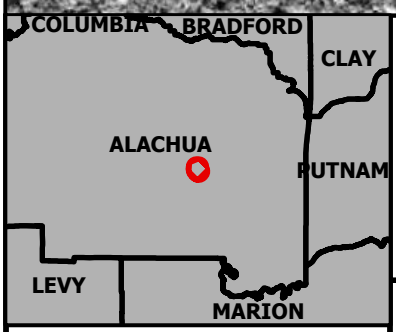
Figure 16b
Offsite Wetland Desktop Delineation
1968 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

- Project Boundary
- Wetland
- Ditch
- Offsite Wetland - Desktop Delineation

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 16c
Offsite Wetland Desktop Delineation
1974 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

- Project Boundary
- Wetland
- Ditch
- Offsite Wetland - Desktop Delineation

ECS

Created by: Nico Martinez
December 2024

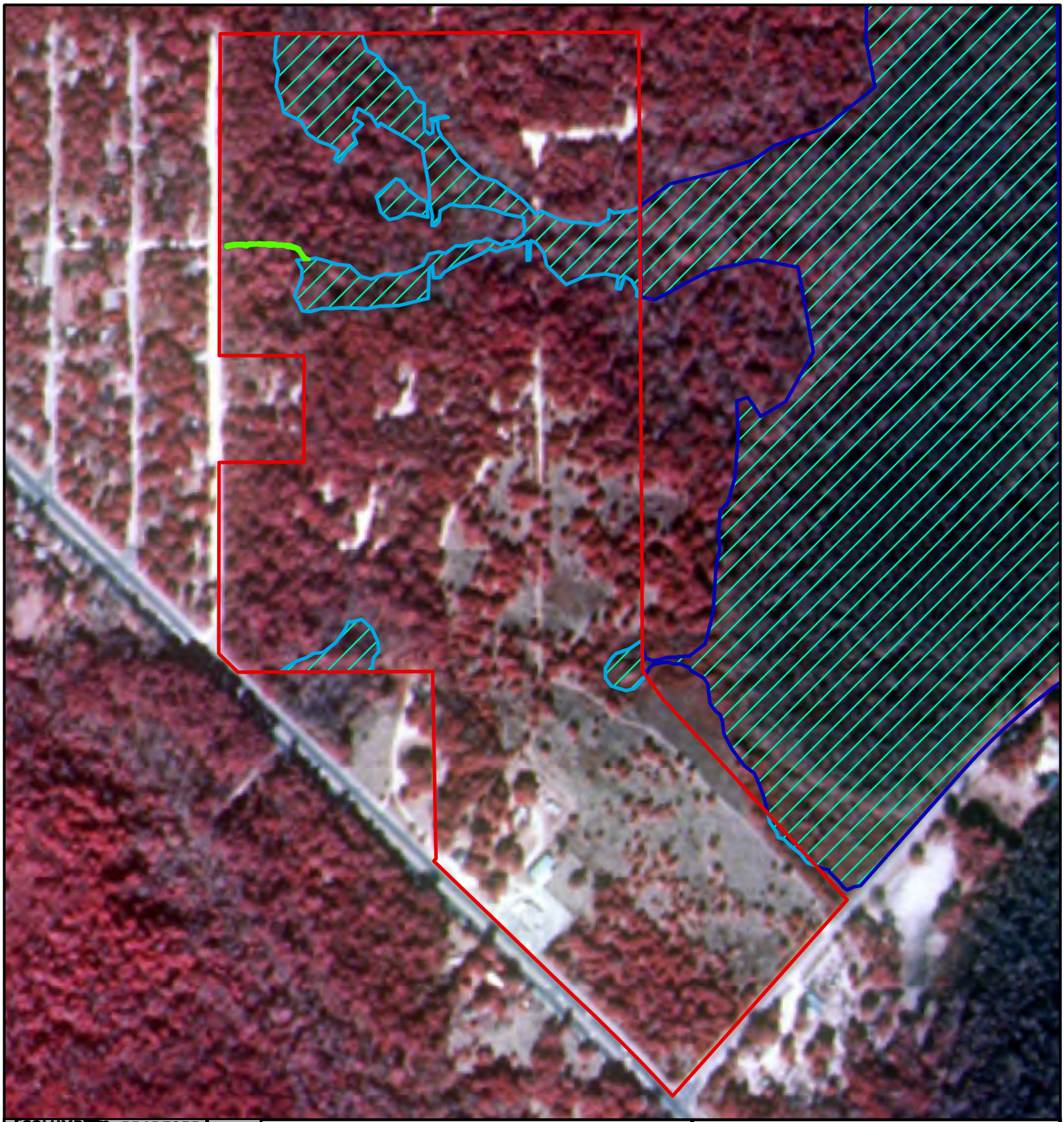


Figure 16d
Offsite Wetland Desktop Delineation
1984 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

