

# Blues Creek Unit 5, Phase 2 Land Use Change & Rezoning Justification Report

Parcel: 06006-052-000

# **Prepared for Submittal to:**

City of Gainesville

# Prepared by:

eda consultants, inc.



January 17, 2023

#### **Proposal and Background**

This application proposes a Planned Development (PD) amendment for the Blues Creek Unit 5, Phase 2 PD (Ordinance 150694; adopted March 2, 2017; see Exhibit 1 in the Appendix) for Parcel 06006-052-000 located in northwest Gainesville in the 7000 – 8000 blocks of NW 57<sup>th</sup> Drive. In addition, the application includes a proposed future land use map amendment for portions of the parcel to change from Single Family to Planned Use District (PUD) and Conservation; and a rezoning for a portion of the property to change from PD to Conservation zoning.

The western boundary of the parcel forms the western boundary of the City of Gainesville in that area. The total size of the existing Blues Creek Unit 5, Phase 2 PD is 36.7 +/- acres. The parcel is currently vacant.

Figure 1: Location Map Blues Creek Unit 5, Phase 2 PD

W 50 Avenue

WW 90 Lance

NW 40 Avenue

NW 40 Avenue

NW 40 Avenue

Figure 1 below illustrates the area under consideration for the PD amendment.

This application proposes to amend the existing PD Ordinance 150694 as follows:

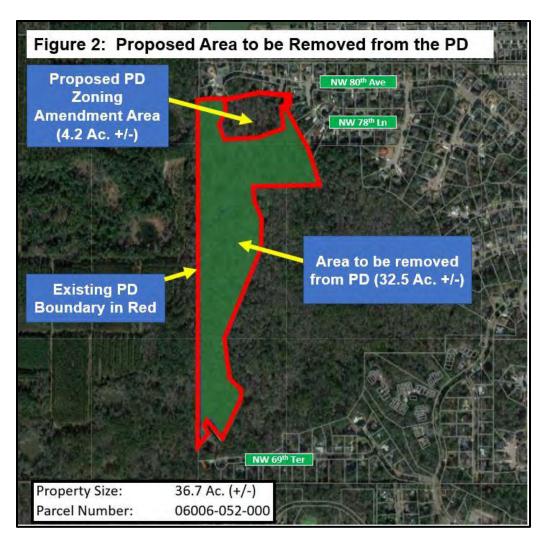
- 1. Reduce the size of the PD to 4.2 +/- acres by removing 32.5 +/- acres of land in the southern portion of the PD and changing that portion of the parcel to the Conservation future land use category and Conservation zoning district.
- 2. Adopt a new PD Layout Plan that reflects the new land area and layout for the PD.
- 3. Delete and/or amend several conditions in the existing PD that are no longer applicable. And add new conditions that: allow single-family attached units on individual platted lots;

allow accessory garages for the single-family attached dwellings; and adopt new dimensional standards for the revised PD.

The site is located in an existing urbanized section of northwest Gainesville. There is surrounding residential development to the north, east and south of the PD. Existing public infrastructure serves the adjacent Blues Creek overall development. Vehicular access to the Blues Creek Unit 5, Phase 2 is available from a stub-out off NW 80<sup>th</sup> Avenue (local street) that connects to NW 73<sup>rd</sup> Avenue and NW 43<sup>rd</sup> Street (a County-maintained roadway).

The parcel is located in Zone B of the Transportation Mobility Program Area (TMPA). Any future development proposal for the site would require a subdivision plat (as required in the PD Conditions) at the time of application. At the final plat stage, the applicant would be required to meet the Zone B TMPA criteria for mitigation of traffic impacts and would be required to meet other level of service standard requirements as established in the Comprehensive Plan.

Figure 2 below illustrates the land area to be removed (that will be rezoned to Conservation) from the Blues Creek Unit 5, Phase 2 PD. As indicated earlier, this application proposes to remove 32.5 +/- acres from the PD. The resulting PD acreage after the proposed amendment is 4.2 +/- acres.



#### History of Blues Creek Development

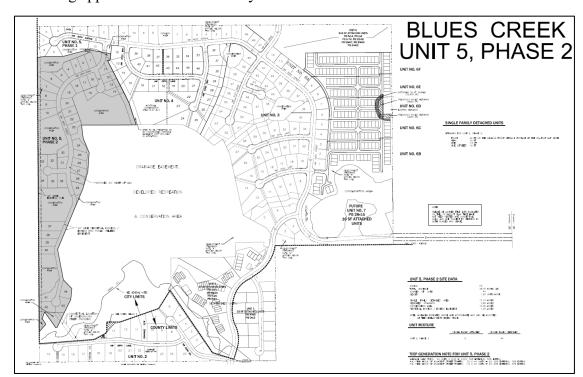
The development of Blues Creek was originally approved as an Alachua County Planned Unit Development (PUD) by Zoning Resolution Z-81-68 that was adopted on July 21, 1981. The County PUD was further amended by a revised Master Plan for Blues Creek adopted and approved by Alachua County dated November 1999.

The entire Blues Creek development consists of approximately 300 acres. Portions of the overall Blues Creek PUD were annexed by the City of Gainesville by Ordinances 001161, 001162, 001163, 002393, and 040290. These annexations occurred in 2001, 2002, and 2005. At this time, approximately 91% (273.6 acres) of the development lies within Gainesville city limits.

Subsequent to the annexations, the City of Gainesville applied City future land use and zoning designations to the property. Consistent with the Alachua County PUD zoning designation, the City applied Planned Development (PD) zoning to the property via Ordinances 030472 (adopted 10/27/03) and 041187 (adopted 11/28/05). The Alachua County development regulations and conditions approved by Alachua County through Resolution Z-81-68 and the revised Master Plan for Blues Creek (dated November 1999) were adopted by the City as the regulating documents for the City PD. The PD allowed for single-family detached and single-family attached units.

The 1999 Master Plan for Blues Creek allowed up to 615 residential dwelling units with a mix of single-family attached units and single-family detached units in multiple unit phases. To date, the Blues Creek development has substantially built out the phases originally approved in the Alachua County PUD. Units 1-4 and 6 are mostly built out and are shown on the 1999 Master Plan for 305 single-family attached units and 170 single-family detached units. Unit 7 is platted for 16 lots (PB 28, PG 15) but is not developed/built. Unit 5 is partially completed with 10 single-family detached units (this is Phase 1 of Unit 5); the 1999 Master Plan allowed up to 82 single-family detached units in Unit 5.

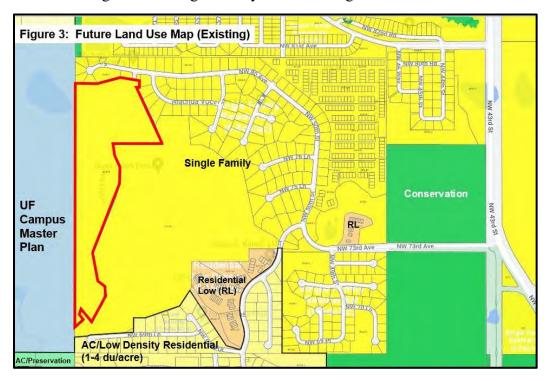
On March 2, 2017, the Gainesville City Commission adopted Ordinance 150694, which created a new PD ordinance regulating Blues Creek Unit 5, Phase 2, which is separate from the existing Blues Creek development. This ordinance is attached as Exhibit 1 in the Appendix. This existing (and still valid) ordinance allows a maximum of 44 single-family detached units with associated conditions.



The existing approved and valid PD Layout Plan referenced above is indicated below:

### **Existing Future Land Use Designation and Zoning District**

The current future land use designation for the parcel is Single Family (SF) as indicated on the map in Figure 3 below. To the west, the property is designated Alachua County UF Campus Master Plan (property owned by the University of Florida). Abutting to the north, south, and east, the land use designation is Single Family in the existing Blues Creek Subdivision.



The existing zoning district for the property is Planned Development (PD) as illustrated on Figure 4 below. The property owned by UF to the west is designated Alachua County Agricultural (A). Abutting properties to the north, south, and east are all designated PD as part of the existing overall Blues Creek PD. Further south, outside city limits, the property is also designated PD zoning in Alachua County.



#### **Environmental Review**

A Natural Areas Resource Assessment (dated 10/5/2015) was submitted for the previous Blues Creek Unit 5, Phase 2 PD (Petition PB-15-00115; Ordinance 150694). That report is being resubmitted with this application along with an updated supplement (Addendum) to the original report (see report from Ecosystem Research Corporation dated January 5, 2023 (see Exhibit 2 in the Appendix for the environmental reports).

The Addendum report includes a section titled 'Results,' which provides a summarization of the existing site conditions, design considerations, proposed impacts and the overall protection of resources within the planning parcel. In addition, a condition addressing the proposed placement of lands within a conservation easement is included in the PD conditions.

The 'Results' section of the 2023 ERC Addendum Report is provided below:

The proposed 4.20-acre future development site is shown as Figure 6 on a 2020 aerial photograph with the 2017 LiDAR overlain. The Project Site boundaries are shown to

avoid two large landscape depressions along the northwest and west perimeter of the proposed SF-Attached Townhouse Project Site. A schematic of the Project Site Area is provided as Figure 7. This drawing shows there are two (2) wetland or surface water jurisdictional features within the boundaries of the site. A very small, disturbed, isolated wetland occurs within the northeast corner of the site and consists of 0.19 acres. This wetland is hydrologically altered and has been filled by construction of the homesite along the north permitter of the wetland. In addition, the wetland was filled along the east boundary by construction of stormwater facilities, utilities, and a sanitary sewer. There is also a large amount of road fill placed along the east boundary as part of past access road construction. This fill extends well into the jurisdiction boundary flagged for the wetland in this area as part of this review. This wetland was referred to as Wetland "W" within the 2015 assessment. Within this review it is named Wetland 1. The general condition of the wetland is shown in Photograph 9 (Attachment 3). At the time of the field survey, the wetland was shallowly flooded, and the canopy vegetation was in poor condition. The wetland was dominated by small tree and shrubs to include swampbay (Persea palustris [Raf.] Sarg.), swamp blackgum (Nyssa sylvatica Marsh. var. biflora [Walt.] Sarg.), sweet gallberry (Ilex coriacea [Pursh] Chapm.), wax myrtle (Myrica cerifera L.), loblolly pine (Pinus taeda L.), water oak (Quercus nigra L.), and sweetbay (Magnolia virginiana L.). Herbaceous groundcover only occurs minimally with groundcover vegetation dominated by woody species saplings and resprouts and individuals of saw palmetto (Serenoa repens [Bartr.] Small) and bracken fern (Pteridium aquilinum [L.] Kuhn.).

A second jurisdictional landscape depression lies within the southwest corner of the site and is defined as Intermittent Surface Water 1. This depression, as flagged, totals 0.04 acres and had only a small pool of water in the deepest area of the depression during the survey. The depression has a minimal groundcover component and only has two subcanopy size saplings within the perimeter of the depression. This feature has flooded in response to intense rain events since 2016 but prior to this time the depression was never seen as flooded and never appeared as a wetland during the prior decade of field investigation. In normal rainy years it exists as a depression covered in upland groundcover species, and when reviewed by all agencies, the area was covered in vines and briers. So, flooding is intermittent during intense rain events. A view of the surface water is shown as Photograph 6 (Attachment 3).

As proposed, the Site Plan will result in impacts to these two (2) regulated wetland and surface water features. The impacts are visually depicted on Figure 8, which illustrates that the complete 0.04-acre Intermittent Surface Water 1 depression will be removed. In addition, a very small 0.02-acre area along the east perimeter of the Wetland-1 area will be removed during entrance road construction. Since the wetland boundary in this area extends uphill from the base-of-slope of the existing fill, the 0.02-acre fill area shown essentially occurs on a previously disturbed and filled wetland area.

The impacts as shown have been avoided and reduced to the greatest extent possible. The Project Site has been situated to avoid the large landscape depressions occurring west and north of the proposed site. The filling of Wetland-1 cannot be avoided as this is the area designated for new access roads, and fill to construct roads has previously been

placed in this area. To avoid the Intermittent Surface Water-1 area would involve moving the

site farther south and southwest, which would involve greater encroachment in areas of higher water tables and in areas with a large population of the listed plant species needle palm (Rhapidophyllum hystrix [Pursh] H. Wendl. & Drude ex Drude). In addition, avoiding this impact to a low-quality depression with intermittent flooding and low wildlife quality would impact more upland habitat. All upland habitat in this area is of higher quality than the depression area and removal of substantially more and larger high-quality tree canopy species, which are prominent in all upland areas on this site, would be required. This surface water habitat is the lowest quality area of all adjacent hydric and upland habitat areas, so the loss of this 0.04-acre area is much less of an impact than if the site footprint were moved.

The proposed impacts must be considered expressively minimal considering the proposed mitigation offered for the realized impacts. The applicant is proposing to use 4.20 acres of the 36.70-acre parcel for development. This results in impacts to only 11.4% of the total parcel acreage. The proposed mitigation plan is provided on Figure 9. The schematic shows that the applicant intends to place the remaining acreage of Parcel 06006-052-000 in Conservation Zoning with future possible creation of a Conservation Easement for the area. This is being considered for possible use of the area to offset and mitigate for surface water and wetland impacts that will occur as a result of development of the proposed PD. In addition, the proposed Conservation Easement is offered to possibly satisfy in part or completely the tree mitigation that may be required for development of the PD area. As a result of this proposal the remaining 32.50-acre area of

Parcel 06006-052-000 will be completely removed from any future development considerations. In addition to this Conservation activity, the 32.50-acre Conservation Area will be donated to a municipal, state, or third-party entity for perpetual Conservation Management. Also, the applicant wishes to place the entire 90.29-acre Drainage Easement into Conservation and donate these lands to a management entity. The actual acreage of this donation cannot at this time be determined due to multiple ownerships of the associated parcels as described on Figure 9. As shown on this figure, the Applicant owns lands within and outside the delineated Easement of 90.29 acres. Others to include the Homeowners Association also own lands within the delineated Easement Area. So, the actual acreage that will be donated will require some negotiations with these owners, but the intent is to include as much area as possible in the proposed Conservation Easement.

For the remaining discussion with respect to this Conservation Easement within this report, ERC will refer to this as 90.29 acres (area of existing easement) understanding that the final acreage may be slightly larger or smaller. Currently, within and adjacent to the Easement, the Applicant has control of 86.93 acres (Total of Parcel areas 1, 3, and 4 on Figure 9). The total proposed conservation acreage may equal the entire area shown on Figure 9 that lies outside of the limits of Parcel 06006-052-000, which totals 93.51 acres (please note acreages are in part determined from Parcel lines that do not exactly correlate with the surveyed Easement Boundary). This will result in a Conservation

Easement that ranges from 86.93 acres to 93.51 acres. Hence, assuming the 90.29-acre easement as the target acreage, the total Conservation Area to include the lands in Parcel 06006-052-000 would equal 122.79 acres. Since everyone and his brother in the City and County has wanted this to happen in the past twenty years, this seems like a proper and appropriate consideration.

Data from field surveys conducted in 2015 for the Planning Parcel, proposed Project Site, and Proposed Conservation Areas are provided on Figure 10 to show the areas and extent of the survey. The GPS icons show where data were collected along with corresponding data nomenclature. The plant community map generated for the entire Planning Parcel area is shown on Figure 11. This includes the plant community mapping of the current 4.20-acre Project Site and all of the proposed Conservation Easement lands. The GPS locations from the current Planning Parcel update are provided on Figure 12. As can be seen from the GPS point designations, the majority of the Project Site is dominated by a Highly Significant Climax Mesic Hammock Habitat. In the project area this community is dominated by large canopy trees with an understory that has a very sparse groundcover. In the north and central area of the site the water table is far below the surface, the site is much drier, and the slope is very shallow. In the south area of the site the canopy cover remains, but the water table is closer to the ground surface and the vegetation is denser. The community is mesic and upland in nature but because the slope of the ground is steeper, the water table becomes closer to the ground surface creating seepage zones farther south of the proposed south property line. An extensive description of all onsite plant communities is provided in the 2015 NARA Report provided as Attachment 2.

# Statement of Proposed Change / Proposed Future Land Use Categories and Zoning Districts

As stated above, the property currently is designated with the Single Family (SF) future land use (FLU) category. The northern portion (4.2 +/- acres) of Parcel 06006-052-000 is proposed to be changed from SF to the Planned Use District (PUD) future land use category designation. The southern 32.5 +/- acres of the parcel are proposed to be changed from SF to the Conservation future land use category.

The proposed PUD future land use amendment ensures that the area will be limited to specific residential uses with implementation by a Planned Development (PD) zoning district. PD zoning is required for all properties with the PUD future land use category (as stated in the City's Future Land Use Element). The proposed Conservation future land use area helps ensure that development will not occur in and around environmentally sensitive areas and will aid in preserving existing natural resources located on-site.

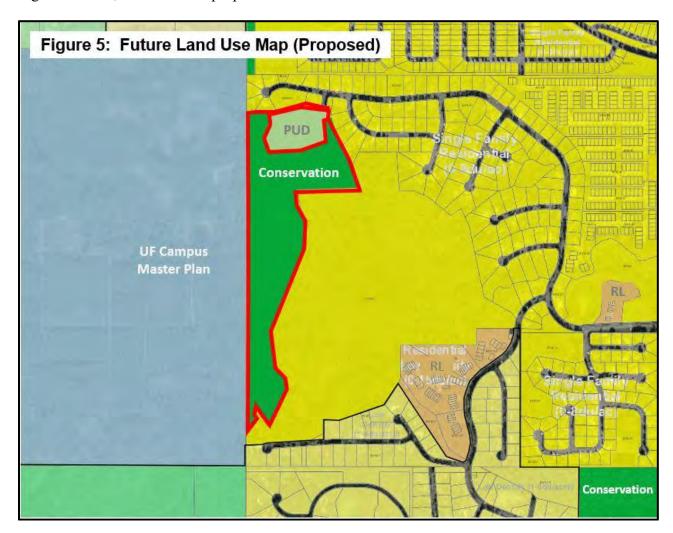
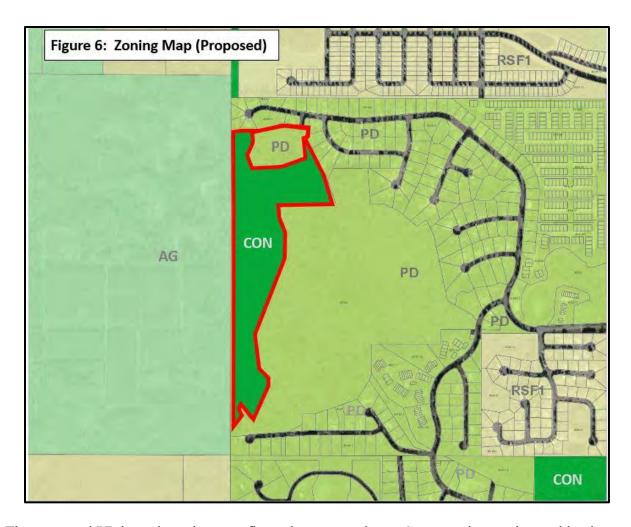


Figure 5 below, illustrates the proposed PUD and Conservation areas future land use areas:

Figure 6 below illustrates the proposed new PD zoning boundary  $(4.2 \pm 1.4)$  acres with the removal of the 32.5  $\pm 1.4$  acres from the PD. The 32.5-acre area is proposed to be changed from PD to Conservation zoning as illustrated on Figure 6 below.



The proposed PD boundary change reflects the proposed new Conservation zoning and land use designations on the 32.5 +/- acres being removed from the PD. Because of the proposed land use and zoning changes for the 32.5 +/- acres, it is no longer appropriate for that acreage to remain under the Blues Creek Unit 5, Phase 2 PD regulations.

In comparing the proposed PD with the currently regulating PD (Ordinance 150694), it should be noted that the existing PD allows up to a maximum of 44 single-family lots on the entire 36.7 +/-acre area. The proposed PD reduces the maximum number of lots from 44 to 36 single-family lots in a significantly smaller area that provides for enhanced environmental protection by clustering the single-family attached units and preserving 32.5 +/- acres in the Conservation land use category and zoning district.

As part of the application to amend the PD zoning for Blues Creek, Unit 5 Phase 2, the applicant has submitted a PD Layout Plan that reflects the new boundary of the PD and the proposed development area at the site. Figure 7 below illustrates the PD Layout Plan sheets:

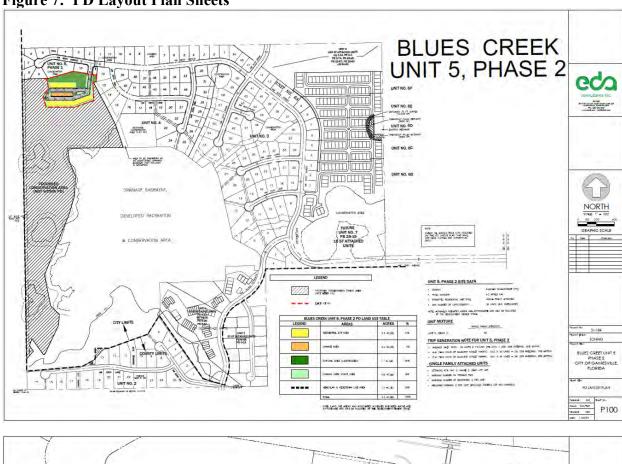


Figure 7: PD Layout Plan Sheets



NOTE: Separate PDF version of these PD Layout Plan sheets are provided as Exhibit 3.

#### Proposed Planned Use District (PUD) & Conservation Future Land Use Categories

City of Gainesville Comprehensive Plan Policy 4.1.1 defines the proposed Planned Use District future land use category as follows:

#### Planned Use District (PUD)

This land use category is an overlay land use category that may be applied on any specific property in the City. The land use regulations pertaining to this overlay district shall be adopted by ordinance in conjunction with an amendment to the Future Land Use Map of this Comprehensive Plan. The category is created to allow the consideration of unique, innovative, or narrowly construed land use proposals that because of the specificity of the land use regulations can be found to be compatible with the character of the surrounding land uses and environmental conditions of the subject land. This category allows a mix of residential and nonresidential uses and/or unique design features which might otherwise not be allowed in the underlying land use category. Each PUD overlay land use category adopted shall address: density and intensity; permitted uses; access by car, pedestrians, bicycle, and transit; trip generation, trip distribution, and trip capture; environmental features; and, when necessary, buffering of adjacent uses. Planned Development zoning shall be required to implement a PUD land use category.

The attached proposed PUD conditions (see Exhibit 4 in the Appendix) are included to show compliance with the PUD requirements in the Future Land Use Element. Because PUD is an overlay land use category, the one of the included conditions indicates that the underlying future land use category should be considered Residential Low.

The proposed PUD is a narrowly construed land use proposal for a small portion of the land that is currently designated Single Family (11.4% of the total 36.7 +/- acres). This smaller area contains the most developable portion of the land from an environmental perspective, and, with the clustering of attached units on platted lots with a reduced footprint, reduces environmental impacts. This is an innovative solution to allow for residential density in the form of attached townhouse units given the single-family character of the surrounding area and the environmental conditions on the property.

The proposed PUD will allow single-family attached units on individually platted lots at a density of up to 8.6 units/acre (maximum of 36 units). Accessory garages for the single-family attached units are allowed along with common area (to be delineated on the PD Layout Plan). The PUD conditions limit the number of bedrooms to a maximum of 72 with a maximum building height of 2 stories. Nonresidential uses are not permitted in the PUD.

Access to the site by car will be from a private drive that connects to the stub-out at NW 80<sup>th</sup> Avenue and NW 57<sup>th</sup> Drive. A connection to the public sidewalk on the north side of NW 80<sup>th</sup> Avenue is in the form of a minimum 5-foot-wide sidewalk and crosswalk system that interconnects the 36 attached single-family dwellings. This is depicted on the PD Layout Plan. There are painted bicycle lanes on both sides of NW 43<sup>rd</sup> Street where the Blues Creek PD entrance is located. Residents within the Blues Creek PD can connect to these bicycle lanes

using the roadway or sidewalk system within the development. There is currently no transit access to the site.

As estimated using the 11<sup>th</sup> Edition of the Institute of Transportation Engineers (ITE) Manual, the maximum anticipated trip generation is 259 new average daily trips (ITE Code 215 (Single-Family Attached Housing)), a reduction of 160 trips from the currently approved PD (419 average daily trips). At the time of platting, the development will be subject to the applicable Transportation Mobility Program Area (TMPA) Zone B criteria as shown in the City's Comprehensive Plan.

To protect environmental features within the PUD/PD area, the platted lots will be configured to maintain a minimum 50-foot buffer between the lot lines and the landward extent of any regulated wetland. Common areas surrounding the platted lots will provide a buffer (larger than what is included on the approved PD Layout Plan) between the proposed single-family attached units and the single-family dwellings to the north and east of the PUD/PD.

The Conservation future land use category is defined in the City's Future Land Use Element Policy 4.1.1 as shown below.

#### Conservation (CON)

This land use category identifies areas environmentally unsuited to urban development, permanent buffers between land uses, areas used for passive recreation and nature parks. Privately held properties within this category shall be allowed to develop at single-family densities of 1 unit per 5 acres. Land development regulations shall determine the appropriate scale of activities, structures and infrastructure that will be allowed.

The 32.5 +/- acres proposed for the Conservation future land use category are appropriate given the wetlands and the Strategic Ecosystem (Millhopper Flatwoods) on the property. Placing this portion of Parcel 06006-052-000 in the Conservation future land use category will help ensure that development will not occur in and around environmentally sensitive areas and will aid in preserving existing natural resources located on-site.

# **Responses to Application Questions**

#### **Surrounding Property Information**

The subject property lies within an area that contains residential uses such as single-family dwellings and attached single-family dwellings.

*North*: To north of the subject property is Single Family land use.

South: To south of the subject property is Single Family land use.

East: To the east is Single Family land use that includes the 90-acre Drainage Easement, Developed Recreation & Conservation Area.

West: Abutting to the west is land in the unincorporated area that is designated Alachua County / UF Campus Master Plan (Institute of Food and Agriculture Sciences (IFAS) facility).

**Adjacent Property Characteristics Table** 

•	<b>Existing Use</b>	FLU Designation	Zoning District
North	Single-family dwellings	Single Family	PD
South	Single-family dwellings	Single Family	PD
East	Single-family dwellings & 90- acre Drainage Easement, Developed Recreation & Conservation Area	Single Family	PD
West	IFAS facility	UF Campus Master Plan (Alachua County)	Alachua County Agricultural

Upon analyzing these existing land use patterns, the proposed land use and zoning changes will not negatively impact the nature of the existing development pattern in the area. The existing development pattern and land use & zoning mapping in the area is primarily single-family dwellings and attached single-family dwellings in the existing Blues Creek PD. Included within the PD, east of the proposed PD amendment area is the 90-acre Drainage Easement, Developed Recreation & Conservation Area that serves the overall Blues Creek PD. To the west, is a large area operated by IFAS in unincorporated Alachua County. The proposed land use and zoning changes will place the majority of the Blues Creek Unit 5, Phase 2 area into Conservation land use and zoning, which will provide environmental protection and buffering. The 4.2-acre +/- area in the proposed PUD/PD area is limited to 36 single-family attached units, which is consistent with other areas within the overall Blues Creek PD that contain townhouse units. The proposed units will be on platted lots for individual owners.

1. Are there other properties or vacant buildings within  $\frac{1}{2}$  mile of the site that have the proper land use and/or zoning for your intended use of this site?

<u>Response</u>: No. The intended use of this property is for single-family attached townhouse units and conservation area. The property is part of an overall PD (Blues Creek PD), so it is the only area under consideration for the intended uses.

2. If the request involves nonresidential development adjacent to existing or future residential, what are the impacts of the proposed use of the property on the following:

Residential streets: Response: Not applicable. There is no nonresidential development proposed.

*Noise and lighting:* Response: Not applicable. There is no nonresidential development proposed.

3. Will the proposed use of the property be impacted by any creeks, lakes, wetlands, native vegetation, greenways, floodplains, or other environmental factors or by property adjacent to the subject property?

<u>Response</u>: Yes, please see the attached Natural Areas Resource Assessment (dated 10/5/2015) and the updated supplement (dated January 5, 2023) in Exhibit 2 in the Appendix.

- 4. Does this request involve either or both of the following:
  - a. Property in a historic district or property containing historic structures? **Response: No.**
  - b. Property with archaeological resources deemed significant by the State? **Response: No.**
- 5. Which of the following best describes the type of development pattern your development will promote?

<u>Response</u>: Urban Infill. The property area is surrounded on the north, south, and east by existing development in the Blues Creek PD. In addition, the subject property has been identified for residential development for decades.

6. Please explain the impact of the proposed change on the community:

<u>Response</u>: The proposed change will add new single-family attached townhouse units to the community's housing stock, which may increase affordability citywide. In addition, the proposed change will add 32.5 acres of land to be protected by with Conservation land use and zoning. This will enhance environmental protections in the area.

7. What are the long-term economic benefits (wages, jobs & tax base)?

<u>Response</u>: The land use change and rezoning will add infill single-family attached units to the City's housing stock, which will add to the City's tax base and create jobs during the construction phase.

8. What impact will the proposed change have on level of service standards?

Roadways:

<u>Response</u>: The proposed change will generate 259 average daily trips. It should be noted that the proposed 36 single-family attached townhouse units and associated vehicle trips are fewer than what are allowed under the current PD, which allows 44 single-family units (a net reduction of 160 average daily trips). The property is located in Zone B of the City's Transportation Mobility Program Area (TMPA), and at the time of development will be required to meet the criteria stated in the City's Transportation Mobility Element.

Recreation:

<u>Response</u>: The proposed 36 single-family attached units are fewer than the previously approved 44 single-family units in PD Ordinance 150694. There will be no impact to the Recreation level of service standards.

Water & Wastewater:

<u>Response</u>: The proposed 36 single-family attached units are fewer than the previously approved 44 single-family units in PD Ordinance 150694. There will be no impact to the Water & Wastewater level of service standards. GRU has indicated that there is adequate capacity to provide services to this proposed development.

Solid Waste:

<u>Response</u>: The proposed 36 single-family attached units are fewer than the previously approved 44 single-family units in PD Ordinance 150694. There will be no impact to the Solid Waste level of service standard. There is adequate solid waste capacity to meet the needs of this proposed development.

Mass Transit:

<u>Response</u>: There is no transit service to this area, therefore there will be no impacts to the mass transit level of service.

Public Schools

Response: A Public Schools Student Generation Calculation Form has been submitted with this application. It is anticipated that there will be a need for 5 Elementary School Student Stations, 2 Middle School Student Stations, and 3 High School Student Stations. In addition, it should be noted that this is an overall reduction of student station demand from the currently approved PD zoning for the property, based on the proposed reduction in number of residential units.

9. Is the location of the proposed site accessible by transit, bikeways or pedestrian facilities?

Response: There is an existing sidewalk on the north side of NW 80<sup>th</sup> Avenue that connects to NW 73<sup>rd</sup> Avenue and the sidewalk system on the west side of NW 43<sup>rd</sup> Street. This proposed development will be interconnected with sidewalks and crosswalks to that public sidewalk along NW 80<sup>th</sup> Avenue that turns into NW 73<sup>rd</sup> Avenue where there are sidewalks on both sides of the street in an area around NW 49<sup>th</sup> Street. There is no existing transit service in this area. There are painted bicycle lanes on NW 43<sup>rd</sup> Street where the Blues Creek PD entrance is located. There is a multi-use path on a portion of the south side of NW 73<sup>rd</sup> Avenue.

#### **Analysis for Changes to the Future Land Use Map**

Future Land Use Element Policy 4.1.3 sets the 11 review criteria for proposed changes to the Future Land Use Map. Each of the 11 criteria are listed below and responses are provided:

1. Consistency with the Comprehensive Plan

Response: The proposed Planned Use District (PUD) and Conservation (CON) future land use categories are consistent with the proposed PD and Conservation zoning districts per the Correspondence with Future Land Use Categories table in Land Development Code Section 30-4.2. The following policies and objective are applicable to the proposed designation:

Future Land Use Element Policy 4.1.1

Planned Use District (PUD)

This land use category is an overlay land use category that may be applied on any specific property in the City. The land use regulations pertaining to this overlay district shall be adopted by ordinance in conjunction with an amendment to the Future Land Use Map of this Comprehensive Plan. The category is created to allow the consideration of unique, innovative, or narrowly construed land use proposals that because of the specificity of the land use regulations can be found to be compatible with the character of the surrounding land uses and environmental conditions of the subject land. This category allows a mix of residential and nonresidential uses and/or unique design features which might otherwise not be allowed in the underlying land use category. Each PUD overlay land use category adopted shall address: density and intensity; permitted uses; access by car, pedestrians, bicycle, and transit; trip generation, trip distribution, and trip capture; environmental features; and, when necessary, buffering of adjacent uses. Planned Development zoning shall be required to implement a PUD land use category.

Response: As stated in this policy, the PUD land use category (as proposed) is appropriate is appropriate for unique and narrowly construed proposals that will be implemented by PD zoning. The subject property is in a unique circumstance given the long-standing PD zoning that has existed on the property (since 1981). Also, this existing Blues Creek PD status came over from Alachua County when it was annexed into the City of Gainesville in various annexations dating back to 2000, 2002, and 2005. This is the final vacant portion of the Blues Creek overall PD, and given changing environmental regulations and housing needs, the proposed PUD land use change for a small portion of the property along with Conservation land use on the remainder is appropriate for this unique circumstance. In addition, the conditions within the proposed PUD (see Exhibit 4) create a narrowly construed development proposal to provide for single-family attached townhomes on platted lots.

#### Conservation (CON)

This land use category identifies areas environmentally unsuited to urban development, permanent buffers between land uses, areas used for passive recreation and nature parks. Privately held properties within this category shall be allowed to develop at single-family densities of 1 unit per 5 acres. Land development regulations shall determine the appropriate scale of activities, structures and infrastructure that will be allowed.

<u>Response:</u> The proposed designation of a large portion of the subject property (32.5 +/-acres) for Conservation land use is consistent with this policy since the property contains multiple wetlands areas and strategic ecosystem which should be protected.

#### Housing Element Goal 4

Ensure housing development does not negatively impact the Gainesville environment.

Response: The proposed PUD land use area (and proposed PD area) includes the area with minimal environmental impacts from future development. In addition, the proposed Conservation land use and zoning area will further protect environmental resources in the immediate area.

#### Housing Policy 4.1.1

The City shall encourage infill housing and cluster subdivisions in order to protect environmentally sensitive lands and to promote energy conservation.

<u>Response:</u> The proposed PUD (and associated PD) amend the existing subdivision layout on the overall Blues Creek Unit 5, Phase 2 PD area to cluster the infill housing units in the most developable portion of the site. The impacted land area is reduced by 32.5 +/- acres, and those 32.5 +/- acres are proposed for Conservation future land use to protect the environmentally sensitive lands.

#### Conservation, Open Space & Groundwater Recharge Element Goal 2

Mitigate the effects of growth and development on environmental resources.

Response: The proposed PUD (and associated PD) minimize the impacts of future development on the subject property by proposing to designate 32.5 +/- acres in the Conservation future land use category. In addition, the single-family attached area in the PUD minimizes environmental impacts by clustering development in the area of the site where environmental resources will be least impacted. Within the PUD area (and associated PD) environmentally sensitive areas will be protected to the greatest degree possible and mitigation provided, if applicable.

#### 2. Compatibility and surrounding land uses

Response: The subject property is currently undeveloped, but there is an existing Blues Creek Unit 5, Phase 2 PD (Ordinance 150694) that approves development of 44 single-family lots of the site. The proposed PUD land use category (with required PD zoning) ensures compatibility by limiting the use of the property to a maximum of 36 attached townhouse residential units with 72 bedrooms on individual platted lots. The overall Blues Creek PD currently includes areas with attached single-family units that area compatible with the single-family detached units. The proposed Conservation future land use area is compatible with the University of Florida IFAS facility to the west that is part of the UF Campus Master Plan.

#### 3. Environmental impacts and constraints

Response: The proposed PUD and Conservation land use areas were selected to minimize the environmental impacts on the subject property. The 4.2 +/- acre portion of the subject property contains the area that reduces any potential environmental impacts. The clustering of attached units in the northern portion of the subject property reduces the encroachment of development on the overall site. The 32.5 +/- acre area proposed for the Conservation future land use category preserves all the environmental features in that area.

4. Support for urban infill and/or redevelopment

Response: The subject property is within the urbanized portion of the City of Gainesville. Urban land uses, centralized utilities, sidewalks, and public roadways are located abutting and adjacent to the parcel to the north, south, and east. The subject property already has entitlements for urban levels of density through the existing PD (Ordinance 150694) that allows for a single-family subdivision. The proposed land use change will allow for an urban infill attached single-family townhouse development on 4.2 +/- acres of the site. This will support urban infill on that site and provide increased housing opportunities in an existing urban residential development area, while preserving 32.5 +/- acres of the site for Conservation land use.

5. Impacts on affordable housing

<u>Response</u>: The proposed land use change will allow for 36 attached single-family townhouse units on platted lots, which may have an impact on affordable housing by adding additional units and providing for a more affordable type of single-family dwelling type than detached units.

6. Impacts on the transportation system

<u>Response</u>: The site is located in Zone B of the Transportation Mobility Program Area (TMPA) and will be required to meet the Zone B requirements when development is proposed on the site. It should be noted that the amended proposal for the subject property reduces the number of housing units from a maximum of 44 to 36, which reduces impacts on the transportation system. The proposed amendments will lessen the

maximum average daily trip (ADT) calculation from 460 ADT to 259 ADT, a reduction of 160 ADT.

In addition, the proposed PUD will provide sidewalks and crosswalks connecting the proposed development to the existing public sidewalk system in the overall Blues Creek PD.

7. An analysis of the availability of facilities and services

<u>Response</u>: The proposed development can be served by centralized Gainesville Regional Utilities potable water, wastewater, and electric services. A private driveway system will connect to the existing public road (NW 80<sup>th</sup> Avenue) in the Blues Creek PD. Planned new sidewalks within the PUD/PD will connect to the existing sidewalks within the Blues Creek PD development.

8. Need for the additional acreage in the proposed future land use category

Response: The subject property is 36.7 +/- acres in size. The proposed change will increase the amount of land in the Conservation future land use category by 32.5 +/- acres, which is desirable in terms of protecting environmental resources on the site. The change from Single Family to PUD for the 4.2 +/- acres will not have any substantial impact on acreage counts in any of the City's future land use categories. The proposed future land use category PUD will allow for fewer residential units (36 versus 44 currently allowed) but will retain residential use on the property.

9. Discouragement of urban sprawl as defined in Section 163.3164, F.S., and consistent with the requirements of Subsection 163.3177(6)(a)9., F.S.

Response: The proposed future land use map change is at an existing urban site that is already in an urban land use category (Single Family). The subject property is surrounded by existing urban development to the north, south, and east that has been in place for decades when examining the existing land use patterns in the immediate area. It does not promote urban sprawl as defined in Section 163.3164, F.S. The site is located in the urban services area.

Section 163.3177(6)(a)9.b., F.S. provides criteria to determine whether a land use amendment discourages the proliferation of urban sprawl. These criteria are listed below with responses.

- b. The future land use element or plan amendment shall be determined to discourage the proliferation of urban sprawl if it incorporates a development pattern or urban form that achieves four or more of the following:
- (I) Directs or locates economic growth and associated land development to geographic areas of the community in a manner that does not have an adverse impact on and protects natural resources and ecosystems.

Response: The site is surrounded by existing development to the north, south, and east that has existed in the area since the 1980s and beyond. The proposed land use change will place 32.5 +/- acres in the Conservation future land use category to protect natural resources and the ecosystem.

(II) Promotes the efficient and cost-effective provision or extension of public infrastructure and services.

<u>Response</u>: The site is located in an area surrounded by uses served by existing public facilities and services (including roads, sidewalks, and centralized utilities).

(III) Promotes walkable and connected communities and provides for compact development and a mix of uses at densities and intensities that will support a range of housing choices and a multimodal transportation system, including pedestrian, bicycle, and transit, if available.

Response: The proposed development will include a sidewalk system within the development that connects to the public sidewalk system along NW 80<sup>th</sup> Avenue. That sidewalk system connects to sidewalks on the west side of NW 43<sup>rd</sup> Street and painted inlane bicycle facilities. is located on South Main Street with existing sidewalks on both sides of the street. The proposed 4.2 +/- acre PUD area will provide a compact single-family attached townhouse development that provides for housing choice.

(IV) Promotes conservation of water and energy.

<u>Response</u>: The subject property is surrounded by existing developed areas to the north, east, and south that are served by existing public facilities and services, thereby reducing sprawl and wasteful allocation of resources.

(V) Preserves agricultural areas and activities, including silviculture, and dormant, unique, and prime farmlands and soils.

<u>Response</u>: The proposed land use change does not include any existing lands designated as Agricultural on the future land use map. The subject property currently has a Single Family future land use designation. Thus, there is no reduction in agricultural land as a result of this proposed future land use amendment.

(VI) Preserves open space and natural lands and provides for public open space and recreation needs.

Response: The subject property currently is not in a Conservation or public lands category (it is in the Single Family future land use category). Therefore, there is no reduction in current open space or recreational area that will occur as a result of the proposed future land use change. In fact, because 32.5 +/- acres are proposed for the Conservation future land use category, this will preserve open space and add additional Conservation acreage in the City of Gainesville.

(VII) Creates a balance of land uses based upon demands of the residential population for the nonresidential needs of an area.

<u>Response</u>: There is existing, surrounding residential development in the overall Blues Creek PD proximate to the subject property. The proposed PUD and Conservation future land use categories will allow for residential units on the property in the proposed PUD area and for the preservation of open space in the proposed Conservation area.

(VIII) Provides uses, densities, and intensities of use and urban form that would remediate an existing or planned development pattern in the vicinity that constitutes sprawl or if it provides for an innovative development pattern such as transit-oriented developments or new towns as defined in s. 163.3164.

<u>Response</u>: The subject property is part of an existing, developed site (Blues Creek PD) that is currently in an urban area served by existing public facilities and services, so it does not constitute sprawl. The subject property currently has a Single Family future land use category designation. The proposed land use change would allow additional residential density in a portion of the site (4.2 +/- acres) to be used for single-family attached residential development.

10. Need for job creation, capital investment, and economic development to strengthen and diversify the City's economy; and

<u>Response</u>: The proposed land use change will allow single-family attached residential units in a portion of the subject property, which will increase the City's tax base and provide jobs during the construction phase.

11. Need to modify land use categories and development patterns within antiquated subdivisions as defined in Section 163.3164, F.S.

<u>Response</u>: The subject property does not include any antiquated subdivisions as defined in Section 163.3164, F.S. Therefore, this provision is not applicable.

# **Analysis for Changes to Zoning**

Section 30-3.14 of the City's Land Development Code establishes the criteria for review of rezoning proposals. There are 10 review criteria listed as shown below. Responses to each of the criteria are provided. In addition to the general review criteria for rezoning of properties, the Land Development Code includes 10 specific review criteria for rezoning to Planned Development in Section 30-3.17. Responses to each of those additional 10 criteria are below the responses to the general criteria.

Sec. 30-3.14. - Rezoning criteria.

Applications to rezone property shall be reviewed according to the following criteria:

A. Compatibility of permitted uses and allowed intensity and density with surrounding existing development.

Response: The proposed PD zoning will allow a single-family attached dwellings on individually platted lots (see the Permitted Uses listed in the PD Conditions) on a 4.2 +/- portion of the subject property. The proposed single-family attached dwellings are compatible with the existing single-family detached dwellings that are north, south, and east of the PD area. The overall Blues Creek PD includes existing single-family attached units in some areas of the PD. Natural areas shown to be undisturbed on the PD Layout Plan (see included PD Layout Plan) and common areas provide buffers between the single-family attached units and the single-family detached housing units in the overall Blues Creek PD.

Figure 7 below illustrates that the proposed PD provides for increased buffers and setbacks from the single-family development when compared with the existing PD layout.

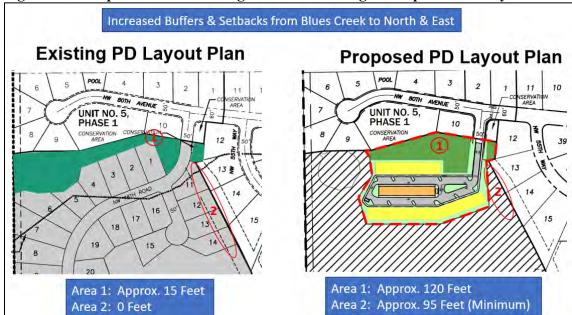


Figure 7: Comparison of Buffering Between Existing & Proposed PD Layout

The proposed maximum residential density in the PD is 8.6 units/acre, which is slightly higher than the maximum density allowed in the Single Family future land use category (8 du/acre) and significantly less than what is allowed in the Residential Low future land use category (15 du/acre).

The 32.5 +/- acre area of the subject property proposed for Conservation zoning is compatible with the UF IFAS Campus Master Plan property to the west and compatible with the single-family detached uses in the overall Blues Creek PD. The Conservation-zoned area will provide a buffer to housing units to the south and protect the environmental resources in the area.

B. The character of the district and its suitability for particular uses.

Response: The PD zoning district is characterized by allowing flexibility for specific conditions, uses, and densities that a traditional zoning district does not permit. It should be noted that the subject property currently has a PD zoning (Ordinance 150694) that was adopted in 2017. Ordinance 150694 amended an existing PD that regulated the property (based on a PUD from Alachua County prior to annexation). Therefore, PD zoning has been on this property for many years. The current proposal for PD zoning is an amendment to the existing PD ordinance to allow single-family attached dwelling units on individually platted lots on a portion of the original 36.7 acres. In this proposal, which reduces the allowable number of residential dwelling units from a maximum of 44 to 36, only a portion (4.2 +/- acres) of the original acreage is proposed for development to reduce environmental impacts. The remaining 32.5 +/- acres are proposed for Conservation zoning, which is appropriate for protecting the environmental conditions at the site.

C. The proposed zoning district of the property in relation to surrounding properties and other similar properties.

Response: Properties to the north, east, and south are all currently zoned PD (part of the overall Blues Creek PD). The subject property is zoned PD (Ordinance 150694) and is surrounded to the north, east, and south by the Blues Creek PD that contains both single-family detached and single-family attached dwelling units. As part of this proposal, the proposed PD area will be bounded to the west and south by Conservation zoning.