- Project Boundary
- Wetland
- Ditch
- Offsite Wetland - Desktop Delineation

Created by: Nico Martinez
December 2024

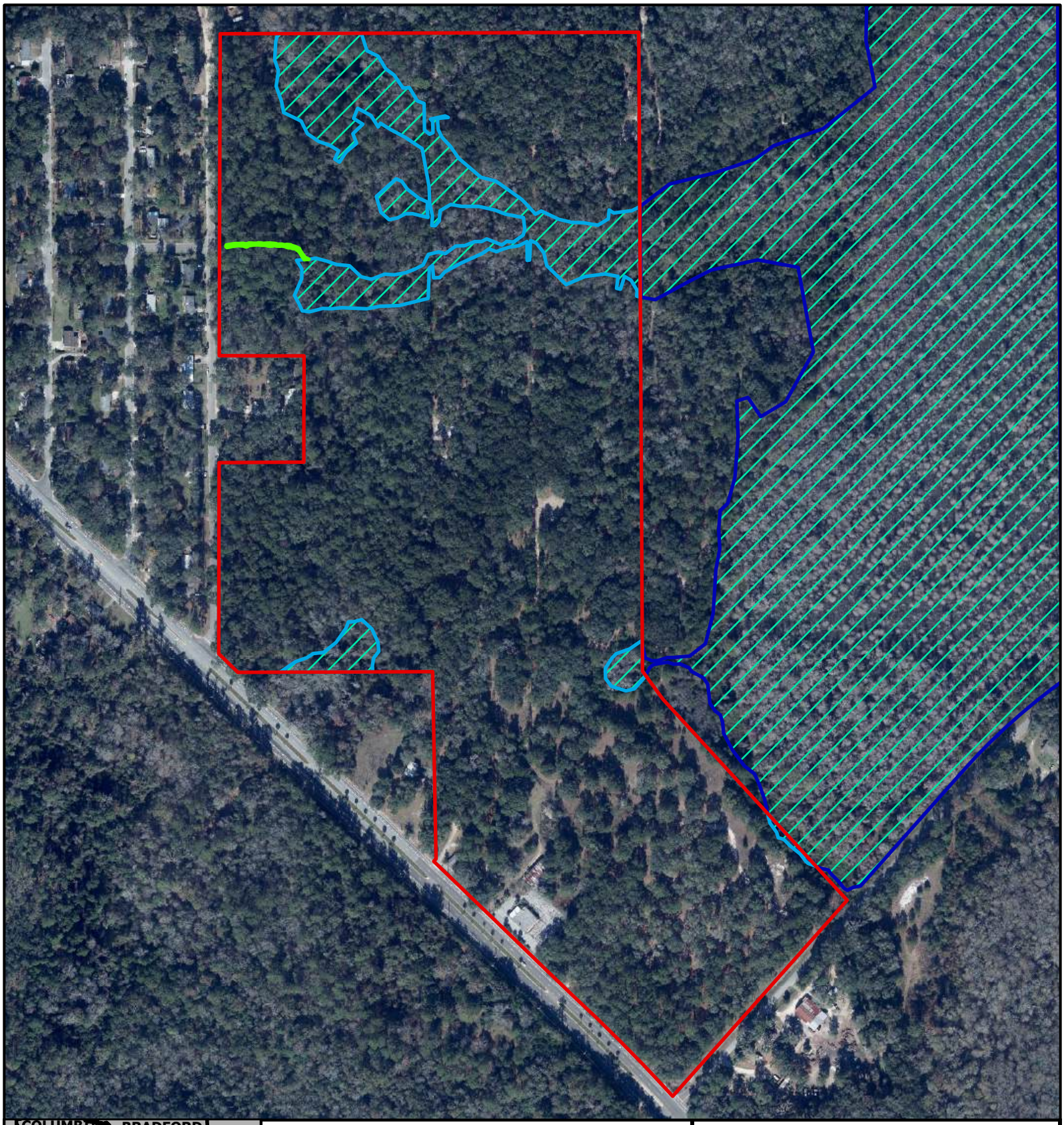


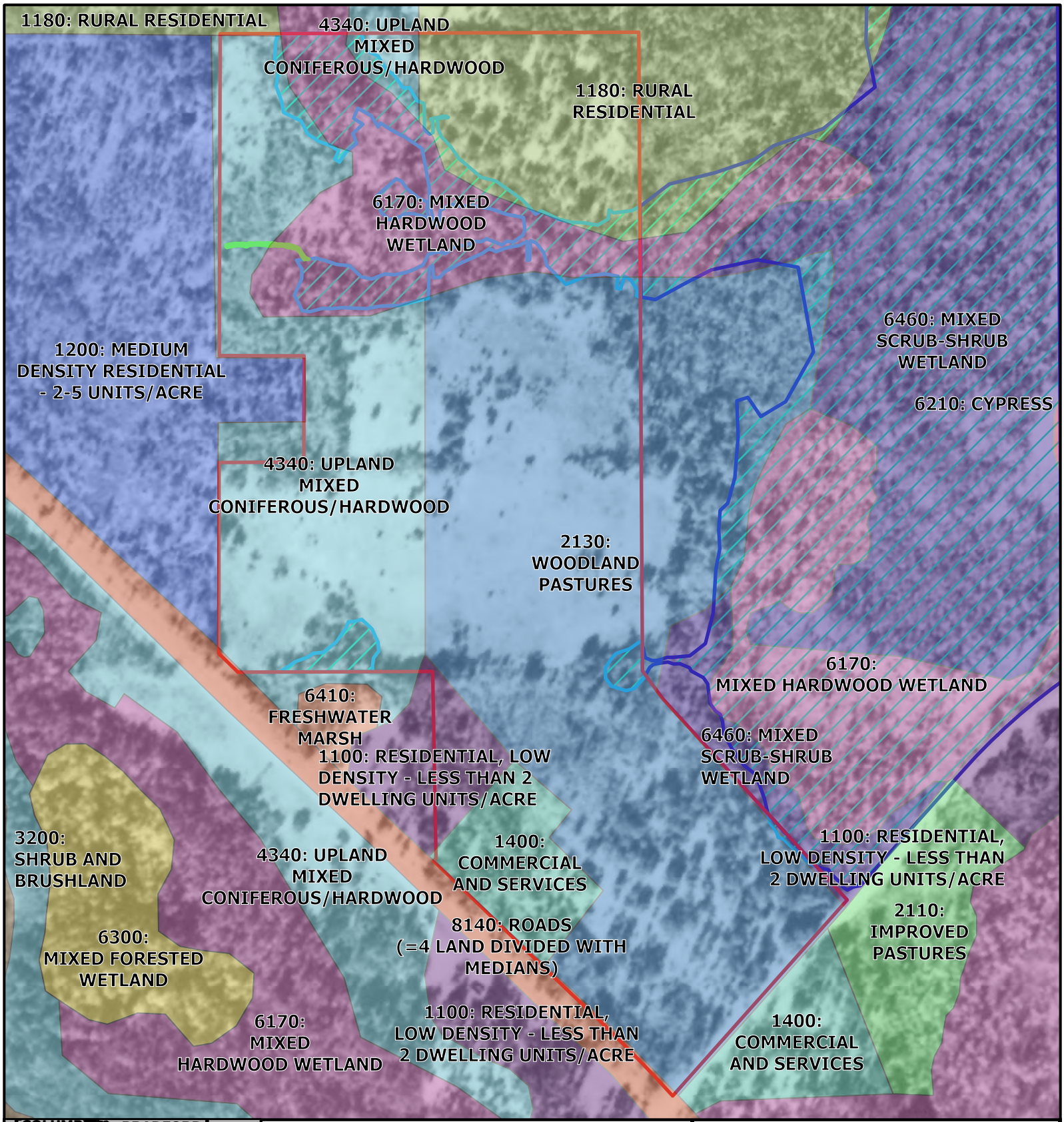
Figure 16e
Offsite Wetland Desktop Delineation
2017 Aerial
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

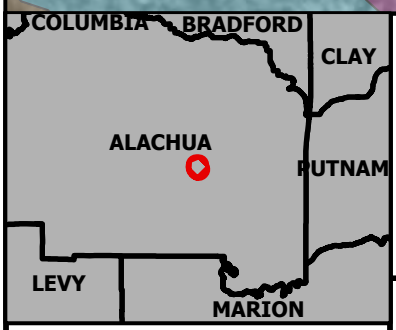
N
W E
S

0 175 350 700 Feet

- Project Boundary
- Wetland
- Ditch
- Offsite Wetland - Desktop Delineation

Created by: Nico Martinez
December 2024





Alachua County, Florida

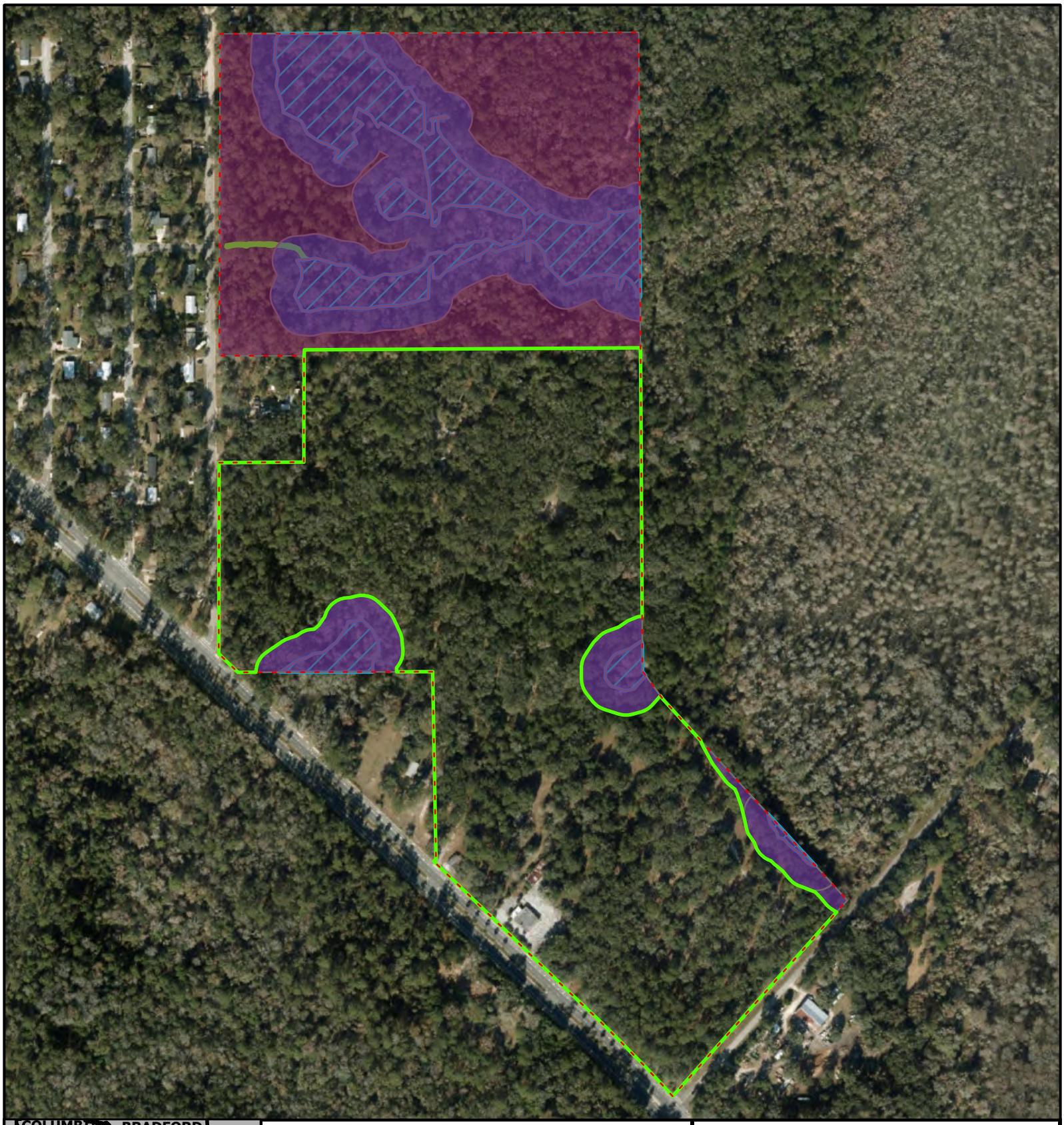
Figure 16f
Offsite Wetland Desktop Delineation
2014 SJRWMD FLUCCS
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

- Project Boundary
- Wetland
- Ditch
- Offsite Wetland - Desktop Delineation
- 1100
- 1180
- 1200
- 1400
- 2110
- 2130
- 3200
- 4340
- 6170
- 6210
- 6300
- 6410
- 6460
- 8140