The portion of the property proposed for Conservation zoning is bounded to the west by unincorporated Alachua County and is zoned Agricultural consistent with the IFAS facility use on the property. The proposed Conservation zoning area (32.5 +/- acres) will abut the proposed amended PD area (4.2 +/- acres) to the east and north. It will abut the existing Blues Creek PD to the east and south. The Conservation area will remain undeveloped and provide a buffer to surrounding property.

D. Conservation of the value of buildings and encouraging the most appropriate use of land throughout the city.

<u>Response</u>: The property is currently undeveloped. Therefore, there are no issues with the conservation of buildings.

E. The applicable portions of any current city plans and programs such as land use, traffic ways, recreation, schools, neighborhoods, stormwater management and housing.

<u>Response</u>: The site falls within Transportation Mobility Program Area (TMPA) Zone B. The proposed PD will be required to meet the TMPA Zone B criteria when development occurs on the property.

F. The needs of the city for land areas for specific purposes to serve population and economic activities.

<u>Response</u>: The proposed amendment to the current PD zoning on the property is consistent with the existing residential development in the surrounding overall Blues Creek PD. The proposed PD will allow for single-family attached townhouse units

to serve the residential needs of the City of Gainesville and will provide an alternative housing type.

G. Whether there have been substantial changes in the character or development of areas in or near an area under consideration for rezoning.

<u>Response</u>: The major changed condition in the area is the applicant's proposal to place a major portion of the subject property (32.5 +/- acres) in Conservation zoning which will further protect and avoid potential impacts to environmental resources on the site.

H. The goals, objectives, and policies of the Comprehensive Plan.

Response: Rezoning of this property to the PD and Conservation zoning districts (property is currently zoned PD and a PD amendment is proposed for a small portion of the subject property) is being proposed to diversify housing types in the Blues Creek PD and protect environmental resources, consistent with the goals, objectives, and policies of the City's Comprehensive Plan as indicated in the following goals, objectives, and policies. It should also be noted that the proposed PD zoning district is the implementing district for the proposed PUD future land use category, as required by that category.

FLU Objective 1.5

Discourage the proliferation of urban sprawl.

<u>Consistency</u>: The PD area is an infill development proposal that is in an already developed area of the city that has existing public utilities and services, including roads, transit service, and utilities. The proposed PD area currently has existing entitlements based on the PD zoning for 44 single-family units.

Housing Element Overall Goal

Encourage a sufficient supply of adequate, decent, safe, sanitary, healthy, and affordable rental and owner-occupied housing for all income groups.

<u>Consistency</u>: The PD proposes 36 single-family attached townhouse units on individual platted lots to provide for owner-occupied housing in the City of Gainesville.

Housing Element Goal 4

Ensure housing development does not negatively affect the Gainesville environment.

<u>Consistency</u>: The rezoning proposal includes reducing the development footprint of the Blues Creek Unit 5, Phase 2 PD area to 4.2 +/- acres and rezoning 32.5 +/- acres to Conservation to reduce the impacts of development on environmental features.

Housing Element Policy 4.1.1

The City shall encourage infill housing and cluster subdivisions in order to protect environmentally sensitive lands and to promote energy conservation.

<u>Consistency</u>: The PD amendment proposes infill housing development that will be clustered on small, individually platted lots. The proposal also includes rezoning 32.5 +/- acres to Conservation zoning to protect environmental features.

Conservation, Open Space & Groundwater Recharge Element Goal 2 Mitigate the effects of growth and development on environmental resources.

Response: The proposed PD minimize the impacts of future development on the subject property by proposing to designate 32.5 +/- acres in the Conservation future land use category. In addition, the single-family attached area in the PUD minimizes environmental impacts by clustering development in the area of the site where environmental resources will be least impacted.

*I.* The facts, testimony, and reports presented at public hearings.

Response: This report will be presented to the City Plan Board at a future public hearing in 2023. The supporting documents include an environmental report submitted with the application. The Neighborhood Workshop was held on Wednesday, November 30, 2022. The submittal includes information about the Neighborhood Workshop and all the required application forms. After the Plan Board votes on a recommendation concerning the proposed land use and zoning changes, the items will be heard at a City Commission meeting.

- J. Applications to rezone to a transect zone shall meet the following additional criteria:
- 1. The proposed T-Zone shall provide a logical extension of an existing zone, or an adequate transition between zones with the potential to establish a coherent expansion of nearby transects with elements including a code compliant street system with sidewalks, pedestrian circulation, lighting systems, and utility infrastructure.
- 2. The area shall have had a change in growth and development pattern to warrant the rezoning to a more or less urban T-Zone.
- 3. The request shall be consistent with the overall City of Gainesville vision for growth and development as expressed in the City of Gainesville Comprehensive Plan.
- 4. The subject land has the characteristics of a T-Zone or has the potential to successfully facilitate development consistent with the intent of the T-Zone, including the creation of a more urban form through prescriptive building placement standards, enhanced window glazing, and an emphasis on the pedestrian experience.

**Response:** Not applicable. This is not an application for rezoning to a transect zone.

# **Analysis for Changes to PD Zoning**

The City of Gainesville Land Development Code Chapter 30, Article III, Division 4 establishes the Planned Development zoning district and the requirements for rezoning to this district. Section 30-3.21 contains information about amendments to an approved PD as stated below:

A. Except as otherwise provided in this section, an amendment to an approved PD (except for an extension of a time limit) shall be accomplished only by a new PD rezoning application.

Because this proposed amendment to the Blues Creek Unit 5, Phase 2 PD involves modifications to specific conditions text included within the existing PD ordinance (Ordinance 150694), it is required to meet the Sec. 30-3.17 review criteria for a rezoning to PD.

Each PD ordinance must contain a specific list of permitted uses in the PD. The table below indicates the proposed uses permitted by right in the Blues Creek Unit 5, Phase 2 PD:

#### Uses Permitted by Right in the Blues Creek Unit 5, Phase 2 Planned Development

Accessory garages for the single-family attached dwelling units

Attached dwellings in the form of zero-lot line single-family attached units on platted lots

Common area as illustrated on the PD Layout Plan

This updated list of permitted uses amends the sole allowed use of single-family detached dwellings in the PD under Ordinance 150694. This amendment will allow for a different housing type that is clustered in a smaller area, which provides for better environmental protection for the southern portion of the parcel (proposed for the Conservation future land use category and Conservation zoning district). The subject property is under unified control by New Generation Home Builders, Inc. as is required by Section 30-3.18 of the Land Development Code. Exhibit 5 in the Appendix contains the proposed amendments to the existing PD conditions for the subject property. New conditions are also proposed that are relevant to the new proposal.

Responses to the review criteria for a PD rezoning are shown below.

#### Sec. 30-3.17. Review criteria.

In addition to the general review criteria for rezonings provided by this article, the city plan board and the city commission shall evaluate PD applications according to the following additional criteria:

A. Consistent with Comprehensive Plan. A PD application may only be approved if it is consistent with the Comprehensive Plan.

<u>Response:</u> The proposed PD amendment is consistent with the related proposed PUD land use change. PD zoning is the implementing zoning for the PUD future land use category. The following Future Land Use Element policies and objectives are supportive of this proposed PD amendment.

FLU Objective 1.5

Discourage the proliferation of urban sprawl.

<u>Consistency</u>: The PD area is an infill development proposal that is in an already developed area of the city that has existing public utilities and services, including

roads, transit service, and utilities. The proposed PD area currently has existing entitlements based on the PD zoning for 44 single-family units.

Housing Element Overall Goal

Encourage a sufficient supply of adequate, decent, safe, sanitary, healthy, and affordable rental and owner-occupied housing for all income groups.

<u>Consistency</u>: The PD proposes 36 single-family attached dwelling units on individual platted lots to provide for owner-occupied housing in the City of Gainesville.

Housing Element Goal 4

Ensure housing development does not negatively affect the Gainesville environment.

<u>Consistency</u>: The rezoning proposal includes reducing the development footprint of the Blues Creek Unit 5, Phase 2 PD area to 4.2 +/- acres and rezoning 32.5 +/- acres to Conservation to reduce the impacts of development on environmental features.

Housing Element Policy 4.1.1

The City shall encourage infill housing and cluster subdivisions in order to protect environmentally sensitive lands and to promote energy conservation.

<u>Consistency</u>: The PD amendment proposes an infill housing development that will be clustered on small, individually platted lots. The proposal also includes rezoning 32.5 +/- acres to Conservation zoning to protect environmental features.

Conservation, Open Space & Groundwater Recharge Element Goal 2 Mitigate the effects of growth and development on environmental resources.

<u>Response:</u> The proposed PD minimize the impacts of future development on the subject property by proposing to designate 32.5 +/- acres in the Conservation future land use category. In addition, the single-family attached area in the PUD minimizes environmental impacts by clustering development in the area of the site where environmental resources will be least impacted.

B. Conformance to PD purpose. A PD application may only be approved if it is in conformance with the purpose of PDs as articulated in section 30-3.15.

Sec. 30-3.15 Purpose. The purpose of the planned development (PD) district is to provide a particularized zoning district that recognizes unique conditions, allows design flexibility, and promotes planned diversification and integration of uses and structures, which other zoning districts cannot accommodate, while also retaining the city commission's authority to establish such limitations and regulations as it deems necessary to protect the public health, safety, and general welfare. The PD district is designed to:

- 1. Encourage flexible land development that sustainably uses land and infrastructure, reduces transportation needs, conserves energy, and maximizes the preservation of natural resources.
- 2. Allow the integration of different land uses and densities in one development that would not otherwise be provided for in other zoning districts in this chapter, and which encourage compatibility in overall site design and scale both internal and external to the project site.
- 3. Permit outstanding and innovative residential and nonresidential developments with quality-of-life design features, such as an integration of housing types and accommodation of changing lifestyles within neighborhoods; design that encourages internal and external convenient and comfortable travel by foot, bicycle, and transit through such strategies as pedestrian scale, a building orientation generally toward streets and sidewalks, parking located to the side or rear of buildings, narrow streets, modest setbacks, front porches, connected streets, multiple connections to nearby land uses, terminated vistas, recessed garages, alleys, enhances landscaping, and mixeduses.
- 4. Provide flexibility to meet changing needs, technologies, economics, and consumer preferences and allows for ingenuity and imagination in the planning and development of relatively large tracts.
- 5. Achieve overall coordinated building and facility relationships and infill development, and eliminate the negative impacts of unplanned and piecemeal development.

Response: The PD amendment application is for an existing approved PD (Ordinance 150694) that is part of an overall PD annexed into the City over several years (2001, 2002, 2005). The overall Blues Creek PD ordinance was based on an Alachua County PUD master plan that was adopted in 1999. This is a unique situation given the annexations and evolution of time for the PD.

The amendments proposed to the PD are to reduce the size of the PD land area (because a portion of the existing Blues Creek Unit 5, Phase 2 PD land area is proposed for the Conservation future land use category and Conservation zoning district) and to update the PD conditions to reflect a new development program on the smaller acreage.

#### The proposed PD:

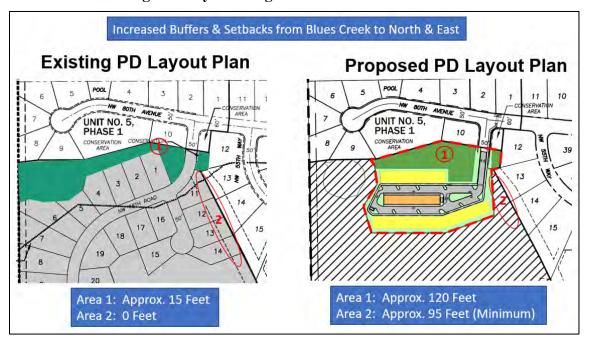
- 1. <u>Encourages flexible land development.</u> The proposed PD amendment will allow single-family attached units on individually platted lots. This will reduce the development footprint allow a large portion of the existing PD to be placed into Conservation zoning to preserve natural resources.
- 2. <u>Allows the integration of different land uses and densities in one development</u>
  <u>that would not otherwise be provided for in other zoning districts.</u> The Blues
  Creek Unit 5, Phase 2 PD is part of an overall Blues Creek PD. The proposed

- PD amendment will allow single-family attached land use at a maximum density of 8.6 units per acre while providing for compatibility with the surrounding single-family dwellings.
- 3. Permit outstanding and innovative residential development with quality-of-life design features such as integration of housing types. This PD amendment will allow for single-family attached dwelling units in an area that is primarily designated for single-family detached units. The amendment will allow for the construction of single family attached units. The Blues Creek Unit 5, Phase 2 PD includes approximately 1.1 acres (26% of the site) in Natural Undisturbed Area and 0.9 acres (21%) of the site in Common Open Space for quality of life. Exhibit 6 in the Appendix illustrates the conceptual front elevations of the single-family attached dwelling units.
- 4. <u>Provide flexibility to meet changing needs, technologies, economics, and consumer preferences.</u> The proposed PD amendment provides flexibility to construct single-family attached dwelling units on individually platted lots. This is a more economical route to home ownership and reflects current consumer preferences.
- 5. Achieve overall coordinated building and facility relationships and infill development and eliminate the negative impacts of unplanned and piecemeal development. The proposed PD amendment is for an infill development on a smaller footprint of land. This allows for the preservation of 32.5 +/- acres of land in Conservation zoning and land use to reduce environmental impacts in the area. The subject property is the last undeveloped parcel within the immediate area and the proposed PD amendment provides for a planned development of the site that maximizes public facilities by utilizing property that can be served by existing utilities and roads.
- C. Internal compatibility. All uses proposed within a PD shall be compatible with other proposed uses; that is, no use may have any undue adverse impact on any neighboring use, based on the streetscape, treatment of pedestrian ways and circulation, motor vehicle circulation, and the separation and buffering of parking areas and sections of parking areas; the existence or absence of, and the location of, focal points and vistas, open spaces, plazas, recreational areas and common areas, and use of existing and proposed landscaping; use of the topography, physical environment and other natural features; use and variety of building setback or build-to lines, separations and buffering; use and variety of building groupings, building sizes, architectural styles, and materials; variety and design of dwelling types; particular land uses proposed, and conditions and limitations thereon; and any other factor deemed relevant to the privacy, safety, preservation, protection or welfare of any proposed use within the PD.

<u>Response:</u> The proposed uses within the PD are all internally compatible. The only permitted uses are single-family attached dwelling units with associated garages and common area.

D. External compatibility. All uses proposed within a PD shall be compatible with existing and planned uses of properties surrounding the PD; that is, no internal use may have any avoidable or undue adverse impact on any existing or planned surrounding use, nor shall any internal use be subject to undue adverse impact from existing or planned surrounding uses. An evaluation of the external compatibility of a PD should be based on the following factors: adjacent existing and proposed uses, design of the development, traffic circulation, and density and intensity.

Response: The proposed PD is surrounded on the north and east by existing single-family development in the overall Blues Creek PD. Within the overall Blues Creek PD, there are other single-family attached developments. The proposed Undisturbed Natural Area and Common Area within the proposed PD will provide extensive buffering between the PD and the single-family dwellings (as indicated in the exhibit below). The proposed Conservation land use and zoning area will also buffer development within the proposed PD from the UF Campus Master Plan to the west and the single-family dwellings to the south.



E. Intensity of development. The residential density and intensity of use of a PD shall be compatible with and shall have no undue adverse impact upon the physical and environmental characteristics of the site and surrounding lands and shall comply with the policies and density limitations set forth in the Comprehensive Plan. Within the maximum limitation of the Comprehensive Plan, the permitted residential density and intensity of use in a PD may be adjusted upward or downward in consideration of the following factors: the availability and location of public and utility services and facilities; the trip capture rate of development; and the degree of internal and external connectedness of streets.

Response: The maximum residential density at the site is set forth in the proposed PD Amendment Conditions as 8.6 units per acre. The proposed residential density is lower than that allowed in the RMF-5 zoning district and similar to the maximum single-family residential density of 8 units per acre. Existing public services are

available to serve the site. The proposed PD will connect to the public street system at NW 80<sup>th</sup> Avenue via an internal driveway system that connects to the stub out at NW 57<sup>th</sup> Drive. Impacts to the environmental features at the PD site are minimized, and a significant portion of land that is currently in the PD (32.5 +/- acres) is proposed for Conservation land use and zoning to protect environmental features.

F. Usable open spaces, plazas and recreation areas. Usable open spaces, plazas and recreation areas provided within a PD shall be evaluated based on conformance with the policies of the Comprehensive Plan and the sufficiency of such areas to provide appropriate recreational opportunities, protect sensitive environmental areas, conserve areas of unique beauty or historical significance, enhance neighborhood design, and encourage compatible and cooperative relationships between adjoining land uses.

Response: As can be noted on the PD Layout Plan, 0.9 acres (21% of the PD area) is in Common Open Space to provide for passive recreation. An additional 1.1 acres are designated as Undisturbed Natural Area (26% of the PD area). The Undisturbed Natural Area will protect sensitive environmental areas, including wetland buffers. The Undisturbed Natural Area and Common Open Space areas provide significant buffers between the proposed PD and existing single-family dwellings.

G. Environmental constraints. The site of the PD shall be suitable for use in the manner proposed without hazards to persons either on or offsite from the likelihood of increased flooding, erosion or other dangers, annoyances or inconveniences. Condition of soil, groundwater level, drainage and topography shall all be appropriate to the type, pattern and intensity of development intended. The conditions and requirements of the protection of resources article shall be met.

Response: The proposed PD has been planned and designed to take into account existing environmental constraints. The PD Layout Plan is arranged in a manner to avoid environmentally sensitive areas to the greatest degree possible, including provision of buffers from sinkholes and wetlands. Impacts are also minimized to the greatest degree possible and compliance with applicable regulations regarding mitigation shall be provided, discussed in more detail in the accompanying Environmental Assessment.

H. External transportation access. A PD shall be located on, and provide access to, a major street (arterial or collector) unless, due to the size of the PD and the type of uses proposed, it will not adversely affect the type or amount of traffic on adjoining local streets. Access shall meet the standards set in chapter 23 and chapter 30, article VI. Connection to existing or planned adjacent streets is encouraged. The trip generation report shall be signed by a professional engineer registered in the state when there is a difference between the traffic report provided by the petitioner and the concurrency test.

Response: The PD connects to NW 80<sup>th</sup> Avenue via an internal driveway system that connects to the stub out at NW 57<sup>th</sup> Drive. NW 80<sup>th</sup> Avenue is a local street, but the proposed PD contains only 36 single-family attached units, which is fewer than the 44 units allowed under the existing approved PD. When development occurs at the site, it will be subject to Zone B Transportation Mobility Program Area (TMPA) requirements as set forth in the City's Transportation Mobility Element of the Comprehensive Plan.

I. Internal transportation access. Every dwelling unit or other use permitted in a PD shall have access to a public street directly or by way of a private road, pedestrian way, court or other area that is either dedicated to public use or is a common area guaranteeing access. Permitted uses are not required to front on a dedicated public road. Private roads and other accessways shall be required to be constructed so as to ensure that they are safe and maintainable.

<u>Response:</u> As illustrated on the proposed PD Layout Plan, access for the subject property is from a driveway system that connects to a stub out of NW 57<sup>th</sup> Drive off NW 80<sup>th</sup> Avenue. The driveway system will be part of the common area vehicular and pedestrian use area to guarantee units in the PD access to a public street.

J. Provision for the range of transportation choices. Sufficient off-street and on-street parking for bicycles and other vehicles, as well as cars, shall be provided. Parking areas shall be constructed in accordance with such standards as are approved by the city commission to ensure that they are safe and maintainable and that they allow for sufficient privacy for adjoining uses. When there is discretion as to the location of parking in the project, it is strongly encouraged that all motor vehicle parking be located at the rear or interior side of buildings, or both. The design of a PD should, whenever feasible, incorporate appropriate pedestrian and bicycle accessways so as to provide for a variety of mobility opportunities. Connection to all sidewalks, greenways, trails, bikeways, and transit stops along the perimeter of the PD is required. Where existing perimeter sidewalks do not exist, sidewalks shall be provided by the development.

Response: As illustrated on the PD Layout Plan, the proposed Blues Creek Unit 5, Phase 2 PD includes sidewalks and crosswalks connecting to the public sidewalk along NW 80<sup>th</sup> Avenue for transportation choice. The sidewalk along the north side of NW 80<sup>th</sup> Avenue connects to the Blues Creek sidewalk system that reaches NW 43<sup>rd</sup> Street at the development entrance. The overall Blues Creek PD connects to NW 43<sup>rd</sup> Street where there are in-lane bicycle facilities. The PD Conditions include a requirement for a minimum of 2 parking spaces per unit (which may be in garages or surface parking) to ensure sufficient parking for cars.

#### **Conclusion**

As stated in this report, the proposed PD amendment for the Blues Creek Unit 5, Phase 2 PD is necessary due to the change in development proposal (changing from single family detached units to single-family attached units) and the reduction in the size of the PD area (from 36.7 +/-acres to 4.2 +/- acres) due to a proposed zoning and land use change that would remove 32.5 +/-acres from the PD and put those acres in the Conservation future land use category and Conservation zoning district.

Since those 32.5 +/- acres would no longer be developed as part of the PD, it is not appropriate for it to remain in the Blues Creek Unit 5, Phase 2 PD. The proposed PD amendment provides a new PD Layout Plan for the property that shows the removal of proposed Conservation acreage. In addition, this proposed PD amendment amends several of the conditions in the existing PD and adds additional conditions that are appropriate for the revised development program. The

PD amendment adds single-family attached units as a permitted uses with associated garages and common area.

The proposed PUD land use change for the 4.2 +/- -acre PD area is appropriate to provide compatibility of the single-family attached units with the neighboring single family detached units. The proposed Conservation land use change is appropriate to protect the environmental resources in the that area. The proposed rezonings and land use changes are consistent with each other and with the City's Comprehensive Plan.

# **Appendix**

Exhibit 1: Blues Creek Unit 5, Phase 2 PD Ordinance 150694

**Exhibit 2: Environmental Assessment Report** 

**Exhibit 3: PD Layout Plan Sheets** 

**Exhibit 4: PUD Conditions** 

**Exhibit 5: PD Conditions** 

**Exhibit 6: Conceptual Single-Family Attached Unit Front Elevation** 

## Exhibit 1

# Blues Creek Unit 5, Phase 2 PD, Ordinance 150694

1	ORDINANCE NO. 150694
2 3 4 5 6 7 8 9	An ordinance of the City of Gainesville, Florida, amending the Zoning Map Atlas by rezoning to Planned Development District (PD) approximately 36.7 acres of property located at 7000-7800 block of NW 58 <sup>th</sup> Street, as more specifically described in this ordinance and commonly referred to as Blues Creek Unit 5, Phase 2; adopting PD maps, a PD report, and development conditions; providing for enforcement; providing a severability clause; providing a repealing clause; and providing an effective date.
11	WHEREAS, Planned Development District (PD) zoning is a zoning category that allows
12	for landowners or developers to submit unique proposals that are not addressed or otherwise
13	provided for in the zoning districts and land development regulations established by the City of
14	Gainesville Land Development Code; and
15	WHEREAS, on July 21, 1981, the Alachua County Commission approved a Planned
16	Unit Development by Resolution No. Z-81-68, which was further amended by a revised Master
17	Plan for Blues Creek adopted on November 1999. Portions of Blues Creek PUD were annexed
18	into the City of Gainesville. The City of Gainesville applied City future land use categories and
19	also rezoned the property to the City of Gainesville zoning category of "Planned Development
20	District" by Ordinance No. 030472 adopted on October 27, 2003 and Ordinance No. 041187
21	adopted on November 28, 2005.
22	WHEREAS, Section 30-224(a) of the City of Gainesville Land Development Code
23	provides that, with certain exceptions, an amendment to a previously approved Planned
24	Development (PD) may only be accomplished by a rezoning ordinance accompanied by a new

proposed Planned Development (PD); and

1	WHEREAS, by initiation of the owners of the subject property to amend the subject		
2	property's Planned Development District (PD) zoning, notice of public meetings was given as		
3	required by law; and		
4	WHEREAS, on February 25, 2016, a public hearing was held by the City Plan Board,		
5	which acts as the local planning agency pursuant to Section 163.3174, Florida Statutes, where it		
6	recommended approval of the petition with certain revisions,		
7	WHEREAS, on May 19, 2016, June 2, 2016 and September 1, 2016, the Cit		
8	Commission heard this item. On September 15, 2016, the City Commission held a public		
9	hearing and approved the petition with certain revisions; and		
10	WHEREAS, at least ten (10) days' notice has been given once by publication in a		
11	newspaper of general circulation notifying the public of this proposed ordinance and of public		
12	hearings in the City Hall Auditorium located on the first floor of City Hall in the City of		
13	Gainesville; and		
14	WHEREAS, public hearings were held pursuant to the notice described above at which		
15	hearings the parties in interest and all others had an opportunity to be and were, in fact, heard;		
16	and		
17	WHEREAS, the City Commission finds that the amendments to the Planned		
18	Development District (PD) zoning for the property described herein (Unit 5, Phase 2) is		
19	consistent with the City of Gainesville Comprehensive Plan, Ordinance No. 021178, and the		
20	Planned Development objectives in the Land Development Code.		
21	NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE		
22	CITY OF GAINESVILLE, FLORIDA:		

2

The Planned Development conditions and requirements set forth herein

Petition No. PB-15-115 PDA

Section 1.

1	apply only to the following described property, commonly referred to as "Blues Creek, Unit 5,		
2	Phase 2":		
3 4 5 6 7	See legal description attached as Exhibit "A" and made a part hereof as if set forth in full. The location of the property is shown on Exhibit "B" for visual reference. In the event of conflict or inconsistency, Exhibit "A" shall prevail over Exhibit "B".		
8	<b>Section 2.</b> The use and development of the property described in Section 1 of this		
9	ordinance shall be consistent with the City of Gainesville Comprehensive Plan, and shall be		
10	regulated by the following exhibits that are attached to this ordinance and made a part hereof as		
11	if set forth in full:		
12	1. Exhibit "B" consists of the PD Layout Plan map titled "Blues Creek Unit 5, Phase		
13	2" dated January 11, 2016 and revised February 1, 2017; and		
14	2. Exhibit "C" consists of the PD Report titled "Planned Development Report		
15	Amendment Blues Creek Unit 5, Phase 2", dated October 6, 2015 and revised December		
16	1, 2015; December 21, 2015 and February 1, 2017.		
17	In the event of conflict or inconsistency, the order of precedence shall be as follows, with		
18	number 1 taking precedence over number 2 and so on: 1) the development standards set forth in		
19	Section 3 of this ordinance; 2) Exhibit "B"; 3) Exhibit "C"; and 4) The City's Land Development		
20	Code.		
21	Section 3. The use and development of the property described in Section 1 of this		
22	ordinance shall be regulated by the following development standards:		
23	(A)Lots bordering the 90-acre Drainage Easement, Developed Recreation & Conservation		
24	Area in the central portion of the property shall not extend into the 90-acre area. Lot		
25	lines for Unit 5, Phase 2 as shown on the PD Layout Plan are conceptual only and when		

platted all lots shall be configured to maintain a minimum 35-foot buffer between the lot line and the landward extent of any regulated wetland.

- (B) Local streets should, to the maximum extent practicable, avoid crossing flood plain, wetland, seepage or sinkhole areas. Where local streets abut or are proximate to these areas, the surface water management system should promote natural drainage patterns which occur there.
- (C) At the time of final plat approval, Unit 5 Phase 2 shall meet the City of Gainesville Transportation Mobility Program Area (TMPA) requirements or transportation mobility requirements then in effect.
- (D) Development activity within the 90-acre Drainage Easement, Developed Recreation and Conservation Area shall be consistent with Suwannee River Water Management District Permit number 4-87-00067 as it may be amended from time to time. Any utility crossing (including potable water, wastewater, electric and other utilities) between Units 2 and 5, as conceptually illustrated on the PD Layout Plan, shall be limited to an underground, non-open cut type crossing with no surface disturbance. This allowance of utility crossings is consistent with the City's Comprehensive Plan and the Planned Development objectives in the Land Development Code.
- (E) The 90-acre Drainage Easement, Developed Recreation and Conservation Area and all other conservation areas shall be managed and maintained in accordance with the provisions of a conservation management plan and conservation easement, as approved by the City at the time of final plat approval. Drainage easements and utility easements shall be allowed in the conservation areas.

- (F) A lift station shall be allowed to service Unit 5, Phase 2. If a lift station is utilized, the lift station location shall be located on a separate lot and shall be depicted as such on the plat.
- (G) Each housing unit within Unit 5, Phase 2 shall be equipped with a residential sprinkler system in compliance with the current edition (at the time of issuance of a building permit) of the National Fire Protection Association NFPA 13D: Standard for the installation of sprinkler systems in one- and two-family dwellings and manufactured homes requirements for one-family dwellings.
- (H) Access to Lots 1-36 (as conceptually depicted on the PD Layout Plan) in Unit 5, Phase 2 shall be a minimum width of 50 feet, shall be constructed in accordance with the Public Works Design Manual as a public road and shall be dedicated to the City as provided in city code.
- (I) In order to protect the wetlands and wetland buffer areas south of lots 29 and 34-36 in Unit 5, Phase 2 (as conceptually depicted on the PD Layout Plan), access to Lots 37-44 (as conceptually depicted on the PD Layout Plan) shall be in the form of a private drive with a recorded perpetual public ingress/egress easement that includes a public utility easement in favor of the City. The cross-section for this public ingress/egress easement shall be a minimum 40-feet in width and shall include a shared pedestrian facility flush with the pavement with a design that is acceptable to and approved by the Public Works Department during design plat review.
- (J) Encroachment of the public road and private drive into the 35-foot wetland buffer area is allowed in limited areas where site constraints exist in Unit 5, Phase 2. However, the overall average 50-foot wetland buffer shall be maintained.

1	(K) Existing trees that are shown to be preserved on the construction plans and that are		
2	approved by the Urban Forestry Inspector may be used to meet the shade tree		
3	requirements along the public roads and private drive in Unit 5, Phase 2. Tree barricades		
4	shall be used during construction activities to protect existing trees that are shown to be		
5	preserved and that will be used to meet the street shade tree requirement along the public		
6	roads and private drive.		
7	(L) Each lot in Unit 5, Phase 2 shall have a minimum area of 0.25 acres and shall meet the		
8	dimensional requirements of the RSF-1 district, except that setbacks shall meet the		
9	requirements in (M) below.		
10	(M) Setbacks for lots in Unit 5, Phase 2:		
11	Front 20 FT or the minimum front setback footage at the point where the lo		
12	width is 85-feet.		
13	Rear 15 FT		
14	Side 7.5 FT		
15	Side (street) 10 FT		
16	Section 4. The development conditions and requirements in this ordinance shall remain		
17	effective until such time as, upon either the City or the property owner filing a rezoning petition, the		
18	City adopts an ordinance rezoning the property described in Section 1 of this ordinance to another		
19	zoning district consistent with the Comprehensive Plan and Land Development Code.		

regardless of whether such violation is ultimately abated or corrected, shall constitute a separate

of a municipal ordinance violation and shall be subject to fine or imprisonment as provided by

Section 1-9 of the Gainesville Code of Ordinances. Each day a violation occurs or continues,

Section 5. Any person who violates any provision of this ordinance shall be deemed guilty

20

21

22

1	offense.		
2	Section 6. If it is determined by the City Manager that a violation of this ordinance exists		
3	the City Manager may issue and deliver an order to cease and desist from such violation in order to		
4	correct a violation, to preclude occupancy of the affected building or area, or to vacate the premises.		
5	The City Manager, through the City Attorney, may seek an injunction in a court of competent		
6	jurisdiction and seek any other remedy available at law.		
7	Section 7. The City Manager or designee is authorized and directed to make the necessary		
8	changes to the Zoning Map Atlas to comply with this ordinance.		
9	Section 8. If any word, phrase, clause, paragraph, section or provision of this ordinance		
10	or the application hereof to any person or circumstance is held invalid or unconstitutional, such		
11	finding shall not affect the other provisions or applications of this ordinance that can be given		
12	effect without the invalid or unconstitutional provision or application, and to this end the		
13	provisions of this ordinance are declared severable.		
14	Section 9. All other ordinances or parts of ordinances in conflict herewith are to the		
15	extent of such conflict hereby repealed effective of the effective date on this ordinance.		
16	Section 10. This ordinance shall become effective immediately upon adoption.		
17	PASSED AND ADOPTED this 2nd day of March, 2017.		
18 19 20 21 22 23	LAUREN POE MAYOR		
24 25	Attest: Approved as to form and legality:		
26 27 28 29	KURT M. KANNON CLERK OF THE COMMISSION  NICOLLE M. SHALLEY CITY ATTORNEY		
	7		

Petition No. PB-15-115 PDA

1

This ordinance passed on first reading this 16th day of February, 2017.

2

4 This ordinance passed on second reading this 2nd day of March, 2017.



engineers • surveyors • planners, inc.

February 2, 2017

Legal Description
Blues Creek Unit 5 – Phase 2

A portion of Section 10, Township 9 South, Range 19 East, City of Gainesville, Alachua County, Florida, being more particularly described as follows:

Begin at the Southwest corner of Blues Creek, Unit 5, Phase 1 as per plat thereof recorded in Plat Book 24, page 73 of the public records of Alachua County, Florida, said corner lying on the West line of the Northwest 1/4 of Section 10, Township 9 South, Range 19 East and run thence Easterly, along the South boundary of said Blues Creek, Unit 5, Phase 1 through the following four courses and distances:

- 1) North 83°09'46" East, 85.49 feet to a concrete monument (PCP PLS 2228)
- 2) North 89°41'18" East, 200.58 feet to a concrete monument (PCP PLS 2228)
- 3) North 74°58'28" East, 288.15 feet to a concrete monument (PCP PLS 2228)
- 4) South 80°15'52" East, 259.62 feet

to the Southeast corner of said Blues Creek, Unit 5, Phase 1, said corner lying on the West boundary of Blues Creek, Unit 4B as per plat thereof recorded in Plat Book "S", page 86 of said public records; thence Southeasterly, along said West boundary, through the following five courses and distances:

- 1) South 06°08'37" West, 72.97 feet to a concrete monument (PLS 4788)
- 2) South 74°39'53" West, 28.92 feet to a concrete monument (PLS 4788)
- 3) South 27°18'47" East, 155.45 feet to a rebar and cap (Steve Owen PLS 4788)
- 4) South 27°21'22" East, 251.86 feet to a concrete monument (PLS 4788)
- 5) South 25°34'45" East, 119.93 feet

to a rebar and cap (LB 3759) found at the Southernmost corner of Lot 15 of said Blues Creek Unit 4B; thence run South 18°04'45" East, along a line shown as the West boundary of Lot 23 of Blues Creek Unit 4 as originally platted in Plat Book "S", page 3 and vacated by Alachua County Resolution 95-44 as recorded in Official Records Book 2044, page 2038 et seq. of said public records, a distance of 258.47 feet to a point on the North boundary of that certain Easement for a drainage system described in Official Records Book 1371, page 160 et seq. of said public records; thence generally Westerly and Southerly, along the boundary of said Easement through the following fifteen courses and distances:

- 1) South 89°56'25" West, 609.89 feet 2) South 06°46'19" East, 146.98 feet
- 3) South 22°23'51" East, 175.00 feet 4) South 03°51'09" West, 215.00 feet
- 5) South 16°21'09" West, 195.00 feet 6) South 22°36'09" West, 735.00 feet
- 7) South 10°48'51" East, 345.00 feet 8) South 43°58'51" East, 135.00 feet
- 9) South 05°06'09" West, 120.00 feet 10) South 26°01'09" West, 350.00 feet
- 11) South 75°16'09" West, 15.00 feet 12) North 35°13'39" West, 216.48 feet
- 13) South 19°41'09" West, 80.00 feet 14) South 33°18'51" East, 75.00 feet
- 15) South 41°41'09" West, 110.76 feet

to a point on the West line of the Southwest 1/4 of said Section 10 lying 339.30 feet North of a concrete monument (no I.D.) found at the Southwest corner of said Section; thence North 00°22'56" West, along



the West line of said Southwest 1/4, a distance of 2311.86 feet to a concrete monument (no i.D.) found at the West 1/4 corner of said Section; thence North 00°24'32" West, along the West line of the Northwest 1/4 of said Section 10, a distance of 748.36 feet to the Point of Beginning.

Containing 36.70 acres, more or less.

 $\verb|\SERVER3\Survey|_Projects|2015|2015-0146| Bluescreek| Description|2015-0146.S00.Docx| Bluescreek| Constitution| Constitution$ 

EXHIBIT "B" TO ORDINANCE NO. 150694

# Planned Development (PD) Report

### Blues Creek Unit 5, Phase 2

#### **Submitted to:**

City of Gainesville

### **Prepared by:**

eda engineers-surveyors-planners, inc.

### Agents for:

New Generation Home Builders, Inc. and Blues Creek Development

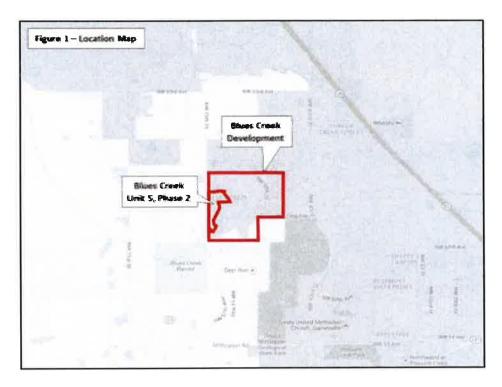
October 6, 2015
Revised: December 1, 2015
December 21, 2015
February 1, 2017

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#### Background

The overall Blues Creek development is located in northwest Gainesville and is west of NW 43<sup>rd</sup> Street, south of NW 81<sup>st</sup> Avenue, and generally north of NW 69<sup>th</sup> Lane. The western boundary of the Blues Creek development forms the western boundary of the City of Gainesville in that area. The map below (Figure 1) illustrates the general location.



The development of Blues Creek was originally approved as an Alachua County Planned Unit Development (PUD) by Zoning Resolution Z-81-68 that was adopted on July 21, 1981. The County PUD was further amended by a revised Master Plan for Blues Creek adopted and approved by Alachua County dated November 1999.

The entire Blues Creek development consists of approximately 300 acres. Portions of the overall Blues Creek PUD were annexed by the City of Gainesville by Ordinances 001161, 001162, 001163, 002393, and 040290. These annexations occurred in 2001, 2002, and 2005. At this time, approximately 91% (273.6 acres) of the development lies within Gainesville city limits.

Subsequent to the annexations, the City of Gainesville applied City future land use and zoning designations to the property. Consistent with the Alachua County PUD zoning designation, the City applied Planned Development (PD) zoning to the property via Ordinances 030472 (adopted 10/27/03) and 041187 (adopted 11/28/05). The PD allows for single-family detached and single-family attached units.

The 1999 Master Plan for Blues Creek allowed up to 615 residential dwelling units with a mix of single-family attached units and single-family detached units in multiple unit phases. To date, the Blues Creek development has substantially built out the phases originally approved in the Alachua County PUD. Units 1-4 and 6 are mostly

built out and are shown on the 1999 Master Plan for 305 single-family attached units and 170 single-family detached units. Unit 7 is platted for 16 lots (PB 28, PG 15) but is not developed/built. Unit 5 is partially completed with 10 single-family detached units (this is Phase 1 of Unit 5).

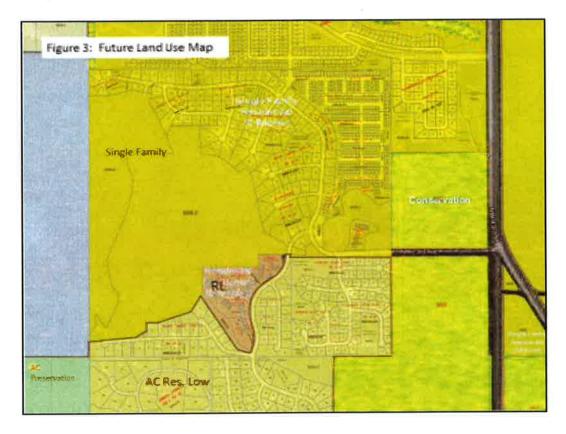
#### **Statement of Proposed Change**

This petition proposes a PD rezoning to reflect a proposed new Unit 5, Phase 2 subdivision of single-family detached lots. The project limits are indicated in the aerial map shown in Figure 2.



#### **Existing Future Land Use Designation**

The current Future Land Use designations on the overall Blues Creek PD are Single Family and Residential Low, as indicated on Figure 3 below:



Policy 4.1.1 of the Future Land Use Element defines the Single Family and Residential Low Land Use Categories as follows:

Single-Family (up to 8 units per acre)

This land use category shall allow single-family detached dwellings at densities up to 8 dwelling units per acre. The Single-Family land use classification identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for single-family development. Land development regulations shall determine the performance measures and gradations of density. Land development regulations shall specify criteria for the siting of low-intensity residential facilities to accommodate special need populations and appropriate community-level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations in conjunction with single-family dwellings under certain limitations.

Residential Low-Density (up to 12 units per acre)

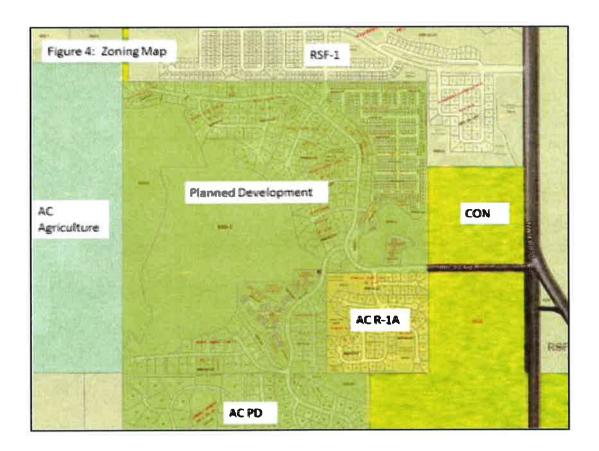
This land use category shall allow dwellings at densities up to 12 units per acre. The Residential Low-Density land use classification identifies those areas within the City that, due to topography, soil conditions, surrounding land

uses and development patterns, are appropriate for singlefamily development, particularly the conservation of existing traditional low density neighborhoods, single-family attached and zero-lot line development, and small-scale multifamily development. Land development regulations shall determine gradations of density, specific uses and performance measures. Land development regulations shall specify criteria for the siting of low-intensity residential facilities to accommodate special need populations and appropriate community level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations; accessory units in conjunction with single-family dwellings; and bed-and-breakfast establishments within certain limitations.

As described above, the Single Family and Residential Low Future Land Use categories do support the existing residential types of uses within the Blues Creek development and support the implementation of the existing Planned Development zoning district.

#### **Existing Zoning District**

The current zoning designation of the overall Blues Creek PD is Planned Development (PD), as indicated on Figure 4 below:



The Planned Unit Development zoning for Blues Creek was originally approved by Alachua County in 1981 with a revised Master Plan adopted by Alachua County dated November 1999. After annexations occurred, the City of Gainesville subsequently adopted Planned Development zoning for the properties on October 27, 2003 (Ordinance 030472) and on November 28, 2005 (Ordinance 041187).

#### **Proposed Zoning District**

This petition requests to amend the existing Blues Creek Planned Development zoning designation. Specifically, this application requests to adopt a new PD Layout Plan, development requirements and conditions, and a PD Report for Unit 5, Phase 2. The new PD Layout Plan changes the configuration of Unit 5 to reduce the number of single-family lots (a reduction of 28 lots), provide for alternative access in the form of a perpetual ingress/egress easement to minimize pavement and to avoid and protect wetland areas, and illustrate a conceptual location for the underground utility crossings between Units 5 and 2 (this is under the condition that it be a non-open cut crossing (no surface disturbance)).

#### Consistency with Land Development Code

#### Division 4 – Planned Development District

#### Sec. 30-211. - Purpose and intent.

(a) Purpose. It is the purpose of this district to provide a method for landowners or developers to submit unique proposals which are not provided for or allowed in the zoning districts otherwise established by this chapter. In particular, these provisions allow a mix of residential and nonresidential uses and/or unique design features which might otherwise not be allowed in the district, but they must conform to all aspects of the comprehensive plan. Rezoning for planned developments (PDs) will be an entirely voluntary procedure.

Consistency: Blues Creek was approved as a Planned Unit Development in 1981 in Alachua County and PD zoning was adopted by the City Commission in 2003 and 2005. The overall PD development provides a mix of single-family dwellings and single-family attached units. Unit 5, Phase 2 is a unique project because of the existing environmental features and the time period over which development has occurred (regulations and jurisdiction have changed over time). The master plan/PD Layout Plan also provides innovative design for protecting wetland areas, wetland buffers, and recognizing that the property is located in the Strategic Ecosystem.

- (b) Objectives. The PD provisions are intended to promote flexibility of design and integration of uses and structures, while at the same time retaining in the city commission the absolute authority to establish limitations and regulations thereon for the benefit of the public health, welfare and safety. By encouraging flexibility in the proposals which may be considered, while at the same time retaining control in the city commission over the approval or disapproval of such proposals, the PD provisions are designed to:
  - (1) Permit outstanding and innovative residential and nonresidential developments with a building orientation generally toward streets and sidewalks; provide for an integration of housing types and accommodation of changing lifestyles within neighborhoods; and provide for design which encourages internal and external convenient and comfortable travel by foot, bicycle, and transit through such strategies as narrow streets, modest setbacks, front porches, connected streets, multiple connections to nearby land uses, and mixed uses.

<u>Consistency</u>: The proposed Blues Creek Unit 5, Phase 2 PD demonstrates an outstanding and innovative approach to protect wetlands, wetland buffers, and the Strategic Ecosystem. It utilizes a perpetual ingress/egress easement for 8 lots in the southern part of Unit 5, Phase 2 to avoid wetland impacts and promote Low Impact Development (LID) practices. Due to the location in the Strategic Ecosystem, a

Conservation Management Area (CMA) will be established for the required set aside areas. This will be done as part of the final plat process.

(2) Provide flexibility to meet changing needs, technologies, economics and consumer preferences.

<u>Consistency</u>: The overall Blues Creek PD does allow flexibility for consumer preferences in housing type because it includes both single-family detached and single-family attached units in the overall PD. The reconfiguration of the single family detached lots in Unit 5, Phase 2 and proposed reduction in the number of lots provides the flexibility for an ingress/egress easement that promotes LID techniques to preserve environmental features and reduce pavement.

(3) Preserve to the greatest extent possible, and utilize in a harmonious fashion, existing and outstanding landscape features, high quality heritage trees, and scenic vistas.