Created by: Nico Martinez
December 2024



Alachua County, Florida

Figure 17a: Set Aside
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

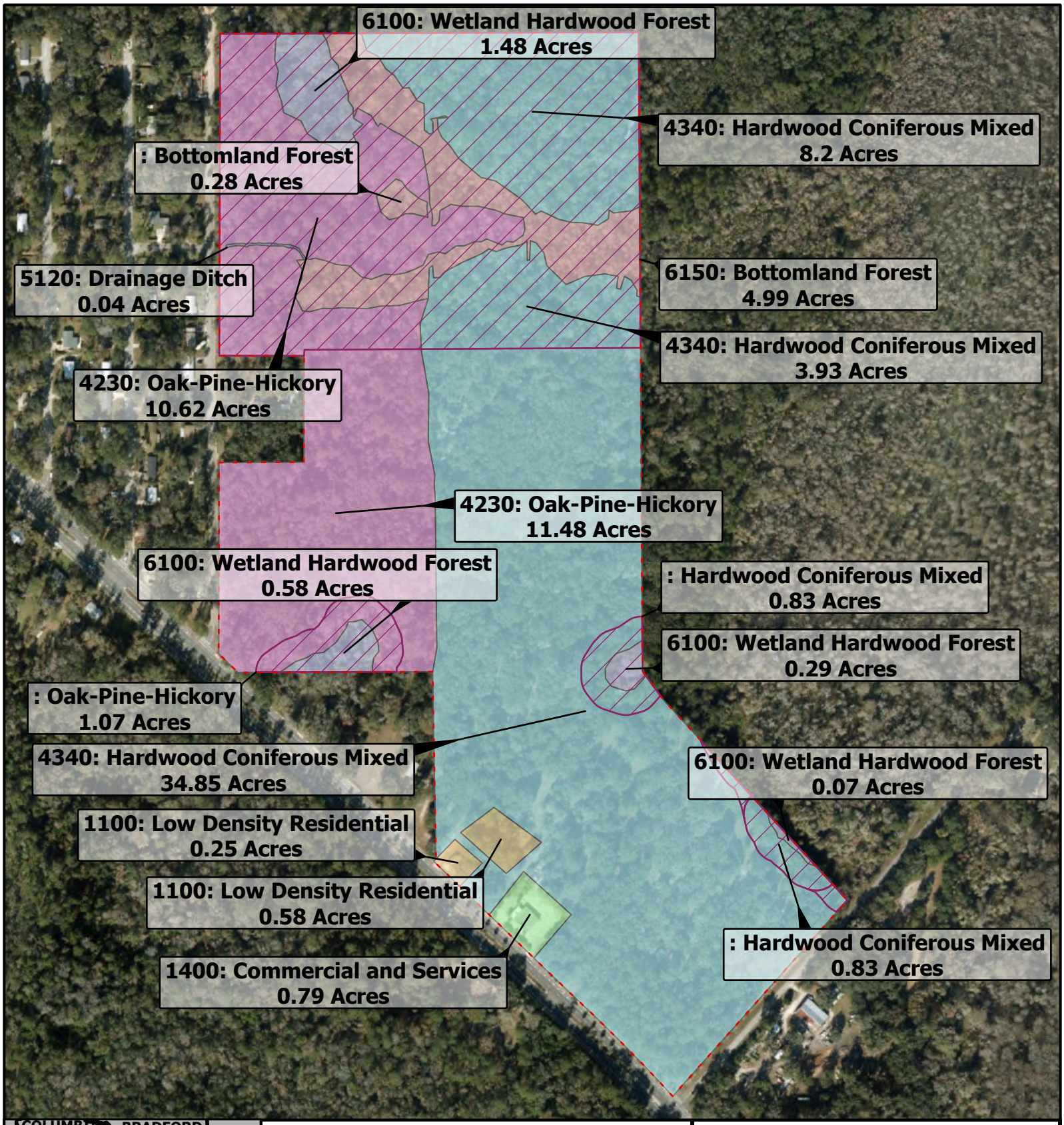
ECS

Created by: Chrissy Carr
December 2024

N
W E
S

0 175 350 700 Feet

- Project Boundary (81.17 acres)
- Wetland (7.69 acres)
- Ditch (0.04 acre)
- Wetlands and Upland Buffers (19.15 acres)
- Set Aside (33.23 acres)
- DevelopmentLine (47.94 acres)



Alachua County, Florida

Figure 17b: Set-Aside (FLUCCS)
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Project Boundary (81.17 acres)
Set Aside (33.23 acres)

Development FLUCCS (47.94 acres)
- Commercial and Services
- Hardwood Coniferous Mixed
- Low Density Residential
- Oak-Pine-Hickory

Set-Aside FLUCCS
- Bottomland Forest
- Drainage Ditch
- Hardwood Coniferous Mixed
- Oak-Pine-Hickory
- Wetland Hardwood Forest

ECS

Created by: Chrissy Carr
February 2025

Alachua County, Florida

Figure 17c: Set Aside Uplands
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

ECS

Created by: Chrissy Carr
February 2025

N
W E
S

0 175 350 700 Feet

Project Boundary (81.17 acres)

Development

Upland (47.94 acres)

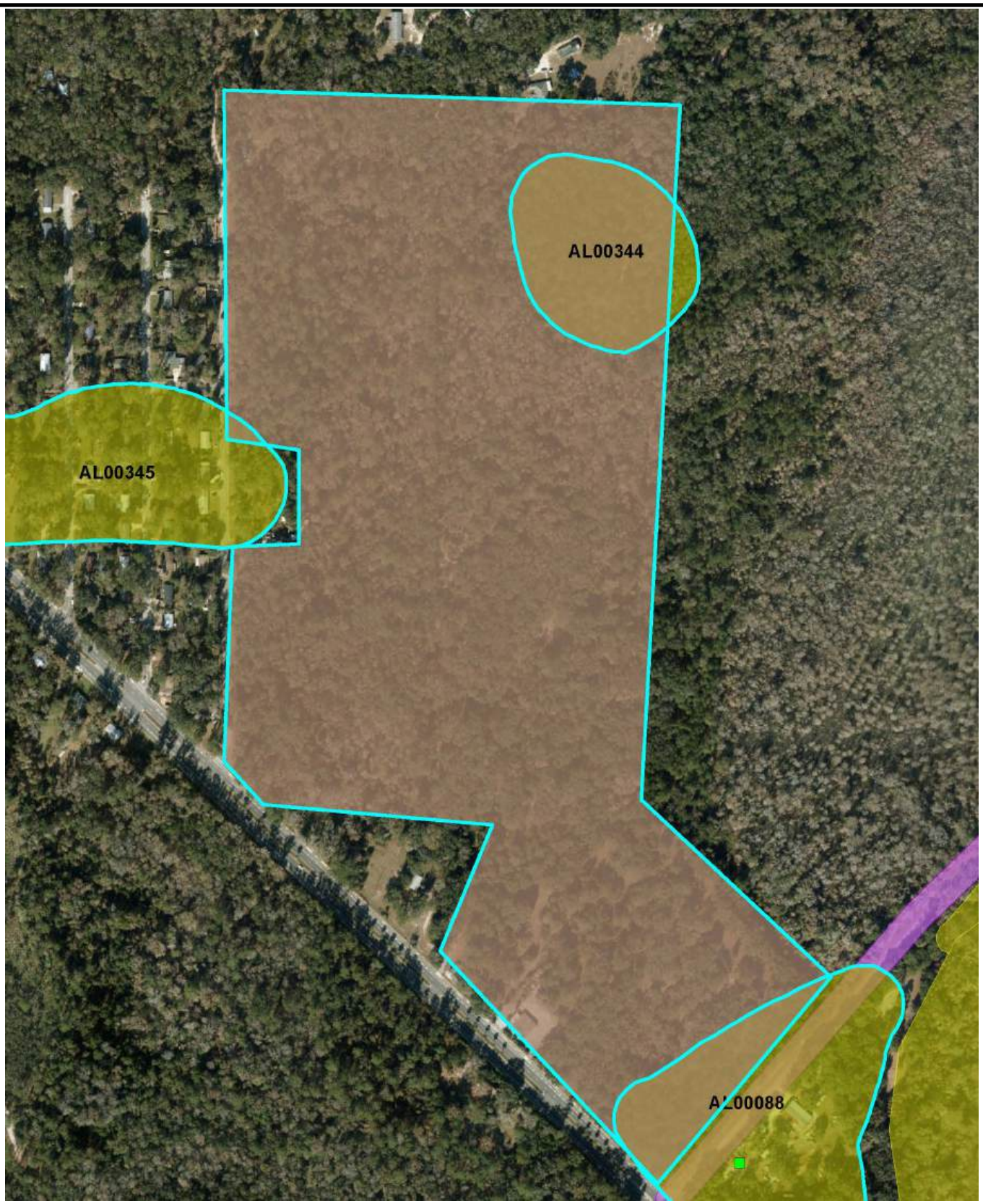
Set Aside (33.23 acres)

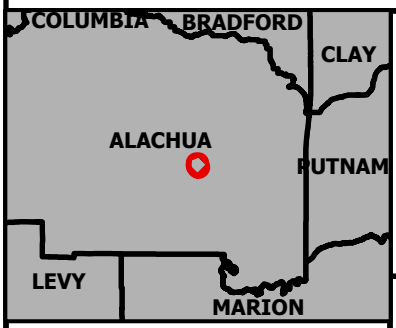
Set-Aside

Ditch (0.04 acres)

Upland (25.50 acres)

Wetland (7.69 acres)





Alachua County, Florida

Figure 18: Potential Cultural Resources
Hawthorne Road Site
SE Hawthorne Road & SE Lake Shore Drive, Gainesville, FL, 32641
Office 55: Project 7163

N
W E
S

0 175 350 700 Feet

Created by: Chrissy Carr
February 2025

Appendix II: Site Photos

1 - Facing west to Wetland B from Ditch along eastern boundary

2 - Facing East offsite from the ditch located east of Wetland B

3 - Wetland C at crossing facing upstream

4 - Wetland C at crossing facing downstream

5 - Arrowhead vine in Wetland C

6 - Wetland D Typical Vegetation

7 - Representative photo of Wetland E facing offsite

8 - Representative upland habitat

9 - Representative upland habitat

10 - Representative gopher tortoise burrow

11 - Hog wire fence along southern property boundary

12 - Culvert along western border at 51st St OSW-A

13 - Commercial site

14 - Water trough near Wetland B

15 - Old Foundation Concrete Debris

16 - Coral Ardisia northwestern property boundary view

17 - Coral ardisia in uplands

18 - Air Potato along OSW A

Appendix III: A List of Threatened and Endangered Species

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
850-681-9364 fax
www.fnai.org

Florida Natural Areas Inventory

Biodiversity Matrix Query Results

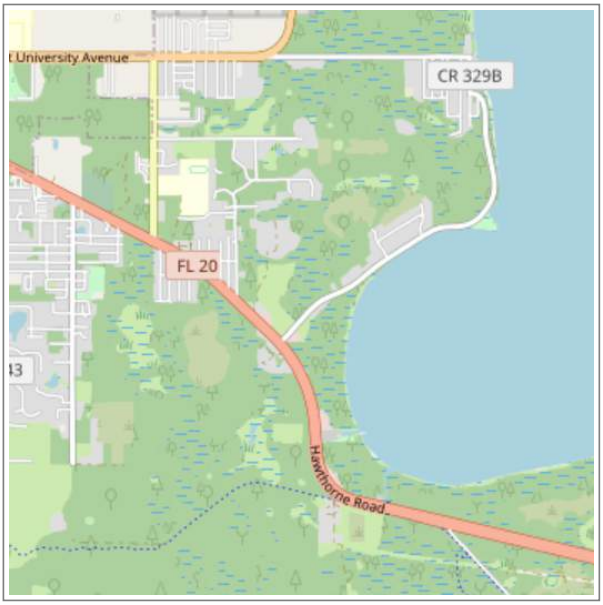
UNOFFICIAL REPORT

Created 12/27/2024

(Contact the FNAI Data Services Coordinator at 850.224.8207 or kbrinegar@fnai.fsu.edu for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 2 Matrix Units: 28679 , 28680



Descriptions

DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

LIKELY - The species or community is *known* to occur in this vicinity, and is considered likely within this Matrix Unit because:

1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; *or*
2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.