<u>Consistency</u>: The Blues Creek PD Layout plan illustrates a proposed subdivision layout that protects environmental features within the development. Unit 5, Phase 2 shows several conservation areas that will protect wetlands and wetland buffers.

(4) Lower development and building costs by permitting smaller networks of utilities, a network of narrower streets, and the use of more economical development patterns and shared facilities.

<u>Consistency</u>: At this stage of development, a large majority of the roads and utility infrastructure have been constructed in Blues Creek. Unit 5, Phase 2 provides for a perpetual ingress/egress easement with a reduced pavement width to serve 8 single-family lots. This minimizes wetland and wetland buffer impacts and promotes LID techniques. Using a non-open cut underground utility crossing connection between Units 5 and 2 will provide underground utilities such as water, wastewater, and electric in a cost feasible fashion while minimizing environmental impacts.

(5) Achieve overall coordinated building and facility relationships and infill development, and eliminate the negative impacts of unplanned and piecemeal development.

<u>Consistency</u>: Blues Creek is a master planned project that provides a variety of housing styles and types. The PD and subdivision process ensures a coordinated and planned approach to the development. Blues Creek is a substantially built-out project. Unit 5, Phase 2 represents infill in a small area of the overall development.

(6) Enhance the combination and coordination of architectural styles, building forms and building relationships within the development.

<u>Consistency</u>: The overall design of Blues Creek provides for a coordinated development of single-family and single-family attached units with a design layout that protects environmentally sensitive areas. The PD Layout Plan for Unit 5, Phase 2 recognizes the relationship of the housing units to these areas and provides appropriate set asides interspersed throughout the development.

(7) Promote the use of traditional, quality-of-life design features, such as pedestrian scale, parking located to the side or rear of buildings, narrow streets, connected streets, terminated vistas, front porches, recessed garages, alleys, aligned building facades that face the street, streets canopied by large shade trees located within wide tree lawns or in tree wells constructed to allow sufficient space, and formal landscaping along streets and sidewalks.

<u>Consistency</u>: Blues Creek Unit 5, Phase 2 will provide for pedestrian connections to Unit 5, Phase 1 and other phases of the development. Lots 37-44 in Unit 5, Phase 2 will be connected by a shared pedestrian facility flush with the pavement (with a design that is acceptable to and approved by the Public Works Department) due to the need to protect wetland areas and minimize pavement through LID design. This area will have very low traffic due to the easement serving only 8 homes and pedestrians will be able to use the shared

pedestrian facility along the ingress/egress easement to connect to the sidewalk system in the northern portion.

Sec. 30-216. - Requirements and evaluation of PD.

The PD report shall address each item in the subsections below. In considering a proposed PD for approval, the city plan board and the city commission shall evaluate the proposal in consideration of these criteria:

(1) Conformance with the PD objectives and the comprehensive plan.

<u>Consistency</u>: As indicated in this report, the Blues Creek Planned Development is consistent with the City of Gainesville Comprehensive Plan.

(2) Concurrency.

<u>Consistency:</u> Infrastructure improvements required in the overall Blues Creek PD have largely been constructed to date. The Unit 5, Phase 2 development will meet the concurrency standards in the Comprehensive Plan and will mitigate trips as per the criteria required in the Transportation Mobility Program Area (TMPA) for Zone B. Potable water and wastewater service capacity are available to serve the development. An application for Concurrency and Transportation Mobility Certification has been submitted to the City.

(3) Internal compatibility.

<u>Consistency:</u> The Blues Creek PD is a master planned community that provides a mix of residential dwelling unit types (single-family detached and single-family attached), which are compatible with each other and the environmental features at the site. All of the units in Unit 5, Phase 2 will be single-family detached. No issues of incompatibility between internal uses exist.

(4) External compatibility.

Consistency: The Blues Creek PD is compatible with the surrounding land uses. To the north is City single-family, which is compatible with the single-family designation for Blues Creek in that portion of the development. To the east of the development is conservation land owned by the City of Gainesville and single family designated land. The Blues Creek residential development is compatible with those categories. To the west, is University of Florida property that is included in the Campus Master Plan with a zoning of Agriculture. The single-family uses in in Unit 5 are compatible with the Agricultural use of the property. To the south of the PD is an existing residential subdivision with a Future Land Use designation of Alachua County Residential Low. The Blues Creek PD has designations of single family and residential low in this area, which are compatible.

(5) Intensity of development.

<u>Consistency</u>: The proposed PD for Blues Creek Unit 5, Phase 2 reduces the total number of single-family units within the development from what was originally proposed for Unit 5. The most recently adopted Blues Creek Master Plan allowed up to 82 single-family dwellings. The proposed PD for Unit 5, Phase 2 reduces that to 54, a reduction of 28 units. Therefore, there will a reduction in intensity within the development as a result of this PD.

(6) Usable open spaces, plazas and recreation areas.

<u>Consistency</u>: The overall Blues Creek PD provides for active recreation areas including a swimming pool, community building and tennis courts. In addition, there is a significant amount of open space in the

development that would allow for passive recreation. In addition, the large central area within the PD will remain undeveloped and will serve as additional passive recreation area/open space.

(7) Environmental constraints.

<u>Consistency</u>: There are environmental constraints within the proposed Unit 5, Phase 2 subdivision area and the portion of associated tax parcel 06006-002-000 that abuts Unit 5, Phase 2. The constraints include wetlands and strategic ecosystem. The Unit 5, Phase 2 layout is designed to avoid wetland areas and configure lots to avoid wetland buffer areas. Encroachment into the 35 foot wetland buffer area occurs in limited areas due to the site constraints. However, the overall average 50 foot wetland buffer is maintained. There are several conservation areas (set-aside areas) designated to protect on-site environmental resources.

(8) External transportation access.

<u>Consistency</u>: The overall Blues Creek development has access to external areas via NW 73<sup>rd</sup> Avenue to NW 43<sup>rd</sup> Street. In addition, there are pedestrian and vehicular connections to the north into the Westchester Cluster Subdivision. To the south, there is a pedestrian connection to the Deer Run Subdivision.

(9) Internal transportation access.

<u>Consistency</u>: The Blues Creek development has an internal road network that connects all units within the subdivision areas. In addition, there are sidewalks along the major roads in the subdivision. A perpetual ingress/egress easement with a shared pedestrian facility is proposed for internal transportation access to Lots 37-44 in Unit 5, Phase 2.

(10) Provision for the range of transportation choices.

<u>Consistency</u>: Blues Creek contains an internal roadway network for vehicular traffic that connects externally to NW 43<sup>rd</sup> Street where there is a sidewalk system on the west side of the roadway. There are sidewalks in portions of the development. At this time, there is no transit access to the development

Sec. 30-217. - Unified control.

All land included in any PD shall be under the complete, unified, legal, otherwise-encumbered control of the applicant, whether the applicant be an individual, partnership, corporation, other entity, group or agency. Upon request of the city manager or designee, the applicant shall furnish the city sufficient evidence to the satisfaction of the city attorney that the applicant is in the complete, legal and unified control of the entire area of the proposed PD. Upon request of the city manager or designee, the applicant shall provide the city, for approval by the city attorney, all agreements, contracts, guarantees and other necessary documents and information that may be required by the city attorney to assure the city that the development project may be lawfully completed according to the plans sought to be approved. If any such documents are requested, the application shall not be considered by the city commission until the city attorney has certified in writing that the legal requirements of this section have been fully met. The applicant shall submit an agreement stating that the applicant will bind the successors and assigns in title to any commitments made in the adopted PD ordinance.

<u>Consistency</u>: Unit 5, Phase 2 is under the control of New Generation Home Builders. Other portions of the overall PD are under the control of Blues Creek Development. Both New Generation Home Builders and Blues Creek Development have provided authorization for the PD application request.

Sec. 30-218. - Phasing.

The city commission may permit or require the phasing or staging of a PD. When provisions for phasing are included in the development plan, each phase must be so planned and so related to previous development, surrounding properties and the available public facilities and services that a failure to proceed with subsequent

phases will have no adverse impact on the PD or surrounding properties. Concurrency certification is not reserved by PD phasing.

<u>Consistency</u>: Phasing in the development is in the form of subdivision plat units. Most of the units are built out. The only unplatted phase is Unit 5, Phase 2, which is proposed for a design plat in a separate application.

#### Sec. 30-219. - Development time limits.

The city commission may establish reasonable periods of time for the completion of any dedicated public facilities within a PD, facilities planned for common areas, and the total PD. If phasing is provided for, time limits for the completion of each phase shall also be established or may be deferred until development review. Any such limit may be extended by the city commission, plan board or development review board for reasonable periods upon the petition of an applicant for an amendment to the PD layout plan or development plan and based upon good cause, as determined by the city commission. Any such extension shall not automatically extend the normal expiration date of a building permit, site plan approval or other development order. If time limits contained in the approved PD layout plan are not complied with and not extended for good cause, the city commission may rezone the property or any part of it, or amend the approved development plan, so as to best protect adjoining properties and the public health, welfare or safety. Failure to complete phasing on schedule shall require a new concurrency review and appropriate concurrency permit.

Consistency: Blues Creek PD is substantially built out at the current time.

#### Sec. 30-224. - Amendments to approved planned development.

(a) Except as noted in subsections (b) and (c) of this section, an amendment to an approved PD (except for an extension of a time limit) must be accomplished only by a rezoning petition and ordinance accompanied by a new proposed PD. All appropriate maps, plans and reports submitted with the approved PD layout plan may be resubmitted with the rezoning petition, along with sufficient new maps, plans and reports to clearly and thoroughly indicate the proposed changes, as the new proposed PD layout plan.

<u>Consistency</u>: So noted. This application serves as a request to amend the approved Blues Creek Planned Development as to Unit 5, Phase 2.

#### Responses to City Application Questions

#### A&B. Surrounding/Adjacent Land Uses

The following land uses currently exist on the adjacent properties:

North: To the north of the PD are single family residences in the Westchester Cluster subdivision.

East: To the east of the PD there are single family residences and vacant conservation area owned by the City of Gainesville.

South: To the south of the PD are single family residential properties.

West: To the west of the PD is property owned by the University of Florida that is part of the Campus Master Plan that is used for an IFAS facility for agricultural research.

Upon analyzing the existing land use pattern, the proposed PD for Unit 5, Phase 2 will not negatively affect the nature of the existing development pattern in the area because it consists of compatible single family development. The Blues Creek PD compatibility will not substantively change as a result of the proposed PD for Unit 5, Phase 2.

Figure 5: Surrounding Property Uses, Future Land Use and Zoning Designations

Direction	FLU Designation	Zoning	Existing Use
North	Single Family Residential	RSF-1	Single-family dwellings
South	Alachua County Residential Low	Alachua County PD and R-1A	Single-family dwellings
East	Single Family, Conservation, and Alachua County Residential Low	RSF-1, CON, and PD	Single-family dwellings and vacant conservation land
West	Alachua County UF Campus Master Plan	Alachua County Agriculture	UF/IFAS Facility

#### C. Development Impacts

#### a. Impact to Residential Streets

The proposed Blues Creek Unit 5, Phase 2 PD will add 44 additional single-family dwelling units to the residential streets within the Blues Creek development. This is estimated to be an additional 419 average daily trips and 44 p.m. peak hour trips of adjacent street traffic.

#### b. Impact on Noise and Lighting

The proposed Unit 5, Phase 2 development area, as identified on the PD Layout Plan, will contain single family detached dwellings. There are no significant impacts from noise or lighting anticipated from this development, which is compatible with surrounding residential subdivision areas within the overall PD. Protections provided by the City, such as the noise ordinance, will be enforced as part of any activity within the area. In addition, light trespass restrictions provide standards for mitigation of impacts that are enforced as part of the development review process.

#### D. Environmental Resources

There are environmental resources located on portions of the property that are the subject of the Blues Creek Unit 5, Phase 2 PD. A separate environmental report documenting these resources has been prepared by Ecosystem Research Corporation, and it is included as part of the backup materials. Wetland areas and wetland

buffer areas in Unit 5, Phase 2 are included within conservation areas shown on the Unit 5, Phase 2 PD Layout Plan. These areas are proposed to be set aside from development. Areas labeled on the existing master plan as "drainage easement, developed recreation & conservation area" and other conservation areas will become a Conservation Management Area (CMA) to meet strategic ecosystem set aside requirements and provide additional protections to this undeveloped land. Conservation areas in Unit 5, Phase 2 that are set aside as established Conservation Management Areas shall be managed and maintained in accordance with the approved Conservation Management Area Management Plan. Conservation Management Areas will retain PD zoning consistent with the Planned Development zoning ordinance.

#### E. Historic Resources

The project area does not contain any known historic structures or any identified archaeological resources deemed significant by the state.

#### F. Development Pattern and Community Contribution

Unit 5, Phase 2 of the Blues Creek Planned Development is located in an already established subdivision in the northwest, urbanized portion of the City of Gainesville. This Unit/Phase has been established as an area permitted for single family development on the existing, approved PD Master Plan. A substantial portion of the infrastructure is available and has already been constructed by the development. The development pattern in this northwest area is well established by surrounding single family subdivisions north and south of the development (both inside and outside of Gainesville city limits). The additional units available in Unit 5, Phase 2 will contribute to the available single family housing stock in Gainesville city limits.

#### **G.** Long-Term Economic Benefits

The proposed Blues Creek Unit 5, Phase 2 PD will be consistent with the development pattern found in the surrounding area. New development activity and investment will support the City's Economic Development goals to promote infill development, offer high quality of living opportunities, support compact urban development and raise the tax base.

#### H. Level of Services Standards

Phase 1 of Unit 5 is already built and contains 10 lots. Unit 5, Phase 2 may contain up to 44 single family dwelling units. Therefore, the Blues Creek Unit 5, Phase 2 PD will result in a reduction of impacts to level of service standards from the original PD.

#### a. Roadways

The overall Blues Creek PD has substantially built out, which also includes the associated road infrastructure. Unit 5 Phase 2 is located in Zone B of the City's Transportation Mobility Program Area (TMPA). Based on the estimated trip generation of 419 average daily trips, the associated design plat and final plat will be required to meet at least 5 criteria as stated in Transportation Mobility Element Policy 10.1.6 for Zone B.

#### b. Recreation

The proposed PD for Unit 5, Phase 2 adds 44 units in the Blues Creek development. Using the 2010 Census persons per household estimate of 2.25, it is estimated that Unit 5, Phase 2 will add 99 additional persons. The City of Gainesville Recreation level of service (LOS) standards are based on acres per 1,000 people. The minimal addition of 99 people will not negatively impact the adopted LOS standards for park acreages.

#### c. Water and Wastewater

The property is currently served with both water, wastewater and electric by Gainesville Regional Utilities at capacities suitable to serve the development. Access to these utilities have been planned previously to serve Unit 5, Phase 2.

#### d. Solid Waste

Solid waste will not exceed Gainesville's established Level of Service Standard of 0.655 tons of solid waste per capita per year disposed (3.6 pounds solid waste per capita per day disposed). Collection of solid waste will not exceed Gainesville's established Level of Service Standard of 1.07 tons of solid waste per capita per year collected (5.9 pounds of solid waste per capita per day collected).

#### e. Mass Transit

RTS service not currently available for the Blues Creek Planned Development. The closest transit route is Route 40 that serves Hunters Crossing (at NW 43<sup>rd</sup> Street and NW 53<sup>rd</sup> Avenue) to the Hub at the UF Campus.

#### f. Schools

Unit 5, Phase 2 of the Blues Creek PD falls within the following public school concurrency areas: Elementary: Talbot; Middle: Mebane; and High School: Santa Fe. Other portions of the Blues Creek PD are served by Ft. Clarke Middle School and Gainesville High School.

#### I. Site Accessibility

The subject property has vehicular access to NW 43<sup>rd</sup> Street via NW 73<sup>rd</sup> Avenue. In addition, there is a partial sidewalk system along NW 73<sup>rd</sup> Avenue that does not fully connect to NW 43<sup>rd</sup> Street. There are also pedestrian and vehicular connections to the north into the Westchester Cluster Subdivision along NW 51<sup>st</sup> Drive. The connection into the Westchester Cluster Subdivision also provides pedestrian and vehicular access to NW 43<sup>rd</sup> Street. To the south, there is a pedestrian connection to the Deer Run Subdivision.

#### **Comprehensive Plan Consistency**

The proposed Blues Creek Unit 5, Phase 2 Planned Development is consistent with the City's Comprehensive Plan. The following Future Land Use Element objectives and policies are applicable to the Planned Development:

#### **Objective 4.1**

The City shall establish land use designations that allow sufficient acreage for residential, commercial, mixed use, office, industrial, education, agricultural, recreation, conservation, public facility and institutional uses at appropriate locations to meet the needs of the proposed population and that allow flexibility for the City to consider unique, innovative, and carefully construed proposals that are in keeping with the surrounding character and environmental conditions of specific sites.

<u>Consistency</u>: This objective supports allocation of land for a wide range of land uses within the City of Gainesville. Included in those uses that are supported are single family and single-family attached residential uses as found in the overall Blues Creek Planned Development.

#### **Policy 4.1.1**

Land use categories on the Future Land Use Map shall be defined as follows:

Single-Family (up to 8 units per acre)

This land use category shall allow single-family detached dwellings at densities up to 8 dwelling units per acre. The Single-Family land use classification identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for single-family development. Land development regulations shall determine the performance measures and gradations of density. Land development regulations shall specify criteria for the siting of low-intensity residential facilities to accommodate special need populations and appropriate community-level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations in conjunction with single-family dwellings under certain limitations.

<u>Consistency</u>: As described in the Comprehensive Plan policies above, the Single Family Future Land Use designation does support the single-family residential use found within the proposed Blues Creek Unit 5, Phase 2 Planned Development.

GOAL 3 ACHIEVE THE HIGHEST LONG-TERM QUALITY OF LIFE FOR ALL GAINESVILLE RESIDENTS CONSISTENT WITH SOUND SOCIAL, ECONOMIC, AND ENVIRONMENTAL PRINCIPLES THROUGH LAND DEVELOPMENT PRACTICES THAT MINIMIZE DETRIMENTAL IMPACTS TO THE LAND, NATURAL RESOURCES, AND URBAN INFRASTRUCTURE.

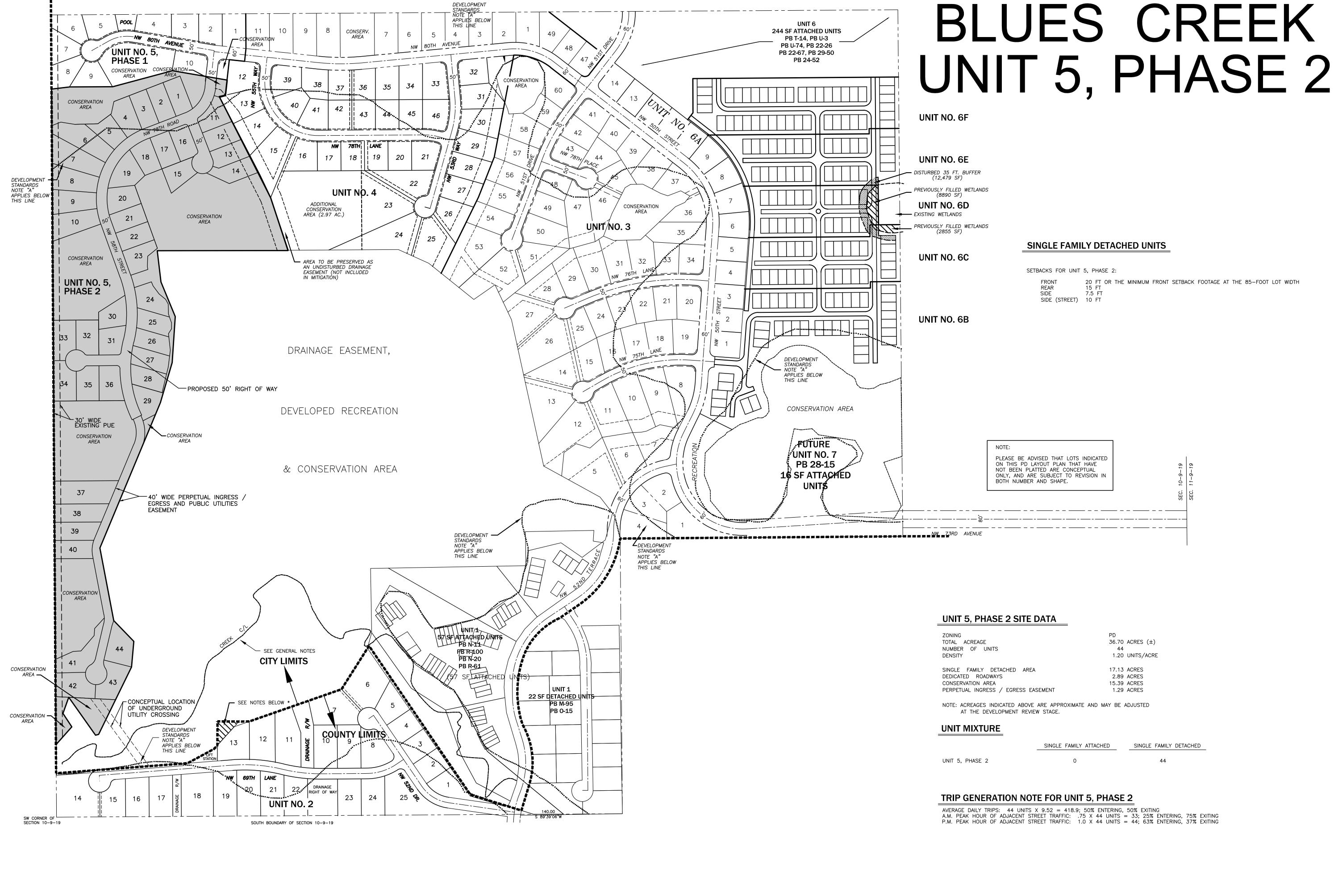
Objective 3.1 The City shall protect environmentally sensitive land, conserve natural resources, and maintain open spaces identified in the Future Land Use Map Series through the Development Review Process and land acquisition programs.

Policy 3.1.1 Standards and guidelines established in Conservation, Open Space, and Groundwater Recharge Element Objective 1.1 and its Policies shall be used to protect identified environmentally sensitive resources.

<u>Consistency</u>: As described in the Comprehensive Plan policies above, the proposed PD is consistent with the protection of the environmentally sensitive areas in Unit 5, Phase 2 through the reduction in the number of lots, protection of wetland areas, use of a perpetual ingress/egress easement to minimize pavement and promote LID techniques, and designation of conservation areas that are proposed to be set aside from development.

#### Conclusion

As stated in this report, the Blues Creek Planned Development is substantially completed, which includes the site infrastructure. The primary intent of the Blues Creek Unit 5, Phase 2 PD is to change the lot configuration in Unit 5, Phase 2 to reduce the total number of single-family units allowed in that section and propose an improved subdivision design to avoid environmentally sensitive areas to the greatest extent reasonably possible. Other changes include: a provision for alternative access in the form of a perpetual ingress/egress easement to protect wetland areas for the southern portion of Unit 5, Phase 2 and illustration of a conceptual location for the non-open cut underground utility crossing between Units 5 and 2. Additional changes provide development standards for Unit 5, Phase 2, include a trip generation note for Unit 5, Phase 2, and add the condition that all housing units in this phase must be sprinkled for fire safety. These proposed changes in the Blues Creek Unit 5, Phase 2 PD will not affect the intent and character of the original PD and are consistent with the City of Gainesville Comprehensive Plan and are in conformance with the Planned Development objectives in the Land Development Code.



SCALE: 1" = 200'100' 200' GRAPHIC SCALE **O** years Ш REEK  $\bigcirc$ BLUES

# Exhibit 2

# **Environmental Assessment Report**

# Environmental Resource Assessment

Blues Creek Unit 5, Phase 2: Planned Development and Conservation Area City of Gainesville, Florida

### Addendum



# Environmental Resource Assessment

Blues Creek Unit 5, Phase 2: Planned Development and Conservation Area

City of Gainesville, Florida

### Addendum

Prepared for Scot Ross New Generation Home Builders, Inc. 14245 SW 4th Place, Unit 20 Newberry, Florida 32669

Prepared by
Ecosystem Research Corporation
2906 NW 142nd Avenue
Gainesville, FL 32609
386-462-5005



# Environmental Resource Assessment in Support of a Land Use and Zoning Amendment Submittal for the Blues Creek Planned Development and Conservation Area

#### **Development Location & Description:**

City of Gainesville, Alachua County, Florida, Blues Creek, Unit 5, Phase 2: Land Use and Zoning Change Parcels, Conceptual Planned Development Site Plan

#### Geographic Location:

Section 10, Township 9 South, Range 19 East Gainesville West USGS Quadrangle Map Alachua County, Florida

#### Landowner

Scot Ross New Generation Home Builders, Inc. 14245 SW 4th Place, Unit 20 Newberry, Florida 32669

#### Engineer/Planner

Sergio Reyes, P.E., President Clay Sweger, AICP LEED AP Principal/Director of Planning eda 720 SW 2nd Avenue, Suite 300 Gainesville, FL 32601

### **Introduction and Physical Site Description**

Ecosystem Research Corporation (ERC) was contracted by Mr. Scot Ross of New Generation Home Builders, Inc., to perform a Natural Areas Resource Assessment (NARA) of two (2) Alachua County tax parcels in support of a proposed Land Use and Zoning Change Amendment. The parcels are within the Blues Creek Planned Development in the northwest quadrant of the City of Gainesville within central Alachua County. Parcel 06006-052-000 consists of 36.70-acres and currently has a Single-Family (SF) Land Use designation, a Planned Development (PD) zoning, and had an approved development plan issued and approved by the City of Gainesville circa 2015 (Figure 1). This parcel has been subject to multiple site plan review submittals over the past two (2) decades. Parcel 06006-002-000 is a 90.29-acre parcel that currently exists as a natural mosaic of mixed upland and wetland plant communities that has been managed as a regional stormwater retention/detention system since circa 1980. This Parcel has a current SF Land Use designation and PD zoning over the entire extent of the Parcel. These two (2) parcels comprise the total extent of the Planning Parcel for the purposes of this current environmental review. Therefore, the total acreage of the Planning Parcel equals 126.99 acres.

In general, this Blues Creek Planned Development is west of NW 43rd Street and north of Millhopper Road (CR-232) (**Figure 2**). Access to the indicated tax parcels is best obtained by NW 73rd Avenue to NW 80th Avenue for the north area and NW 73rd Avenue to NW 69th Lane for the south area (**Figures 1** and **2**).

Ownership of the two (2) Alachua County tax parcels that comprise the **Planning Parcel** are listed as follows and shown on **Figure 3**:

Tax Parcel Number	Ownership	Acreage
06006-052-000	New Generation Home Builders, Inc. 14245 SW 4th Place, Unit 20 Newberry, FL 32669	36.70
06006-002-000	Blues Creek Development 324 NW 154th Street Newberry, FL 32669	90.29
	TOTAL PLANNING PARCEL AREAGE	126.99

The **Planning Parcel** boundaries represent the extent of contiguous parcels owned by the applicant and are directly affected by the activities described within this document. The **Planning Parcel** and **Resource Assessment Area (RAA)** are the same for this study and are represented by the total extent of both parcels (**126.99 acres**; **Figure 2**). **Parcel 06006-002-000** currently has a *SF Future Land Use and a PD zoning*. The Project Site

where future development was previously approved is the entire extent of **Parcel 06006-052-000**, which consists of **36.70 acres (Figure 1)**.

#### **Historical Permit Considerations**

Parcel 06006-002-000 is managed as a large, regional Stormwater Management and Treatment System originally permitted as an Uplands Overflow Landscape Depression for stormwater treatment by the State and County from 1979 through 1985 when the original stormwater and construction permits were issued. This area has also historically been used for flood control and this use continues to date. However, permitting was performed for this area via a host of Management and Storage of Surface Waters Permits (MSSW) originally issued by the Suwannee River Water Management District (SRWMD) circa 1987–1988. The District did not have permit authority prior to this time. Briefly, the permit history of this treatment system is complicated, spans a number of years, and was performed prior to any online access to permits, drawings, or aerial photographs being available. Older permits are often not available in their entirety because all figures were hand drawn, often on the back side of copied pages, and have been lost with time. Most current reviewers have no experience with these older permit methodologies. Therefore, a very general review of the history is provided to save the current reviewers an immense amount of time and effort.

Generally, the initial owners of the entire Blues Creek Development area entered into an agreement with Alachua County to establish a regional stormwater treatment system within this **90.29-acre** parcel. In the late 1970s and early 1980s the hydrology of the basin was described in numerous environmental reports. These are bound reports and not available online. The general intent of the treatment system was to treat all the stormwater originating on the **300-acre Blues Creek Properties** as well as control and treat stormwaters and floodwaters within an approximately **1,300-acre drainage basin** comprised of the upper headwaters of the Blues Creek drainage basin. This was the intent of all permits issued for this site since 1980 and extending until the present date.

However, to understand this history requires an extensive review of all historical reports, easements, County Zoning Resolutions and MSSW permits, and ERP permits issued for this site. This permit history is complicated, has been subject to numerous legal challenges, and unless a reviewer has some grasp of historical wetland jurisdiction rules and historical stormwater permit methodologies, this history will be totally confusing, if not undecipherable. The following review comments concern aspects of this history, but most of this has already been *ironed-out*; however, some knowledge of the history is absolutely required to understand any future development activity proposed for this site.

The complicating issue is that most of the initial stormwater permitting methodologies for this site were new at the time and this conceptual methodology had never been addressed in the County (or Florida) so there was some "after the fact" permitting, which explains some discrepancies in the historical permit record. In general, the permit record is easier to explain than the history of the Project!

In 1981, Devil's Creek, LTD, San Felasco Villas Venture, and Millhopper Development Corporation created an Easement on the 90.29-acre parcel to directly treat stormwaters originating on a 1,300-acre drainage basin that specifically included 300-acres of future Blues Creek Development Properties. The Easement was created 7 August 1981 and recorded 8 September 1981 (O.R. Book 1371, Page 160). The easement document is included for review as Attachment 1 to this report. As was common practice, the Drainage Easement was created at the request of and in cooperation with Alachua County as described within Zoning Resolution Z-81-68, dated 24 June 1981. The Resolution required construction of a dam and spillway at the terminus of the 90.29-acre parcel for the stormwater treatment system needed for final development approval of the San Felasco Villas and Deer Run Unit III development sites. ERC could not find reference to the construction date for the spillway, but the structure is in place as seen on the January–February 1984 historical false-color infrared photograph (this photo is in ERC in-house files; a more elaborate history of this project site is contained within the 2015 NARA Report provided as Attachment 2 to this document).

Construction of the spillway and flow control structures at the terminus of the stormwater treatment system was further described and regulated by permits issued by the Florida Department of Environmental Regulation (currently FDEP), which issued **Permit NO. 010818622** on 25 May 1984 (a construction permit regulating installation of a box culvert, utility lines, and retaining wall for the Blues Creek Development apparently related to the creek crossing at NW 52nd Terrace). This permit was followed by issuance of **Permit NO.** RC-01-92547 dated 5 February 1985 by FDEP for construction of the stormwater management system within the area defined by the Easement.

On 29 June 1987, SRWMD issued MSSW Permit NO. 4-87-00067, which significantly modified the original stormwater permit defined by Permit NO: RC-01-92547 by creating five (5) new storm basins within the boundaries of the 90.29-acre Easement. This Permit was challenged by a local environment group, who won the appeal. MSSW Permit NO.4-87-00067 was modified on 16 June 1988 to prohibit any proposed construction within the 90.29-acre Easement and establish this as a Natural Stormwater Treatment System (defined as or referred to as a Conservation Area). The permit as described above was modified by a Division of Administrative Hearing Officer

through a mutually agreed on **Stipulated Order. ERC** has seen no documentation to indicate that a new Easement document was created to replace the Easement described in **Attachment 1**.

Following this sequence of activities, permitting of the site has been addressed or modified though issuance of several Environmental Resource Permits by the District since 1988. Since the original permit was issued in 1984, the **90.29-acre** parcel was *never* permitted as a wetland, and wetland jurisdiction has never been asserted for this area by the **State of Florida** from 1980 to 1988 or by **SRWMD** since that date or ever by **ACOE**. The area historically consisted of a mosaic of wetland and upland plant communities that had **NO** jurisdictional connection to other connected **Waters of the State** or was ever claimed by the State for permit purposes.

Historically, the depression was considered Isolated and Upland. Similarly, ACOE never determined Blues Creek to be Traditional Navigable Water (TNW) used for interstate commerce; therefore, the onsite wetlands were never considered Waters of the United States (WOTUS) as related to Federal Jurisdiction. This Non-WOTUS

Determination would apply to the current Federal Wetlands Jurisdiction as regulated by the State of Florida and described within Chapter 62-331, FAC. State 404 Program.

Currently this 90.29-acre Treatment System is exempt from State wetland and surface water regulation as described within Chapter 62-340. FAC, Delineation of the Landward Extent of Wetlands and Surface Waters, specifically as described within Section 62-340.700, Exemptions for Treatment or Disposal Systems. The legal description within the 1984 Easement Document (Attachment 1) defines the boundaries of the system and was originally more or less correlated with the confining contours of the large landscape depression. It is generally associated with a specific contour interval.

In past years, **ERC** defined a wetland and surface water boundary around this system that was approved by the District, City, and County and was reviewed by ACOE as a courtesy to a request made by **ERC**. However, as associated with the **90.29-acre** basin, this boundary was never intended for use as a *Wetland Boundary* pursuant to *Chapter 62-340* but was provided to establish **Wetland** and **Upland Plant Community Boundaries** within the treatment system for habitat mapping purposes and upland set-aside calculations. In past permit application reviews, this boundary has been treated or considered as a wetland boundary and buffers have been added to the boundary, but this is a totally inappropriate use of the boundary, and it is at odds with the specific exemptions contained in **Chapter 62-340.700** and the code provisions in the City and County Land Development Codes. The current basin regulatory line is established by legal description, is not a wetland line, and does not serve this purpose.

#### **Current Proposed Project Description**

The Project Site is referred to as "Blues Creek Unit 5, Phase 2." The current application proposes text amendments to the existing Land Use and Zoning of Parcel 06006-052-000. This parcel totals 36.70 acres. The current land use of this parcel is SF, and the existing zoning is PD. The applicant proposes to divide the parcel into a 4.20-acre Development Site and a 32.50-acre Conservation Area. The proposed land use for the 4.2-acre site is Planned Unit District (PUD) and the proposed zoning is PD. The proposed Conservation and Development Areas of the Parcel are shown on Figure 4. For environmental review purposes, Parcel 06006-002-000 is included within the limits of the Planning Parcel; however, No land use or zoning amendments are proposed for this Parcel. As part of this application a Conceptual Development Plan is provided for the 4.20-acre PD area, which will be constructed for multiple SF-Attached Townhouses with associated parking and stormwater management facilities. A conceptual site plan is attached for review as Figure 5.

## Results of Current Site Reviews for the Proposed Development Site

ERC was retained by Mr. Scot Ross, representing New Generation Home Builders, Inc. (Newberry, Florida), to prepare an updated *Environmental Resource Assessment* (ERA) to include a *Listed Species Survey* for Parcel 06006-052-000. Field surveys of the proposed future 4.20-acre development parcel were performed 25–26 April 2022 to specifically review the existing condition of the 4.20-acre site only. Photographs of the Project Site conditions during this review are provided as Attachment 3 (Photographs 1–11). All areas of this Blues Creek development parcel and the stormwater basin areas within Parcel 06006-002-000 have been extensively reviewed and documented by ERC for the past two decades. Therefore, this site review was very specific in intent and had a local review area. Results of all previous surveys and data obtained have been discussed at length within a NARA prepared for this Project Site in 2015. The entire contents of this report and review are attached to this report as Attachment 2 for easy retrieval of historical information if needed. Therefore, this current report is considered as an Addendum to previous studies.

### Natural Area Resource Assessment Methodology

#### Field Survey

**ERC** performed a Level 1 Review (as specifically described in **Section 30-310(e)(2)** of the City of Gainesville Land Development Regulation) of the **4.2-acre** section of the

Planning Parcel. The surveys were performed by Peter M. Wallace, MS, and Robert A. Garren, MS, of ERC. A survey of the RAA was performed by repeatedly traversing the site with a series of pedestrian transects. Observations regarding plant species composition were recorded at **462** locations within the Development Site and adjacent areas. At each location, plant species, plant habitat type, observations of animal occurrences, and GPS position coordinates were recorded using a hand-held Garmin GPSMap76CSx unit. The site survey was specifically performed to assess any changes in the general ecological condition of the property, determine the existing plant community composition, and survey for the presence or possible occurrence of listed plant and animal species.

#### Results

The proposed **4.20-acre** future development site is shown as **Figure 6** on a 2020 aerial photograph with the 2017 LiDAR overlain. The Project Site boundaries are shown to avoid two large landscape depressions along the northwest and west perimeter of the proposed SF-Attached Townhouse Project Site. A schematic of the Project Site Area is provided as Figure 7. This drawing shows there are two (2) wetland or surface water jurisdictional features within the boundaries of the site. A very small, disturbed, isolated wetland occurs within the northeast corner of the site and consists of **0.19 acres**. This wetland is hydrologically altered and has been filled by construction of the homesite along the north permitter of the wetland. In addition, the wetland was filled along the east boundary by construction of stormwater facilities, utilities, and a sanitary sewer. There is also a large amount of road fill placed along the east boundary as part of past access road construction. This fill extends well into the jurisdiction boundary flagged for the wetland in this area as part of this review. This wetland was referred to as Wetland "W" within the 2015 assessment. Within this review it is named Wetland 1. The general condition of the wetland is shown in **Photograph 9** (Attachment 3). At the time of the field survey, the wetland was shallowly flooded, and the canopy vegetation was in poor condition. The wetland was dominated by small tree and shrubs to include swampbay (Persea palustris [Raf.] Sarg.), swamp blackgum (Nyssa sylvatica Marsh. var. biflora [Walt.] Sarg.), sweet gallberry (Ilex coriacea [Pursh] Chapm.), wax myrtle (Myrica cerifera L.), loblolly pine (Pinus taeda L.), water oak (Quercus nigra L.), and sweetbay (Magnolia virginiana L.). Herbaceous groundcover only occurs minimally with groundcover vegetation dominated by woody species saplings and resprouts and individuals of saw palmetto (Serenoa repens [Bartr.] Small) and bracken fern (Pteridium aquilinum [L.] Kuhn.).

A second jurisdictional landscape depression lies within the southwest corner of the site and is defined as **Intermittent Surface Water 1**. This depression, as flagged, totals **0.04** 

acres and had only a small pool of water in the deepest area of the depression during the survey. The depression has a minimal groundcover component and only has two subcanopy size saplings within the perimeter of the depression. This feature has flooded in response to intense rain events since 2016 but prior to this time the depression was never seen as flooded and never appeared as a wetland during the prior decade of field investigation. In normal rainy years it exists as a depression covered in upland groundcover species, and when reviewed by all agencies, the area was covered in vines and briers. So, flooding is intermittent during intense rain events. A view of the surface water is shown as **Photograph 6** (**Attachment 3**).

As proposed, the Site Plan will result in impacts to these two (2) regulated wetland and surface water features. The impacts are visually depicted on **Figure 8**, which illustrates that the complete **0.04-acre** *Intermittent Surface Water 1* depression will be removed. In addition, a very small **0.02-acre** area along the east perimeter of the **Wetland-1 area** will be removed during entrance road construction. Since the wetland boundary in this area extends uphill from the base-of-slope of the existing fill, the **0.02-acre** fill area shown essentially occurs on a previously disturbed and filled wetland area.

The impacts as shown have been avoided and reduced to the greatest extent possible. The Project Site has been situated to avoid the large landscape depressions occurring west and north of the proposed site. The filling of **Wetland-1** cannot be avoided as this is the area designated for new access roads, and fill to construct roads has previously been placed in this area. To avoid the **Intermittent Surface Water-1** area would involve moving the site farther south and southwest, which would involve greater encroachment in areas of higher water tables and in areas with a large population of the listed plant species needle palm (*Rhapidophyllum hystrix* [Pursh] H. Wendl. & Drude ex Drude). In addition, avoiding this impact to a low-quality depression with intermittent flooding and low wildlife quality would impact more upland habitat. All upland habitat in this area is of higher quality than the depression area and removal of substantially more and larger high-quality tree canopy species, which are prominent in all upland areas on this site, would be required. This surface water habitat is the lowest quality area of all adjacent hydric and upland habitat areas, so the loss of this **0.04-acre** area is much less of an impact than if the site footprint were moved.

The proposed impacts must be considered expressively minimal considering the proposed mitigation offered for the realized impacts. The applicant is proposing to use **4.20 acres** of the **36.70-acre** parcel for development. This results in impacts to only **11.4%** of the total parcel acreage. The proposed mitigation plan is provided on **Figure 9**. The schematic shows that the applicant intends to place the remaining acreage of **Parcel** 

06006-052-000 in Conservation Zoning with future possible creation of a Conservation **Easement** for the area. This is being considered for possible use of the area to offset and mitigate for surface water and wetland impacts that will occur as a result of development of the proposed PD. In addition, the proposed Conservation Easement is offered to possibly satisfy in part or completely the tree mitigation that may be required for development of the PD area. As a result of this proposal the remaining 32.50-acre area of Parcel 06006-052-000 will be completely removed from any future development considerations. In addition to this Conservation activity, the 32.50-acre Conservation Area will be donated to a municipal, state, or third-party entity for perpetual Conservation Management. Also, the applicant wishes to place the entire 90.29-acre Drainage Easement into Conservation and donate these lands to a management entity. The actual acreage of this donation cannot at this time be determined due to multiple ownerships of the associated parcels as described on Figure 9. As shown on this figure, the Applicant owns lands within and outside the delineated Easement of 90.29 acres. Others to include the Homeowners Association also own lands within the delineated Easement Area. So, the actual acreage that will be donated will require some negotiations with these owners, but the intent is to include as much area as possible in the proposed Conservation Easement.

For the remaining discussion with respect to this Conservation Easement within this report, ERC will refer to this as 90.29 acres (area of existing easement) understanding that the final acreage may be slightly larger or smaller. Currently, within and adjacent to the Easement, the Applicant has control of 86.93 acres (*Total of Parcel areas 1, 3, and 4 on Figure 9*). The total proposed conservation acreage may equal the entire area shown on Figure 9 that lies outside of the limits of Parcel 06006-052-000, which totals 93.51 acres (please note acreages are in part determined from Parcel lines that do not exactly correlate with the surveyed Easement Boundary). This will result in a Conservation Easement that ranges from 86.93 acres to 93.51 acres. Hence, assuming the 90.29-acre easement as the target acreage, the total Conservation Area to include the lands in Parcel 06006-052-000 would equal 122.79 acres. Since everyone and his brother in the City and County has wanted this to happen in the past twenty years, this seems like a proper and appropriate consideration.

Data from field surveys conducted in **2015** for the Planning Parcel, proposed Project Site, and Proposed Conservation Areas are provided on **Figure 10** to show the areas and extent of the survey. The GPS icons show where data were collected along with corresponding data nomenclature. The plant community map generated for the entire Planning Parcel area is shown on **Figure 11**. This includes the plant community mapping of the current **4.20-acre** Project Site and all of the proposed **Conservation Easement** lands. The GPS

locations from the current Planning Parcel update are provided on **Figure 12.** As can be seen from the GPS point designations, the majority of the Project Site is dominated by a Highly Significant Climax Mesic Hammock Habitat. In the project area this community is dominated by large canopy trees with an understory that has a very sparse groundcover. In the north and central area of the site the water table is far below the surface, the site is much drier, and the slope is very shallow. In the south area of the site the canopy cover remains, but the water table is closer to the ground surface and the vegetation is denser. The community is mesic and upland in nature but because the slope of the ground is steeper, the water table becomes closer to the ground surface creating seepage zones farther south of the proposed south property line. An extensive description of all onsite plant communities is provided in the *2015 NARA Report* provided as **Attachment 2**.

#### **Listed Species Updated Review**

#### Published Listed Species Occurrence Data

#### Federal Review Pursuant to Section 7 of the Clean Water Act (CWA)

There are No federal wetlands on site that will be affected by the proposed development. There are intermittent and ephemeral surface water depressions that inundate only in response to intensive rainfall and do not represent surface waters with an average water table at or above the surface. There is a hydrologically altered, previously impacted wetland that will receive additional fill impacts from the proposed development. So, these features do not represent habitats that do or would support life cycles of species that depend on wetlands or surface waters for survival or reproduction. If federal wetland review of this site were required pursuant to Section 404 of the Clean Water Act (CWA), then review of the impacts would historically have been required by ACOE who would have requested consultation with the U.S. Fish and Wildlife Service (USFWS) through Section 7 of the Endangered Species Act (ESA) to address possible effects on federally listed wildlife species. Since the passage of the State 404 Assumption Program, it is not exactly clear how the Section 7 process will be initiated by the State.

Development of the Project Site will not affect any federally or state listed animal species; however, a comprehensive site review was conducted to determine if species were present, and an extensive data review was performed to determine the historical or extant reported species occurrences for this area of the County. Previous listed species review and data are described in the **2015 NARA** report provided in **Attachment 2**. The following report format specifically addresses endangered species review of the Project Site and adjacent areas required by **Section 7**. For projects that may require alterations to

the **FEMA** floodplain and subsequent map revision, the listed species review employed in this report also addresses the requirements that would satisfy **FEMA** if floodplain alterations were required for map revisions. Therefore, the procedure provided below has multiple applications for federal and state development applications.

The following report format also specifically addresses endangered species review of the Project Site and adjacent areas that would be required by **HUD** for applications requiring federal assistance for low-income housing, etc. This Project has no planned low-income housing provisions, but the **HUD** review procedure provides a template for listed species review of projects of this size and ecological location. No city in Alachua County nor the County itself have a specific procedure outlined for review of listed species impacts. The procedure followed here, and the summary information provided, has been used by **ERC** for successful permitting review of many projects within Alachua County and other counties in north Florida.