Matrix Unit ID: 28679

3 **Documented** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Alligator mississippiensis American Alligator	G5	S4	SAT	FT(S/A)
Drymarchon couperi Eastern Indigo Snake	G3	S2?	T	FT
Gopherus polyphemus Gopher Tortoise	G3	S3	C	ST

1 **Documented-Historic** Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Lampropeltis getula Eastern Kingsnake	G5	S1S2	N	N

5 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	T	FT
Plegadis falcinellus Glossy Ibis	G5	S3	N	N
Scrub	G2	S2	N	N
Upland hardwood forest	G5	S3	N	N

Matrix Unit ID: 28680

2 **Documented** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Matelea floridana Florida spiny-pod	G2	S2	N	E
Pituophis melanoleucus Pine Snake	G4	S3	N	ST

0 **Documented-Historic** Elements Found

6 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Alligator mississippiensis American Alligator	G5	S4	SAT	FT(S/A)
Drymarchon couperi Eastern Indigo Snake	G3	S2?	T	FT
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	T	FT
Plegadis falcinellus Glossy Ibis	G5	S3	N	N
Upland hardwood forest	G5	S3	N	N

Matrix Unit IDs: 28679 , 28680

52 **Potential** Elements Common to Any of the 2 Matrix Units

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Agrimonia incisa incised groove-bur	G3	S2	N	T
Ambystoma cingulatum Frosted Flatwoods Salamander	G2	S1	T	FT
Ambystoma tigrinum Eastern Tiger Salamander	G5	S3	N	N
Antigone canadensis pratensis Florida Sandhill Crane	G5T2	S2	N	ST
Aphodius troglodytes Gopher Tortoise Aphodius Beetle	G2G3	S2	N	N
Arnoglossum diversifolium variable-leaved Indian-plantain	G2	S2	N	T
Asplenium x curtissii Curtiss' spleenwort	GNA	S1	N	N
Asplenium x heteroresiliens Morzenti's spleenwort	G2	S1	N	N
Asplenium x plenum ruffled spleenwort	G1Q	S1	N	N
Ataenius brevicollis An Ataenius Beetle	G3G5	S1S2	N	N
Bolbocerosoma hamatum Bicolored Burrowing Scarab Beetle	G3G4	S3	N	N
Brickellia cordifolia Flyr's brickell-bush	G3	S2	N	E
Calopogon multiflorus many-flowered grass-pink	G2G3	S2S3	N	T
Ceratocanthus aeneus Shining Ball Scarab Beetle	G2G3	S2	N	N
Copris gopheri Gopher Tortoise Copris Beetle	G2	S2	N	N
Corynorhinus rafinesquii Rafinesque's Big-eared Bat	G3G4	S1	N	N
Ctenium floridanum Florida toothache grass	G2	S2	N	E
Dasymutilla archboldi Lake Wales Ridge Velvet Ant	G2G3	S2S3	N	N
Dryobates borealis Red-cockaded Woodpecker	G3	S2	E, PT	FE
Eudocimus albus White Ibis	G5	S4	N	N
Falco sparverius paulus Southeastern American Kestrel	G5T4	S3	N	ST
Forestiera godfreyi Godfrey's swampprivet	G2	S2	N	E

Gopherus polyphemus Gopher Tortoise	G3	S3	C	ST
Hartwrightia floridana hartwrightia	G2	S2	N	T
Heterodon simus Southern Hognose Snake	G2	S2S3	N	N
Lampropeltis extenuata Short-tailed Snake	G3	S3	N	ST
Lampropeltis getula Eastern Kingsnake	G5	S1S2	N	N
Lithobates capito Gopher Frog	G2G3	S3	N	N
Litsea aestivalis pondspice	G3?	S2	N	E
Matelea floridana Florida spiny-pod	G2	S2	N	E
Mustela frenata olivacea Southeastern Weasel	G5T4	S3?	N	N
Myotis austroriparius Southeastern Myotis	G4	S3	N	N
Nemastylis floridana celestial lily	G2	S2	N	E
Neofiber alleni Round-tailed Muskrat	G2	S2	N	N
Nolina atopocarpa Florida beargrass	G3	S3	N	T
Notophthalmus perstriatus Striped Newt	G2G3	S2	N	C
Nyctanassa violacea Yellow-crowned Night-heron	G5	S3	N	N
Nycticorax nycticorax Black-crowned Night-heron	G5	S3	N	N
Onthophagus polyphemi polyphemi Punctate Gopher Tortoise Onthophagus Beetle	G2G3T2T3	S2	N	N
Peltotrupes profundus Florida Deepdigger Scarab Beetle	G3	S3	N	N
Peucaea aestivalis Bachman's Sparrow	G3	S3	N	N
Phyllanthus liebmannianus ssp. platylepis pinewoods dainties	G4T2	S2	N	E
Phyllophaga elongata Elongate June Beetle	G3	S3	N	N
Podomys floridanus Florida Mouse	G3	S3	N	N
Pteroglossaspis ecristata giant orchid	G2G3	S2	N	T
Pycnanthemum floridanum Florida mountain-mint	G3	S3	N	T
Sciurus niger niger Southeastern Fox Squirrel	G5T5	S3	N	N
Sideroxylon alachuense silver buckthorn	G1	S1	N	E
Spigelia loganioides pinkroot	G2Q	S2	N	E
Ursus americanus floridanus Florida Black Bear	G5T4	S4	N	N
Verbesina heterophylla variable-leaf crownbeard	G2	S2	N	E
Wet flatwoods	G4	S4	N	N

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Alachua County, Florida

Local office

Florida Ecological Services Field Office

(352) 448-9151
(772) 562-4288
fw4flesregs@fws.gov

777 37th St
Suite D-101
Vero Beach, FL 32960-3559

https://www.fws.gov/office/florida-ecological-services

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. 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.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Tricolored Bat Perimyotis subflavus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

Birds

NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Everglade Snail Kite Rostrhamus sociabilis plumbeus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7713	Endangered
Florida Scrub-jay Aphelocoma coerulescens Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6174	Threatened
Red-cockaded Woodpecker Dryobates borealis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7614	Threatened
Whooping Crane Grus americana No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/758	EXPN

Reptiles

NAME	STATUS
Eastern Indigo Snake Drymarchon couperi Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

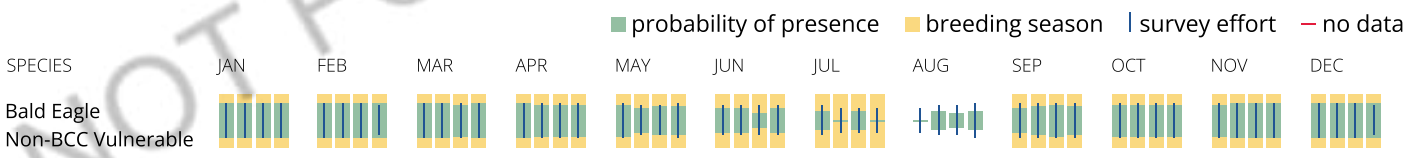
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/ documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel Falco sparverius paulus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31

American Oystercatcher Haematopus palliatus — Breeds Apr 15 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8935

Bachman's Sparrow Peucaea aestivalis — Breeds May 1 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6177

Bald Eagle Haliaeetus leucocephalus — Breeds Sep 1 to Jul 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Chimney Swift Chaetura pelagica — Breeds Mar 15 to Aug 25

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Great Blue Heron Ardea herodias occidentalis — Breeds Jan 1 to Dec 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Gull-billed Tern Gelochelidon nilotica — Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9501

Henslow's Sparrow Centronyx henslowii — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3941

King Rail Rallus elegans — Breeds May 1 to Sep 5

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8936

Least Tern Sternula antillarum antillarum — Breeds Apr 25 to Sep 5

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Magnificent Frigatebird Fregata magnificens This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Oct 1 to Apr 30
Painted Bunting Passerina ciris This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15
Pectoral Sandpiper Calidris melanotos This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Prairie Warbler Setophaga discolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Red-headed Woodpecker Melanerpes erythrocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Ruddy Turnstone Arenaria interpres morinella This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Semipalmated Sandpiper Calidris pusilla This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Swallow-tailed Kite Elanoides forficatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Worthington's Marsh Wren Cistothorus palustris griseus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles",

specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

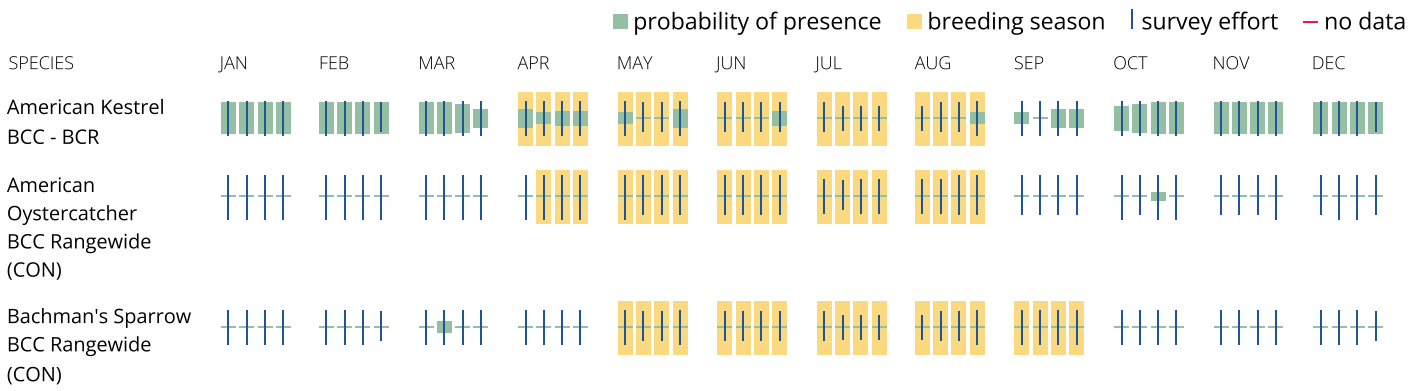
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