With respect to the requirements for listed species review defined by **USFWS**, Florida Fish and Wildlife Conservation Commission (**FWC**), and the Development Regulations of the City of Gainesville and Alachua County, most listed species regulations involve occurrence and protection of unique, high-quality, undisturbed native habitats or habitats that retain the characteristic of the historical native plant communities. As such it can be stated that

The Project Site or parcels directly adjacent to the Project Site does contain Native and relatively Natural Plant Communities and associated habitats that do support listed plant species, but these habitats are too small in extent to support or could support any long-term viable populations for any large-range-requiring endangered or imperiled animal species known to occur within Alachua County, Florida, that would be adversely affected by the proposed Project Development. This does not mean that transient use of the site by listed animal species does not occur or listed species do not presently occur on the site. However, the site does not contain suitable forage or nesting habitat to support populations that have very specific habitat requirements or need large ranges for mating or forage. The site and all habitats within the proposed project area have not been significantly altered by agricultural management or various development activities since prior to 1937 based on historical aerial photographic review. However, all habitats have been significantly altered by logging, and conversion to silviculture in the past. Hydrologic alterations to adjacent sites have altered the surface water flows that flow into the site, and the associated water quality has been affected by significant stormwater flows from adjacent agricultural areas and development sites.

The Project Site and surrounding areas were historically dominated by two native plant community types, described briefly as follows:

- (1) Xeric Longleaf Pine-Turkey Oak-Wiregrass Community: This is a Xeric High Pine habitat that is maintained by natural fire occurrence on a 2–3-year cycle. The historical extent of this community more-or-less corresponds to the present mapping distribution of the Candler Fine Sand, Gainesville Sands, and parts of the Tavares Sand soil mapping units or similar mapping units having deep sands underlain by no sub-surface clay layers. Soils having a confining layer that is sufficiently deep to allow for rapid percolation of rains with minimal times of having a water table near the surface may provide for maintenance of these Xeric habitats. Generally High Pine soils are deep, dry, sandy Entisols. This habitat type has historically been removed from this site and the surrounding area by past construction activities as well as clearing for pasture and silvicultural activities. In Alachua County, once the plow layer is disturbed and the roots of the historical vegetation are cleared and burned, these historical habitats never return to their native form. Instead, the sites become invaded by laurel oak (Quercus hemisphaerica), which is a native nuisance species that becomes the dominant canopy, subcanopy, and groundcover component of the vegetation cover and excludes colonization of the more desirable native species. Loblolly pine (Pinus taeda) replaces longleaf pine (Pinus palustris) as the dominant pine species. The groundcover is almost 100% covered by seedlings and saplings of the woody canopy species; therefore, there are **NO** areas of diverse herbaceous cover present. These successional communities are the dominant plant communities that now exist in the County. Their succession and persistence are evident by examination of historical aerial photo coverages and have been verified by performance of field surveys that confirm the successional, persistent, and widespread distribution of this community. There are Xeric Habitat areas within the southern area of Parcel 06006-052-000, however this habitat does not exist within the proposed 4.20- acre Project Site.
- (2) Mesic-Calcareous Hammock: This is natural native mixed Hardwood Mesic plant community that is characterized by a diverse mix of deciduous hardwood species to include swamp chestnut oak (*Quercus michauxii*), pignut hickory (*Carya glabra*), sweetgum (*Liquidambar styraciflua*), black cherry (*Prunus serotina*), sugar hackberry (*Celtis laevigata*), box elder (*Acer negundo*), American hornbeam (*Carpinus caroliniana*), eastern hop hornbeam (*Ostyra virginiana*), Carolina holly (*Ilex ambigua*), and eastern roughleaf dogwood (*Cornus asperifolia*). Evergreen canopy species are present but at low densities and include redbay (*Persea borbonia*), sweetbay (*Magnolia virginiana*), cabbage palm (*Sabal palmetto*), and spruce pine (*Pinus glabra*). These communities rarely burn, are mesic in nature, and often occur on slopes. Often the water table may be very near the surface for

short periods and flows across the surface clays often characterizes these communities that may be on shallow to very steep slopes. Within Alachua County, these communities are uniquely associated with the Hawthorn Formation along the Cody Scarp extending from elevations of 75 to 150 ft. Typical soils include the Arredondo fine sand and Bonneau fine sand, which are Ultisols and have a discontinuous subsurface clay layer. In addition, Cadillac, and Jonesville soils (Alfisols), which have subsurface clay layers, occur within this plant community. The Pedro soils (Ultisols), which have limestone exposed at the surface or is close to the surface mixed with clay, occur in these habitat areas south of the Project Area. These soils are in areas of limerock outcrops, sinkholes, caves, and chimneys and support Mesic-Calcareous Hammock vegetation. Similar to Sandhill habitats, when these areas are plowed and converted to pasture or silviculture, the historical community does not regenerate. Along the slopes of the creeks in east Alachua County this habitat type is found on soils with defined Argillic horizons that slope from the flatwoods to the creek channels. In areas where the water table is near the surface the habitat is best described as Hydric Hammock and the dominant groundcover generally changes from wiregrass (Aristida stricta) to slender woodoats (Chasmanthium laxum). A high-quality example of this habitat type occurs within the Project Site and throughout the remaining areas of Parcel 06006-052-000.

Many of the imperiled reptile species in Alachua County are associated with native Sandhill habitats or fire-maintained Flatwood habitats, which are now only very rarely found in historical pristine condition. These natural historical habitats have been totally removed from the immediate area of the Project Site; however, they did historically occur within the boundaries of the Blues Creek Parent Development Site, but NOT now.

Therefore, development of the site as proposed will disturb a small acreage of Significant Mesic Hammock Habitat but will not harm any Critical Habitat in this area. The impacts that occur to the Mesic Hammock Habitat will be significantly offset and mitigated by placement of a large area of significant upland and wetland habitat totaling 122.79 acres into perpetual conservation.

The remaining sections of this listed species review will provide documentation to support this conclusion. The documentation includes historical onsite pedestrian review of all areas of the Project Site on multiple field days as well as extensive review of all listed species GIS databases prepared by local, state, and federal governments for Alachua County, Florida. In addition, a list of the potentially occurring listed species on the site and surrounding areas and a list of migratory birds known for the area was

obtained via an online **IPaC** (*Information for Planning and Consultation*) consultation performed for the Project Area on 8 January 2023. The results of this consultation are discussed in this report and are provided in its entirety as received from the **USFWS** in **Attachment 4.** 

#### Requirements for Listed Species Review and Critical Habitat Impact Review

Section 7 of the <u>Endangered Species Act of 1973</u> (ESA) requires all Federal agencies to use their authorities to conserve <u>endangered and threatened species</u> in consultation with the USFWS. This 'proactive conservation mandate' for Federal agencies is articulated in Section 7(a)(1). Section 7(a)(2) contains a complementary consultation mandate for Federal agencies, as follows:

#### Section 7(a)(2) Mandate

This section directs all Federal agencies to insure that the actions they authorize, fund, or carry out do not jeopardize the continued existence of endangered or threatened species or destroy or adversely modify <u>critical habitat</u>. The **Section 7** implementing regulations (<u>50 CFR Part 402</u>) specify how Federal agencies are to fulfill their **Section 7(a)(2)** consultation requirements.

#### Section 7(a)(2) Responsibilities

Under the **Section 7** implementing regulations (<u>50 CFR Part 402</u>), Federal agencies must review their actions to determine whether they may affect endangered or threatened species or critical habitat. To accomplish this, Federal agencies must determine whether any listed species may be present in the Project Area and whether that area overlaps with critical habitat. If one or more listed species may be present in the action area or if critical habitat overlaps with the action area, agencies must evaluate the potential effects of their action. If no species or their critical habitat are present or affected, no consultation is required. Consultation will be either informal, ending with written concurrence from USFWS, or formal. Formal consultation concludes when USFWS delivers its biological opinion to the Federal agency.

Federal agencies must confer with the USFWS per Section 7(a)(4) of the ESA if any action is likely to jeopardize a species proposed for listing or to destroy or adversely modify proposed critical habitat. Critical habitat is a term used to define specific geographic areas that contain habitat features essential to the survival and conservation of endangered or threatened species. Critical habitat areas often require specific management strategies to maintain or establish an existing habitat in a condition that supports or potentially supports an imperiled species. To determine whether either of these are likely, agencies may follow the same approach used for listed species and designated critical habitat (that is, evaluate the likely effects of their actions on any

proposed species that may be present in the Project Area and on any proposed critical habitat that lies within or adjacent to the Project Area).

To this end, this report is provided to evaluate the potential effects that the Project may have on listed species using extensive field analysis integrated with multiagency GIS data review of the Project Area and surrounding area. In addition, online consultations were performed based on criteria outlined within an **IPaC** Consultation procedure (see **Attachment 4**).

### Summary Information Regarding Threatened & Endangered Species in Florida

There are several agencies that have been delegated the authority to protect and preserve the threatened and endangered flora and fauna within the State of Florida. USFWS maintains a list of species afforded special protection by the *Endangered Species Act of 1973 (16 U.S.C. 1531)*. The list is published in the *List of Endangered and Threatened Wildlife and Plants, 50 CFR 17.11-12*. FWC maintains a list of the protected animals occurring within the state by authority of the *Florida Endangered and Threatened Species Act of 1977 (Section 372.072, Florida Statutes [FS])* and *Chapter 68A-27, Florida Administrative Code (FAC), Rules Relating to Endangered and Threatened Species*. The specific policy of the Florida Endangered and Threatened Species Act of 1977 is declared as follows:

Subsection 2: Declaration of Policy—The Legislature recognizes that the State of Florida harbors a wide diversity of fish and wildlife and that it is the policy of this state to conserve and wisely manage these resources, with particular attention to those species defined by the Florida Fish and Wildlife Conservation Commission, the Department of Environmental Protection, or the U.S. Department of Interior, or successor agencies, as being endangered or threatened. As Florida has more endangered and threatened species than any other continental state, it is the intent of the Legislature to provide for research and management to conserve and protect these species as a natural resource.

The list of threatened and endangered animals protected by these laws is published in *Section 68-27.003, .004, and .005, FAC*. The regulation of listed marine animals was historically delegated to the Florida Department of Natural Resources (FDNR); however, has since been reorganized into the Florida DEP. The *Preservation of Native Flora of Florida Act (Sections 581.185, 581.186 [in part] and 581.201, FS)* passed in 1978 declares a public policy of the State of Florida regarding native flora, as follows:

**Subsection 1: Legislative Declaration**—The Legislature finds and declares that it shall be the public policy of this state to: provide recognition of those plant species native to the state that are endangered, threatened, or commercially

exploited; protect the native flora from unlawful harvesting on both public and privately owned lands; provide an orderly and controlled procedure for restricted harvesting of native flora from the wild, thus preventing wanton exploitation or destruction of native plant populations; encourage the propagation of native species of flora; and provide the people of this state with the information necessary to legally harvest native plants so as to ultimately transplant those plants with the greatest possible chance of survival.

To this end, the Florida Department of Agriculture and Consumer Services regulates the threatened and endangered plant species occurring within the state. As specifically authorized by *Chapter 5B-40*, *Preservation of Native Flora of Florida*, *FAC*, the *Regulated Plant Index* is published in *Section 5B-40.0055*. FWC periodically releases a publication that summarizes animal species regulated by FWC and the USFWS. The publication is titled *Florida's Endangered Species*, *Threatened Species*, *and Species of Special Concern*. The federal lists of plants and animals are published in *50CFR 17.11-12*, and the list of Florida's federally listed plant species is published by the Florida Division of Forestry.

Alachua County, by authority of *Article 3, Significant Plant and Wildlife Habitat*, and *Article 4, Listed Plant and Animal Species Habitat*, of the ULDC regulates development in habitats where listed species occur or could potentially occur. Provisions within Articles 3 and 4 allow the County to require up to 25% of the upland portion be protected and set aside as primary conservation areas. Areas protected under Articles 3 and 4 are designated as CMAs and are further regulated via rules outlined in *Article 17*, *Conservation Management Areas (ULDC)* and potentially require that the property owner establish a conservation easement for the specific areas within the parcel. The owner is further responsible for the development of a management plan and perpetual management of the area.

The City of Gainesville via provisions of *Sections 30-8.12(C)(11) and 30-8.11(E)* (2 February 2019) has adopted the County's template for listed species protection and provides protection of listed species and listed species habitats. Protective mechanisms include provision of CMAs with associated management plans as described in *Section 30-8.14*, LDC. Neither the County's nor the City's land development codes describe the protections warranted for individual species or habitats. These protections are defined on a case-by-case basis often in cooperation with the responsible federal or state regulatory entity.

Several other lists of the endangered and threatened fauna and flora are maintained for the State of Florida. The Florida Natural Areas Inventory (FNAI) maintains a list that summarizes the status and distribution of plant and animal species and natural communities within Florida. The FNAI is managed by The Nature Conservancy in cooperation with FDEP. The lists compiled by the FNAI contain many species that do not occur on the state or federal lists. The FNAI list as compiled is not subjected to the time-consuming administrative process required for listing for state and federal protection. Therefore, these lists often reflect the up-to-date true status of species that may be in immediate peril. The FNAI species that are not state or federally listed are not given legal protection.

An inventory of the statewide distribution of potentially threatened and endangered species was initiated in 1973 by the Florida Committee on Rare and Endangered Plants and Animals (FCREPA). The group published a several-volume series that contains detailed descriptions, distributions, and academic evaluations of species considered to be in peril. The FCREPA list contains many species in addition to the state and federal lists; however, these additional species are afforded no legal protection. The FCREPA series offers the best compiled review of the biology of the imperiled biota of Florida to date. Beginning in 1986, revisions of the FCREPA volumes were initiated and continue to date.

To aid in review of the imperiled species that occur in Florida and the State and Federal Regulations that govern their management, these publications are available:

- Endangered and Threatened Species Act of Florida, Chapter 372.072, FS
- Rules Relating to Endangered and Threatened Species, Chapter 68A-27, FAC
- The Preservation of Native Flora of Florida, Chapter 581.185, FS
- Preservation of Native Flora of Florida, Chapter 5B-40, FAC
- Florida's Endangered and Threatened Species, December 2018

# Results of County, State, and Federal Listed and Imperiled Species Database Reviews

#### Eagle Nest Locator and Wading and Waterbird Rookery Databases

• American Bald Eagle (FNAI G5/S3)

The results of the query of the Eagle Nest Locator and Water and Wading Bird Rookery Sites databases are provided on **Figure 13**. The results show that there are **NO** nests or extant rookeries within many miles of the Project Area. Construction of the site will **NOT** disturb any primary or secondary protective buffers for these features. There are **NO** federal wetlands or surface waters on site. There will be **NO** impacts to wetlands or

surface waters that provide forage habitat for listed wading or waterbirds. Development of the site will have **NO** adverse effects on any eagle nesting site and **NO** adverse impact on wading or waterbirds.

Bald Eagles Nesting Sites—Project Effect: "No Effect"
Wading and Waterbirds, Rookeries / Forage Areas—Project Effect: "No Effect"

### Federally Listed Species Occurrence Range Database Federally Listed Bird Species

- Red-cockaded Woodpecker (Federally Endangered; FNAI G3/S2)
- Florida Scrub-Jay (Federally Threatened; FNAI G2?/S2)
- Wood Stork (Federally Threatened; FNAI G4/S2)
- Eastern Black Rail (Federally Threatened; FNAI G3G4/S2)

Results of the USFWS Federally Listed Bird Species database search for the Project Site and surrounding area are presented in the following sections and effects determinations are provided for each species.

#### **Red-cockaded Woodpecker**

The known existing and historical ranges of the red-cockaded woodpecker (RCW) in relation to the Project Site are shown on Figure 14. RCWs require well-managed, firemaintained old growth pine flatwoods habitats for nesting and forage. In addition, relatively large expanses of this habitat type are required to support a breeding population. RCWs require large mature trees with red heart fungus within the heartwood for successful nesting. There are large pine trees in the area that may provide a suitable nesting area; however, the habitat to support this species, which is typically very specific, DOES NOT occur within the Planning Parcel or adjacent areas. Both the data from the FWS Observation Database and the FNAI Element Occurrence Tracking List indicate **NO** RCWs have been observed on the Planning Parcel or in this area of the County. The existing USFWS RCW occurrence observations are shown in relation to the Project Site on Figure 14. The database shows that RCWs historically occurred in areas of the County north of the airport and south of Waldo. However, these are historical colonies that have been extirpated. There are NO known colonies remaining in Alachua County. There is **NO** habitat on site to support this species. These data show that the current range of RCWs lies a considerable distance from the Project Site with a population occurring on Fort Blanding in Bradford and Clay counties northeast of Alachua County.

Red-cockaded Woodpecker—Project Effect: "No Effect"

#### Florida Scrub-Jay

The Florida Scrub-Jay Consultation Area along with delineated habitats and known observation locations is provided as **Figure 15**. The observations provided refer to studies performed from a 1992–1993 statewide survey. With respect to the Project Site, the closest historical known location lies within the Cedar Key Scrub  $\pm 70$  miles southwest from the Project Site (not shown on Figure 15). There is a large population within the Ocala National Forest within Marion County southeast of Alachua County. There is **NO** scrub-jay habitat on the Project Site and the Project will **NOT** affect any scrub-jay roosting or nesting habitat.

Florida Scrub-Jay—Project Effect: "No Effect"

#### **Wood Stork**

There were **NO** wood storks seen foraging on the site or any area around the site. There is No wood stork habitat in the vicinity of the Project Site. The Planning Parcel lies west of the Historical Regulated Forage Buffer for the River Styx Wood Stork Colony (**Figure 16**). However, this colony is **NO** longer active and is considered extirpated. There are **NO** wetlands or surface waters on site or on adjacent sites that support wood stork nesting or foraging. Therefore, there is **NO** forage or nesting habitat on site for wood storks that will be affected by Project Site development.

Wood Stork—Project Effect: "No Effect"

#### **Eastern Black Rail**

The eastern black rail was listed as a Federally Threatened Species on 9 November 2020. This species is distributed within the eastern and southeastern United States and requires wetland habitats and transitional habitats between wetland and upland grasslands for forage and reproduction. The eastern black rail has been reported in Alachua County in the past, primarily associated with Paynes Prairie and adjacent emergent ponds and wet prairies. The most recent reports of eastern black rail sightings in Alachua County are summarized in the "Checklist of the Birds of Alachua County" maintained by the Alachua Audubon Society, which contains results through 21 September 2020 and contains the following summary:

BLACK RAIL—Unknown status, possibly rare resident, e.g., Paynes Prairie, 9 Apr 1986, 1 Jun 1988, 18 Dec 1991, 5 Sep 1997. One breeding report, early 1900s: adult with three young, Paynes Prairie, early June.

There are **NO** reported listings after September 1997. There are **NO** wetlands located on the Project Site or immediately adjacent site that would support this species; therefore, there is **NO** onsite habitat to support this species.

Eastern Black Rail—Project Effect: "No Effect"
Project Effect: "No Effect" on Federally Listed Bird Species.

#### **Federally Listed Reptile Species**

- Eastern Indigo Snake (Federally Threatened, State Threatened; FNAI G3/S3)
- Gopher Tortoise (Federally Listed as Candidate Species in Florida Range, State Threatened; FNAI G3/S3)

#### **Eastern Indigo Snake**

The Project Site is within the historical and extant distribution range of the eastern indigo snake. The indigo snake inhabits a broad range of habitats in Florida but prefers gopher tortoise burrows or pocket gopher burrows within Xeric Habitats. There are **NO** gopher tortoise burrows or pocket gopher burrows on the site. There is **NO** natural native Xeric habitat within the Project Site. Indigo snakes will use armadillo burrows for refuge; however, due to the high-water table, these are often filled with water for various periods. The Project Site is surrounded on the east and north by high-density residential development, and development in several areas in the vicinity is on-going or planned in the near future. The Project Site is surrounded by residential access.

The site consists of High-Quality Mesic Habitat that is surrounded by Hydric Hammock Habitats and Wetland Habitats. There is a high likelihood that indigo snakes may be transient occupants on this site, but the site only provides minimal forage or nest habitat due to absence of any burrow-dwelling reptiles and mammals. Within the Project Area it is possible that indigo snakes will be encountered at the time of site development; however, these populations are transient and very difficult to census. Therefore, the site should be developed consistent with the *Standard Protection Measures for the Eastern Indigo Snake (USFWS August 13, 2013*). To determine the probable EFFECT that development of the Project would have on the eastern indigo snake, the FWS "Eastern Indigo Snake Programmatic Effect Determination Key" was consulted. Use of the key indicates that the Project would be "Not Likely to Adversely Affect" (NLAA) the eastern indigo snake. The Project is covered with Mesic Habitat and has substantially less than 25 acres of natural Xeric Habitat and NO Potentially Occupied gopher tortoise burrows; therefore, the potential effects on the population are minimal.

Eastern Indigo Snake—Project Effect: "Not Likely to Adversely Affect" (NLAA) However, development consistent with the FWS Guidelines results in a Project Effect of "No Effect"

#### **Gopher Tortoise**

In Florida, the gopher tortoise and its burrow are protected under state law. This species has now been designated as a Candidate Species for Listing in its range east of the Mobile River and Tombigbee River in Alabama. West of these rivers, the gopher tortoise is listed as Threatened in areas of Alabama, Mississippi, and Louisiana. Gopher tortoises generally occur in sandy, dry habitats with a sparse canopy and abundant low-growing herbaceous vegetation. They are commonly found in Sandhills, Pine Flatwoods, Scrub, Scrubby Flatwoods, Dry Prairies, and several other generally dry habitats. On sites where natural fire has been suppressed, growth of dense woody trees and shrubs make it difficult for gopher tortoises to move about and find suitable food sources. Because gopher tortoises share their burrows with over 350 other species of animals, they are considered a keystone species.

There were **NO** gopher tortoise burrows found on site. The Project Site would not be considered Listed Species Habitat or Gopher Tortoise Habitat by the County due to the dense canopy cover and absence of open space sandy habitat. Development of the site will have "**NO Effect**" on any gopher tortoise burrow or gopher tortoise population.

Gopher Tortoise—Project Effect: "No Effect"

#### **Federally Listed Amphibian Species**

- Striped Newt (Notophthalmus perstriatus) (FNAI G2G3/S2)
- Frosted Flatwoods Salamander (*Ambystoma cingulatum*) (Federal Threatened, FNAI G2; S1/S2)

#### **Striped Newt**

The Project Site occurs within the historical range of the striped newt and has historically been reported in Alachua Count and adjacent counties. The striped newt is a Xericadapted species that typically inhabits fire-maintained Scrubby Flatwoods, Sandhill, and Scrub Habitats. The striped newt is commonly associated with gopher tortoise habitat and is frequently found within burrows. This species depends on natural, ephemeral, isolated wetlands for breeding and reproduction and is extremely sensitive to the impacts that are cosmopolitan in this area, which include extensive soil disturbance, fire suppression, road construction, and disturbance of gopher tortoise burrows. It is unlikely this species occurs on site due to the absence of natural, ephemeral, emergent wetlands on the site or in adjacent areas due to the past disturbance in the area.

Striped Newt—Project Effect: "No Effect"

#### **Frosted Flatwoods Salamander**

The frosted flatwoods salamander is not shown to occur within Alachua County or adjacent counties in any State or Federal Database for Alachua County or the Project Area. There are **NO** historical reported species occurrences shown on any database within the Project Site boundaries and **NO** known occurrences have been reported in the area of the Project Site. The habitat for this species does not occur in the Project Area.

The frosted flatwoods salamander is a federally listed threatened species. The salamander inhabits Slash and Longleaf Pine Flatwoods having a wiregrass (*Aristida stricta*) groundcover with breeding occurring in small ephemeral ponds. Historically, two (2) occurrences reported closest to Project Site have occurred in Bradford County, which is many miles north of the Site north of the Santa Fe River. The frosted flatwoods salamander was reported from Cypress Domes in Bradford County on 5 May and 1 December 1979. Subsequent sampling of the site where the species was reported occurred in 1993; however, **NO** individuals of the species could be found. Although the historical distribution of the species included Alachua and Bradford counties, currently the species is considered as extirpated from these counties with **NO** known extant populations occurring within Alachua, Marion, Duval, or Bradford counties. Within Florida, the current known distribution is believed to only include Franklin, Wakulla, Liberty, Jefferson, and Baker counties. Regardless of the current distribution, there is currently **NO** onsite habitat that will be disturbed that is suitable to maintain this species.

Frosted Flatwoods Salamander—Project Effect: "No Effect"

#### **Federally Listed Crustacean Species**

• Squirrel Chimney Cave Shrimp (Federally Threatened; FNAI G1/S1)

The squirrel chimney cave shrimp is a transparent cave-dwelling crustacean that is about 1.2 inches long. It was found in Squirrel Chimney in Alachua County in 1953. Since that time, it has been collected less than a dozen times and was last collected in 1973. Collection efforts in 1994–1996 of Squirrel Cave and several local cave systems revealed no sign or traces of the shrimp. Squirrel Chimney is a nearly vertical limerock chimney within the Haile Limestone Plain geographic subdivision in northwestern Alachua County. This chimney has several possible undocumented connections to other underground systems. This habitat is very specialized in the County and requires surface connections to subterranean caves. There are **NO** comparable habitats in the vicinity of the Project Site.

Squirrel Chimney Cave Shrimp—Project Effect: "No Effect"

#### **Migratory Birds**

The following migratory birds were documented within the **IPaC** consultation provided as **Attachment 4**. Migratory birds are designated for USFWS consultation and require protection for HUD and other Federal Related or Funded Projects. In addition, wetland impacts and impacts to critical habitats require oversight by the USFWS. During Section 7 consultation, the USFWS must evaluate the potential effects the project may have on migratory birds that potentially use the areas in and surrounding the Project Site. The birds that occur on this list are of particular concern because either (1) the birds are listed on the USFWS "Birds of Conservation Concern list" or (2) they warrant special concern in the area of the proposed Project Site. Based on the information contained within the **IPaC** Consultation Report, there are **NO** Critical Habitats in the area of the Project Site under the jurisdiction of the USFWS. Brief comments related to the potential occurrence of the Migratory Species that potentially occur in the County are provide within each species' section, as follows:

- American Kestrel (*Falco sparverius paulus*) (State Threatened, FNAI G5S2): This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA. Breeds Apr 1 to Aug 31.
  - Comment: The southeastern American kestrel is a State-listed species, and a permit is required to take a nesting location; it has a 450-ft Protective No Disturbance Buffer extending from nesting locations. The kestrel was not seen on or adjacent to the Project Site. Onsite habitats provide dead snags, but **NO** large old-field areas exist that would support forage for this species. There are **NO** open habitats that provide for forage of this species. The only adjacent undeveloped properties surrounding the Project Site occur well to the west of the Project Site.
  - American Kestrel—Project Effect: "No Effect"
- Bachman's Sparrow (*Aimophila aestivalis*) (FNAI G3S3): This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. Breeds May 1 to Sep 30.
  - **Comment:** from the "Checklist of the Birds of Alachua County," Bachman's sparrow is an uncommon resident of Alachua County that is considered vulnerable in the State of Florida. This habitat specialist generally requires fire-maintained mature to old growth natural longleaf pine forests that are not significantly affected by forest management. Sites that have mature well-maintained pine forests both on the site and in adjacent areas are the required preferred habitat. These birds also require a well-developed mature herbaceous groundcover with limited shrub and hardwood groundcover and mid-story components. This habitat

type does **NOT** occur on the Project Site or in surrounding areas however habitat is available farther south within the Hickory Sink Strategic Ecosystem area.

Bachman's Sparrow—Project Effect: "No Effect"

• Bald Eagle (*Haliaeetus leucocephalus*) (FNAI G5S3): 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.

**Comment:** there are **NO** eagle nests that will be affected by the project. There is **NO** forage habitat on the Project Site that support feeding and foraging of eagles. See discussion in Bald Eagle Nest section above.

Bald Eagle—Project Effect: "No Effect"

• Great Blue Heron (*Ardea herodias occidentalis*): This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA. Breeds Jan 1 to Dec 31.

**Comment:** The great blue heron is commonly found throughout wetland habitats in Alachua County. It requires wet habitats for forage and nesting. There are **NO** wetlands on the Project Site or in the vicinity of the Project Site that support forage or nesting of this species.

Great Blue Heron—Project Effect: "No Effect"

• **Henslow's Sparrow** (*Ammodramus henslowii*): This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. Breeds elsewhere.

**Comment:** Henslow's sparrow is a rare winter visitor in Alachua County and requires well-developed coastal marshes for breeding. In addition, the sparrow may use natural uncultivated grasslands for forage and breeding. The habitat requirements for this species do not exist on the Project Site.

Henslow's Sparrow—Project Effect: "No Effect"

• Lesser Yellowlegs (*Tringa flavipes*): This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. Breeds elsewhere.

**Comment:** This species is a waterbird that forages and breeds in brackish and freshwater wetlands. Additionally, the species will use wet ponds, mud flats, and a wide variety of wetland habitats. There is **NO** wetland habitat on the Project Site that provides habitat for this species.

Lesser Yellowlegs—Project Site: "No Effect"

• **Prairie Warbler** (*Dendroica discolor*) (G5T3S3): This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. Breeds May 1 to Jul 31.

**Comment:** This species is defined as a common fall transient that is uncommon in spring and rare in winter in Alachua County. This species prefers upland shrub habitats or other successional habitats such as oldfield; however, open space appears to be the significant requirement of the habitat. The project does not provide this habitat type.

Prairie Warbler—Project Effect: "No effect"

• 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.

Comment: The red-headed woodpecker prefers open savannah type deciduous woodlands with open understories as its primary nesting and foraging habitat. In Alachua County it is defined as a common summer resident but is uncommon in winter. The Project Site has areas of mature deciduous canopy with an open mature groundcover. The species was not seen on site but could be a transient visitor. Substantial habitat that supports this species that is similar to the Project Site habitat will be placed in Perpetual Conservation. These areas will provide long-term support for this species, therefore the net short - term effect on populations of this species will be negligible while the long-term effect will be beneficial. This species was not seen on site and not reported in previous studies.

Red-headed Woodpecker—Project Effect: "No Effect"

• Short-billed Dowitcher (*Limnodromus griseus*): This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. Breeds elsewhere.

**Comment:** This species is described in Alachua County as a rare spring transient and irregular transient in late summer and fall. These are primarily salt water and brackish waterbirds that do not breed in Alachua County. These birds prefer habitats unavailable on the Project Site or within the County.

Short-billed Dowitcher—Project Effect: "No Effect"

• Swallow-tailed Kite (*Elanoides forficatus*): This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. Breeds Mar 10 to Jun 30.

**Comment:** The swallow-tailed kite is described in Alachua County as a rare spring resident. In Alachua County, the kite prefers nesting and hunting along riparian systems with tall mature trees and is often in competition in these areas with red-shouldered hawks and barred owls. They frequently visit and nest at the

same sites from year to year with several pairs nesting in proximity. The Project Site provides minimal forage or nesting habitat for this species however the adjacent wetland depressions associated with the Stormwater Management System provide substantial forage and nesting habitat for this species.

Swallow-tailed Kite—Project Effect: "No Effect"

# Additional Imperiled Species Listed by the State of Florida and the Florida Natural Areas Inventory (FNAI) Element Occurrence Database for Federal, State, and Non-Listed Imperiled Species

To provide for additional and more thorough review of imperiled species not listed by the Federal Government, additional data resources are evaluated to provide potential "Effects" analysis that the Project Development may have on locally occurring imperiled species. The Alachua County "Summary of Rare and Regulated Plants" provides habitat and listing information. It should be noted that in addition to species listed by the state and federal governments, Alachua County through Chapter 406 and Chapter 78 and the City of Gainesville also consider species designated as \$1, \$2 and \$3 by FNAI to be regulated pursuant to the Listed Species and Listed Species Habitats Land Development Regulations. FWC periodically publishes a comprehensive list of all State regulated plant and animal species. This publication is entitled "Florida's Endangered and Threatened Species."

The FNAI maintains a list of all animals and plants that are listed or considered as imperiled in the State of Florida. This list, which includes all Federal and State Listed Species, is designated as the "Element Occurrence Database." The graphical results of the FNAI Element Occurrence Database search for the Project Site and adjacent areas is shown on Figure 17. The database shows NO listed species have historically been reported from the designated Project Site. There is NO onsite habitat that supports species with requirements for large ranges of native habitat or require very specific native habitat types. NO significant habitat areas occur on site that are known to support imperiled animal species. From the data collected throughout the State, FNAI has created probability polygons that show the potential ranges of species occurring in the area (Figure 17). These ranges of occurrence should only be interpreted considering that the required habitat for the species exists in the area of interest (e.g., the Project Site). A Project Site may occur within a designated probability area but if the habitat does not occur then there is reduced chance of encounters with or occurrence of the designated species.

The FNAI database (**Figure 17**) shows that several listed species occur in west Alachua County in the vicinity of the Project Site; however, these species have been identified

within the San Felasco Park. There are several imperiled species that may have been historically present within the general area of the Project Site and adjacent areas or may be potentially present as transient visitors to the site. However, the habitat requirements for these species no longer exist in the area. Species that may have historically occurred on the Planning Parcel or in adjacent areas are briefly described, as follows:

#### **Mammals**

• Sherman's Fox Squirrel (Sciurus niger shermani) (State Species of Special Concern, FNAI G5T5/S3): The fox squirrel typically occupies Xeric areas that are frequently burned and that have numerous mature oaks and pines distributed throughout the habitat. They can also inhabit residential yards with large oaks and pines. They will move to avoid the direct impacts of development. Fox squirrels in disturbed Xeric Habitats such as pastures are often found in large fencerow trees where water troughs are located for cattle. If the water source is removed the squirrels with vacate the area. Fox squirrels DO NOT occur on sites in the vicinity of the Project Site or within the Project Site. None were seen during the site survey.

Sherman's Fox Squirrel—Project Effect: "No Effect"

• Florida Black Bear (FNAI G5T4/S4): The general forage range of the Florida black bear in and around the Project Site is provided on Figure 18. Within the area, due to the large areas of undeveloped habitats north and west of the Project Area, encounters with black bears would be considered as occasional to common. Areas where nuisance encounters with black bears have been reported are also shown on Figure 18. Several nuisance reports are shown east of the general Project Area. On the Project Site, it is likely that chance encounters with transient black bears may occur, but the development of the parcels will not adversely affect black bears.

Florida Black Bear—Project Effect: "No Effect"

#### **Reptiles**

• Eastern Diamondback Rattlesnake (*Crotalus adamanteus*) (FNAI G4/S3): The eastern diamondback rattlesnake is found throughout Florida and generally may occur anywhere on the Project Site, especially within armadillo or other mammal burrows. There is a lack of suitable habitat on site to support growth and reproduction of this species. There is a paucity of fruit-producing blackberry vines that attract ground-dwelling birds like quail that are prey for this species. There is habitat to effectively support small to medium size mammals. No rattlesnakes have ever been seen on this site, but they can certainly occur here.

Eastern Diamondback Rattlesnake—Project Effect: "No Effect"

• Short-tailed Snake (Stilosoma extenuatum) (State Threatened, FNAI G3/S3): The short-tailed snake inhabits xeric habitats, primarily Longleaf Pine-Turkey Oak Sandhills. The Project Site does NOT have native Xeric habitat types with open sandy soil. It is unlikely this species occurs on site or that a population can be sustained on site is unlikely. The species has not been documented on site (FNAI database), but the snakes live primarily underground and are difficult to census. They have not historically been reported in the vicinity of the existing Proposed Development. There is currently NO onsite habitat to support this species and significant residential, commercial, and road development within the local area precludes the maintenance of a viable reproducing population in the area.

Short-tailed Snake—Project Effect: "No Effect"

• Florida Pine Snake (*Pituophis melanoleucus mugitus*) (State Threatened, FNAI G4/S3): The pine snake is a rare inhabitant of xeric communities. There are NO preferred natural habitat types for this species remaining on site and there are NO areas of the site that have a population of gopher tortoise and pocket gopher burrows. Pine snakes prefer pocket gopher burrows and, less frequently, gopher tortoise burrows for refuge. There is NO onsite habitat to support this species. NO sightings have been reported on this site. There is NO habitat on site for this species and all historical habitats on adjacent sites have been altered.

Florida Pine Snake—Project Effect: "No Effect"

• Southern Hognose Snake (*Heterodon simus*) (FNAI G2/S2S3): The primary habitat for the southern hognose snake is sandhill and sandy soil, open hammocks, and scrub. These native habitat types **DO NOT** occur on site or remains in areas surrounding the Project Site. This species has not been reported for the immediate area of the site and it is unlikely that a breeding population is present near the proposed development.

Southern Hognose Snake—Project Effect: "No Effect"

- Striped Newt (Notophthalmus perstriatus) (FNAI G2G3/S2)
- Gopher Frog (Rana capito) (FNAI G3/S3)

The Project Area occurs within the historical range of the striped newt and gopher frog. The striped newt and gopher frog are Xeric-adapted species that typically inhabit scrubby flatwoods, sandhill, and scrub habitats. These species are commonly associated with gopher tortoise habitat and are frequently found within burrows. Both species depend on natural, ephemeral, isolated wetlands for breeding and reproduction. These species are extremely sensitive to the impacts that are cosmopolitan in this area, which include extensive soil disturbance, fire suppression, road construction, and disturbance of gopher tortoise burrows. It is unlikely these species occur on site due to the absence of natural ephemeral

emergent wetlands on the site or in adjacent areas and the absence of suitable fire maintained xeric habitat and no occurrence of gopher tortoise burrows.

Striped Newt—Project Effect: "No Effect" Gopher Frog—Project Effect: "No Effect"

#### **Birds**

• Little Blue Heron (*Egretta caerulea*) (State Threatened, FNAI G5/S4): This wading bird uses wetland emergent or wet prairies for habitats but is commonly found in excavated ponds or roadside ditches. There are NO wading bird habitats within the site or immediately adjacent areas. Stormwater ponds on adjacent developments or other previously developed areas may provide transient habitat for this species. In addition, newly created storm ponds as a result of development of the Project Site may provide additional minimal habitat for this species.

Little Blue Heron—Project Effect: "No Effect"

• Florida Sandhill Crane (*Grus canadensis pratensis*) (State Threatened, FNAI G5T2/S2): Sandhill cranes are seen frequently around lakes, wetlands, and storm ponds in residential areas or roadside areas with maintained yard grass perimeters. There is nesting habitat for this species in the regional area but not on the site or adjacent properties. There is NO natural habitat for this species on the Project Site.

Florida Sandhill Crane—Project Effect: "No Effect"

• Southeastern American Kestrel (Falco sparverius paulus) (State Threatened, FNAI G5T4/S3): The southeastern American kestrel is a State-listed species that requires a permit to take a nesting location and has a 450-ft Protective No Disturbance Buffer from nesting locations. The kestrel was not seen on or adjacent to the Project Site and not reported in previous studies. Onsite habitats provide dead snags, but NO large old-field areas exist that would support this species. The only adjacent cleared, undeveloped properties surrounding the Project Site are currently being developed.

Southeastern American Kestrel—Project Effect: "No Effect"

#### **Plants**

• Godfrey's Swampprivet (Forestiera godfreyii) (FNAI G2S2; State Endangered): This is an endangered shrub to small subcanopy tree that is found within the historical extent of Sugarfoot Hammock within the County. Remnants of this Mesic-Calcareous Hammock still exist but the areal extent has been substantially reduced in recent years. Godfrey's swamprivet is found within several mesic to hydric habitats within the Hogtown Prairie section of the Hogtown Creek drainage. Extensive searches were performed of the Project Site as part of this ERA and NO individuals were found.

Godfrey's Swampprivet—Project Effect: "No Effect"

• Variable-leaf Crownbeard (*Verbesina heterophylla*) (G2/S2; State Endangered): This listed plant species, a member of the Asteraceae (composite) family, is found in mesic flatwoods and dry woods in several north-central and northeast Florida counties and is considered endemic to northeast Florida. It is listed as Facultative Wet by the USFWS and FDEP. This species occurs within the Northern Highlands Province of the County. There is **NO** mesic or wet habitat on site to support this species and none were seen during the site survey.

Variable-leaf Crownbeard—Project Effect: "No Effect"

• Florida Spiny-pod (*Matelea floridana*) (G2/S2; State Endangered): This vine species, a member of the dogbane family (Apocynaceae), is typically found in mesic habitats. Florida spiny-pod may be encountered within various habitats throughout the County. This species is relatively common in Alachua County and occurs in the area of the Project Site, but none were observed during the field survey.

Florida Spiny-pod—Project Effect: "No Effect"

• Angularfruit Milkvine (*Gonolobus suberosus*) (State Threatened): This species is in the dogbane family and is a vine often found in the same habitats as Florida spiny-pod (they are, in fact, both very morphologically similar when not in flower). This species occurs within various habitats throughout the County generally in drier sites than Florida spiny-pod. This species occurs in the area of the Planning Parcel, but none were observed during the field survey.

Angularfruit Milkvine—Project Effect: "No Effect"

• Cardinalflower (*Lobelia cardinalis*) (State Threatened): This species is found in wetland areas and is listed as Facultative Wet (USFWS) and Obligate (FDEP). This imperiled species is rare within Alachua County but occurs within the northern areas of the Northern Highlands Province. The plant has not been reported as far south as the Project Site in the County. It is a rare inhabitant of herbaceous and forested wetlands located in the Pine Flatwoods area in the north and east part of the County.

Cardinalflower—Project Effect: "No Effect"

• **Hooded Pitcherplant** (*Sarracenia minor*) (**State Threatened**): This species is a wetland taxon and is listed as Obligate (USFWS) and Facultative Wet (FDEP) by the federal and state regulatory agencies. This species occurs within the Flatwoods of the Northern Highlands Province located in the north and eastern areas of the County.

Hooded Pitcherplant—Project Effect: "No Effect"

• Florida Toothachegrass (*Ctenium floridanum*) (G2/S2; State Endangered): This grass has been recorded and vouchered in several northeast Florida counties including Alachua County, which appears to be the southwestern limit of its range. It is a wetland species and is classified as Facultative Wet by both the USFWS and FDEP.

Florida Toothachegrass—Project Effect: "No Effect"

• Eastern Sweetshrub (*Calycanthus floridus*) (G5/S2; State Endangered): This small shrub has been found in the county within the Northern Highlands Marginal Zone. It is also identified around residential areas where it is planted for ornamental use. This plant species was not encountered on the Project Site.

Eastern Sweetshrub—Project Effects: "No Effect"

• Silver Buckthorn (Sideroxylon alachuense) (G1/S1; State Endangered): Silver buckthorn occurs in upland hardwood forests around limerock sinks and on shell mounds. Lack of suitable habitat greatly reduces the probability of this species occurring in the area of the Planning Parcel. It was not seen during the Site surveys nor has been encountered during adjacent site surveys conducted in the past.

Silver Buckthorn—Project Effect: "No Effect"

• Flyr's Nemesis (*Brickellia cordifolia*) (G2G3/S2; State Endangered): This upland species has been recorded within several miles of the Planning Parcel on the Spring Hill Properties; however, it has not been observed on site. It grows in dry, upland pine-oak woods but it does not thrive in areas that have been clear-cut and converted to pine plantations as are common on the Project Site.

Flyr's Nemesis—Project Effect: "No Effect"

• Red-margin Zephyrlily (Zephyranthes simpsonii) (G2G3/S2S3; State Threatened): This species is a central and south Florida species and has not been vouchered for Alachua County; however, it has the potential to occur along roadside ditches and other damp grassy areas and has been reported as far north as Marion County. It is listed as Facultative by the USFWS.

Red-margin Zephyrlily—Project Effect: "No Effect"

• Rainlily (*Zephyranthes atamasca* var. *treatiae*) (State Threatened): This wetland species is classified as Facultative Wet by the USFWS and FDEP and has been vouchered in Alachua County; however, it has not been recorded in the area of the Planning Parcel. This taxon also includes the formerly separate species Treat's rainlily (*Z. treatiae*), which has been taxonomically subsumed into *Z. atamasca* var. *treatiae*.

Rainlily—Project Effect: "No Effect"

• Cinnamon Fern (Osmundastrum cinnamomeum) (State Commercially Exploited): Cinnamon fern is found in many of the wetland areas throughout the County and is a commonly found plant species in north Florida wetlands and wet flatwoods. This is not an imperiled species; however, it is listed as Commercially Exploited in the Regulated Plant Index (Chapter 5B-40.0055 FAC). It is not found on this site.

Cinnamon Fern—Project Effect: "No Effect"

• Royal Fern (Osmunda regalis var. spectabilis) (State Commercially Exploited): Royal fern is equally as common as cinnamon fern and occurs in wetland areas throughout Florida. This is not an imperiled species; however, it is listed as Commercially Exploited in the Regulated Plant Index (Chapter 5B-40.0055 FAC). It is not found on this site.

Royal Fern—Project Effect: "No Effect"

• Needle Palm (*Rhapidophyllum hystrix*) (State Commercially Exploited):
Needle palm is a wetland taxon that occurs in Hydric Hammocks, Mesic
Hammocks, and Forested Wetlands. It is classified as Facultative Wet by the
USFWS and FDEP. This is not an imperiled species; however, it is listed as
Commercially Exploited in the Regulated Plant Index (Chapter 5B-40.0055 FAC).
It has not been recorded on the Project Site.

Needle Palm—Project Effect: "No Effect"

• Woodland Poppy Mallow (*Callirhoe papaver*) (G2/S2; State Endangered): Woodland poppy mallow is a listed endangered species in Florida and occurs in Alachua County in a restricted area that includes the Project Area. This plant was previously reported at South Pointe in 2007 but the location it was found has since been developed. The habitat for this species no longer exists in the Project Area and it was not encountered during the field survey.

Woodland Poppy Mallow—Project Effect: "No Effect"

#### <u>Invertebrates</u>

• Sugarfoot Moth Fly (Nemopalpus nearcticus): This is an unlisted but very rare insect originally found in the Sugarfoot Hammock area and hence named for the site. Sugarfoot Hammock was a large expanse of Mesic Hammock habitat that historically occurred within and surrounding the Project Site. This habitat no longer exists on site. This moth has not been found in the area since it was originally described; however, it has subsequently been reported in the Gulf Hammock area.

Sugarfoot Moth Fly—Project Effect: "No Effect"

#### **Results of Field Surveys for Listed Species**

There were **NO** listed animal species seen within the Project Site during the present or previous surveys. However, three (3) listed plant species have been previously encountered in or around the specific Project Site area, and their population locations are shown on **Figure 19**, as follows:

Scientific Name	<b>Common Name</b>	Classification
Rhapidophyllum hystrix	Needle palm	Commercially Exploited (CE)
Matelea floridana	Florida spiny pod	Endangered – State (E)
Hexalectris spicata	Spiked crested coralroot	Endangered – State (E)

Rhapidophyllum hystrix (Photos 103 and 104, Appendix D of Attachment 2) is a commercially exploited species and is expected for the habitat type. The population of this species will be preserved in place, also does well in residential habitats, or they can be transplanted to other Conservation Areas.

Matelea floridana (Photos 101 and 102, Appendix D of Attachment 2) is a vine in the dogbane family (Apocynaceae) that is listed as Endangered. Nonetheless, in Alachua County it is common along fencerows, forested habitats, and Mesic Hammocks. The onsite populations generally occur in designated Conservation Areas or along the Project Site perimeter so the populations will be generally preserved. This plant is difficult to find, and its expected distribution can occur throughout this site. This plant is by No means Endangered in this County as it is found on almost all sites ERC surveys. Matelea floridana is listed by the state as Endangered and is tracked by Florida Natural Areas Inventory (FNAI). The proposed Conservation Areas will provide long-term habitat for this species.

Hexalectris spicata (Photo 105, Appendix D of Attachment 2) is a terrestrial orchid that is listed as Endangered by the State of Florida. However, it is not tracked by FNAI. Observation of this plant was a chance encounter in 2015 (it was found during the last hour of the final day of field survey) and was not found during the current site survey. These plants are not easily transplanted; however, relocating the recorded specimen may not be possible since this tuberous species is only seen above ground when flowering. This is a leafless plant described as mycotrophic, in that it is entirely devoid of chlorophyll and obtains nutrition through an association with mycorrhizal fungi living in the roots of canopy and subcanopy species. This further complicates efforts to locate it. Within a given population, the numbers of plants can vary greatly from year to year generally due to rainfall fluctuation. This plant may only flower once in a 10-year period.

It was observed in an area that will be undeveloped in the proposed project design. Our observed plants are variety *spicata*. <sup>1</sup>

#### **Summary**

The Proposed Development area of the **4.20-acre** area of **Parcel 06006-052-000** does consist of Significant Ecological Community habitat in the form of Mature Mesic Hammock Habitat. Development of the Project Site will result in removal of a **0.04-acre**, low-quality intermittent surface water depression and **0.02 acres** of impact to a very disturbed wetland depression that has been previously disturbed and filled. To mitigate these habitat impacts, the applicant proposes to establish a Conservation Easement on surrounding areas of **Parcel 06006-052-000 (32.50 cares)** and **Parcel 06006-002-000 (90.29 acres)**, which totals **122.79 acres** that contain a mosaic of extremely high-quality upland and wetland habitat. These properties will be given to the City or County or a local Conservation Management entity.

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<sup>&</sup>lt;sup>1</sup> Information obtained from Brown, Paul Martin. Wild Orchids of Florida. 2002. The University Press of Florida.

Table 1. Species code, scientific name, common name, USFWS (Federal) Classification, FDEP (State) Classification, and Floristic Classification for all plant species recorded 18 and 19 July 2013, 8 and 10 July 2015, 22 September 2015, and 25–26 April 2022 at the Blues Creek Project Site, Alachua County. See footnotes at end of table for explanation of classification codes.

Species			USFWS1	FDEP <sup>2</sup>	Floristic <sup>3</sup>
Code	Scientific Name	Common Name	Classif.	Classif.	Classif.
ACE RUB	Acer rubrum L.	Red maple	FAC	FACW	NC
AMB ART	Ambrosia artemisiifolia L.	Common ragweed	FACU	UPL	NW
AND VIR	Andropogon virginicus L. var. virginicus	Broomsedge	FAC-	FAC	NP
API AME	Apios americana Medik.	Groundnut	FACW		NC
ARA SPI	Aralia spinosa L.	Devil's walkingstick	FAC	UPL	NC
ARI TRI	Arisaema triphyllum (L.) Schott	Jack-in-the-pulpit	FACW-	FACW	NC
ASC CRV	Asclepias curassavica L.	Scarlet milkweed	FAC	UPL	EW
ASI PAR	Asimina parviflora (Michx.) Dunal	Smallflower pawpaw	FACU	UPL	NC
ASP PLA	Asplenium platyneuron (L.) Britton et al.	Ebony spleenwort	FACU	UPL	NC
BAC HAL	Baccharis halimifolia L.	Sea myrtle	FAC	FAC	NP
BID ALB	Bidens alba (L.) DC.	Beggarticks	NL	UPL	NW
BIG CAP	Bignonia capreolata L.	Crossvine	FAC		NC
BOE CYL	Boehmeria cylindrica (L.) Sw.	False nettle	FACW+	OBL	NC
CAL AME	Callicarpa americana L.	Beautybush	FACU-	UPL	NC
CAM RAD	Campsis radicans (L.) Seemann ex Bureau	Trumpet creeper	FAC		NC
CAR cf. CAP	Carex cf. atlantica L.H. Bailey ssp. capillacea (L.H. Bailey) Reznicek (sterile)	Prickly bog sedge	OBL	OBL	NC
CAR GLC	Carex glaucescens Elliott	Clustered sedge	OBL	FACW	NC
CAR LPF	Carex lupuliformis Sartwell ex Dewey	False hop sedge	OBL	FACW	NP
CAR LUP	Carex lupulina Muhl. ex Willd.	Hop sedge	OBL	OBL	NC
CAR CAR	Carpinus caroliniana Walter	American hornbeam	FAC	FACW	NC
CAR AME	Cartrema americana (L.) G.L. Nesom	Wild olive	FAC	UPL	NC
CAR GLA	Carya glabra (Mill.) Sweet	Pignut hickory	FACU	UPL	NC
CEL LAE	Celtis laevigata Willd.	Hackberry	FACW	FACW	NC

Species Code	Scientific Name	Common Name	USFWS <sup>1</sup> Classif.	FDEP <sup>2</sup> Classif.	Floristic <sup>3</sup> Classif.
CEP OCC	Cephalanthus occidentalis L.	Common buttonbush	OBL	OBL	NC
CHA LAX	Chasmanthium laxum var. laxum (L.) Yates	Slender woodoats	FACW-	FACW	NC
CLI MAR	Clitoria mariana L.	Atlantic pigeonwings	NL	UPL	NC
COR ASP	Cornus asperifolia Michx.	Roughleaf dogwood	FACW-	UPL	NC
CYN DAC	Cynodon dactylon (L.) Pers.	Bermudagrass	FACU	UPL	EA
CYP CRO	Cyperus croceus Vahl	Baldwin's flatsedge	FAC	FAC	NP
CYP RET	Cyperus retrorsus Chapm.	Pinebarren flatsedge	FACU+	FAC	NP
CYP VIR	Cyperus virens Michx.	Green flatsedge	FACW	FACW	NC
DIC ACI	Dichanthelium aciculare (Desvaux ex Poiret) Gould & Clark	Needle-leaf witchgrass	FACU	UPL	NP
DIC ACU	Dichanthelium acuminatum (Swartz) Gould & Clark	Tapered witchgrass	FAC	UPL	NC
DIC COM	Dichanthelium commutatum (Schultes) Gould	Variable witchgrass	FAC	FAC	NC
DIC LAX	Dichanthelium laxiflorum (Lam.) Gould	Openflower witchgrass	FAC	UPL	NC
DIO BUL	Dioscorea bulbifera L.	Air-potato	NL		EA
DIO VRG	Diospyros virginiana L.	Common persimmon	FAC	FAC	NC
DRY LUD	Dryopteris ludoviciana (Kunze) Small	Southern wood fern	FACW	FACW	NC
ELE ELA	Elephantopus elatus Bertol.	Florida elephant's-foot	NL	UPL	NC
ERI JAP	Eriobotrya japonica (Thunb.) Lindl.	Loquat	NL	UPL	EW
EUP CAP	Eupatorium capillifolium (Lam.) Small	Dog fennel	FACU	FAC	NW
EUP COM	Eupatorium compositifolium Walter	Yankeeweed	FAC-	FAC	NP
FRA CAR	Fraxinus caroliniana Mill.	Popash	OBL	OBL	NC
GAL ELL	Galactia elliottii Nutt.	Elliott's milkpea	FACU		NP
GAL VOL	Galactia volubilis (L.) Britton	Downy milkpea	FACU		NC
GAY NAN	Gaylussacia frondosa var. nana (A. Gray) Small	Dangleberry	FAC	FAC	NC
GEL SEM	Gelsemium sempervirens (L.) J. St. Hil.	Yellow jessamine	FAC		NC
GOR LAS	Gordonia lasianthus (L.) J. Ellis	Loblolly bay	FACW	FACW	NC
HEX SPI	Hexalectris spicata (Walter) Barnhart †	Spiked crested coralroot	FACU	UPL	NC
HIB GRA	Hibiscus grandiflorus Michx.	Swamp rosemallow	OBL	OBL	NC

HIB MOS Hibiscus moscheutos L.  Crimsoneyed rosemallow OBL OBL HYD RAN Hydrocotyle ranunculoides L. f. HYD RAN Hydrocotyle umbellata L. HYD SP. Hydrocotyle sp. HYPD SP. Hydrocotyle sp. HYP Hypericum hypericoides (L.) Crantz St. Andrew's-cross FAC FAC ILE COR Ilex coriacea (Pursh) Chapm. Sweet gallberry FACW FACW ILE GLA Ilex glabra (L.) A. Gray Gallberry FACW UPL ILE OPA Ilex opaca var. opaca Alton American holly FAC- FAC IRI PSE Iris pseudacorus L. Paleyellow iris OBL OBL JUN COR Juncus coriaceus Mack. Leathery rush FACW OBL JUN COR Juncus repens Michx. LEG MUC Lechea mucronata Raf. LAN CAM Lantana camara L. LEG MUC Lechea mucronata Raf. LIQ STY Liquidambar styraciflua L. Sweetgum FAC- FAC UPL LEG MUC Liquidambar styraciflua L. Sweetgum FAC- FAC UPL LEG MUC Liquidambar styraciflua L. Sweetgum FAC- FAC UPL LYO FRE Lyonia ferruginea (Walt.) Nutt. Rusty lyonia FAC- UPL LYO FRE Lyonia intuicosa (Michx.) Torr. Staggerbush FAC UPL LYO LUC Lyonia liquistrina (L.) DC. Maleberry FACW OBL MAG GRA Magnolia grandiflora L. Sweetbay FAC+ UPL MAG VIR Magnolia virginiana L. Sweetbay FAC+ UPL MAG VIR Magnolia virginiana L. Sweetbay FAC+ UPL MAG VIR Magnolia virginiana L.	Floristic <sup>3</sup> Classif.
HYD UMB Hydrocotyle umbellata L.  HYD SP. Hydrocotyle sp.  Marshpennywort  HYP HYP Hypericum hypericoides (L.) Crantz St. Andrew's-cross FAC FAC ILE COR Ilex coriacea (Pursh) Chapm. Sweet gallberry FACW FACW ILE GLA Ilex glabra (L.) A. Gray Gallberry FACW UPL ILE OPA Ilex opaca var. opaca Aiton American holly FAC- FAC IRI PSE Iris pseudacorus L.  Paleyellow iris OBL OBL ITE VIR Itea virginica L.  JUN COR Juncus coriaceus Mack. Leathery rush FACW OBL JUN CRAM Lantana camara L. Leathery rush FACU UPL ILEC MUC Lechea mucronata Raf. Hairy pinweed NL UPL ILEM SP. Lemna sp.  LOR SP. Lemna sp.  LOR SWeet gallberry FACW FACW OBL JUN CRAM OBL JUN CRAM CAMBARIA SWEET STACE OBL Aquatic ILQ STY Liquidambar styraciflua L.  LY Sweetgum FAC- UPL LYO FRU Lyonia furuicosa (Michx.) Torr. Staggerbush FAC UPL LYO LIG Lyonia liquistrina (L.) DC. Maleberry FACW FACW MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL MAG GRA Magnolia grandiflora L.  MAG VIR Magnolia virginiana L. Sweetbay FAC+ UPL MAG VIR Magnolia virginiana L.  Sweetbay FAC+ UPL MAG OBL Magnolia virginiana L.	NC
HYD SP. Hydrocotyle sp. HYP HYP Hypericum hypericoides (L.) Crantz  ILE COR Ilex coriacea (Pursh) Chapm.  ILE GLA Ilex glabra (L.) A. Gray  ILE GLA Ilex opaca var. opaca Aiton  ITE VIR Itea virginica L.  JUN COR Juncus coriaceus Mack.  LEAN CAM Lantana camara L.  LEC MUC Lechea mucronata Raf.  LEC MUC Lechea mucronata Raf.  LIEC MUC Lechea mucronata Raf.  LIEC MUC Lyonia firuticosa (Michx.) Torr.  LYO STRU Lyonia ligustrina (L.) DC.  MAG GRA Magnolia virginiana L.  Mas openia grandiflora L.  Mas oplia virginiana L.  Mas oplia magnolia virginiana L.  Mas oplia virginiana L.  Mas oplia magnolia virginiana L.  Mas oplia virginiana L.  Mas oplia magnolia virginiana L.  Mas oplia virginiana L.  Mas oplia process  FAC FAC FAC Gallberry  FACW UPL Lechea mucronata Raf.  Hairy pinweed  NL UPL Lechea mucronata Raf.  Leathery rush  FAC UPL Lyonia fruticosa (Michx.) Torr.  Staggerbush  FAC UPL  LYO FRU Lyonia fruticosa (Michx.) Torr.  Staggerbush  FAC UPL  LYO LAG Magnolia virginiana L.  MAG OVIR Magnolia virginiana L.  Sweetbay  FAC+ OBL	NC
HYP HYP Hypericum hypericoides (L.) Crantz  ILE COR Ilex coriacea (Pursh) Chapm.  ILE GLA Ilex glabra (L.) A. Gray  ILE GLA Ilex glabra (L.) A. Gray  ILE OPA Ilex opaca var. opaca Aiton  ITE VIR Itea virginica L.  JUN COR Juncus coriaceus Mack.  Leathery rush  FACW  JUN CAM  LEC MUC Lechea mucronata Raf.  LEC MUC Lechea mucronata Raf.  LIE Mary Liquidambar styraciflua L.  LYO FER Lyonia ferruginea (Walt.) Nutt.  LYO FER Lyonia figustrina (L.) DC.  MAG GRA Magnolia grandiflora L.  Sweetbay  FACW  FACW  FACW  Gallberry  FACW  FACW  FACW  Harry FACW  FACW  FACW  FACW  FACW  OBL  JUN COR  JUN COR  Juncus coriaceus Mack.  Leathery rush  FACW  OBL  JUN CAM  DUPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  LEC MUC Lechea mucronata Raf.  Hairy pinweed  NL  UPL  Maleberry  FACW  FACW	NP
ILE COR Ilex coriacea (Pursh) Chapm.  ILE GLA Ilex glabra (L.) A. Gray  ILE GLA Ilex glabra (L.) A. Gray  ILE OPA Ilex opaca var. opaca Aiton  American holly  FAC- FAC  IRI PSE Iris pseudacorus L.  IRI PAC IPL  IRI	
ILE GLA	NC
ILE OPA Ilex opaca var. opaca Aiton American holly FAC- FAC IRI PSE Iris pseudacorus L. Paleyellow iris OBL OBL ITE VIR Itea virginica L. Virginia willow FACW+ OBL JUN COR Juncus coriaceus Mack. Leathery rush FACW OBL JUN REP Juncus repens Michx. Lesser creeping rush OBL OBL LAN CAM Lantana camara L. Lantana FACU UPL LEC MUC Lechea mucronata Raf. Hairy pinweed NL UPL LEM SP. Lemna sp. Duckweed OBL Aquatic LIQ STY Liquidambar styraciflua L. Sweetgum FAC+ FACW LYO FER Lyonia ferruginea (Walt.) Nutt. Rusty Iyonia FAC- UPL LYO FRU Lyonia fruticosa (Michx.) Torr. Staggerbush FAC UPL LYO LIG Lyonia liquistrina (L.) DC. Maleberry FACW FAC LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FAC+ UPL MAG GRA Magnolia grandiflora L. Sweetbay FACW+ OBL	NC
IRI PSE Iris pseudacorus L. Paleyellow iris OBL OBL ITE VIR Itea virginica L. Virginia willow FACW+ OBL JUN COR Juncus coriaceus Mack. Leathery rush FACW OBL JUN REP Juncus repens Michx. Lesser creeping rush OBL OBL LAN CAM Lantana camara L. Lantana FACU UPL LEC MUC Lechea mucronata Raf. Hairy pinweed NL UPL LEM SP. Lemna sp. Duckweed OBL Aquatic LIQ STY Liquidambar styraciflua L. Sweetgum FAC+ FACW LYO FER Lyonia ferruginea (Walt.) Nutt. Rusty lyonia FAC- UPL LYO FRU Lyonia fruticosa (Michx.) Torr. Staggerbush FAC UPL LYO LIG Lyonia ligustrina (L.) DC. Maleberry FACW FAC LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL MAG GRA Magnolia grandiflora L. Sweetbay FACW+ OBL	NC
ITE VIR Itea virginica L. Virginia willow FACW+ OBL JUN COR Juncus coriaceus Mack. Leathery rush FACW OBL JUN REP Juncus repens Michx. Lesser creeping rush OBL OBL LAN CAM Lantana camara L. Lantana FACU UPL LEC MUC Lechea mucronata Raf. Hairy pinweed NL UPL LEM SP. Lemna sp. Duckweed OBL Aquatic LIQ STY Liquidambar styraciflua L. Sweetgum FAC+ FACW LYO FER Lyonia ferruginea (Walt.) Nutt. Rusty Iyonia FAC- UPL LYO FRU Lyonia fruticosa (Michx.) Torr. Staggerbush FAC UPL LYO LIG Lyonia ligustrina (L.) DC. Maleberry FACW FAC LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FAC+ UPL MAG GRA Magnolia grandiflora L. Sweetbay FACW+ OBL	NC
JUN COR Juncus coriaceus Mack.  JUN REP Juncus repens Michx.  Lesser creeping rush  OBL  OBL  LAN CAM Lantana camara L.  LEC MUC Lechea mucronata Raf.  LEM SP. Lemna sp.  Duckweed  OBL  Aquatic  LIQ STY Liquidambar styraciflua L.  LYO FER Lyonia ferruginea (Walt.) Nutt.  Rusty lyonia  FAC-  UPL  LYO FRU Lyonia fruticosa (Michx.) Torr.  Staggerbush  FAC UPL  LYO LIG Lyonia ligustrina (L.) DC.  Maleberry  FACW  FACW  MAC LAT Macroptilium lathyroides (L.) Urban  MAG GRA Magnolia grandiflora L.  Sueetbay  FACW  OBL  OBL  Aquatic  Sweetgum  FAC+  FACW  FACW  FACW  Maleberry  FACW	EW
JUN REP Juncus repens Michx.  LAN CAM Lantana camara L.  LEC MUC Lechea mucronata Raf.  LEM SP. Lemna sp.  Duckweed  Duckweed  OBL Aquatic  LIQ STY Liquidambar styraciflua L.  LYO FER Lyonia ferruginea (Walt.) Nutt.  Rusty Iyonia  FAC-  UPL  LYO FRU Lyonia fruticosa (Michx.) Torr.  Staggerbush  FAC UPL  LYO LUC Lyonia liquistrina (L.) DC.  Maleberry  FACW  FACW  FACW  MAC LAT Macroptilium lathyroides (L.) Urban  MAG GRA Magnolia grandiflora L.  Sueetbay  Lesser creeping rush  OBL  OBL  OBL  OBL  OBL  OBL  OBL  OB	NC
LAN CAM Lantana camara L.  LEC MUC Lechea mucronata Raf.  LEM SP. Lemna sp.  Duckweed  Duckweed  OBL Aquatic  LIQ STY Liquidambar styraciflua L.  LYO FER Lyonia ferruginea (Walt.) Nutt.  Rusty Iyonia  FAC-  UPL  LYO LIG Lyonia liquistrina (L.) DC.  LYO LUC Lyonia lucida (Lam.) D. Don  MAC LAT Macroptilium lathyroides (L.) Urban  MAG GRA Magnolia grandiflora L.  Magnolia virginiana L.  Sueetgum  FAC+  FACW  FACW  Sweetgum  FAC-  UPL  Staggerbush  FAC  UPL  Maleberry  FACW  FACW  FACW  FACW  FACW  FACW  FACW  Southern magnolia  FAC+  UPL  Sweetbay  FACW+  OBL	NC
LEC MUC Lechea mucronata Raf. Hairy pinweed NL UPL LEM SP. Lemna sp. Duckweed OBL Aquatic LIQ STY Liquidambar styraciflua L. Sweetgum FAC+ FACW LYO FER Lyonia ferruginea (Walt.) Nutt. Rusty lyonia FAC- UPL LYO FRU Lyonia fruticosa (Michx.) Torr. Staggerbush FAC UPL LYO LIG Lyonia ligustrina (L.) DC. Maleberry FACW FAC LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL MAG GRA Magnolia grandiflora L. Southern magnolia FAC+ UPL MAG VIR Magnolia virginiana L. Sweetbay FACW+ OBL	NC
LEM SP. Lemna sp.  LiQ STY Liquidambar styraciflua L.  LYO FER Lyonia ferruginea (Walt.) Nutt.  LYO FRU Lyonia fruticosa (Michx.) Torr.  LYO LIG Lyonia ligustrina (L.) DC.  LYO LUC Lyonia lucida (Lam.) D. Don  MAC LAT Macroptilium lathyroides (L.) Urban  MAG GRA Magnolia grandiflora L.  Magnolia virginiana L.  Duckweed  Sweetgum  FAC+ FACW  FACW  FAC-  UPL  Staggerbush  FAC UPL  Maleberry  FACW  FACW  FACW  FACW  FACW  FACW  FACW  FACW  Southern magnolia  FAC+ UPL  Sweetbay  FACW+ OBL	EW
LIQ STY Liquidambar styraciflua L.  LYO FER Lyonia ferruginea (Walt.) Nutt.  Rusty lyonia FAC- UPL  LYO FRU Lyonia fruticosa (Michx.) Torr.  Staggerbush FAC UPL  LYO LIG Lyonia ligustrina (L.) DC.  Maleberry FACW FAC  LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW  MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL  MAG GRA Magnolia grandiflora L.  Southern magnolia FAC+ UPL  MAG VIR Magnolia virginiana L.  Sweetbay FACW+ OBL	NC
LYO FER Lyonia ferruginea (Walt.) Nutt.  Rusty Iyonia FAC- UPL  LYO FRU Lyonia fruticosa (Michx.) Torr.  Staggerbush FAC UPL  LYO LIG Lyonia ligustrina (L.) DC.  Maleberry FACW FAC  LYO LUC Lyonia lucida (Lam.) D. Don  Fetterbush FACW FACW  MAC LAT Macroptilium lathyroides (L.) Urban  Phasey bean FACU UPL  MAG GRA Magnolia grandiflora L.  Southern magnolia FAC+ UPL  MAG VIR Magnolia virginiana L.  Sweetbay FACW+ OBL	NC
LYO FRU Lyonia fruticosa (Michx.) Torr.  Staggerbush FAC UPL LYO LIG Lyonia ligustrina (L.) DC.  Maleberry FACW FAC LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL MAG GRA Magnolia grandiflora L.  MAG VIR Magnolia virginiana L.  Sweetbay FACW+ OBL	NC
LYO LIG Lyonia ligustrina (L.) DC.  Maleberry FACW FAC  LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW  MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL  MAG GRA Magnolia grandiflora L. Southern magnolia FAC+ UPL  MAG VIR Magnolia virginiana L. Sweetbay FACW+ OBL	NC
LYO LUC Lyonia lucida (Lam.) D. Don Fetterbush FACW FACW  MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL  MAG GRA Magnolia grandiflora L. Southern magnolia FAC+ UPL  MAG VIR Magnolia virginiana L. Sweetbay FACW+ OBL	NC
MAC LAT Macroptilium lathyroides (L.) Urban Phasey bean FACU UPL MAG GRA Magnolia grandiflora L. Southern magnolia FAC+ UPL MAG VIR Magnolia virginiana L. Sweetbay FACW+ OBL	NC
MAG GRA Magnolia grandiflora L. Southern magnolia FAC+ UPL MAG VIR Magnolia virginiana L. Sweetbay FACW+ OBL	NC
MAG VIR Magnolia virginiana L. Sweetbay FACW+ OBL	EW
, ,	NC
	NC
MAT FLO   Matelea floridana (Vail) Woodson † Florida spiny pod NL	NC
MIK SCA Mikania scandens (L. f.) Willd. Climbing hempweed FACW+	NP
MIT REP Mitchella repens L. Partridgeberry FACU+	NC
MYR CER Myrica cerifera L. Wax myrtle FAC+ FAC	NP

Species			USFWS <sup>1</sup>	FDEP <sup>2</sup>	Floristic <sup>3</sup>
Code	Scientific Name	Common Name	Classif.	Classif.	Classif.
NEP COR	Nephrolepis cordifolia (L.) C. Presl	Tuberous sword fern	NL	FAC	EA
NYS BIF	Nyssa sylvatica Marsh. var. biflora (Walt.) Sarg.	Swamp blackgum	OBL	OBL	NC
NYS SYL	Nyssa sylvatica Marsh. var. sylvatica	Blackgum	FAC	UPL	NC
OPL HIR	Oplismenus hirtellus (L.) P.Beauv.	Woodsgrass	FACU+	FAC	NC
OSM CIN	Osmunda cinnamomea L.	Cinnamon fern	FACW+	FACW	NC
OSM REG	Osmunda regalis L.	Royal fern	OBL	OBL	NC
OST VIR	Ostrya virginiana (Mill.) K. Koch	Eastern hophornbeam	FACU-	UPL	NC
PAN ANC	Panicum anceps Michx.	Beaked panicum	FAC-	FAC	NC
PAN RIG	Panicum rigidulum Nees	Redtop panicum	FACW	FACW	NC
PAN VER	Panicum verrucosum Muhl.	Warty panicum	FACW	FACW	NC
PAR QUI	Parthenocissus quinquefolia (L.) Planch.	Virginia creeper	FAC		NC
PAS NOT	Paspalum notatum Fluegge	Bahiagrass	FACU+	UPL	EA
PAS SET	Paspalum setaceum Michx.	Thin paspalum	FAC	FAC	NP
PAS URV	Paspalum urvillei Steud.	Vaseygrass	FAC	FAC	EW
PEL VIR	Peltandra virginica (L.) Schott & Endl.	Green arrow arum	OBL	OBL	NC
PER PAL	Persea palustris (Raf.) Sarg.	Swampbay	FACW	OBL	NC
PHA GYM	Phanopyrum gymnocarpon (Elliott) Nash	Savannah panicum	OBL	OBL	NC
PHY URI	Phyllanthus urinaria L.	Chamber bitter	FAC	FAC	EW
PIN ELL	Pinus elliottii Engelm.	Slash pine	FACW	UPL	NC
PIN GLA	Pinus glabra Walter	Spruce pine	FACW	FACW	NC
PIN TAE	Pinus taeda L.	Loblolly pine	FAC	UPL	NC
PLE POL	Pleopeltis polypodioides (L.) E.G. Andrews & Windham	Resurrection fern	NL	UPL	NC
POL PUN	Polygonum punctatum Ell.	Dotted smartweed	FACW+	OBL	NP
PRU CAR	Prunus caroliniana [Mill.] Aiton	Carolina laurelcherry	NL	UPL	NC
PRU SER	Prunus serotina var. serotina Ehrh.	Black cherry	FACU	UPL	NC
PTE AQU	Pteridium aquilinum (L.) Kuhn.	Bracken fern	FACU	UPL	NC
QUE GEM	Quercus geminata Small	Sand live oak	NL	UPL	NC

Species Code	Scientific Name	Common Name	USFWS <sup>1</sup> Classif.	FDEP <sup>2</sup> Classif.	Floristic <sup>3</sup> Classif.
QUE HEM	Quercus hemisphaerica Bartr.	Laurel oak	NL	UPL	NC
QUE LAU	Quercus laurifolia Michx.	Swamp laurel oak	FACW	FACW	NC
QUE MIC	Quercus michauxii Nutt.	Swamp chestnut oak	FACW-	FACW	NC
QUE MIN	Quercus minima (Sarg.) Small	Dwarf live oak	NL	UPL	NC
QUE MYR	Quercus myrtifolia Willd.	Myrtle oak	NL	UPL	NC
QUE NIG	Quercus nigra L.	Water oak	FAC	FACW	NC
QUE SIN	Quercus sinuata Walter	Bluff oak	NL	UPL	NC
QUE VIR	Quercus virginiana Mill.	Virginia live oak	FACU+	UPL	NC
RHA HYS	Rhapidophyllum hystrix (Pursh) H. Wendl. & Drude ex Drude ‡	Needle palm	FACW	FACW	NC
RHY CAD	Rhynchospora caduca Ell.	Falling beaksedge	OBL	FACW	NC
RHY COR	Rhynchospora corniculata (Lam.) A. Gray	Short-bristle beaksedge	OBL	OBL	NC
RUB CUN	Rubus cuneifolius Pursh	Sand blackberry	FACU		NP
RUB PEN	Rubus pensilvanicus Poir.	Sawtooth blackberry	FACU+		NP
SAB MIN	Sabal minor (Jacq.) Pers.	Bluestem palm	FACW	FACW	NC
SAB PAL	Sabal palmetto (Walter) Lodd. ex Schult. & Schult. f.	Cabbage palm	FAC	FAC	NC
SAL CAR	Salix caroliniana Michx.	Carolina willow	OBL	OBL	NP
SAL MIN	Salvinia minima Baker	Water spangles	OBL	Aquatic	EW
SAP SEB	Sapium sebiferum (L.) Roxb.	Popcorntree	FAC	FAC	EA
SAU CER	Saururus cernuus L.	Lizard's tail	OBL	OBL	NC
SCL TRI	Scleria triglomerata Michx.	Tall nutgrass	FACU+	FACW	NC
SER REP	Serenoa repens (Bartr.) Small	Saw palmetto	FACU	UPL	NC
SMI BON	Smilax bona-nox L.	Greenbrier	FAC		NC
SMI LAU	Smilax laurifolia L.	Bamboo vine	FACW+		NC
SMI PUM	Smilax pumila Walter	Sarsaparilla vine	NL		NC
SOL LEA	Solidago leavenworthii Torr. & A.Gray	Leavenworth's goldenrod	FAC+	FACW	NC
SOL ODO	Solidago odora var. odora Aiton	Sweet goldenrod	NL	UPL	NC
SPH SP.	Sphagnum sp.	Moss	Aquatic	OBL	NC

Species			USFWS1	FDEP <sup>2</sup>	Floristic <sup>3</sup>
Code	Scientific Name	Common Name	Classif.	Classif.	Classif.
SYM TIN	Symplocos tinctoria (L.) L'Her.	Horse sugar	FAC	UPL	NC
THE DEN	Thelypteris dentata (Forsk.) E. St. John	Downy shield fern	FACW	FACW	NC
THE KUN	Thelypteris kunthii (Desv.) C.V. Morton	Southern shield fern	FACW	FACW	NC
TOX RAD	Toxicodendron radicans (L.) Kuntze	Poison ivy	FAC		NC
ULM ALA	Ulmus alata Michx.	Winged elm	FACU+	FACW	NC
ULM AME	Ulmus americana L.	American elm	FACW	FACW	NC
VAC ARB	Vaccinium arboreum Marshall	Sparkleberry	FACU	UPL	NC
VAC COR	Vaccinium corymbosum L.	Highbush blueberry	FACW	FACW	NC
VAC STA	Vaccinium stamineum L.	Deerberry	FACU	UPL	NC
VER BRA	Verbena brasiliensis Vell.	Brazilian vervain	FAC-	UPL	EW
VER OFF	Verbena officinalis L.	Herb-of-the-cross	FACU-	UPL	NP
VIT ROT	Vitis rotundifolia Michx.	Muscadine	FAC		NP
WOO ARE	Woodwardia areolata (L.) Moore	Netted chain fern	OBL	OBL	NC
WOO VIR	Woodwardia virginica (L.) Smith	Virginia chain fern	OBL	FACW	NC

<sup>&</sup>lt;sup>1</sup>USFWS (United States Fish and Wildlife Service) Classifications: OBL = obligate wetland species; FACW = facultative wetland species; FAC = facultative species (neither wetland nor upland); UPL = upland species; NL = not listed in the federal list; NI = non-indicator species

<sup>&</sup>lt;sup>2</sup> FDEP (Florida Department of Environmental Protection) Classifications: OBL = obligate wetland species; FACW = facultative wetland species; FAC = facultative species (neither wetland nor upland); UPL = upland species; "---" = vine (non-indicator species)

<sup>&</sup>lt;sup>3</sup> Floristic Classifications (a measure of relative desirability): NC = Native Characteristic species (highly desirable); NP = Native Pioneer species (highly desirable); NW = Native Weedy species (slightly desirable); EW = Exotic Weedy species (undesirable); EA = Exotic Aggressive species (very undesirable)

<sup>†</sup>Listed as **Endangered-State** in the *Preservation of Native Flora of Florida Act*. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.

<sup>‡</sup>Listed as **Commercially Exploited** in the *Preservation of Native Flora of Florida Act.* Defined as species of plants native to the state which are subject to being removed in significant numbers from native habitats in the state and sold or transported for sale.

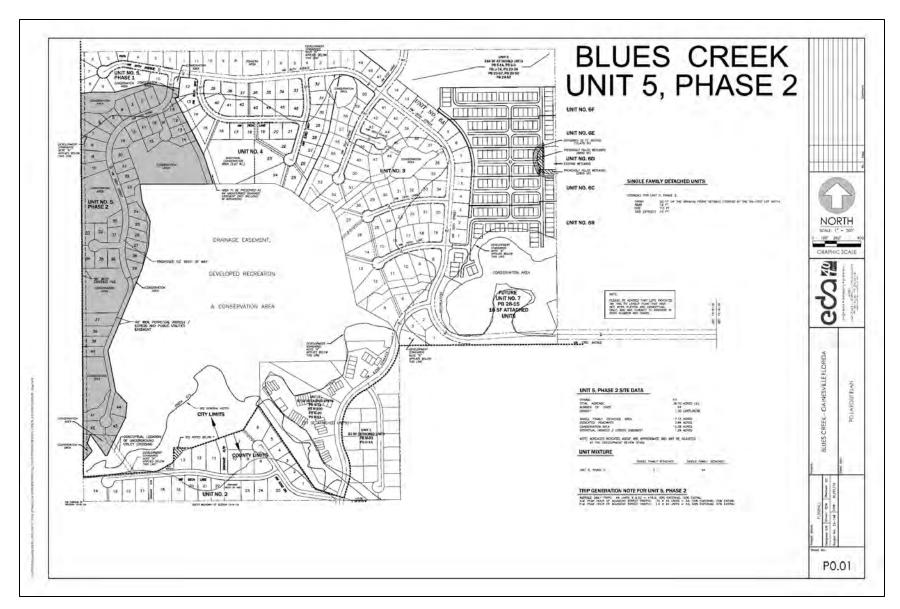


Figure 1. Existing approved PD site plan.



Figure 2. Project Site shown in relation to local access roads.

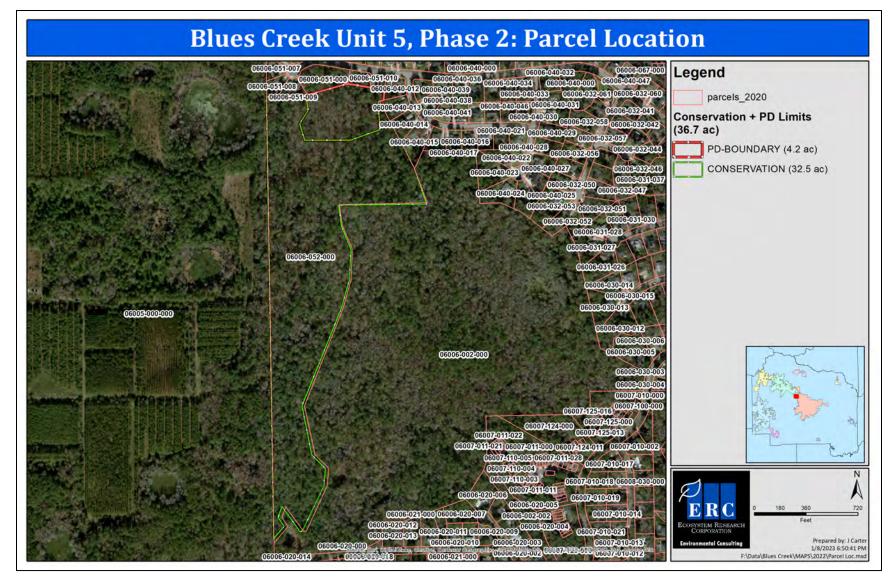


Figure 3. Parcel location map of the Project Site and surrounding area.

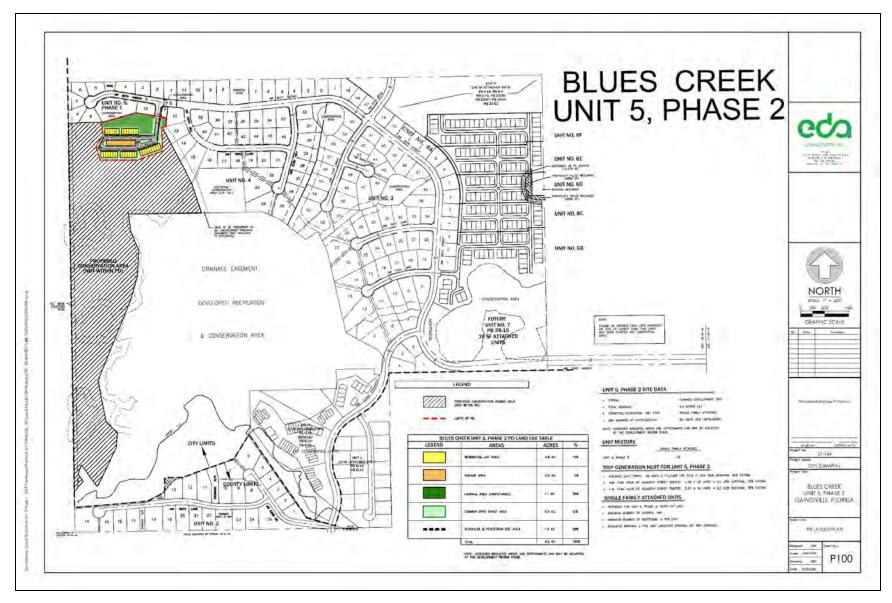


Figure 4. Proposed site plan and conservation zoning change.

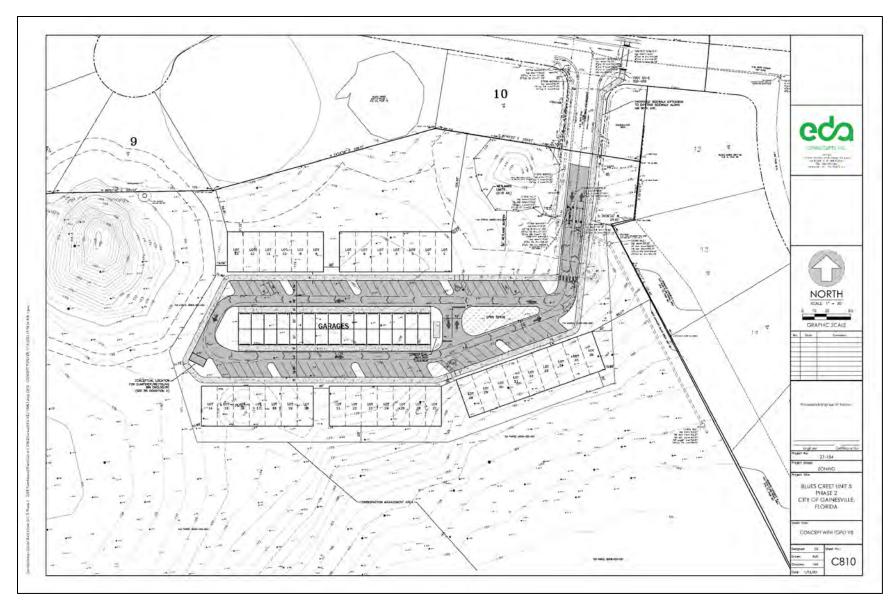


Figure 5. Proposed site development plan and site topography.

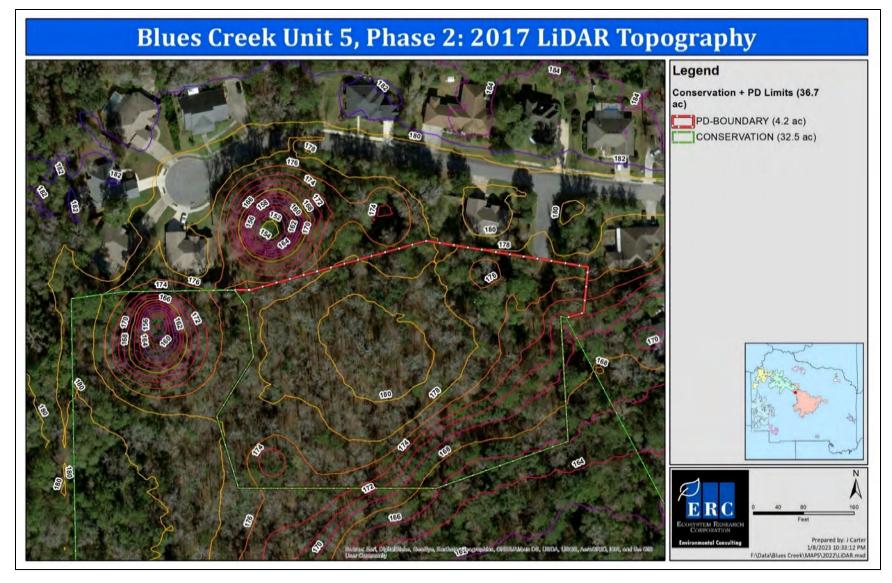


Figure 6. Existing site as shown on a 2020 aerial photograph overlain with 2017 LiDAR topography.

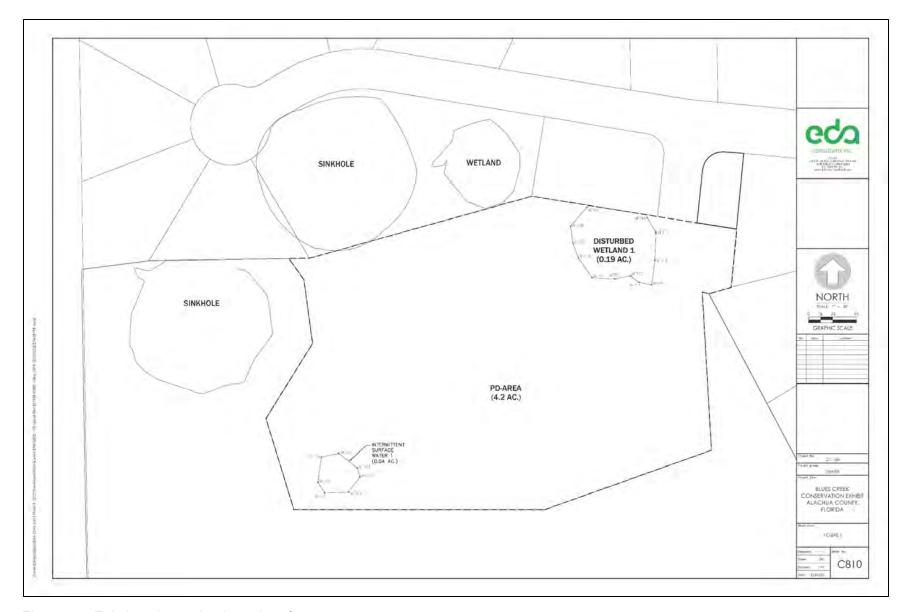


Figure 7. Existing site wetlands and surface waters.

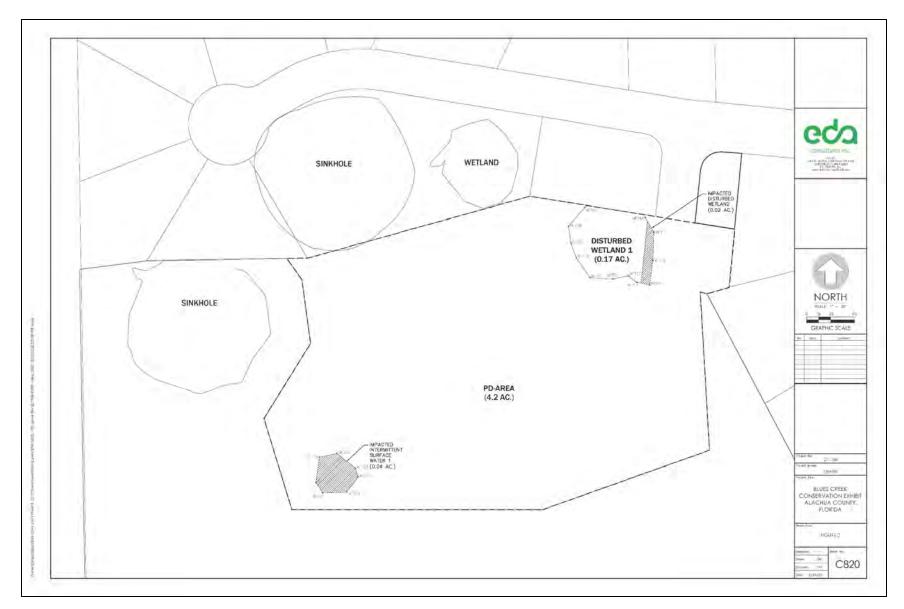


Figure 8. Project site wetland and surface water impacts.

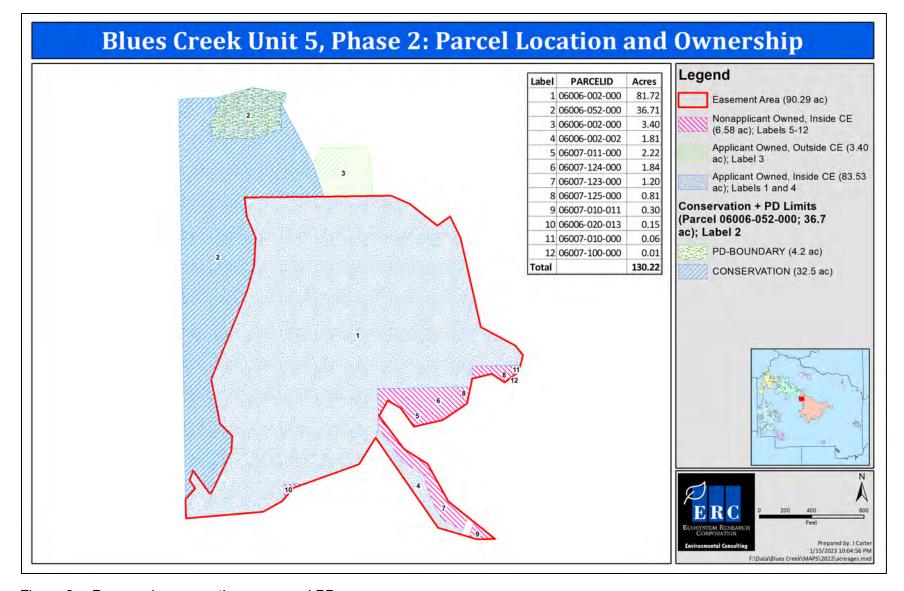


Figure 9. Proposed conservation areas and PD area.