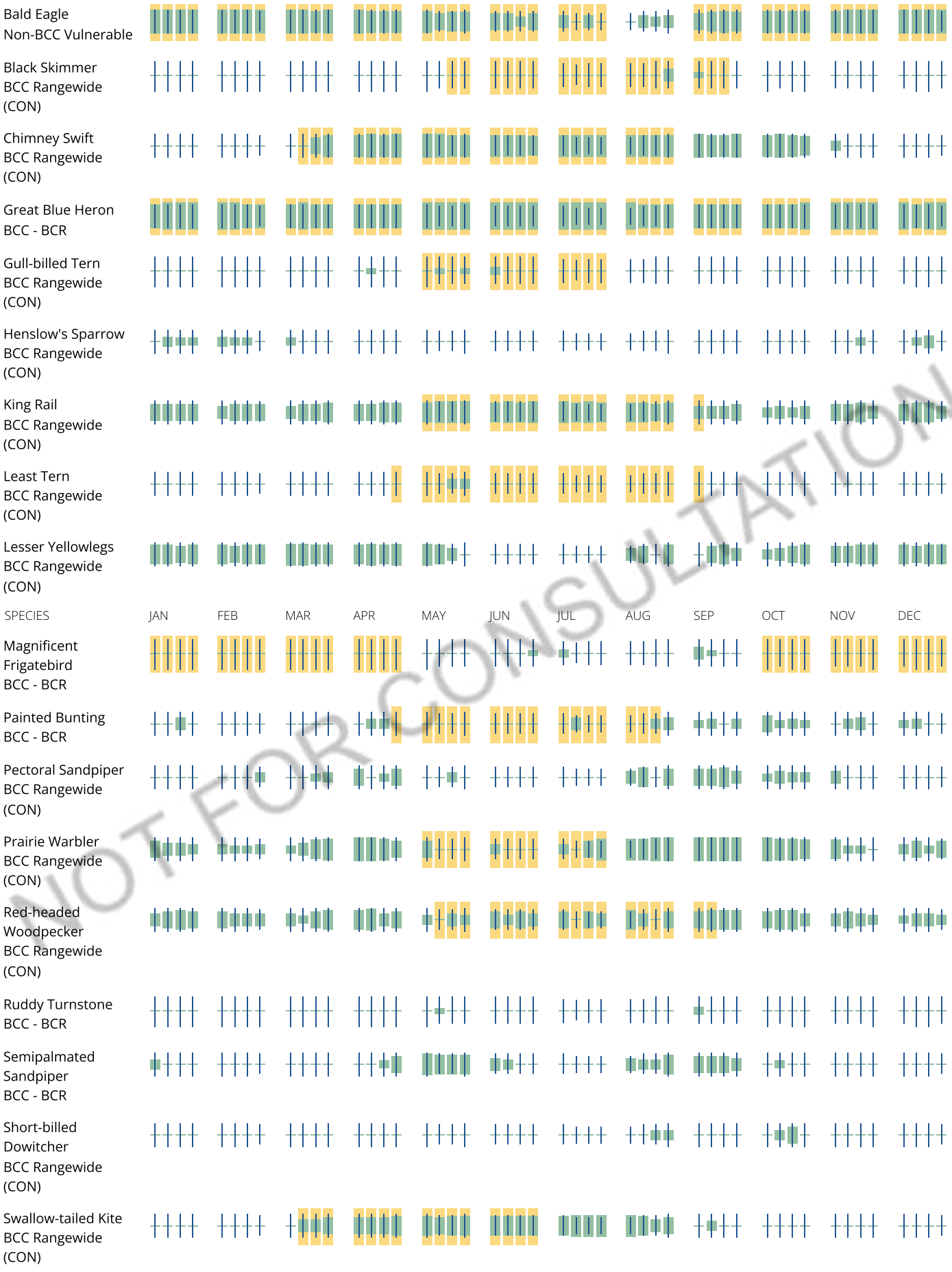
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

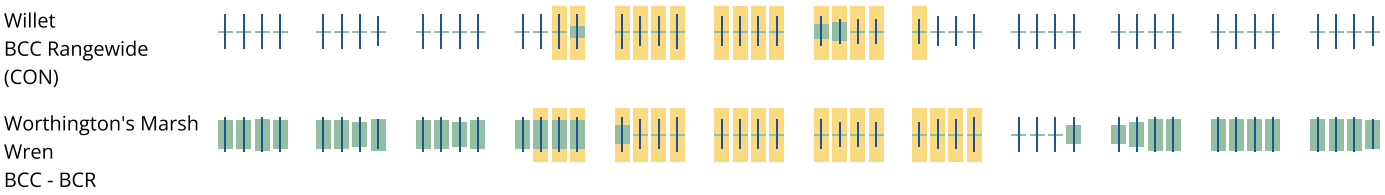
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A
- PSS3C

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix IV: Alachua County Checklist

Alachua County Board of County Commissioners
Department of Growth Management

10 SW 2nd Ave., Gainesville, FL 32601
Website: https://growth-management.alachuacounty.us

Submit application to: **Development Review**
Tel. 352.374.5249
Email: developmentreview@alachuacounty.us

ENVIRONMENTAL RESOURCES ASSESSMENT CHECKLIST

Pursuant to Alachua County Comprehensive Plan 2002, as amended, Conservation Open Space Element Policy 3.4.1, applications for land use change, zoning change, and development approval shall be required to submit an inventory of natural resource information. The inventory shall include site specific identification, analysis and mapping of each resource present on or adjacent to the site. The identification and analysis shall indicate information sources consulted.

Natural Resources Checklist:
Check "Yes" for each resource or resource characteristic identified and discuss and provide supporting material.
Check "N/A" for each resource or resource characteristic not present or otherwise relevant to the application.

Yes	☒	N/A	☐	Surface Waters (ponds, lakes, streams, springs, etc.)
Yes	☒	N/A	☐	Wetlands
Yes	☒	N/A	☐	Surface Water or Wetland Buffers
Yes	☒	N/A	☐	Floodplains (100-year)
Yes	☐	N/A	☒	Special Area Study Resource Protection Areas (Cross Creek, Idylwild/Serenola, etc.)
Yes	☒	N/A	☐	Strategic Ecosystems (within or adjacent to mapped areas)
Yes	☒	N/A	☐	Significant Habitat (biologically diverse natural areas)
Yes	☒	N/A	☐	Listed Species/Listed Species Habitats (FNAI S1, S2, & S3; State or Federally E, T, SSC)
Yes	☒	N/A	☐	Non-native Invasive Species
Yes	☐	N/A	☒	Recreation/Conservation/Preservation Lands
Yes	☐	N/A	☒	Significant Geological Features (caves, springs, sinkholes, etc.)
Yes	☒	N/A	☐	High Aquifer Recharge Areas
Yes	☐	N/A	☒	Wellfield Protection Areas
Yes	☒	N/A	☐	Wells
Yes	☒	N/A	☐	Soils
Yes	☐	N/A	☒	Mineral Resources Areas
Yes	☒	N/A	☐	Topography/Steep Slopes
Yes	☐	N/A	☒	Historical and Paleontological Resources
Yes	☐	N/A	☒	Hazardous Materials Storage Facilities
Yes	☐	N/A	☒	Contamination (soil, surface water, ground water)

Signed: Christina Carr **Project #:** ECS55:7163 **Date:** 1/4/2025

For assistance in completing this form, please visit the Alachua County Environmental Protection Department (ACEPD) website at http://alachuacounty.us/Depts/EPD/Pages/EPD.aspx or contact ACEPD at (352) 264-6800.