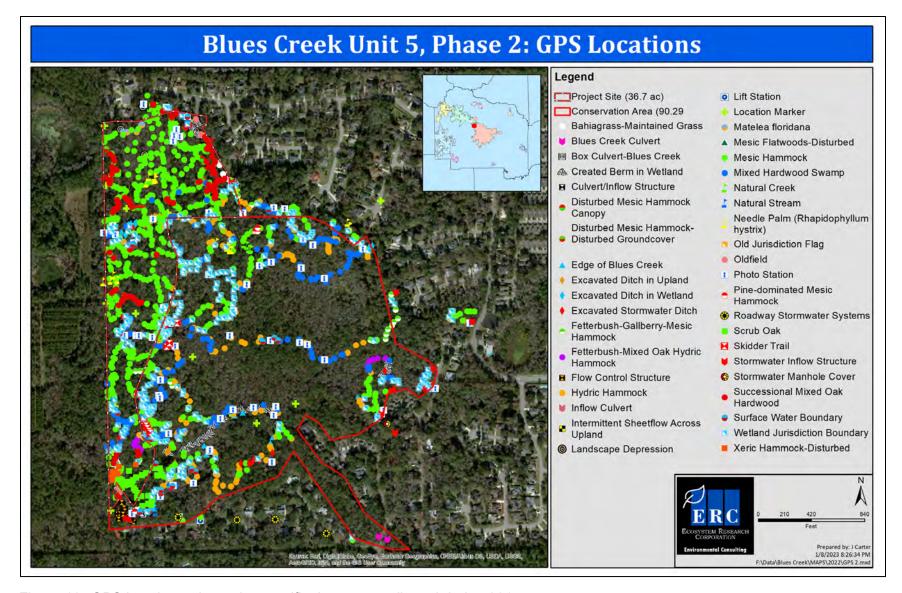


Figure 10. GPS locations where site-specific data were collected during 2015 surveys.

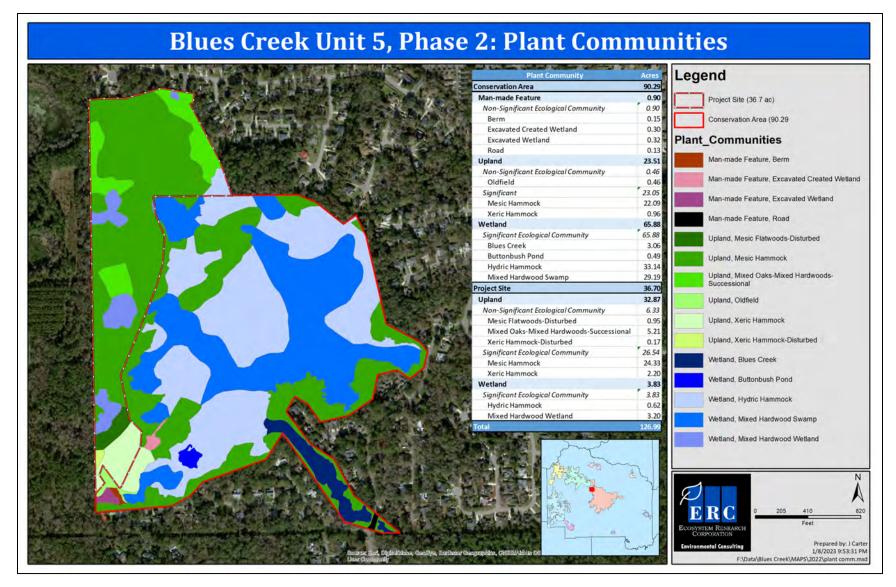


Figure 11. Plant communities of the Resource Assessment Area constructed in 2015.

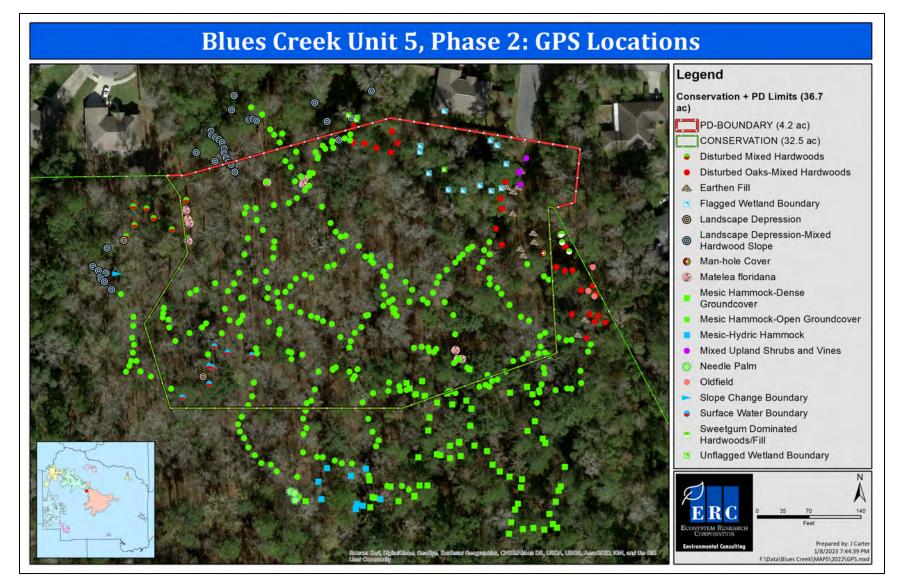


Figure 12. GPS locations where site-specific data were collected in May 2022.



Figure 13. Bald eagle nests and water and wading bird rookeries in relation to the Project Site and surrounding area.

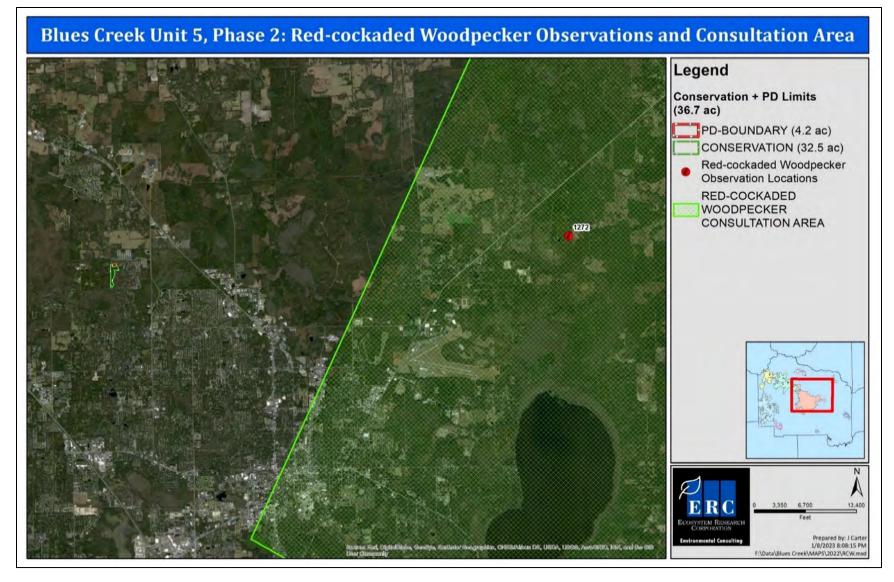


Figure 14. Red-cockaded woodpecker observation locations and consultation area shown in relation to the Project Site and surrounding area.

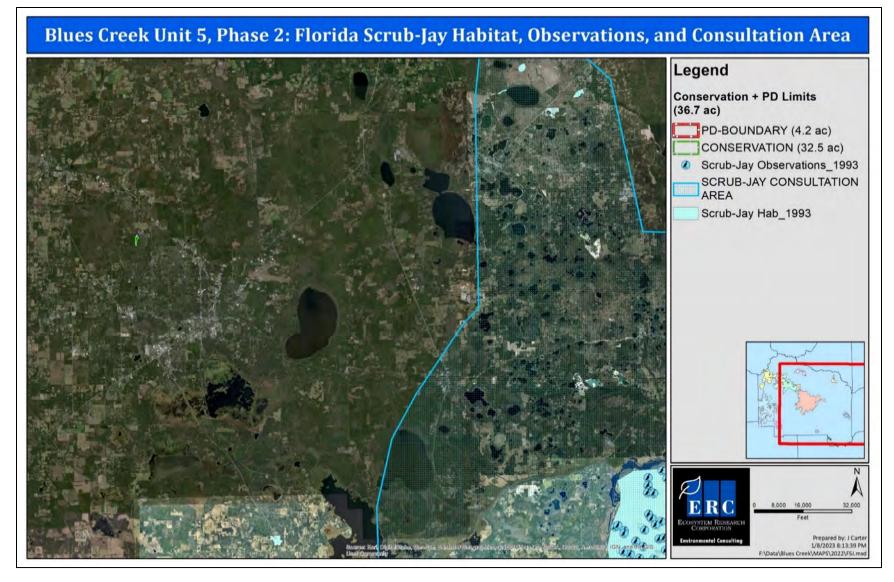


Figure 15. Florida Scrub-Jay observation locations, consultation area, and habitat shown in relation to the Project Site and surrounding area.

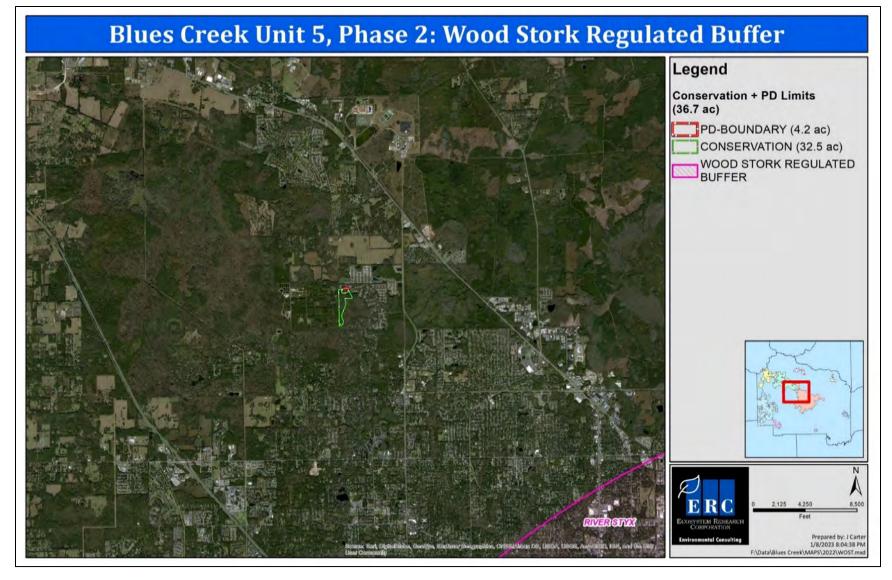


Figure 16. Wood stork regulated buffer area shown in relation to the Project Site and surrounding area.

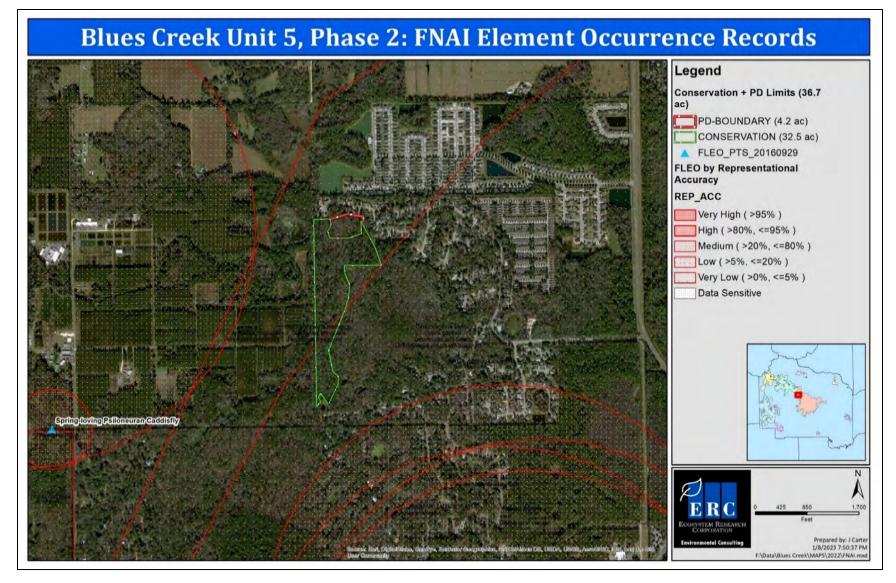


Figure 17. Florida Natural Area Inventory element occurrence records for the project site and surrounding area.

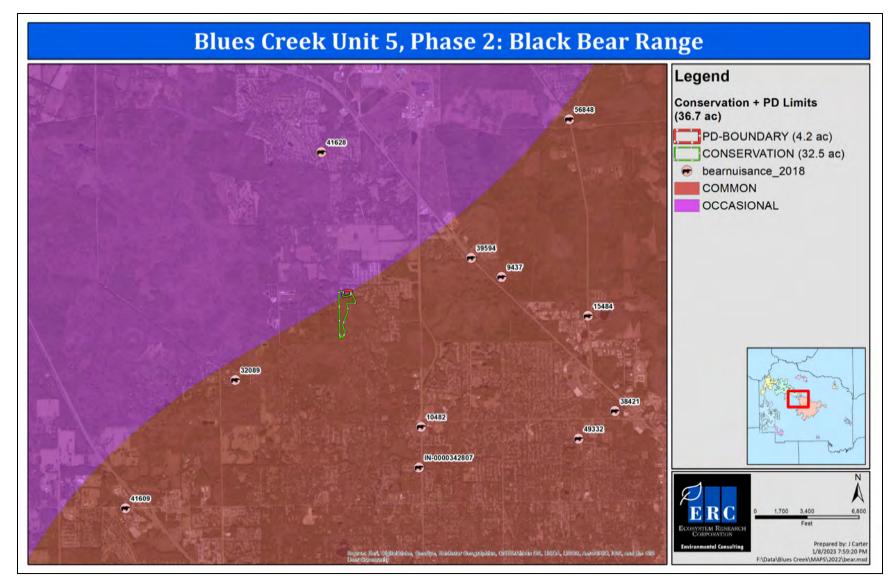


Figure 18. Black bear range and nuisance locations shown in relation to the Project Site and surrounding area.



Figure 19. Listed plant species observed on the Project Site and surrounding area from 2015-2022.

Attachment 1: Drainage Easement for 90.29-acre Conservation Area (Parcel 06006-002-000)



THIS INSTRUMENT PREPARED

5' ANTHONY W CRIVA

ATTORNEY AT LAW

4DM NEWBERHY ROAD

GRICE-SVILLE FLORIDA 32607

#### EASLMENT

THIS EASEMENT, made this \_\_\_\_\_\_\_\_\_.

1981, by DEVIL'S CREEK, LTD, a Florida limited partnership, as Party of the First Part and SAN FELASCO VILLAS VENTURE and MILLHOPPER DEVELOPMENT CORPORATION, as Parties of the Second part.

WITNESSETH:

That the seif Party of the First Part and in consideration of the sum of One Dollar (\$1.00) and other valuable considerations paid each to the other, raceipt of which is hereby acknowledged, has given and granted, and by hese presents does give and grant unto the Party of the Second Part, its successors and assigns, a perpetual easement over and across the following described property located in Alachua Scunty, Florida, to-wit:

See legal description attached hereto and made a part hereof as Exhibit "A"

for the ourpose of construction, repairing and maintaining a drainage system over, a.25 :, upon and beneath the surface of said land.

TO HAVE AND TO HOLD the same under the said Party of the Second Part, it successors and assigns forever. It being the intent of the parties hereto that the right of the Party of the Second Part may be assigned either exclusively or nonexclusively to any other party.

IN WITNESS WHEREOF, the said Party of the First Part has caused these presents to be executed the day and year aforesaid.

Signed, sealed and delivered in our presence as witnesses

FFAIRE A

STATE OF FLORIDA

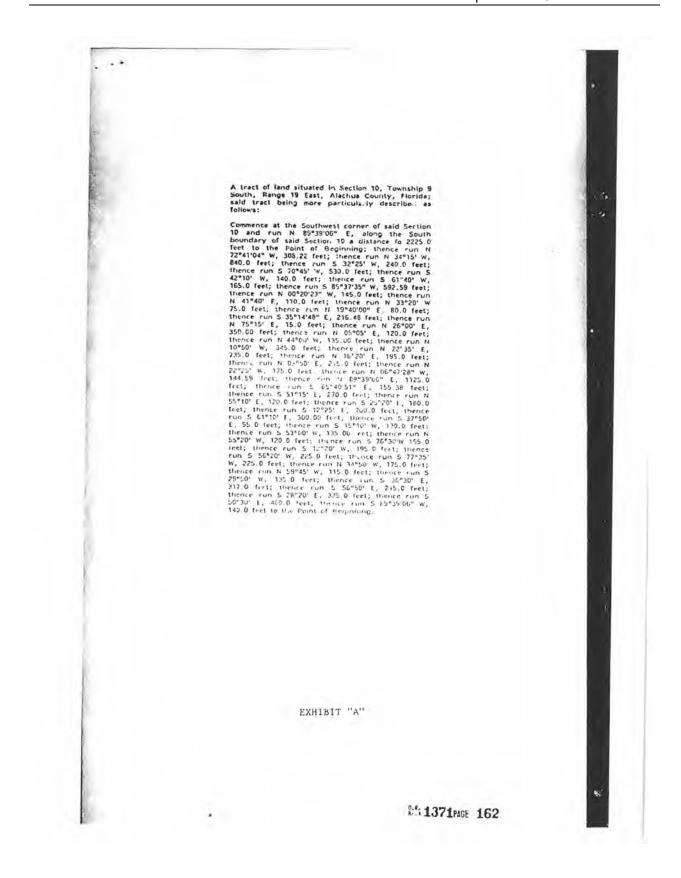
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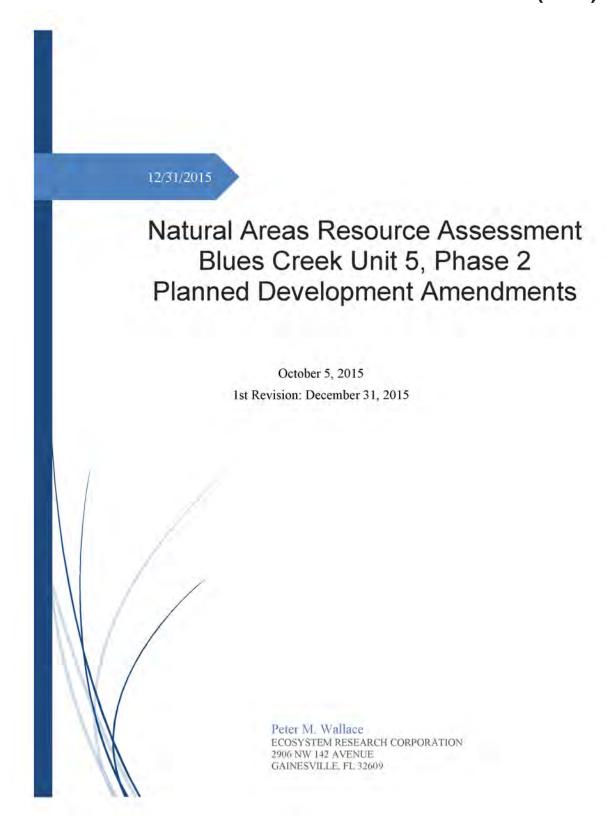
CARL E. MIDKIFF, general

P. 1371PEGF 160

The foregoing instrument was acknowledged before me
this 774 day of AUGUST
MIDKIFF, as General Partner, of DEVIL'S C'EEK, LTD., a
Notary Public. State of Florida, My Commission Expires:  Notary Public State of Toolds at Large My Commission Expires:  Notary Public State of Toolds at Large My Commission Expires Spril 19, 1982



# **Attachment 2: Natural Areas Resource Assessment (2015)**



Parcels 06006-052-000 (36.70 ac) and 06006-002-000 (90.29 ac) City of Gainesville, Florida

## Prepared for

Alachua Land Investors, LLC 324 NW 154th Street Newberry, FL 32669

New Generation Home Builders, Inc. (Owner: Parcel No. 06006-052-000, 36.70 acres) 14184 SW 4th Place Jonesville, FL 32669

and

Blues Creek Development (Owner: Parcel No. 06006-002-000, 90.29 acres) 324 NW 154th Street Newberry, FL 32669

### Prepared by

Ecosystem Research Corporation 2906 NW 142nd Avenue Gainesville, FL 32609



October 5, 2015 1st Revision: December 31, 2015

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# 1.0 Introduction and Physical Site Description

Ecosystem Research Corporation (ERC) was contracted by Alachua Land Investors LLC to perform a Natural Areas Resource Assessment of two (2) Alachua County tax parcels. The parcels are located within the Blues Creek Planned Development located in the northwest quadrant of the City of Gainesville within central Alachua County. In general, the Blues Creek Planned Development is located west of NW 43rd Street and north of Millhopper Road (CR-232) (**Figure 1**). Access to the tax parcels is best obtained by NW 73rd Avenue to NW 80th Avenue to access the north area and NW 73rd Avenue to NW 69th Lane to access the south area of the parcels (**Figure 1**).

The two (2) Alachua County tax parcels that comprise the **Planning Parcel** are listed as follows (**Figure 2**):

Tax Parcel Number	Ownership	Acreage
06006-052-000	New Generation Home Builders, Inc.	36.70
06006-032-000	Jonesville, FL 32669	30.70
	Blues Creek Development	
06006-002-000	324 NW 154th Street	90.29
	Newberry, FL 32669	
ТО	TAL RESOURCE ASSESSMENT AREA	126.99

The **Planning Parcel** boundaries represent the extent of contiguous parcels that are owned by the applicant. The Project Site where future development will occur is the entire extent of parcel 06006-052-000, which consists of 36.70 acres. The **Planning Parcel** and **Resource Assessment Area (RAA)** are the same for this study and are represented by the total extent of both parcels, consisting of 126.99 acres (**Figure 2**).

Parcel 06006-002-000 is currently designated as a Conservation Area, which has protections as defined within the Blues Creek PD Master Plan. The "Conservation Area" is also subjected to the conditions of a drainage easement established in 1981. This easement is provided as **Appendix A**.

The Project Site is referred to as "Blues Creek Unit 5, Phase 2." The current application proposes text amendments to the existing Blues Creek Planned Development (PD)

Zoning Designations and Amendments of the PD Master Plan to reflect a proposed new Unit 5, Phase 2 subdivision of single-family lots.

# 2.0 Natural Area Resource Assessment Methodology

### 2.1 Field Survey

ERC performed a Level 1 Review (as specifically described in Section 30-310(e)(2) of the City of Gainesville Land Development Regulation) of the entire RAA, which includes all parcels owned and/or controlled by the applicant located within and adjacent to the proposed development parcel. For this project, the RAA is equal to the total extent of all contiguous parcels owned by the applicant. The review was conducted within the ±126.99-ac area shown on Figures 1 and 2. The Level 1 Review was performed consistent with the requirements as described in Section 30-310(e)(1). A Binding Methodology Agreement establishing the Level 1 review process was established with the City of Gainesville pursuant to Section 30.310(g). The agreement is provided as Appendix B. Within the RAA, the following activities were conducted.

- Review and description of wetland resources with mapping of the wetland jurisdiction boundary based on state methodologies as described in Chapter 62-340, FAC;
- 2. Survey for presence of listed species;
- 3. Database review for reported listed species occurrences;
- 4. Delineation of listed species habitats;
- 5. Delineation of significant natural communities; and
- 6. Description of Regulated Creeks and other Flow-ways.

The Natural Area Resource Assessment was conducted by Ecosystem Research Corporation (ERC). The RAA was delineated based on the occurrence of contiguous parcels owned by the applicants that will be directly affected by the proposed activity. The Natural Areas Resource Assessment report details the results of past and current field surveys conducted within the RAA.

A field survey of the Project Site was performed 18 and 19 July 2013, 8 and 10 July 2015, 22 September 2015, and 2 November 2015 to evaluate the general ecological condition of the area and determine if any listed plant or animal species or other environmental constraints were present within the boundaries of the RAA or immediately adjacent parcels. The surveys were performed by Peter M. Wallace, MS (Authorized

Gopher Tortoise Agent #GTA-14-00037) and Robert A. Garren, MS (Authorized Gopher Tortoise Agent #GTA-09-00057B) of Ecosystem Research Corporation. A survey of the RAA was performed by repeatedly traversing the site with a series of pedestrian transects. Observations regarding plant species composition were recorded at 1,794 locations within the RAA and adjacent drainage areas. At each location, plant species, plant habitat type, observations of animal occurrences, and GPS position coordinates were recorded using a hand-held Garmin GPSMap76CSx unit. The site survey was specifically performed to assess the general ecological condition of the property, determine the existing plant community composition, and survey for the presence or occurrence of listed plant and animal species that may affect development of the area.

### 2.2 Review of Existing Published Database Resources

To complement the data obtained from the field survey, several existing GIS databases were queried to obtain available published site-specific GIS data for the site and surrounding areas. These databases include the following:

- 1. Natural Resources Conservation Service (NRCS) Soils
- 2. Federal Emergency Management Agency (FEMA)
- 3. Florida Fish and Wildlife Conservation Commission (FWC) Eagle Nest Locator
- 4. FWC Wading and Waterbird Rookery Nest Sites
- 5. Florida Natural Areas Inventory (FNAI) Element Occurrence Database
- 6. Wood Stork Regulated Buffers
- 7. Alachua County 2001 LiDAR Topography
- 8. Alachua County Strategic Ecosystems Overlay Database
- 9. City of Gainesville Regulated Creeks Database
- 10. National Wetlands Inventory Database
- 11. Alachua County Composite Wetlands and Soils Database
- 12. Alachua County Hazardous Materials Storage Facilities Database

The field survey and data review assessment performed for the project specifically addresses the requirements of the City of Gainesville Land Development Code, as defined in Section 30-310.

#### 3.0 Results of Data Review

# 3.1 Published Geographic and Hydrologic Data Review

#### 3.1.1 Soils

The RAA is located within Section 10, Township 9 South, Range 19 East and is described geographically within the USGS Gainesville West Quadrangle map (Figure 3).

The NRCS soil survey map for the RAA and surrounding area is shown on **Figure 4**. Based on the NRCS map, there are eight (8) soil mapping units described for the RAA. The majority of the area within the RAA consists of Pelham sand and Surrency sand with smaller areas of Wauchula sand; Millhopper sand, 0 to 5 percent slopes; Blichton sand, 5 to 8 percent slopes; Kanapaha sand, 0 to 5 percent slopes; Pomona sand; and Tavares sand, 0 to 5 percent slopes. The characteristics of the soils that occur within the RAA are briefly described, as follows:

Mapping Unit No.	Mapping Unit Name	Hydric	Drainage Class	Clay Confining Layer
7	Kanapaha sand, 0 to 5 percent slopes	No	Poorly drained	44-80 in. clay
8	Millhopper sand, 0 to 5 percent slopes	No	Moderately well drained	58-89 in. clay
13	Pelham sand	No	Poorly drained	29-80 in, clay
14	Pomona sand	No	Poorly drained	16-24 in. spodic 43-69 in. clay
16	Surrency sand	Yes	Very poorly drained	28-80 in. clay
17	Wauchula sand	No	Poorly drained	14–18 in. spodic 28–37 in. clay
20	Tavares sand, 0 to 5 percent slopes	No	Moderately well drained	None
75	Blichton sand, 5 to 8 percent slopes	No	Poorly drained	28-62 in. clay

The most notable observation with regard to the distribution of soils is the relative positions of Pelham sand and Surrency sand occurring within the large depressional area

of Parcel 06006-002-000. The Surrency sands correspond to a system of mixed hardwood wetlands found in the area while the Pelham Sands correspond to a mosaic of Hydric Hammock and Mesic Hammock plant associations. Within the landscape depression, it is difficult to differentiate between the soils of these community types in many areas based on the soil profile characteristics. Blues Creek flows through an area dominated by Pelham soils and Wauchula sand; however, the stream channel is undefined by the distribution of soil mapping units. For this site, the Mesic Hammock vegetation is typically found on Pelham Sand while Flatwoods communities correlate with the Kanapaha Sand.

#### 3.1.2 FEMA Flood Prone Areas

The FEMA Flood Zone is shown on **Figure 5** and, as depicted, does not correlate to the true 100-year flood zone that exists on the site. The mapped flood zone roughly follows a historic topographic flow-way that extends to the site from off site around the west central boundary of the RAA. The FEMA onsite flood zone correlates with the distribution of the 155-ft (NAVD 88) and below LiDAR contours occurring within the landscape depression. However, onsite evidence and flooding and the current extent of surface water would indicate that the annual flood event lies at least at the 156-ft LiDAR contour (NAVD 88). Hence, the FEMA line depicted by the coverage shown on Figure 5 should not be relied upon in the area of the Project Site. However, it is the current regulatory boundary.

#### 3.1.3 LiDAR Topography

The Alachua County 2001 LiDAR (NAVD 88) topography map for the RAA and surrounding area is shown on **Figure 6**. Apparent on the LiDAR topography are the following:

- 1. The limits of a broad, gently sloping landscape depression occurring within Parcel 06006-002-000 are well defined. This basin within this parcel slopes from a high of  $\pm 161$  ft at the north end of the parcel to a low of 152 ft located within the southwest corner of the RAA. The majority of the depression lies between 155 and 156 ft.
- 2. The broad central area of the basin is surrounded by a steeper well-defined sloping landscape extending from ±156 ft to the base of a steep escarpment that begins at about 163 ft and extends to an elevation of ±178 ft where the slope quickly flattens out. This escarpment extends through the northwest area of the RAA and completely surrounds the RAA in offsite areas.

- 3. There are a number of streams or wetland depressions that originate above the 163-ft contour and flow into the large depression located primarily within the RAA, specifically within the Parcel 06006-002-000 Conservation Area. Blues Creek is the most prominent tributary, which enters along the southeast section of the depression and flows only through the extreme southern one-quarter of Parcel 06006-002-000 then exits at the southwest corner of the RAA. Almost the entire length of Blues Creek within the depression is a well-defined channel even as it traverses the Hydric Hammock areas. The creek does pass through a buttonbush (*Cephalanthus occidentalis* L.) pond and Mixed Hardwood Swamp area prior to exiting the depression. At high flows, only sheet flow occurs in these areas but, during low flow periods, defined channels are present.
- There is a large flow control structure located within Blues Creek that controls stage and water flow in the creek prior to where the stream exits the property. The structure is approximately 200 ft long by 50 ft wide. A survey of the flow-control structure and associated structures is provided as **Appendix C** and has been referred to as a weir, spillway, berm, etc. The top of the structure is at elevation 156.65 ft (NAVD 88: 157.45 ft NGVD 29). There is a flow control box located on the east side in which the top elevation is at  $\pm 154.2$  ft (NAVD 88; 155.00 ft NGVD 29). The control box structure represents the east terminus of a 30 in.  $\times$  50 in, pipe that extends through the flow control structure to the downstream reach of Blues Creek. The invert of the culvert is 150.49 ft (NAVD 88; 151.29 ft NGVD 29). The front of the control structure contains a 2.0 ft  $\times$  1.5 ft slot at the east end that allows water into the flow control box at an elevation of 151.3 ft (NAVD 88; 152.53 ft NGVD 29). This structure does cause water to pool on the upstream side site several feet higher than that which historically occurred. The structure was built circa 1980 as required by Alachua County as part of the final permitting for the Deer Run III and San Felasco Villas subdivisions. 1 The structures are shown in photographs 5–7, 9, and 10–13 within the Photographic Atlas provided as **Appendix C**. The top of the large flow control structure was historically considered to be the elevation of the 10-year flood event, or  $\pm 156.2$  ft (NAVD 88; 157 ft NGVD 29). It should be stressed that all historical surveys for the site have been conducted based on the NGVD 1929 datum while the LiDAR presented on Figure 5 is based on the NAVD 88 vertical datum. All topographic surveys of the

<sup>&</sup>lt;sup>1</sup> As described in the Hassan Report (1980) and referenced in Alachua County Zoning Resolution Z-81-68 (24 June 1981).

site that ERC has reviewed as part of the RAA analysis are based on the NGVD 1929 datum.

#### 3.2 Published Wetlands and Water Resources Databases

The National Wetlands Inventory (NWI) and Alachua County Composite Wetlands map is provided on **Figure 7**. The Alachua County mapping includes aerially mapped wetlands as well as the hydric soil occurrences distributed throughout the RAA. The extent of wetlands as shown on Figure 7 represents a very general approximation of the wetland extent as it occurs on the site. The onsite wetland boundary is not possible to delineate by LiDAR topography or aerial signatures. The NWI coverage underestimates the wetland extent that is present on the site because it only approximates the extent of the deciduous canopy signature. It is not possible to delineate the boundary between Hydric and Mesic Hammocks based on the aerial photographic signature. An onsite field review is necessary to differentiate this boundary. Neither of the boundaries shown on Figure 7 are based on ground reconnaissance.

#### 3.3 Strategic Ecosystem Overlays

A portion of the RAA lies within the boundaries of the Millhopper Flatwoods Strategic Ecosystem Overlay (**Figure 8**). As is apparent on Figure 8, the Strategic Ecosystem boundaries as established within the KBN-Golder 1996 report do not correlate to any visual Regulated Resource boundary on the map. The boundary, as shown, passes through the center of the Conservation Area basin and doesn't correspond to a photographic signature or available topography. In addition, the 2012 adoption of the overlay by the City of Gainesville did not correct the overlay to remove any intensively developed areas that have occurred since the original study was conducted circa 1986. For the current overlay as it relates to the RAA, ±53.1% of the extent of the Regulated Resources occurring within Parcel 06006-002-000 are not included within the overlay. As shown, the overlay covers a total of 75.65 acres within the RAA, of which 41.66 acres are uplands and 33.99 acres are wetlands.

### 3.4 Review of Published Data for Listed Species

# 3.4.1 Summary Information Regarding Threatened & Endangered Species in Florida

There are several agencies that have been delegated the authority to protect and preserve the threatened and endangered flora and fauna that occur within the State of Florida. The United States Fish and Wildlife Service (USFWS) maintains a list of species afforded

special protection by the Endangered Species Act of 1973 (16 U.S.C. 1531). The list is published in the List of Endangered and Threatened Wildlife and Plants, 50 CFR 17.11-12. The Florida Fish and Wildlife Conservation Commission maintains a list of the protected animals occurring within the state by authority of the Florida Endangered and Threatened Species Act of 1977 (Section 372.072, Florida Statutes [FS]) and Chapter 68A-27, Florida Administrative Code (FAC), Rules Relating to Endangered and Threatened Species. The specific policy of the Florida Endangered and Threatened Species Act of 1977 is declared as follows:

Subsection 2: Declaration of Policy—The Legislature recognizes that the State of Florida harbors a wide diversity of fish and wildlife and that it is the policy of this state to conserve and wisely manage these resources, with particular attention to those species defined by the Florida Fish and Wildlife Conservation Commission, the Department of Environmental Protection, or the U.S. Department of Interior, or successor agencies, as being endangered or threatened. As Florida has more endangered and threatened species than any other continental state, it is the intent of the Legislature to provide for research and management to conserve and protect these species as a natural resource.

The list of threatened and endangered animals protected by these laws is published in *Section 68-27.003, .004, and .005, FAC*. The regulation of listed marine animals was historically delegated to the Florida Department of Natural Resources (FDNR); however, has since been reorganized into the Florida Department of Environmental Protection. The *Preservation of Native Flora of Florida Act (Sections 581.185, 581.186 [in part] and 581.201, FS)* passed in 1978 declares a public policy of the State of Florida with regard to native flora, as follows:

Subsection 1: Legislative Declaration—The Legislature finds and declares that it shall be the public policy of this state to: provide recognition of those plant species native to the state that are endangered, threatened, or commercially exploited; protect the native flora from unlawful harvesting on both public and privately owned lands; provide an orderly and controlled procedure for restricted harvesting of native flora from the wild, thus preventing wanton exploitation or destruction of native plant populations; encourage the propagation of native species of flora; and provide the people of this state with the information necessary to legally harvest native plants so as to ultimately transplant those plants with the greatest possible chance of survival.

To this end, the Florida Department of Agriculture and Consumer Services (FDACS) regulates the threatened and endangered plant species occurring within the state. As specifically authorized by *Chapter 5B-40, Preservation of Native Flora of Florida*, *FAC*, the *Regulated Plant Index* is published in *Section 5B-40.0055*. The Game Commission periodically releases a publication that summarizes animal species that are regulated by the Florida Fish and Wildlife Conservation Commission and the USFWS. The publication is titled *Florida's Endangered Species, Threatened Species, and Species of Special Concern*. The federal lists of plants and animals are published in *50CFR 17.11-12* and the list of Florida's federally listed plant species is also published by the Florida Division of Forestry.

Alachua County, by authority of *Article 3*, *Significant Plant and Wildlife Habitat*, and *Article 4*, *Listed Plant and Animal Species Habitat*, of the Unified Land Development Code (ULDC) regulates development in habitats where listed species occur or could potentially occur. Provisions within Articles 3 and 4 allow the County to require that up to 25% of the upland portion may be required to be protected and set aside as primary conservation areas. Areas protected under Articles 3 and 4 are designated as Conservation Management Areas and are further regulated via rules outlined in *Article 17*, *Conservation Management Areas (ULDC)* and potentially require that the property owner establish a conservation easement for the specific areas within the parcel. The owner is further responsible for development of a management plan and perpetual management of the area.

The City of Gainesville via provisions of *Sections 30-310.1(c)(11)* and 30-310.2(b) (2-August-2012) has adopted the County's template for listed species protection and provides protection of listed species and listed species habitats. Protective mechanisms include provision of Conservation Management Areas with associated management plans as described in *Section 30-310.3(a-i)*, LDC. Neither the County's nor the City's land development codes describes the protections warranted for individual species or habitats. These protections are defined on a case-by-case basis often in cooperation with the responsible federal or state regulatory entity.

Several other lists of the endangered and threatened fauna and flora are maintained for the State of Florida. The Florida Natural Areas Inventory (FNAI) maintains a list that summarizes the status and distribution of both plant and animal species as well as natural communities occurring within the State of Florida. The FNAI is managed by The Nature Conservancy in cooperation with the Florida Department of Environmental Protection. The lists compiled by the FNAI contain many species that do not occur on the State or

Federal lists. The FNAI list as compiled is not subjected to the time-consuming administrative process that is required for listing for State and Federal protection. Therefore, these lists often reflect the up-to-date true status of species that may be in immediate peril. The FNAI species that are not State or Federally listed are not given legal protection.

An inventory of the statewide distribution of potentially threatened and endangered species was initiated in 1973 by the Florida Committee on Rare and Endangered Plants and Animals (FCREPA). The group published a several-volume series that contains detailed descriptions, distributions, and academic evaluations of species considered to be in peril. The FCREPA list contains many species in addition to the State and Federal lists; however, these additional species are afforded no legal protection. The FCREPA series offers the best compiled review of the biology of the imperiled biota of Florida to date. Beginning in 1986, revisions of the FCREPA volumes were initiated and continue to date.

To aid in review of the imperiled species that occur in Florida and the State and Federal Regulations that govern their management, the following publications are available:

- Endangered and Threatened Species Act of Florida, Chapter 372.072, FS
- Rules Relating to Endangered and Threatened Species, Chapter 68A-27, FAC
- The Preservation of Native Flora of Florida, Chapter 581.185, FS
- Preservation of Native Flora of Florida, Chapter 5B-40, FAC
- Florida Endangered Species, Threatened Species, and Species of Special Concern, January 2013

### 3.4.2 Results of Specific Listed Species Searches

The results obtained from query of the eagle nest locator database, water and wading bird breeding habitat database, Florida Natural Areas Inventory element occurrence database, and the Wood Stork Regulated Buffer is presented on **Figure 9**. The results indicate that no eagle nests or extant or historical wading bird or waterbird rookery sites occur within a one-mile radius of the RAA boundary. The RAA does not lie within any Wood Stork Regulated Buffer.

The Element Occurrence locations of imperiled species as listed within the Florida Natural Areas Inventory (FNAI) Element Tracking Database are also shown on **Figure 9**. There are no historical reported occurrences shown within the RAA boundaries.

### 3.5 Review of Archaeological Resources

A Cultural Resource Assessment Survey of the Project Site has not been reviewed by ERC.

### 3.6 Hazardous Waste Storage Facilities

The location of hazardous materials storage facilities that are monitored by Alachua County are shown on **Figure 10**. There are no storage facilities within the RAA.

## 3.7 Regulated Creeks, City of Gainesville Land Development Regulations, Sections 30–301 and 30–302

The Regulated Creeks as shown within the City of Gainesville Regulated Creeks Database is shown as **Figure 11**. The map shows the general route of Blues Creek as it traverses the RAA. Any proposed activities with regards to lot or road layout of the current PUD Plan will not adversely affect the Regulated Boundaries of Blues Creek.

# 4.0 Results of Field Verification of Existing Natural Resources

## 4.1 Field Survey Procedure

The RAA was surveyed 18 and 19 July 2013, 8 and 10 July 2015, 22 September 2015, and 2 November 2015 to determine the extent of Regulated Natural Resources occurring within the RAA. The areas where site-specific data were recorded are shown on a 2014 aerial photograph in relation to the RAA boundary on **Figure 12**. The GPS icons shown reflect the vegetation, land use, onsite physical structures, or listed species occurrences on the site that were evaluated at 1,794 locations within the RAA. A Photographic Atlas that provides examples of the plant associations, flow-ways, and stormwater management facilities occurring on site is provided as **Appendix D**.

## 4.2 Delineation of Wetlands and Surface Waters Occurring within the Project Site Boundary

The extent of wetlands and surface waters that occur within the Project Site boundary (Parcel 06006-052-000) were first delineated by ERC in 2002. The Wetland Boundary and Topographic Survey that shows the extent of the wetlands is provided as **Appendix E**. The wetlands were delineated pursuant to **Chapter 62-340**, **FAC** and were delineated with sequentially numbered flags which were located by professional survey (Appendix E). The flagged boundary was reviewed by Louis Mantini of the Suwannee River Water

Management District as well as Michael Buono and Michael Drummond of Alachua County Environmental Protection Department who approved the delineation at the time of flagging (2002). The wetland boundary was the line approved by the District when they issued the Stormwater Permit for Unit 5, Phase 2, circa 2005. At the time of the delineation review, there were several very small depressions and small excavated drainages that were reviewed by the agencies for purposes of jurisdiction. These drainages and depressions are intermittently wet and dry and were dry from 2002 to 2012. However, in 2012, intermittent flooding for short periods of time occurred in these areas. All areas were dry in July 2015; however, were shallowly flooded or saturated in September 2015 following intense rain events.

There is a large landscape depression located off site along the north property boundary (see Photo 1, Appendix D; GPS 801). This depression had never been seen with standing water until September 2015. However, recent water levels on site are the highest ever seen and are similar to what is currently observed within Devil's Millhopper, which at this time is flooded. The offsite depression above is located west and adjacent to two wetland areas (Photos 2 and 3, Appendix D) that have a perched water table that is higher than the base elevation of the larger drier depression. These wetlands have been inundated during all field visits. This indicates that the water table in the area is extremely variable and is perched above clay in some areas and in areas where clay is not present water percolates rapidly through the deep sands. Based on general observations and flow patterns within the Project Site and the adjacent Conservation Area, the onsite wetlands have a perched water table and do not function as "sinkhole wetlands" as has been previously described for the site. None of the wetlands have exposed limerock or clay side slopes. All onsite wetlands are best described as Mixed Hardwood Wetlands that have been historically disturbed by logging activities and are currently occupied by successional plant associations which include water oak (Quercus nigra L.), laurel oak (Quercus hemisphaerica Bartr.), swamp blackgum (Nyssa sylvatica var. biflora [Walt.] Sarg.), sweetgum (Liquidambar styraciflua L.), hackberry (Celtis laevigata Willd.), cabbage palm (Sabal palmetto [Walter] Lodd. ex Schult. & Schult. f.), sweetbay (Magnolia virginiana L.), swampbay (Persea palustris [Raf.] Sarg.), red maple (Acer rubrum L.), and buttonbush (Cephalanthus occidentalis L.). For general discussion purposes, there are six (6) wetland areas located on the Project Site. The wetland nomenclature, acreages, and associated buffers are shown on Figure 13 for review. The total wetland acreage on the site equals 3.82 acres.

## 4.3 Delineation of Plant Community Associations Occurring within the Boundaries of the Resource Assessment Area

A list of the commonly occurring plant species within the RAA is provided as **Table 1**. To describe and delineate the communities occurring within the RAA, a series of transects were traversed across the upland and wetland areas. This task was considered critical to understanding the ecology of the area and there have been minimal historical efforts to accomplish this task. ERC has reviewed numerous ecological descriptions of the area prepared since 1980 and none accurately describes the characteristics of the Project Site or adjacent Conservation Area. This is in part due to the absence in the past of handheld GPS units and digital aerial photographs that allow the field surveyor to actually have a reasonable guess as to their probable location when making observations.

To assist in the delineation of natural habitats occurring on the site, a series of historical aerial photographs were obtained and rectified and are provided with the RAA boundary on Figures 14 through 23, as follows:

Figure Number	Flight Year
14	2014
15	2005
16	2000
17	1999
18	1974
19	1968
20	1961
21	1955
22	1949
23	1937

ERC has not found in the past that any accurate observations have been described for the RAA vegetation or hydrology. The field survey was performed as previously described on Figure 12. From the site survey data, a plant community map was constructed and is presented on Figure 24. The plant community acreages are also tabulated on Figure 24 as well as their classification with regards to Significant or Non-Significant Ecological Communities. To describe the RAA communities present, the following descriptions are provided:

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## 4.3.1 90.29-Acre Conservation Area (Parcel 06006-002-000) Plant Communities

#### **Man-Made Features**

**Berm**: There is a large constructed berm located within Blues Creek that functions as a spillway or flow control structure for waters flowing from the RAA offsite to the southwest to Blues Creek. This is a large earthen and concrete structure and unlike any type of structure seen by ERC in any similar areas of the state. The structure was constructed circa 1978–1980 (see Photos 5–7 and 9–13, Appendix D).

**Excavated Created Wetland**: There is an excavated created wetland located within the southwest corner of Parcel 06006-002-000. This wetland was apparently created for borrow material to create the spillway. The pond is dominated by a dense stand of crimsoneyed rosemallow (*Hibiscus moscheutos* L.) and swamp rosemallow (*Hibiscus grandiflorus* Michx.).

**Excavated Wetland**: There is an area of Blues Creek located southwest of the spillway that was potentially excavated to move water through the area more rapidly or excavated to facilitate construction of the spillway. The excavated area is covered with lemnids (*Lemna* sp.), Carolina willow (*Salix caroliniana* Michx.), and buttonbush (*Cephalanthus occidentalis* L.) and is considerably disturbed in comparison to the adjacent onsite areas of Blues Creek (see Photos 12 and 13, Appendix D).

**Road**: The roadway as mapped refers to the paved area and improvements to NW 50th Street passing through the southern extent of the Conservation Area.

#### **Uplands—Non-Significant Ecological Communities**

Oldfield: A disturbed oldfield community is located north of Blues Creek in the area east of the spillway. The area was historically cleared of all vegetation and has re-colonized with a host of pasture grasses to include bermudagrass (*Cynodon dactylon*) and bahiagrass (*Paspalum notatum* Fluegge). In addition, ruderal herbs and shrubs are found throughout the area to include dog fennel (*Eupatorium capillifolium* [Lam.] Small), yankeeweed (*Eupatorium compositifolium* Walter), phasey bean (*Macroptilium lathyroides* [L.] Urban), sea myrtle (*Baccharis halimifolia* L.), muscadine (*Vitis rotundifolia* Michx.), sand blackberry (*Rubus cuneifolius* Pursh), and others.

#### **Uplands—Significant Ecological Communities**

Mesic Hammock—General Description: The majority of the Significant Habitat area is a relatively mature Mesic Hammock plant association that has been variously logged since at least 1937. The Significant Habitat plant communities are best described as a Mesic Hammock plant association and probably represent one of the best examples of this plant association occurring outside of the boundary of the San Felasco Hammock Preserve State Park, at least in the very north area of the Project Site. The onsite Mesic Hammock habitat typically occurs above the 157-ft contour and occurs along the gentle and step slopes of the rim of the landscape depression. The onsite Mesic Hammock can occur on areas ranging from saturated soils to deep, dry, sandy soils. Typically, Mesic Hammock habitats occur on areas that may or may not have been historically logged but in almost all cases there has been minimal disturbance to the upper soil profiles and generally these sites have never been used for agriculture.

**Mesic Hammock**—Climax: For the purpose of this report, the term "Mesic Hammock: Climax" defines the most significant undisturbed climax communities located on the site. This is the most natural community on site and resembles the community type that would have historically dominated this area of Alachua County. The term "Mesic Hammock" is used in Alachua County to describe mixed-hardwood dominated mesic communities in which there is a paucity of live oak (*Quercus virginiana* Mill.), laurel oak (*Quercus* hemisphaerica Bartr.), or water oak (Quercus nigra L.), which are tardily deciduous evergreen oak species. There is typically an abundance of swamp chestnut oak (*Quercus* michauxii Nutt.), bluff oak (Quercus sinuata Walter), Shumard oak (Quercus shumardii Buckl.), and southern red oak (*Quercus falcata Michx.*), which are oaks that lose all their leaves in the dormant season. The pines present in this area are typically dominated by spruce pine (*Pinus glabra* Walt.) instead of loblolly pine (*Pinus taeda* L.). The Florida Natural Areas Inventory (FNAI) in the "Guide to the Natural Communities of Florida" 2010 edition refers to this community type as "Upland Hardwood Forests." ERC has used "Mesic Hammock" terminology because it is the most locally used description for this habitat and it is consistent with the nomenclature used by the County within the Comprehensive Plan "Natural Resources Biodiversity Data and Analysis Report."

Within this community, the groundcover is open and park-like. The canopy is codominated by large individuals of pignut hickory (*Carya glabra* [Mill.] Sweet), blackgum (*Nyssa sylvatica* Marsh. var. *sylvatica*), sugarberry (*Celtis laevigata* Willd.), swamp chestnut oak (*Quercus michauxii* Nutt.), spruce pine (*Pinus glabra* Walt.), sweetgum (*Liquidambar styraciflua* L.), American elm (*Ulmus americana* L.), winged

elm (*Ulmus alata* Michx.), white ash (*Fraxinus americana* L.), black cherry (*Prunus serotina* Ehrh.), and Shumard oak (*Quercus shumardii* Buckl.). Large live oak (*Quercus virginiana* Mill.) infrequently occur throughout the area. The subcanopy is typically dominated by eastern hop-hornbeam (*Ostrya virginiana* [Mill.] K. Koch); however, in lower areas, ironwood (*Carpinus caroliniana* Walt.) is common.

Mesic Hammock–Climax Variations: Within the delineated significant habitat areas, there are three (3) distinct variations of the Climax Mesic Hammock Community that occurs and can be separated, although with some difficulty, into distinct polygons. These habitats have developed with different canopy composition, probably as a result of historic logging. Although the canopy composition is different, there is a distinct presence of a unique and diverse subcanopy and groundcover flora that is uniquely characteristic of climax Mesic Hammock communities. These variations are briefly described, as follows:

Mesic Hammock: Laurel Oak-Sweetgum-Loblolly Pine Dominant—In this community type the canopy is dominated by laurel oak (Quercus hemisphaerica Bartr.) and/or sweetgum (Liquidambar styraciflua L.) and loblolly pine (Pinus taeda L.) or slash pine (Pinus elliottii Engelm.). This community type typically has a canopy of very large trees of these species and a notable lack of spruce pine (Pinus glabra Walt.), pignut hickory (Carya glabra [Mill.] Sweet), live oak (Quercus virginiana Mill.), swamp chestnut oak (Quercus michauxii Nutt.), southern magnolia (Magnolia grandiflora L.), and southern red oak (*Quercus falcata* Michx.) in the canopy. However, the subcanopy is generally a diverse array of typical Mesic Hammock: Climax species and the groundcover is also typical of that found in undisturbed Hammock areas. This plant community type cannot accurately be delineated from aerial photography because, due to the pine-laurel oak signature, it appears very similar to very disturbed laurel oak-loblolly pine successional habitats in which the groundcover and subcanopy are almost invariably significantly dominated by seedlings and sapling of laurel oak. There are areas within this habitat type in which only one of the three canopy species will be present. These areas are more difficult to separate and have not been differentiated for this report.

Mesic Hammock: Laurel Oak—Sweetgum Climax—These are areas within the significant habitat that have laurel oak (Quercus hemisphaerica Bartr.) and sweetgum (Liquidambar styraciflua L.) almost as the sole dominant canopy species present. This community additionally has a subcanopy and groundcover that is indistinguishable from the Mesic Hammock: Climax habitat. These areas appear to be logged on the 1949 aerial photograph.

Mesic Hammock: Subcanopy Dominant—This community variation is characteristic of areas in which there are minimal canopy size individuals of any species but there is a dense subcanopy comprised of the typical Mesic Hammock: Climax species, especially eastern hop-hornbeam (Ostrya virginiana [Mill.] K. Koch), pignut hickory (Carya glabra [Mill.] Sweet), and winged elm (Ulmus alata Michx.). The groundcover is typical of Mesic Hammock: Climax areas with minimal laurel oak (Quercus hemisphaerica Bartr.) being present. The majority of the trees present are small caliper trees, usually less than 8 in. diameter at breast height (dbh).

Xeric Hammock: There is a remnant area of Xeric Hammock that occurs along the north bank of Blues Creek in the southwest corner of the site. This habitat is unique to the area and consists of a low canopy of sand live oak (*Quercus geminata* Small), with occasionally large Virginia live oak (*Quercus virginiana* Mill.) present. There are occasional myrtle oak (*Quercus myrtifolia* Willd.) present along and a dense cover of staggerbush (*Lyonia fruticosa* [Michx.] Torr.), rusty lyonia (*Lyonia ferruginea* [Walt.] Nutt.), and saw palmetto (*Serenoa repens* [Bartr.] Small) is found throughout the area. Loblolly pine (*Pinus taeda* L.) is common in the canopy and species such as hairy pinweed (*Lechea mucronata* Raf.), sweet goldenrod (*Solidago odora* var. *odora* Aiton), and dangleberry (*Gaylussacia frondosa* var. *nana* [A. Gray] Small) are common in the groundcover. There are disturbed areas of this habitat that have a denser growth of briars and vines with a reduced canopy. This entire habitat area is shown to be recently logged on the 1949 historical aerial photograph (Figure 22). At this time, there probably were large longleaf pine (*Pinus palustris* Mill.) present in the area which warranted the logging effort.

#### Wetlands—Significant Ecological Communities

Blues Creek: Blues Creek occurs as a deeply incised winding creek surrounded by dry uplands within its southern extent of the Conservation Area. As it passes through the main body of the Conservation Area it is a well-defined channel with broad flat areas of mesic and xeric hammock along its boundaries. Blues Creek disappears into a buttonbush (Cephalanthus occidentalis L.) marsh and mixed hardwood swamp area prior to discharging into the flow control structure located along the east boundary of the spillway. The extent of Blues Creek east and west of the spillway has been significantly disturbed by excavation in the immediate upstream and downstream areas adjacent to the spillway. The intent of the excavation appears to have been to enlarge the creek substantially in the area adjacent to the spillway. In the upstream area, water levels are

maintained much higher than was historically encountered prior to the spillway and trash and surface lemnids (*Lemna* sp.) are common in this area of the creek.

**Buttonbush Pond**: Within the Conservation Area, Blues Creek flows into a deepwater Buttonbush Pond in which buttonbush (*Cephalanthus occidentalis* L.) is dominant along with Carolina willow (*Salix caroliniana* Michx.), lizard's tail (*Saururus cernuus* L.), floating marshpennywort (*Hydrocotyle ranunculoides* L. f.), and manyflower marshpennywort (*Hydrocotyle umbellata* L.). A dense cover of lemnids (*Lemna* sp.) is also common in the area which reflects the effects of stormwater inflow into this wetland.

**Hydric Hammock**: There is a large extent of Hydric Hammock habitat occurring throughout the Conservation Area. This habitat has a significant degree of hydrologic variation because stormwater inflows into the habitat since development began have influenced the succession of this community.

In general, the Hydric Hammock community has a canopy dominated by swamp chestnut oak (Quercus michauxii Nutt.), swamp laurel oak (Quercus laurifolia Michx.), laurel oak (Quercus hemisphaerica Bartr.), sweetgum (Liquidambar styraciflua L.), hackberry (Celtis laevigata Willd.), loblolly pine (Pinus taeda L.), slash pine (Pinus elliottii Engelm.), spruce pine (Pinus glabra Walter), American hornbeam (Carpinus caroliniana Walter), and American elm (*Ulmus americana* L.). Slash pine (*Pinus elliottii* Engelm.) and loblolly pine can be dominant in both dry and wet areas. Red maple (Acer rubrum L.) is a prominent component in the wetter areas. The groundcover is generally dominated by bluestem palm (Sabal minor [Jacq.] Pers.) and a dense cover of slender woodoats (Chasmanthium laxum var. laxum [L.] Yates). In wetter areas of stormwater influence, lizard's tail (Saururus cermus L.) is often the dominant cover. Historically, these areas were characterized by saturated soils with surface water restricted to isolated pools only at times of extreme rains. Since the Conservation Area now receives direct point source inflows of stormwater, this has resulted in surface flows throughout the Hydric Hammock where historically this would not have occurred. In addition, some of the Hydric Hammock communities have been converted to what would be more appropriately described as Mixed Hardwood Wetland areas due to the large amounts of stormwater that are now placed in the system. Areas of Mesic Hammock within the Conservation Area have also been converted to Hydric Hammock due to increased flows and higher levels of water due to installation of the spillway.

This historical increase in hydrology within the Conservation Area has been the result of three factors:

- Increased stormwater directly discharged to the system at specific point source locations.
- 2. Elevation of water levels in the area due to the historical construction of a logging road that completely transects the depression from west to east. This structure pools water to the north in this system with flow occurring through the fill in several areas of small breeches. The location of the road can be seen by the fill icon shown on Figure 12. This road was probably constructed around 1949 when logging was apparent on both the east and west sides of the Conservation Area.
- 3. The construction of the spillway causing significant flooding in the Conservation Area and significantly extending the duration of flood events. The spillway and flow control structure cause water levels to reach ±157.5 ft (NGVD 29) during extreme events and commonly cause flooding to occur at the ±155-ft level and to be maintained at this level for extreme periods. Drawdown in the natural creek was probably maintained at the 150–151-ft contour where today the minimal elevation of the outflow level is ±152 ft.

All of these factors affect the current distribution of mesic and hydric habitats within the basin as compared to the historic condition which existed prior to 1978–1980.

Mixed Hardwood Swamp: The mixed hardwood swamps in the Conservation Area have been historically logged. Therefore, most of the existing canopy is comprised of medium-sized canopy trees. These wetland communities are typically dominated by red maple (Acer rubrum L.), sweetbay (Magnolia virginiana L.), swamp blackgum (Nyssa sylvatica var. biflora [Walt.] Sarg.), and sweetgum (Liquidambar styraciflua L.), with slash pine (Pinus elliottii Engelm.) being common or dominant in several areas. The groundcover is a mix of sedges and rushes; however, lizard's tail (Saururus cernuus L.) is the dominant species. Stormwater inflow has dramatically affected the hydrology of these areas. In July 2015, the entire east side of the swamp was inundated with water that could be traced to the stormwater inflows entering the basin from the north, northwest, and east sides. The blackgum swamps occurring along the west side of the basin were completely dry at this time. Hence, directional inflow of stormwater into the area has altered the general hydrology expected for the various wetland systems depending on location within the basin.

## 4.3.2 Project Area Plant Communities

The plant communities of the Project Site are similar to that described within the Conservation Area. For this reason, descriptions of the plant communities that occur within the Project Site that were previously described will not be repeated; however, communities unique to the Project Site are described as follows:

### <u>Uplands—Non-Significant Ecological Communities</u>

Mesic Flatwoods–Disturbed (Figure 24): An expanse of disturbed Mesic Flatwoods occurs along the south side of Wetland E. This area has a groundcover of dense saw palmetto (Serenoa repens [Bartr.] Small), gallberry (Ilex glabra [L.] A. Gray), and fetterbush (Lyonia lucida [Lam.] D. Don) intertangling with sawtooth blackberry (Rubus pensilvanicus Poir.), muscadine (Vitis rotundifolia Michx.), yellow jessamine (Gelsium sempervirens [L.] J. St. Hil.), and Virginia creeper (Parthenocissus quinquefolia [L.] Planch.). The canopy is dominated by loblolly pine (Pinus taeda L.), laurel oak (Quercus hemisphaerica Bartr.), and water oak (Quercus nigra L.). The area has been historically logged.

Mixed Oaks–Mixed Hardwoods–Successional: This community type typically occurs on habitats in which the historical Mesic Hammock canopy has been removed and clearing and significant disturbance of the groundcover and soil profile has also occurred. The resulting community is dominated by a predominantly oak canopy consisting of laurel oak (*Quercus hemisphaerica* Bartr.) and water oak (*Quercus nigra* L.). Other hardwood species present include black cherry (*Prunus serotina* var. *serotina* Ehrh.), pignut hickory (*Carya glabra* [Mill.] Sweet), Carolina laurelcherry (*Prunus caroliniana* [Mill.] Aiton), hackberry (*Celtis laevigata* Willd.), and a dominant cover of loblolly pine (*Pinus taeda* L.). These communities typically succeed to a climax oak forest dominated by laurel oak (*Quercus hemisphaerica* Bartr.).

**Xeric Hammock–Disturbed**: This is a xeric hammock community in which loblolly pine (*Pinus taeda* L.) has become a dominant canopy species and shrubs and dense vines occur in the subcanopy and understory. On the Project Site, this area is typically associated with historical road construction that has occurred on the offsite IFAS areas adjacent to the west boundary of the Project Site.

### Wetlands—Significant Natural Communities

**Mixed Hardwood Wetland**: The Project Site wetlands represented by wetland areas A, X, D, and E are best described as Mixed Hardwood Wetlands. These are depressional

wetlands underlain by clay, with a perched water table. Within these wetlands there are small well-defined circular basins in some areas with predominantly open water habitat. Dispersed around these habitats are logged areas of successional mixed hardwoods, mixed hardwood swamp areas dominated by red maple (*Acer rubrum* L.) and swamp blackgum (*Nyssa sylvatica* var. *biflora* [Walt.] Sarg.), hydric hammock areas dominated by swamp chestnut oak (*Quercus michauxii* Nutt.), and wet flatwoods dominated by loblolly pine (*Pinus taeda* L.) and fetterbush (*Lyonia lucida* [Lam.] D. Don). All of these habitats are disturbed and have been subjected to logging, road construction occurring offsite on the IFAS property, and stormwater inflows directed into the wetlands from IFAS property.

## 4.4 Historical Distribution of Plant Communities within the Resource Assessment Area (RAA)

The plant communities (Figure 24) that were delineated based on the current field surveys shown on Figure 12 have been overlain on 1949, 1968, and 1974 historical aerial photographs and are provided as **Figures 25**, **26**, and **27**, respectively. On the 1949 aerial (Figure 25), logging of the mesic areas of the site is taking place, which tends to delineate the hardwood wetland areas of the site, indicating where water is standing in 1949. In 1949 within the Gainesville area, water levels approximated seasonal high levels due to a high seasonal rainfall occurring at this time. This is also obvious in the offsite wet prairie and marsh systems occurring on the IFAS property to the west. The route of Blues Creek is difficult to see even though it has been clearcut. In any event, the plant community boundaries mapped in 2015 correlate well with the distribution of the 1949 upland habitats onsite.

On the 1949 aerial there is an obvious pooling of water that occurs within the central area of the depression north of Blues Creek. There is currently an old road present at the south end of the central Mixed Hardwood Swamp that separates Blues Creek from the Mixed Hardwood Swamp area (see Created Berm icons on Figure 12). North of this road is Mixed Hardwood Swamp and south of this road is Blues Creek and a Hydric Hammock habitat. There is an old pipe in the road and currently there are two (2) breeches which allow water to flow from north to south in this area. The road, however, now causes significant pooling to the north of Blues Creek. Under high resolution, the road is barely visible on the 1949 aerial. It appears it was used as a logging route to allow access across the swamp from east to west.

In 1949, water only appears to pool within the Hydric Hammock within the central area of the depression. ERC observed water flow across this area in July 2015; however, the dominant canopy is slash pine (*Pinus elliottii* Engelm.), with an understory of slender woodoats (*Chasmanthium laxum* var. *laxum* [L.] Yates). This area appears to currently flood intermittently and represents the wetter variation of the Hydric Hammock community present on the site. For comparison, the plant communities are also shown on the 1968 (Figure 26) and 1974 (Figure 27) aerials. At the time of these aerial flights, the site is drier based on the wetland signatures within the IFAS property to the west.

## 4.5 Delineation of Flow-Ways within the Resource Assessment Area (RAA)

The flow-ways that have been observed within the RAA from 2013 to 2015 are shown on Figure 28 in relation to the existing plant communities. Currently, most of the flow-ways entering the basin are a direct response to stormwater flows. Historically, some of these flow-ways existed; however, flow in these areas entered the central area of the swamp primarily by sheet flow during storm events. The current flow-ways exist as eroded stormwater inflow ditches that have defined, eroded channels and deltas or flumes of eroded silts carried from upstream areas. The historic flow-ways apparently sheet-flowed from upper elevation uplands to the depression into the well-defined Mixed Hardwood Swamp areas. The Hardwood Swamp areas now overflow through Hydric Hammock and historic Mesic Hammock in areas where there is no historic evidence that flow had occurred. Especially notable is the most northern of the flow inputs from a pipe that routes water from the direction of NW 80th Avenue to the depression. This flow has changed the character of the area as well as made the fringing Mesic Hammock much more hydric.

The second area where flow has changed the landscape is the northwest stormwater inflow from IFAS. ERC has reviewed a District compliance item with regard to this flow. Evidently, in circa 1989 IFAS cleared a 0.2-mile length of ditch on their property and rerouted stormwater through Wetland X (Permit #4-89-00097). This flow is intermittent; however, there is an excavated man-made channel at the east end of Wetland X that routes water originating from the ditch to the Conservation Area. The flows have made the area wetter and causes substantial stormwater flows in the Conservation Area to route across and through downstream Mesic and Hydric Hammock areas. Interestingly enough, nearly all stormwater flows are routed through the east side of the depression. In July 2015, although flow was noted throughout the east side of the Conservation Area, the

Hardwood Swamp areas lying east of wetlands D and E (Figure 13) were dry with no recent evidence of standing water.

## 4.6 Occurrence of Listed Species

There were no listed animal species seen within the RAA. Three listed plant species were encountered and their populations are shown on Figure 29. They are, as follows:

Scientific Name	Common Name	Classification
Rhapidophyllum hystrix	Needle palm	Commercially Exploited (CE)
Matelea floridana	Florida spiny pod	Endangered – State (E)
Hexalectris spicata	Spiked crested coralroot	Endangered - State (E)

Rhapidophyllum hystrix (Photos 103 and 104. Appendix D) is a commercially exploited species and is expected for the habitat type. The population of this species can be preserved in place and do well in residential habitats or they can be transplanted to conservation areas.

Matelea floridana (Photos 101 and 102, Appendix D) is a vine in the dogbane family (Apocynaceae) that is listed as Endangered. Nonetheless, in Alachua County it is common along fencerows, forested habitats, and mesic hammocks. The onsite populations that were encountered occur in designated conservation areas so the populations will be preserved. Matelea floridana is listed by the state as endangered and is tracked by the Florida Natural Areas Inventory (FNAI).

Hexalectris spicata (Photo 105) is a terrestrial orchid that is listed as Endangered by the State of Florida. However, it is not tracked by FNAI. Observation of this plant was a chance encounter since it was found during the last hour of the final day of field survey. These plants are not easily transplanted; however, relocating the recorded specimen may not be possible since this tuberous species is only seen above ground when flowering. This is a leafless plant described as mycotrophic, in that it is entirely devoid of chlorophyll and obtains nutrition through an association with mycorrhizal fungi living in the roots of canopy and subcanopy species. This further hampers efforts to locate it.

Within a given population, the numbers of plants can vary greatly from year to year generally due to rainfall fluctuation. Our observed plants are variety *spicata*.<sup>2</sup>

## 4.7 Discussion of Significant Natural Resources, Strategic Ecosystems, and Upland Set-Aside

#### 4.7.1 Site Plan Set-Asides

The proposed current site layout for the Unit 5, Phase 2 area is provided as **Appendix F**. The set-asides which are part of the existing site plan are shown on **Figure 30**. Currently the site plan details wetland buffers (3.82 acres) and additional open space areas (7.65 acres) which total 11.47 acres. The total Project Site acreage equals 36.70 acres, of which 32.87 acres are uplands (Figure 24). Therefore, currently the site plan would provide that 34.90% of the total upland area within the Project site will be set-aside.

### 4.7.2 Strategic Ecosystem Resources

The current Strategic Ecosystem Overlay of the RAA occupies 75.65 acres (**Figure 31**). Within the Conservation Area Strategic Ecosystem Overlay, there is a total of 42.34 acres, of which 11.55 acres are uplands and 30.79 acres are wetlands. If the total Planning Parcel or Resource Assessment Area is considered, then the total upland set-aside within the Strategic Ecosystem Overlay would total 17.54 acres (11.55 + 5.99) (**Figure 32**), or 42.10% of the total 41.66 (11.55 + 30.11) acres of upland within the Strategic Ecosystem Overlay occurring within the Project Site and Conservation Area.

### 4.7.3 Upland Set-Aside Resources for the RAA

The total acreage of the RAA equals 126.99 acres. The uplands within the Project Site total 32.87 acres (Figure 24). The uplands within the Conservation Area total 23.51 acres (Figure 24). The total Conservation Area uplands (total = 23.51 acres) have been setaside and an additional set-aside of 7.65 acres (Figure 30) will occur within the Project Site for a total of 31.16 acres. The total RAA uplands equals (32.87 + 23.51) 56.38 acres (Figure 24). Of this total (7.65 + 23.51), 31.16 acres are being preserved, which equals (31.16/56.38) 55.27% of the total RAA uplands.

<sup>&</sup>lt;sup>2</sup> Information obtained from Brown, Paul Martin. Wild Orchids of Florida. 2002. The University Press of Florida.

#### 5.0 Historical and Current Permit Considerations

Review of the historical permitting of the Project Site and Conservation Area has revealed that in making decisions relating to this site, the City must consider the permits that have been issued in the past by the State of Florida and Water Management District.

First and most importantly is that in recent permitting the City has considered that the ±90.29 acres of conservation is a wetland and a wetland boundary has been required to be established for this system. As this study has shown, there are considerable uplands present in this area. Because of the nature and type of wetlands within the Conservation Area and the mosaic of uplands which are present, neither the State of Florida not the Water Management District has ever exerted wetland jurisdiction over this system. In 1985 (via permit RC01-92547 issued 5 February 1985 and Permit 010818622 issued 25 May 1984), the State of Florida through the Department of Environmental Regulation did not exert jurisdiction within the system and permitted the ±90-acre Conservation Area as an "overland flow stormwater treatment system" to treat the entire 1300-acre drainage basin or Blues Creek. In 1988, in response to a challenge by an environmental group of a 1987 permit issued by the District that authorized construction of 5 stormwater basins within the 90-acre area, issued a permit modification (via permit 4-87-00067, June 1988) that established the 90-acre area as a stormwater wet retention/detention system. This permit authorized the 90-acre area for treatment of stormwater from all phases of the Blues Creek development.

Therefore, the Conservation Area is a permitted stormwater treatment system and not a jurisdictional wetland subject to the buffer requirements as defined in **Sections 30-301** and **30-302** of the City of Gainesville Land Development Regulations.

A second issue that needs to be addressed is that the 90-acre area should additionally be considered exempt from the City wetland code as described in 30-304(a)(2) in that the 90-acre stormwater treatment system was originally required by Alachua County for treatment of stormwater from the entire 1300-acre basin. The area was specifically required as part of Zoning Resolution Z-81-68, 24 June 1981, which required the construction of the spillway and creation of the stormwater treatment system as part of the final approval of the San Felasco Villas and Deer Run Unit III. Building of the flow control structure was completed circa 1980 as part of the final design for the Deer Run III subdivision.

Although the applicant has indicated buffers along the perimeter of the Conservation Area in the site plan, the Suwannee River Water Management District, in response to requests by the Applicant's consultants, has determined that the 90.29-acre Conservation Area does not contain state jurisdictional wetlands (**Appendix G**). The Conservation Area was historically and is currently permitted as a Stormwater Management Facility. Therefore, City and State wetland regulations are not applicable. However, the Applicant throughout this application has designed the Project with consideration of this being a wetland system. For future permitting purposes, the area should be considered as a permitted Stormwater Management Facility. The boundary of the permitted stormwater treatment system would correspond to the elevation of the top of the spillway, which is  $\pm 157.5$ -ft (NGVD 29).

## 6.0 Summary

The Natural Resources of the Blues Creek Unit 5, Phase 2 Project Site have been delineated and discussed. In addition, the ecology of the 90.29-acre Conservation Area is discussed in context with historical development and permitting of Blues Creek PUD.

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Species code, scientific name, common name, USFWS (Federal) Classification, FDEP (State) Classification, and Floristic Classification for all plant species recorded 8 and 10 July 2015 at the Blues Creek Subdivision Site, Alachua County. See footnotes at end of table for explanation of classification Table 1.

Species			USFWS1	FDEP <sup>2</sup>	Floristic <sup>3</sup>
Code	Scientific Name	Common Name	Classif.	Classif.	Classif.
ACE RUB	Acer rubrum L.	Red maple	FAC	FACW	NC
AMB ART	Ambrosia artemisijfolia L.	Common ragweed	FACU	UPL	MN
AND VIR	Andropogon virginicus L. var. virginicus	Broomsedge	FAC-	FAC	NP
API AME	Apios americana Medik.	Groundnut	FACW	!	NC
ARA SPI	Aralia spinosa L.	Devil's walkingstick	FAC	UPL	NC
ARI TRI	Arisaema triphyllum (L.) Schott	Jack-in-the-pulpit	FACW-	FACW	NC
ASC CRV	Asclepias curassavica L.	Scarlet milkweed	FAC	UPL	EW
ASP PLA	Asplenium platyneuron (L.) Britton et al.	Ebony spleenwort	FACU	UPL	NC
BACHAL	Baccharis halimifolia L.	Sea myrtle	FAC	FAC	NP
BID ALB	Bidens alba (L.) DC.	Beggarticks	Ŋ	UPL	MM
BIG CAP	Bignonia capreolata L.	Crossvine	FAC	!	NC
BOE CYL	Boehmeria cylindrica (L.) Sw.	False nettle	FACW+	OBL	NC
CAL AME	Callicarpa americana L.	Beautybush	FACU-	UPL	NC
CAM RAD	Campsis radicans (L.) Seemann ex Bureau	Trumpet creeper	FAC	!	NC
CAR cf. CAP	Carex cf. atlantica L.H. Bailey ssp. capillacea (L.H. Bailey) Reznicek (sterile)	Prickly bog sedge	OBL	OBL	NC
CAR GLC	Carex glaucescens Elliott	Clustered sedge	OBL	FACW	NC
CAR LPF	Carex lupuliformis Sartwell ex Dewey	False hop sedge	OBL	FACW	N
CAR LUP	Carex lupulina Muhl. ex Willd.	Hop sedge	OBL	OBL	NC
CAR CAR	Carpinus caroliniana Walter	American hornbeam	FAC	FACW	NC
CAR AME	Cartrema americana (L.) G.L. Nesom	Wild olive	FAC	UPL	NC
CAR GLA	Carya glabra (Mill.) Sweet	Pignut hickory	FACU	UPL	NC
CEL LAE	Celtis laevigata Willd.	Hackberry	FACW	FACW	NC
CEP OCC	Cephalanthus occidentalis L.	Common buttonbush	OBL	OBL	NC
CHA LAX	Chasmanthium laxum var. laxum (L.) Yates	Slender woodoats	FACW-	FACW	NC
CLI MAR	Clitoria mariana L.	Atlantic pigeonwings	Ŋ	UPL	NC
COR ASP	Cornus asperifolia Michx.	Roughleaf dogwood	FACW-	UPL	NC

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			USFWS	LUEL	FIGURE
Code	Scientific Name	Common Name	Classif.	Classif.	Classif.
CYP CRO	Cyperus croceus Vahl	Baldwin's flatsedge	FAC	FAC	ΝΡ
CYP RET	Cyperus retrorsus Chapm.	Pinebarren flatsedge	FACU+	FAC	NP
CYP VIR	Cyperus virens Michx.	Green flatsedge	FACW	FACW	NC
DIC ACI	Dichanthelium aciculare (Desvaux ex Poiret) Gould & Clark	Needle-leaf witchgrass	FACU	UPL	Ν
DIC ACU	Dichanthelium acuminatum (Swartz) Gould & Clark	Tapered witchgrass	FAC	UPL	NC
DIC COM	Dichanthelium commutatum (Schultes) Gould	Variable witchgrass	FAC	FAC	NC
DIC LAX	Dichanthelium laxiflorum (Lam.) Gould	Openflower witchgrass	FAC	UPL	NC
DIO BUL	Dioscorea bulbifera L.	Air-potato	Ŋ	ł	EA
DIO VRG	Diospyros virginiana L.	Common persimmon	FAC	FAC	NC
ORY LUD	Dryopteris Iudoviciana (Kunze) Small	Southern wood fern	FACW	FACW	NC
ELE ELA	Elephantopus elatus Bertol.	Florida elephant's-foot	Z	UPL	NC
ERI JAP	Eriobotrya japonica (Thunb.) Lindl.	Loquat	Z	UPL	EW
EUP CAP	Eupatorium capillifolium (Lam.) Small	Dog fennel	FACU	FAC	NW
EUP COM	Eupatorium compositifolium Walter	Yankeeweed	FAC-	FAC	Ν
FRA CAR	Fraxinus caroliniana Mill.	Popash	OBL	OBL	NC
GAL ELL	Galactia elliottii Nutt.	Elliott's milkpea	FACU	1	Ν
GAL VOL	Galactia volubilis (L.) Britton	Downy milkpea	FACU	1	NC
SAY NAN	Gaylussacia frondosa var. nana (A. Gray) Small	Dangleberry	FAC	FAC	NC
GEL SEM	Gelsemium sempervirens (L.) J. St. Hil.	Yellow jessamine	FAC	1	NC
GOR LAS	Gordonia lasianthus (L.) J. Ellis	Loblolly bay	FACW	FACW	NC
HEX SPI	Hexalectris spicata (Walter) Barnhart	Spiked crested coralroot	FACU	UPL	NC
HIB MOS	Hibiscus moscheutos L.	Crimsoneyed rosemallow	OBL	OBL	NC
HYD SP.	Hydrocotyle sp.	Marshpennywort	1	1	1
HYP HYP	Hypericum hypericoides (L.) Crantz	St. Andrew's-cross	FAC	FAC	NC
ILE COR	Ilex coriacea (Pursh) Chapm.	Sweet gallberry	FACW	FACW	NC
ILE GLA	Ilex glabra (L.) A. Gray	Gallberry	FACW	UPL	NC
ILE OPA	Ilex opaca var. opaca Aiton	American holly	FAC-	FAC	NC
IRI PSE	Iris pseudacorus L.	Paleyellow iris	OBL	OBL	EW
ITE VIR	Itea virginica L.	Virginia willow	FACW+	OBL	NC
JUN COR	Juncus coriaceus Mack.	Leathery rush	FACW	OBL	NC
IIIN DED	Innous vanous Micho	I asser creening mish	OBL	ORI	ZN

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Code         Scientific Name         Common Name         Classif         Classif           LEN NUC Lectera microand Raf.         Laintana         FACU         UPL           LEC MUC Lectera microand Raf.         Hairy pinweed         NL         UPL           LEC MUC Lectera microand Raf.         Hairy pinweed         NL         UPL           LING STY Liquidiantens systematic and systematic and control of point generate (Walta) Nutr.         Swagestowsh         FAC-         UPL           LYO FER Lyoning finitions (Malta) XIOT.         Maltana generate (Malta) Nutr.         National generations (Malta) Not.         PAC-         UPL           LYO ERI Lyoning finitions (Malta) XIOT.         MACONING midsterrant (Lam) D. Don         FACH         UPL           LYO LUC Lyoning incide (Lam) D. Don         FACH         UPL           MAG GRAP Alegarolia grandiflora L.         Swagestowsh         FACW         PAC           MAG GRAP Alegarolia grandiflora L.         Swagestowsh         FACW         PAC           MIK SCA Alfarain scanders (L.) Willd         Swagestowsh         FACW         PAC           MIK SCA Alfarain scanders (L.) Willd         Swagestowsh         FACW         PAC           NYS SYI         Alfarain scanders (L.) Willd         NWAR CER         Alfarain scanders (L.) Willd         NWAR CER         Alfarain s	Species			$USFWS^1$	$FDEP^2$	Floristic <sup>3</sup>
Raf.         Lantana         FACU           Raf.         Duckweed         OBL         AC         FAC+         FAC+         FAC+         FAC+         FAC         FACW         FAC	Code	Scientific Name	Common Name	Classif.	Classif.	Classif.
Liquidambar syraciflua L.  Sweetgum  Machelia regard (Mah.) Torr.  Magoolia grandiflora L.  Magoolia grandiflora L.  Magoolia verginian C.  Magoolia ve	LAN CAM	Lantana camara L.	Lantana	FACU	UPL	EW
Lieuma sp.     Duckweed     OBL       Liequidambar syraciflua L.     Sweegmm     FAC+       Lyonia ferraginea (Walt.) Nutt.     Rusy iyonia     FAC       Lyonia ferraginea (Walt.) Nutt.     Suggestbush     FAC       Lyonia figustrina (L.) DC.     Maleberry     FACW       Lyonia incida (Lam.) D. Don     Plassy bean     FACW       Macropillum lenhyvoides (L.) Urban     Plassy bean     FACW       Magnolia grandiflora L.     Sweetbay     FACW+       Magnolia virginitura L.     Sweetbay     FACW+       Mikania scandens (L. f.) Willd     Partridgeberry     FACW+       Mikania scandens (L. f.) Willd     Tuberous sworden     NL       Mythrica cerlifora (L.) Presi     Tuberous sworden     NL       Mythrica cerlifora (L.) Presi     Swamp blackgum     FAC       Mythrica cerlifora (L.) P. Beaux.     Climbing beargain     FACU+       Nyssa sylvatica Mash. var. sylvatica     Blackgum     FACU-       Osmunda regula.     Commanonea     FACU-       Panicum anceps Michx.     Realed panicum     FACU-       Panicum onceps Michx.	LEC MUC	Lechea mucronata Raf.	Hairy pinweed	Ŋ	UPL	NC
Ligatidambar styraciflua L.  Ligatidambar styraciflua L.  Liyonia ferruginea (Walt.) Nutt.  Liyonia figustrina (L.) DC.  Macropillum lathyroides (L.) Urban  Magnolia grandiflara L.  Magnolia grandiflara L.  Magnolia grandiflara L.  Magnolia grandiflara L.  Mikamia scandens (L.) Urban  Magnolia grandiflara L.  Mikamia scandens (L.) Willd.  Mikamia scandens (L.) Willd.  Mikamia scandens (L.) Willd.  Mikhalia scandens (L.) Willd.  Mikhalia scandens (L.) Willd.  Myssa sylvatica Marsh. var. sylvatica  Nyssa sylvatica Marsh. var. sylvatica  Nyssa sylvatica Marsh. var. sylvatica  Oplismenus hireflus (L.) P. Beauv.  Oplismenus hireflus (L.) Planch.  Banicum vertucosum Muhl.  Panicum vertucosum Muhl.  Paricum	LEM SP.	Lemna sp.	Duckweed	OBL	Aquatic	NC
Lyonia ferruginea (Walt) Nutt.  Lyonia ferruginea (Walt) Nutt.  Lyonia ferruginea (Walt) Nutt.  Lyonia figustrina (L.) DC.  Lyonia lucida (Lam.) D. Don  Macropitium lathyroides (L.) Urban  Magnolia virginiana L.  Nyasa sylvatica Mash. var. sylvatica  Oplismenus hirtellus (L.) P.Beauv.  Oplismenus (Mill.) K. Koch  Banicum regidhum Nees  Pacturelus (Mill.) K. Koch  Banicum regidhum Nees  Pacturelus (Mill.) K. Koch  Banicum verrocosum Muhl.  Virginia creeper FACU  Pacturelus (Mill.) K. Koch  Parturelus virginia (L.) P.Beauv.  Pacturelus (Mill.) K. Koch  Banicum verrocosum Muhl.  Virginia creeper FACU  Pacturelus (Mill.) K. Ko	LIQ STY	Liquidambar styraciflua L.	Sweetgum	FAC+	FACW	NC
Lyonia funitosa (Michx.) Torr.  Lyonia ligustrina (L.) DC.  Lyonia ligustrina (L.) DC.  Lyonia ligustrina (L.) DC.  Lyonia ligustrina (L.) DC.  Lyonia ligustrina (L.) D.  Magenolia medica (L.) Urban  Magenolia medifica (L.) Urban  Magenolia gradifilara L.  Sweetbay  Sweetbay  Climbing hempweed  FACW+  Mitchella repens L.  Myraca cerifera L.  Myraca sylvatica Mansh. var. sylvatica  Oplismenus hirtellus (L.) P. Beauv.  Oplismenus merceps Michx.  Beanch panicum netrosymus (Mil.) K. Koch  Beanch panicum netrosymus (Mil.)  Parthenocissus quinquefolia (L.) Planch.  Parthen	LYO FER	Lyonia ferruginea (Walt.) Nutt.	Rusty Iyonia	FAC-	UPL	NC
Lyonia ligustrina (L.) DC. Lyonia lugustrina (L.) DC. Lyonia lucida (Lam.) D. Don  Macerophilium lathyroides (L.) Urban  Magnolia grandiflora L.  Magnolia virginiana L.  Magnolia virginiana L.  Mikania scardens (L. f.) Willd.  Mikania scardens (Mill.) K. Koch  Panicum receps Michs.  Panicum receps	LYO FRU	Lyonia fruticosa (Michx.) Torr.	Staggerbush	FAC	UPL	NC
Lyonia lucida (Lam.) D. Don  Macropitlium lathyroides (L.) Urban  Magnolia yrandiflora L.  Magnolia virginiana L.  Mikania scandens (L. f.) Willd.  Mikharia scandens (L. f.) Willd.  Myrica ezrifera L.  Nax myrtle  Nax myrt	LYO LIG	Lyonia ligustrina (L.) DC.	Maleberry	FACW	FAC	NC
Macropitium lathyroides (L.) Urban Magnolia grandiflora L. Magnolia grandiflora L. Magnolia virginiana L. Magnolia virginiana L. Mikchai a scandens (L. f.) Willd. Mikchella repens L. Mikchella repens L. Mikchella repens L. Myrica cerifera L. Myrica cerifera L. Myrica cerifera L. Myrica cerifera L. Myssa sylvatica Matsh. var. biflora (Walt.) Sarg. Nephrolepis cordifolia (L.) C. Presl Nyssa sylvatica Matsh. var. biflora (Walt.) Sarg. Nyssa sylvatica Matsh. var. sylvatica Oplismenus hirrellus (L.) P. Beauv. Osmunda cinnamomea L. Osmunda regalis L. Osmunda virginiana (Mill.) K. Koch Paspalum relegge Paspalum regiles Clud. Paspalum regiles Clud. Schott & Endl. Savamah panicum Phanopyrum gymnocarpon (Elliott) Nash	LYOLUC	Lyonia lucida (Lam.) D. Don	Fetterbush	FACW	FACW	NC
Magnolia grandiflora L.       Southern magnolia       FAC+         Magnolia virginiana L.       Sweetbay       FACW+         Mikania scandens (L. f.) Willd.       Climbing hempweed       FACW+         Mitchella repens L.       Wax mytle       FACU+         Mytica cerifera L.       Tuberous sword ferm       NL         Nephrolepis cordifolia (L.) C. Presl       Swamp blackgum       OBL         Ajssa sylvatica Marsh. var. sylvatica       OBL       OBL         Ajssa sylvatica Marsh. var. sylvatica       Woodsgrass       FACU+         Opismenus hirrellus (L.) P. Beauv.       Cimannon ferm       OBL         Opismenus hirrellus (L.) P. Beauv.       Cimannon ferm       FACU+         Osmunda cimannomea L.       Royal ferm       FACU+         Osmunda regalis L.       Rosyal ferm       FACU+         Osnunda regalis L.       Redtop panicum       FACU+         Osnunda regalis L.       Redtop panicum       FAC         Panicum verrucosum Muhl.       Redtop panicum       FAC         Panicum verrucosum Muhl.       Variginia creeper       FAC         Panicum verrucosum Muhl.       Redtop panicum       FAC         Paspalum notaum Fluegge       Paspalum notaum Fluegge       FAC         Paspalum notaum Fluegge <td< td=""><td>MACLAT</td><td>Macroptilium lathyroides (L.) Urban</td><td>Phasey bean</td><td>FACU</td><td>UPL</td><td>EW</td></td<>	MACLAT	Macroptilium lathyroides (L.) Urban	Phasey bean	FACU	UPL	EW
Magnolia virginiana L.  Mikania scandens (L. f.) Willd.  Mikhenia scandens (L. f.) Willd.  Mitchella repens L.  Mitchella repens L.  Myrica cerifera Mar.  Myrica pariam myrica Serifica Mar.  Myrica pariam myrica Serifica Mar.  Myrica cerifera Mar.  Myrica pariam myrica Serifica Mar.  Myrica pariam myrica Mich.  Myrica pariam myrica Mich.  Myrica pariam myrica Mich.  Myrica pariam myrica Mar.  Myrica Myrica Myrica Mar.  Myrica Myrica Myrica Mar.  Myrica Myrica Myrica Mar.  Myrica Myrica Myrica Myrica Mar.  Myrica Myrica Myrica Myrica	MAG GRA		Southern magnolia	FAC+	UPL	NC
Mikania scandens (L. f.) Willd.       Climbing hempweed       FACW+         Mitchella repens L.       Mitchella repens L.       Partridgeberry       FACU+         Myrica cerifera L.       Wax myrtle       FACU+         Nephrolepis cordifolia (L.) C. Presl       Swamp blackgum       NL         Ayssa sylvatica Marsh. var. sylvatica       Blackgum       FACU+         Osnunda cinnanomea L.       Woodsgrass       FACU+         Osnunda cinnanomea L.       Royal fem       OBL         Osnunda cinnanomea L.       Royal fem       OBL         Osnunda cinnanomea L.       Royal fem       OBL         Osnunda cinnanomea L.       Royal fem       FACU+         Osnunda cinnanomea L.       Royal fem       FACU+         Osnunda cinnanomea L.       Royal fem       FACU+         Osnunda cinnanomea L.       Basten hophormbeam       FACU+         Osnunda negalis L.       Roch       Basten hophormbeam       FACU+         Panicum virgidulum Nees       Panicum virgidulum Nees       Parkenocissus quinquefolia (L.) Planch.       Panicum virgidulum Nees       FAC         Paspalum notatum Fluegge       Patrangege       FAC       Paspalum setaceum Michx.       FAC         Paspalum notatum Fluegge       Patrangegeau row arum       OBL	MAG VIR	Magnolia virginiana L.	Sweetbay	FACW+	OBL	NC
Mitchella repens L.       Partridgeberry       FACH         Myrica cerifera L.       Wax myrtle       FACH         Nephrolepis cordifolia (L.) C. Presl       Swamp blackgum       NL         Nyssa sylvatica Marsh. var. sylvatica       Swamp blackgum       FACU+         Nyssa sylvatica Marsh. var. sylvatica       Woodsgrass       FACU+         Oplismenus hirtellus (L.) P. Beauv.       Cinnamon fem       FACU+         Opsimunda cinnamonea L.       Royal fem       OBL         Osmunda regalis L.       Royal fem       OBL         Osmunda regalis L.       Royal fem       FACU+         Ostrya virginiana (Mill.) K. Koch       Beaked panicum       FACU-         Panicum regalulum nees       Redtop panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum regalulum Nees       Redtop panicum       FACW         Panicum regalulum Nees       Redtop panicum       FACW         Panicum regalulum nees       Redtop panicum       FACW         Panicum verrucosum Muhl.       Virginia creeper       FACW         Paspalum netatum Fluegge       Pakacygrass       FAC         Paspalum netatum Fluegge       Pakacygrass       FAC         Plaandpa virginica (L.) Schott & Endl.       Sava	MIK SCA	Mikania scandens (L. f.) Willd.	Climbing hempweed	FACW+	ŀ	NP
Myvica cerifera L.       Wax myrtle       FAC+         Nephrolepis cordifolia (L.) C. Presl       Tuberous sword fem       NL         Nyssa sylvatica Marsh. var. sylvatica       Swamp blackgum       FAC         Nyssa sylvatica Marsh. var. sylvatica       Woodsgrass       FACU+         Oplismenus hirtellus (L.) P. Beauv.       Cinnamon fem       FACU+         Osmunda cinnamomea L.       Royal fem       OBL         Osmunda regalis L.       Royal fem       OBL         Osmunda regalis L.       Royal fem       OBL         Ostrya virginiana (Mill.) K. Koch       Beaked panicum       FACU-         Panicum raceps Michx.       Redtop panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum verrucosum Muhl.       Virginia creeper       FACW         Paspalum notatum Fluegge       Pakacy panicum       FAC         Paspalum notatum Fluegge       Pakacy panicum       FAC         Paspalum notatum Fluegge       Pakacy panicum       FAC         Paspalum urvillei Steud.       Green arro	MIT REP	Mitchella repens L.	Partridgeberry	FACU+	ŀ	NC
NEphrolepis cordifolia (L.) C. Presl Nephrolepis cordifolia (L.) C. Presl Nyssa sylvatica Marsh. var. biflora (Walt.) Sarg. Nyssa sylvatica Marsh. var. sylvatica Oplismenus hirtellus (L.) P. Beauv. Osmunda cinnamonea L. Osmunda regalis L. Osmunda regalis L. Ostrya virginiana (Mill.) K. Koch Panicum anceps Michx. Panicum rigidulum Nees Panicum rigidulum Nees Panicum rigidulum Nees Panicum verrucosum Muhl. Parthenocissus quinquefolia (L.) Planch. Paspalum notatum Fluegge Paspalum notatum Fluegge Paspalum setaceum Michx. Pacculativa (Michx)	MYR CER	Myrica cerifera L.	Wax myrtle	FAC+	FAC	Ν
Nyssa sylvatica Marsh. var. biflora (Walt.) Sarg.       Swamp blackgum       OBL         Nyssa sylvatica Marsh. var. sylvatica       Woodsgrass       FACU+         Oplismenus hirtellus (L.) P. Beauv.       Cinnamon ferm       FACU+         Osmunda cinnamomea L.       Royal ferm       OBL         Osmunda regalis L.       Royal ferm       OBL         Ostrya virginiana (Mill.) K. Koch       Beaked panicum       FACU-         Panicum anceps Michx.       Redtop panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum rigidulum Nees       Warty panicum       FACW         Panicum regulatum Illus       FACW       In parthenocissus quinquefolia (L.) Planch.       FACW         Paspalum notatum Fluegge       Paspalum       FAC         Paspalum setaceum Michx.       Virginia creeper       FAC         Paspalum setaceum Michx.       Virginia creeper       FAC         Paspalum urvillei Steud.       Vascygrass       FAC         Planahan virginica (L.) Schott & Endl.       Savannah panicum       OBL         Phyllanthus urinaria L.       Chamber bitter       FAC	NEP COR	Nephrolepis cordifolia (L.) C. Presl	Tuberous sword fern	Ŋ	FAC	EA
Nyssa sylvatica       Blackgum       FAC         Oplismenus hirrellus (L.) P.Beauv.       Woodsgrass       FACU+         Oplismenus hirrellus (L.) P.Beauv.       Cinnamon fem       FACU+         Osmunda cinnamomea L.       Royal fem       OBL         Osmunda regalis L.       Royal fem       OBL         Ostrya virginiana (Mill.) K. Koch       Beaked panicum       FACU-         Panicum anceps Michx.       Redtop panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACW       I         Panicum rigidulum Nees       Warty panicum       FACW       I         Panicum rigidulum Nees       Redtop panicum       FACW       I         Paspalum notatum Fluegge       Panicum       FACW       I         Paspalum notatum Fluegge       Panicum       I       I       I         Paspalum notatum Flueg	NYS BIF	Nyssa sylvatica Marsh. var. biflora (Walt.) Sarg.	Swamp blackgum	OBL	OBL	NC
Oplismenus hirtellus (L.) P. Beauv.       Woodsgrass       FACU+         Osmunda cinnamomea L.       Cinnamon ferm       FACW+         Osmunda regalis L.       Royal ferm       OBL         Ostrya virginiana (Mill.) K. Koch       Beaked panicum       FACU-         Panicum anceps Michx.       Redtop panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum rigidulum Nees       Warty panicum       FACW         Panicum verrucosum Muhl.       Virginia creeper       FACW         Paspalum notatum Fluegge       Pakac       FACW         Paspalum notatum Fluegge       Pakac       FACU+         Paspalum setaceum Michx.       Vascygrass       FAC         Paspalum setaceum Michx.       Vascygrass       FAC         Paspalum virillei Steud.       Vascygrass       FAC         Pltandra virginica (L.) Schott & Endl.       Savannah panicum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Chamber bitter       FAC	NYS SYL	Nyssa sylvatica Marsh. var. sylvatica	Blackgum	FAC	UPL	NC
Osmunda cinnamonea L.       Cinnamon fem       FACW+         Osmunda regalis L.       Royal fem       OBL         Ostrya virginiana (Mill.) K. Koch       Beaked panicum       FACU-         Panicum anceps Michx.       Redtop panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum verrucosum Muhl.       Virginia creeper       FACW         Paspalum notatum Fluegge       FACW         Paspalum notatum Fluegge       FACU+         Paspalum setaceum Michx.       Pahiagrass       FACU+         Paspalum notatum Fluegge       FAC         Phanopyrum gymnocarpon (Elliott) Nash       Green arrow arum       OBL         Phyllanthus urinaria L. <t< td=""><td>OPL HIR</td><td>Oplismenus hirtellus (L.) P.Beauv.</td><td>Woodsgrass</td><td>FACU+</td><td>FAC</td><td>NC</td></t<>	OPL HIR	Oplismenus hirtellus (L.) P.Beauv.	Woodsgrass	FACU+	FAC	NC
Osmunda regalis L.       Osmunda regalis L.         Ostrya virginiana (Mill.) K. Koch       Eastern hophornbeam       FACU-         Panicum anceps Michx.       Beaked panicum       FACU-         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum verrucosum Muhl.       Virginia creeper       FACW         Paspalum notatum Fluegge       Bahiagrass       FACU+         Paspalum notatum Fluegge       FACU+         Paspalum setaceum Michx.       Bahiagrass       FACU+         Paspalum notatum Fluegge       FAC         Vascygrass       FAC         Phanopyrum gymnocarpon (Elliott) Nash       Green arrow arum       OBL         Phyllanthus urinaria L.       FAC         Chamber bitter       FAC	OSM CIN	Osmunda cinnamomea L.	Cinnamon fern	FACW+	FACW	NC
Ostrya virginiana (Mill.) K. Koch       Eastern hophornbeam       FACU-         Panicum anceps Michx.       Beaked panicum       FAC-         Panicum rigidulum Nees       Redtop panicum       FACW         Panicum verrucosum Muhl.       Warty panicum       FACW         Paryalum verrucosum Muhl.       Virginia creeper       FACW         Paspalum notatum Fluegge       Bahiagrass       FACU+         Paspalum setaceum Michx.       Thin paspalum       FAC         Paspalum setaceum Michx.       Vascygrass       FAC         Paspalum urvillei Steud.       Vascygrass       FAC         Peltandra virginica (L.) Schott & Endl.       Green arrow arum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Savannah panicum       OBL         Phyllanthus urinaria L.       FAC         Chamber bitter       FAC	OSM REG	Osmunda regalis L.	Royal fern	OBL	OBL	NC
Panicum anceps Michx.         Beaked panicum         FAC-           Panicum rigidulum Nees         Redtop panicum         FACW           Panicum regidulum Nees         Warty panicum         FACW           Panicum verrucosum Muhl.         Virginia creeper         FACW           Paspalum notatum Fluegge         FACU+           Paspalum notatum Fluegge         FACU+           Paspalum setaceum Michx.         Thin paspalum           Paspalum setaceum Michx.         Vascygrass           Paspalum urvillei Steud.         Vascygrass           Peltandra virginica (L.) Schott & Endl.         Green arrow arum           Phanopyrum gymnocarpon (Elliott) Nash         Savannah panicum           Phyllanthus urinaria L.         FAC           Chamber bitter         FAC	OST VIR	Ostrya virginiana (Mill.) K. Koch	Eastern hophornbeam	FACU-	UPL	NC
Panicum rigidulum Nees       Redtop panicum       FACW         Panicum verrucosum Muhl.       Warty panicum       FACW         Parthenocissus quinquefolia (L.) Planch.       Virginia creeper       FAC         Paspalum notatum Fluegge       FACU+         Paspalum setaceum Michx.       FAC       Thin paspalum         Paspalum urvillei Steud.       Vascygrass       FAC         Peltandra virginica (L.) Schott & Endl.       Green arrow arum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Savannah panicum       OBL         Phyllanthus urinaria L.       FAC	PAN ANC	Panicum anceps Michx.	Beaked panicum	FAC-	FAC	NC
Panicum verrucosum Muhl.       Panicum verrucosum Muhl.       FACW       Parthenocissus quinquefolia (L.) Planch.       Virginia creeper       FAC         Paspalum notatum Fluegge       FACU+       Thin paspalum       FACU+         Paspalum setaceum Michx.       Vascygrass       FAC         Paspalum urvillei Steud.       Vascygrass       FAC         Peltandra virginica (L.) Schott & Endl.       Green arrow arum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Savannah panicum       OBL         Phyllanthus urinaria L.       FAC	PAN RIG	Panicum rigidulum Nees	Redtop panicum	FACW	FACW	NC
Parthenocissus quinquefolia (L.) Planch.       Virginia creeper       FAC         Paspalum notatum Fluegge       FACU+       Thin paspalum       FACU+         Paspalum setaceum Michx.       Thin paspalum       FAC         Paspalum urvillei Steud.       Vascygrass       FAC         Peltandra virginica (L.) Schott & Endl.       Green arrow arum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Savannah panicum       OBL         Phyllanthus urinaria L.       FAC	PAN VER	Panicum verrucosum Muhl.	Warty panicum	FACW	FACW	NC
Paspalum notatum Fluegge       Bahiagrass       FACU+         Paspalum setaceum Michx.       Thin paspalum       FAC         Paspalum urvillei Steud.       Vascygrass       FAC         Peltandra virginica (L.) Schott & Endl.       Green arrow arum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Savamah panicum       OBL         Phyllanthus urinaria L.       FAC	PAR QUI	Parthenocissus quinquefolia (L.) Planch.	Virginia creeper	FAC	ļ	NC
Paspalum setaceum Michx.       Thin paspalum       FAC         Paspalum urvillei Steud.       Vaseygrass       FAC         Peltandra virginica (L.) Schott & Endl.       Green arrow arum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Savamah panicum       OBL         Phyllanthus urinaria L.       FAC	PAS NOT	Paspalum notatum Fluegge	Bahiagrass	FACU+	UPL	EA
Paspalum urvillei Steud.       Vascygrass       FAC         Peltandra virginica (L.) Schott & Endl.       Green arrow arum       OBL         Phanopyrum gymnocarpon (Elliott) Nash       Savamah panicum       OBL         Phyllanthus urinaria L.       FAC	PAS SET	Paspalum setaceum Michx.	Thin paspalum	FAC	FAC	ΝΡ
Pettandra virginica (L.) Schott & Endl.       Green arrow arum       OBL       Changyrum         Phanopyrum gymnocarpon (Elliott) Nash       Savannah panicum       OBL       OBL         Phyllanthus urinaria L.       FAC       FAC       FAC	PAS URV	Paspalum urvillei Steud.	Vaseygrass	FAC	FAC	EW
Phanopyrum gymnocarpon (Elliott) Nash Savannah panicum OBL Phyllanthus urinaria L. Chamber bitter FAC	PEL VIR	Peltandra virginica (L.) Schott & Endl.	Green arrow arum	OBL	OBL	NC
Phylanthus urinaria L. FAC	PHA GYM		Savannah panicum	OBL	OBL	NC
	PHY URI	Phyllanthus urinaria L.	Chamber bitter	FAC	FAC	EW

Ecosystem Research Corporation 2015

Natural Areas Resource Assessment Blues Creek Unit 5, Phase 2 Planned Development Amendments

and a			USF WS	LDEL	110113116
Code	Scientific Name	Common Name	Classif.	Classif.	Classif.
PIN GLA	Pinus glabra Walter	Spruce pine	FACW	FACW	NC
PIN TAE	Pinus taeda L.	Loblolly pine	FAC	UPL	NC
PLE POL	Pleopeltis polypodioides (L.) E.G. Andrews & Windham	Resurrection fern	Ŋ	UPL	NC
POL PUN	Polygonum punctatum Ell.	Dotted smartweed	FACW+	OBL	ΝP
PTE AQU	Pteridium aquilinum (L.) Kuhn.	Bracken	FACU	UPL	NC
QUE GEM	Quercus geminata Small	Sand live oak	Ŋ	UPL	NC
<b>QUE HEM</b>	Quercus hemisphaerica Bartr.	Laurel oak	Ŗ	UPL	NC
QUE LAU	Quercus laurifolia Michx.	Swamp laurel oak	FACW	FACW	NC
QUE MIC	Quercus michauxii Nutt.	Swamp chestnut oak	FACW-	FACW	NC
QUE NIG	Quercus nigra L.	Water oak	FAC	FACW	NC
QUE SIN	Quercus sinuata Walter	Bluff oak	Ŋ	UPL	NC
QUE VIR	Quercus virginiana Mill.	Virginia live oak	FACU+	UPL	NC
RHA HYS	Rhapidophyllum hystrix (Pursh) H. Wendl. & Drude ex Drude	Needle palm	FACW	FACW	NC
RHY CAD	Rhynchospora caduca EII.	Falling beaksedge	OBL	FACW	NC
RHY COR	Rhynchospora corniculata (Lam.) A. Gray	Short-bristle beaksedge	OBL	OBL	NC
RUB PEN	Rubus pensilvanicus Poir.	Sawtooth blackberry	FACU+	ŀ	NP
SAB MIN	Sabal minor (Jacq.) Pers.	Bluestem palm	FACW	FACW	NC
SAB PAL	Sabal palmetto (Walter) Lodd. ex Schult. & Schult. f.	Cabbage palm	FAC	FAC	NC
SAL CAR	Salix caroliniana Michx.	Carolina willow	OBL	OBL	Ν
SAL MIN	Salvinia minima Baker	Water spangles	OBL	Aquatic	EW
SAP SEB	Sapium sebiferum (L.) Roxb.	Popcorntree	FAC	FAC	EA
SAU CER	Saururus cernuus L.	Lizard's tail	OBL	OBL	NC
SCL TRI	Scleria triglomerata Michx.	Tall nutgrass	FACU+	FACW	NC
SER REP	Serenoa repens (Bartr.) Small	Saw palmetto	FACU	UPL	NC
SMI BON	Smilax bona-nox L.	Greenbrier	FAC	ł	NC
SMI LAU	Smilax laurifolia L.	Bamboo vine	FACW+	ł	NC
SMI PUM	Smilax pumila Walter	Sarsaparilla vine	Ŋ	!	NC
SOL LEA	Solidago leavenworthii Totr. & A.Gray	Leavenworth's goldenrod	FAC+	FACW	NC
SOL ODO	Solidago odora var. odora Aiton	Sweet goldenrod	Ŋ	UPL	NC
SPH SP.	Sphagnum sp.	Moss	Aquatic	OBL	NC
SVM TIN	Symplocos tinctoria (L.) L'Her	Horse snoar	FAC	Ш	ZN

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Natural Areas Resource Assessment Blues Creek Unit 5, Phase 2 Planned Development Amendments

Code			COL		FIOLISTIC
Conc	Scientific Name	Common Name	Classif.	Classif.	Classif.
THE DEN The	THE DEN Thelypteris dentata (Forsk.) E. St. John	Downy shield fern	FACW	FACW	NC
THE KUN The	THE KUN Thelypteris kunthii (Desv.) C.V. Morton	Southern shield fern	FACW	FACW	NC
TOX RAD Tox	TOX RAD Toxicodendron radicans (L.) Kuntze	Poison ivy	FAC	ł	NC
ULM ALA Uln	JLM ALA Ulmus alata Michx,	Winged elm	FACU+	FACW	NC
VAC ARB Vac	VAC ARB Vaccinium arboreum Marshall	Sparkleberry	FACU	UPL	NC
VAC COR Vac	VAC COR Vaccinium corymbosum L.	Highbush blueberry	FACW	FACW	NC
VAC STA Vac	VAC STA Vaccinium stamineum L.	Deerberry	FACU	UPL	NC
VER BRA Ver	VER BRA Verbena brasiliensis Vell.	Brazilian vervain	FAC-	UPL	EW
VER OFF Ver	VER OFF Verbena officinalis L.	Herb-of-the-cross	FACU-	UPL	N <sub>P</sub>
VIT ROT Viti	VIT ROT Vitis rotundifolia Michx.	Muscadine	FAC	ł	Ν
WOO ARE Wo	WOO ARE Woodwardia areolata (L.) Moore	Netted chain fern	OBL	OBL	NC
WOO VIR WO	WOO VIR Woodwardia virginica (L.) Smith	Virginia chain fern	OBL	FACW	NC

= upland species; NL = not listed in the federal list; NI = non-indicator species

<sup>2</sup> FDEP (Florida Department of Environmental Protection) Classifications: OBL = obligate wetland species; FACW = facultative wetland species; FAC = facultative species (neither wetland nor upland); UPL = upland species; "---" = vine (non-indicator species)

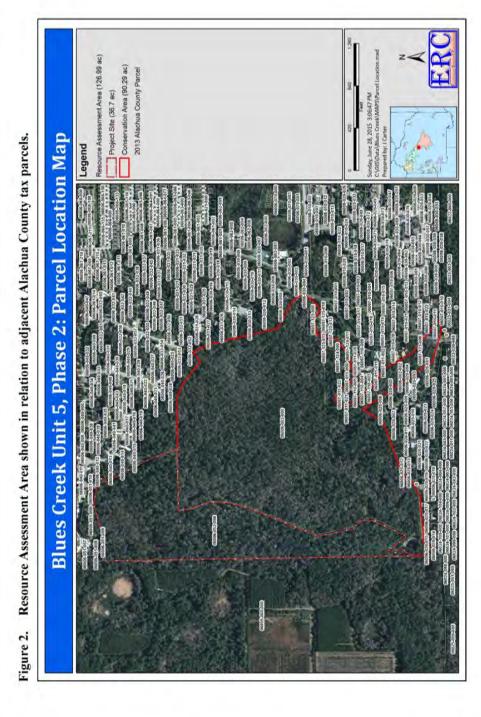
<sup>3</sup> Horistic Classifications (a measure of relative desirability). NC = Native Characteristic species (highly desirable); NP = Native Pioneer species (highly desirable), NW = Native Weedy species (undesirable); EM = Exotic Aggressive species (very undesirable) and estirable); EW = Exotic Aggressive species (very undesirable).

Natural Areas Resource Assessment Blues Creek Unit 5, Phase 2 Planned Development Amendments

Location Map Resource Assessment Area location as shown in relation to local access roads. Phase 2: **Blues Creek Unit** Figure 1.

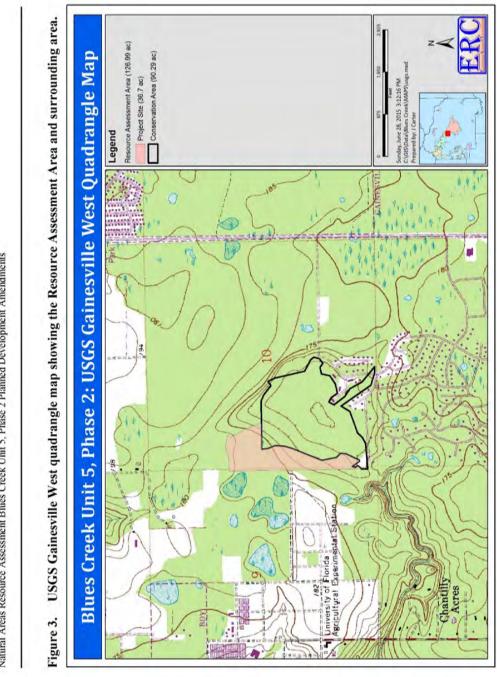
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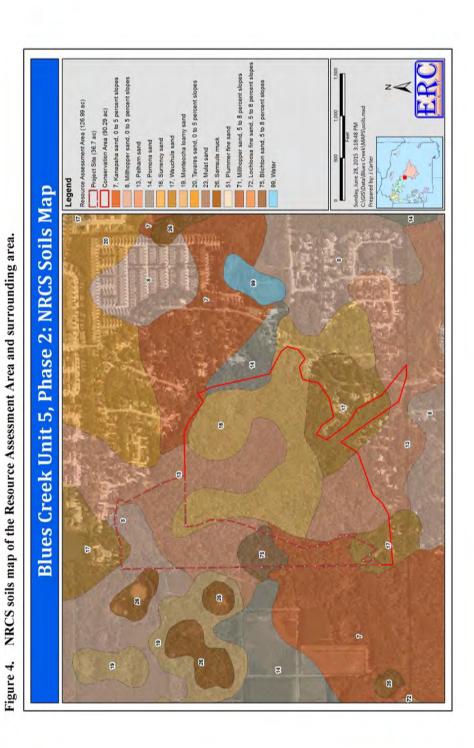
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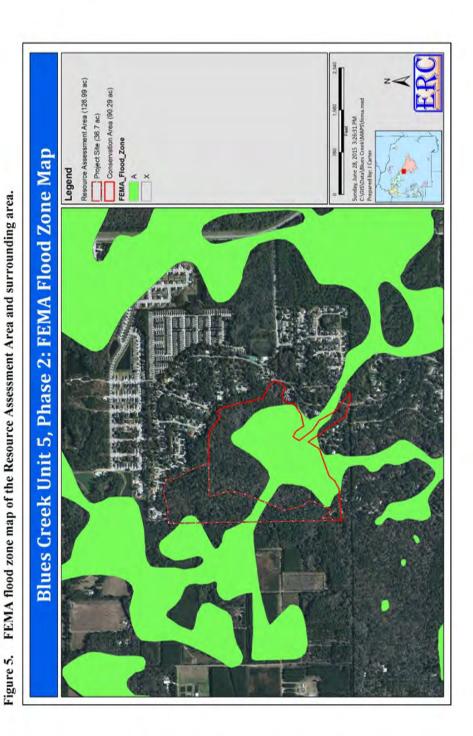
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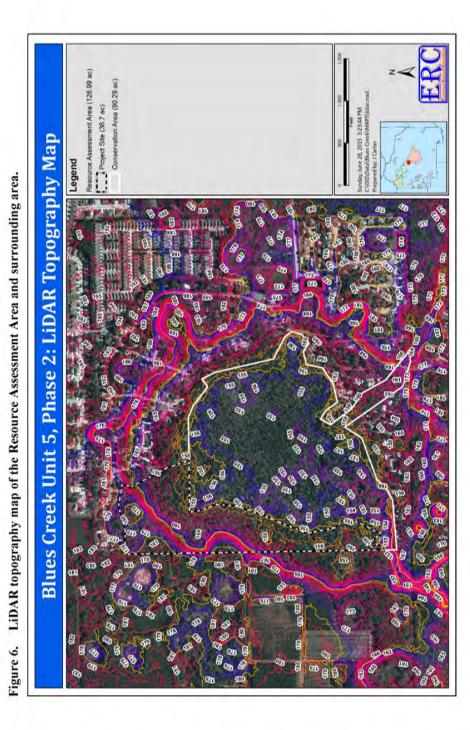
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Blues Creek Unit 5, Phase 2: National Wetlands Inventory and Alachua County Wetlands Map National Wetlands Inventory and Alachua County composite wetlands coverage for the Resource Assessment Area and surrounding area. Figure 7.

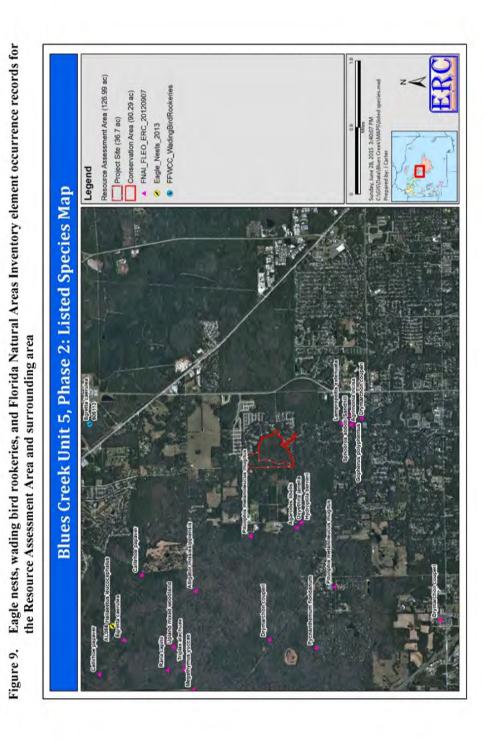
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Phase 2: Strategic Ecosystem Overlay Map Strategic Ecosystem Overlap map for the Resource Assessment Area and surrounding area. Blues Creek Unit 5, Figure 8.

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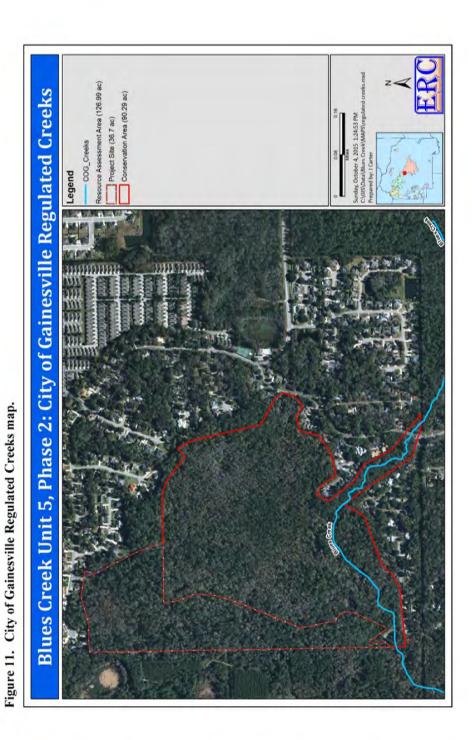
Hazardous materials storage facilities shown in relation to the Resource Assessment Area and

Figure 10.

Blues Creek Unit 5, Phase 2: Hazardous Materials Storage Facilities Map surrounding area.

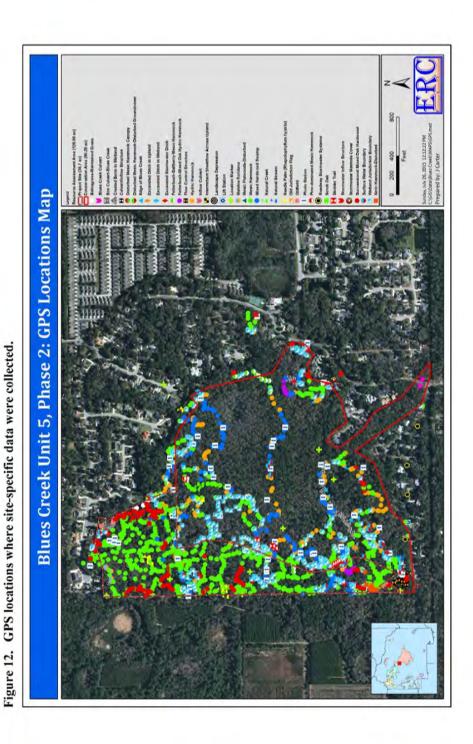
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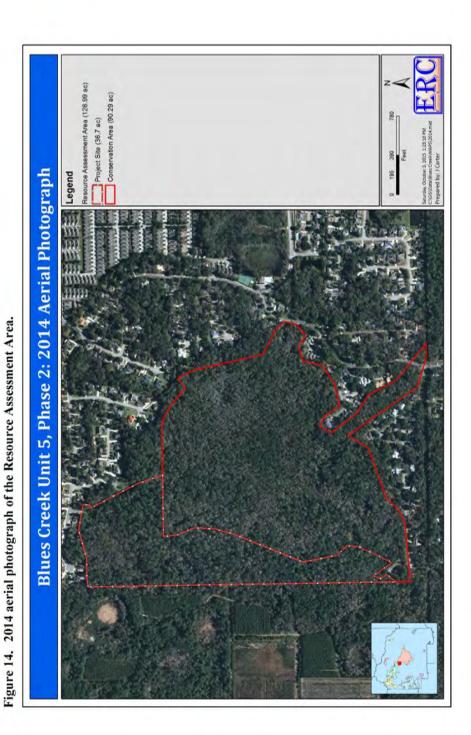


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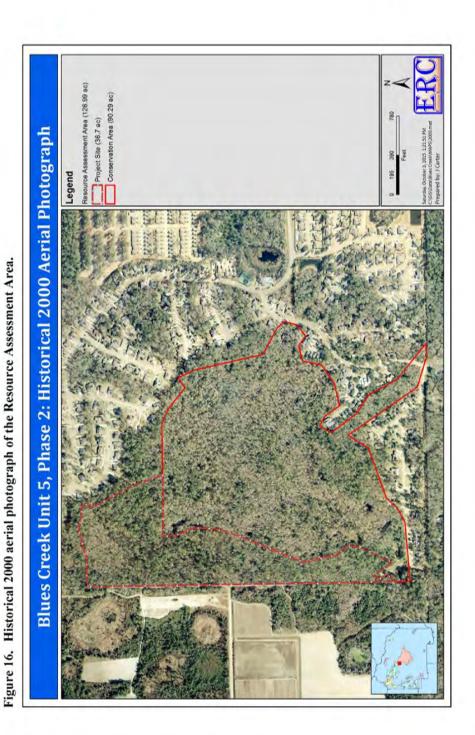
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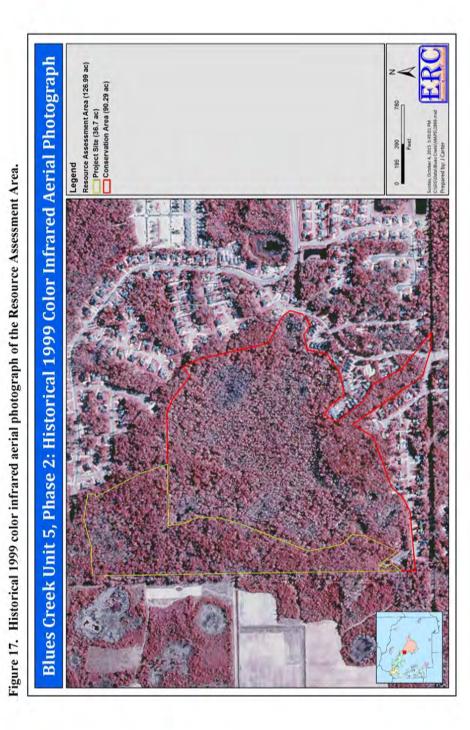


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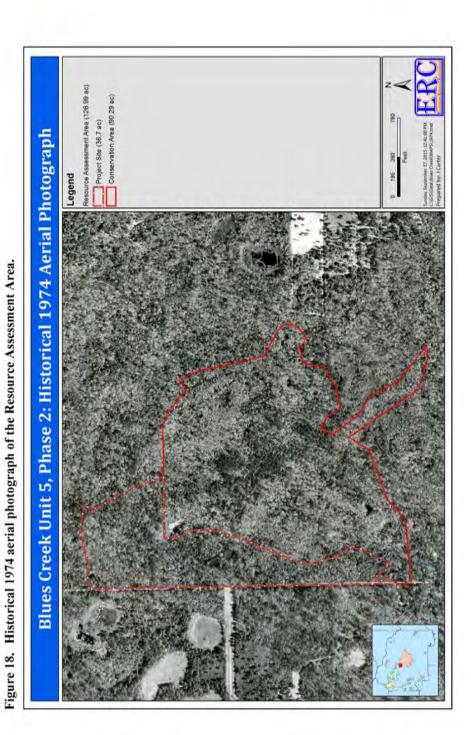
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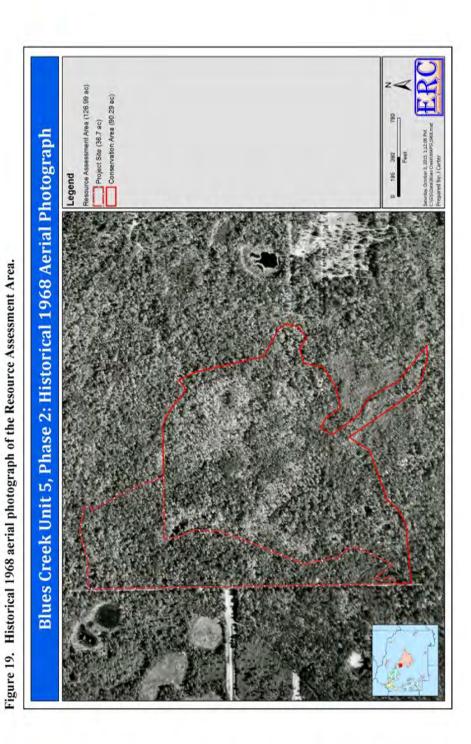
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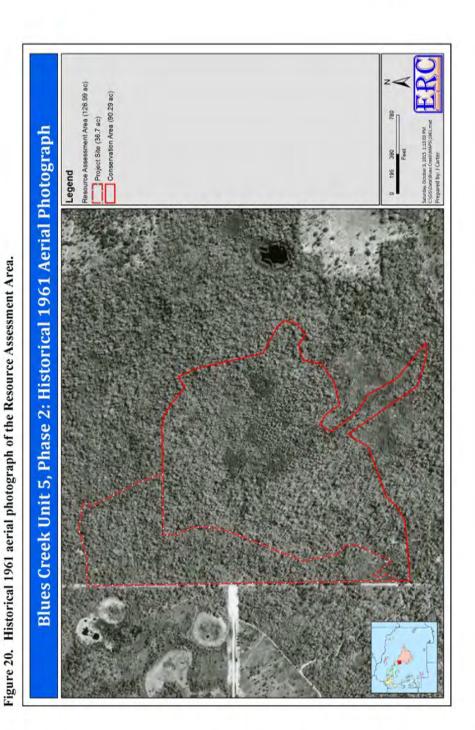
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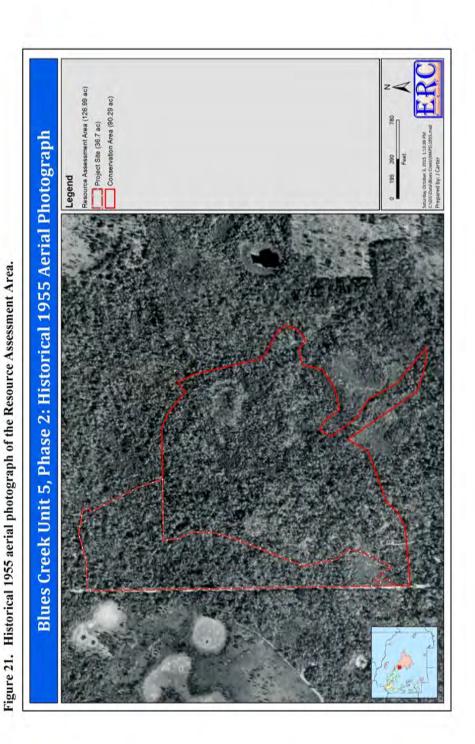
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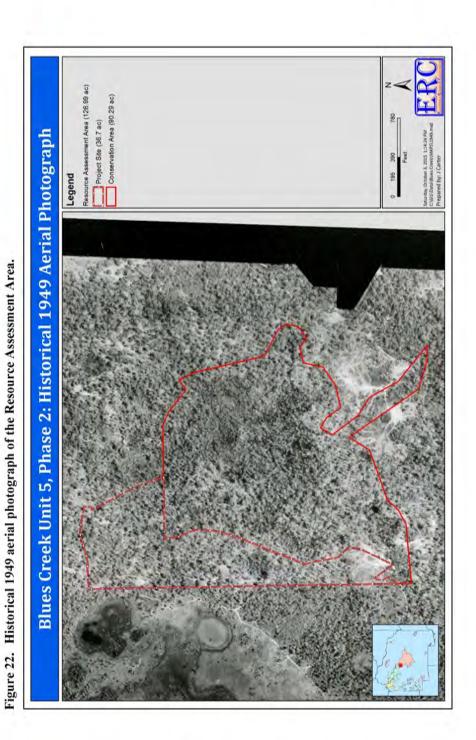


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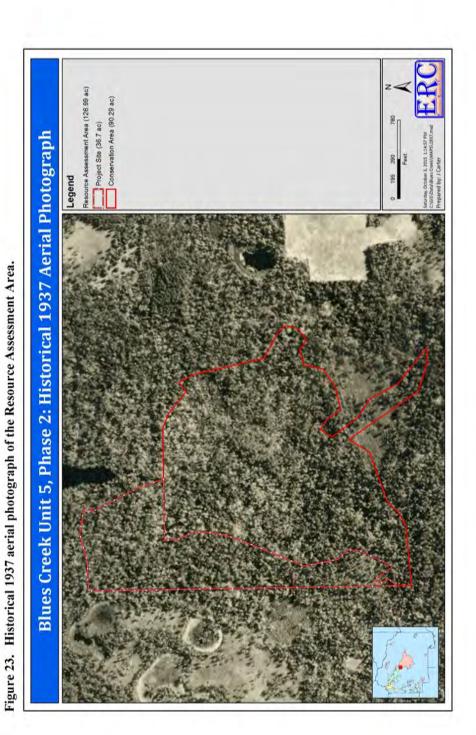


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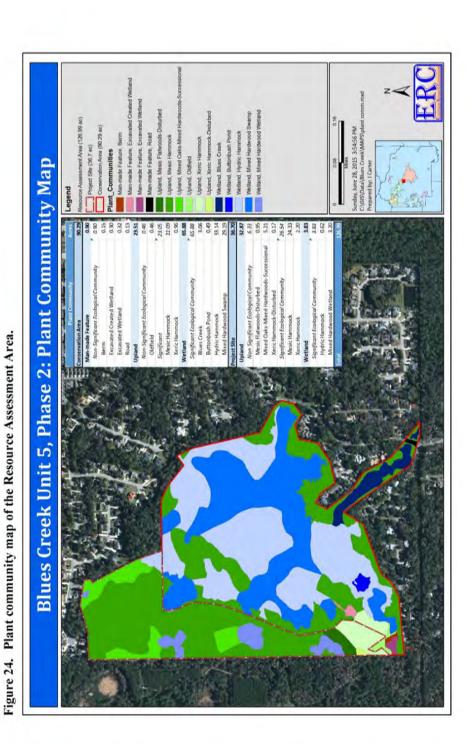


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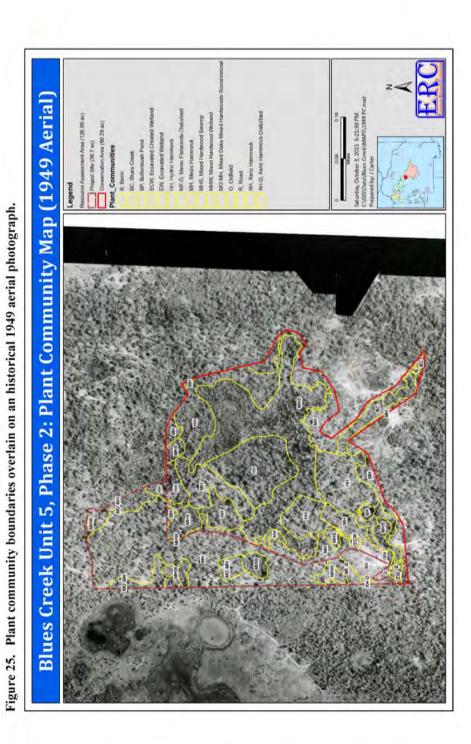
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Natural Areas Resource Assessment Blues Creek Unit 5, Plase 2 Planned Development Amendments



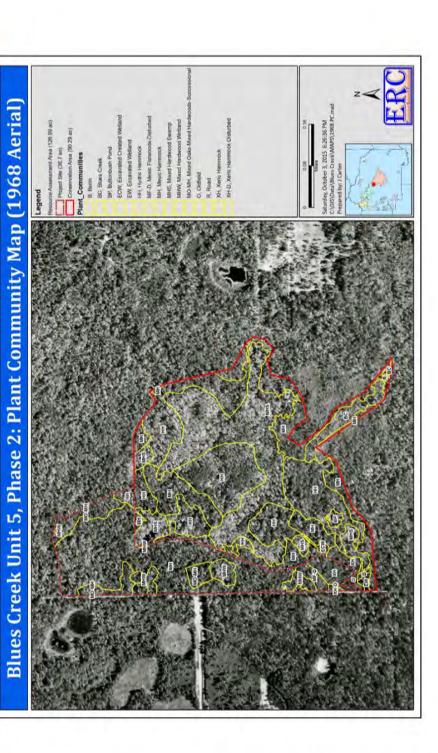
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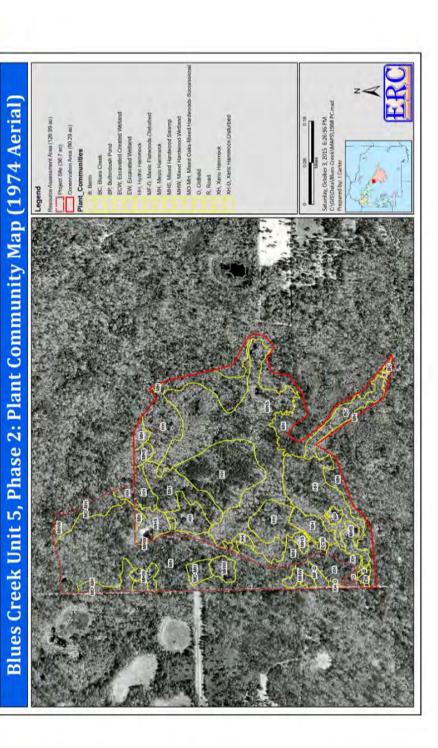
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Figure 26. Plant community boundaries overlain on an historical 1968 aerial photograph.

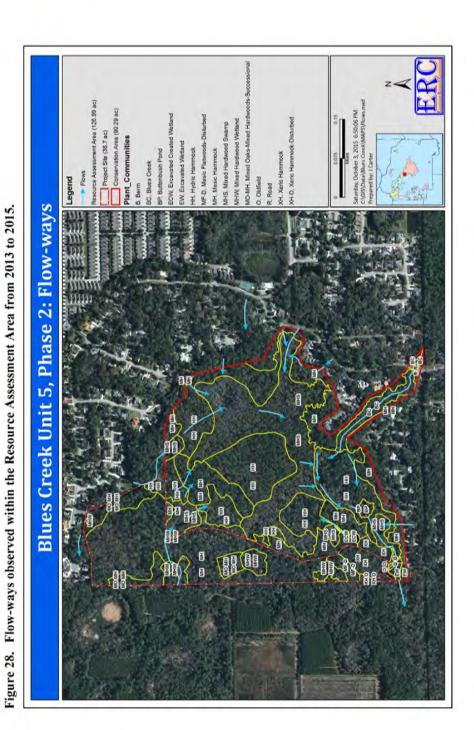


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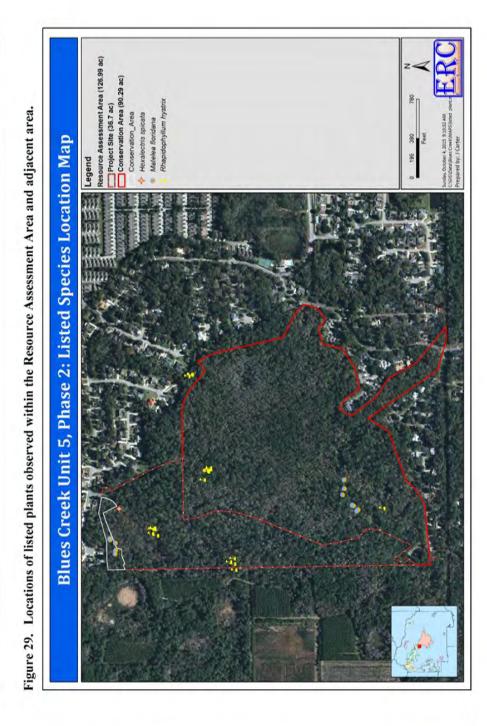
Figure 27. Plant community boundaries overlain on an historical 1974 aerial photograph.



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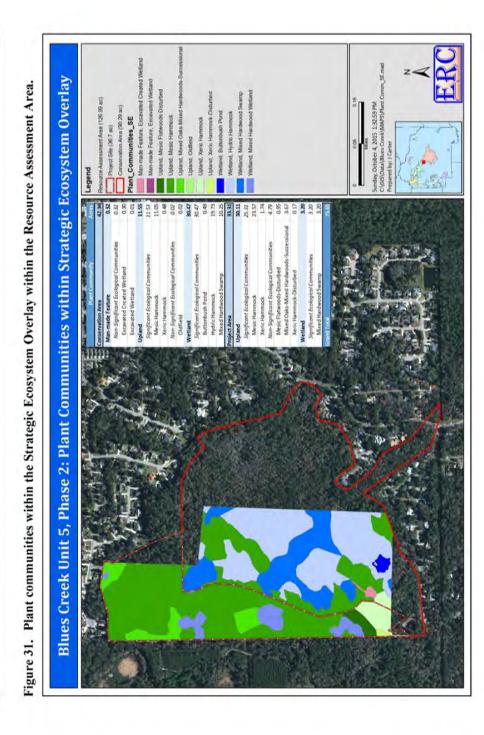


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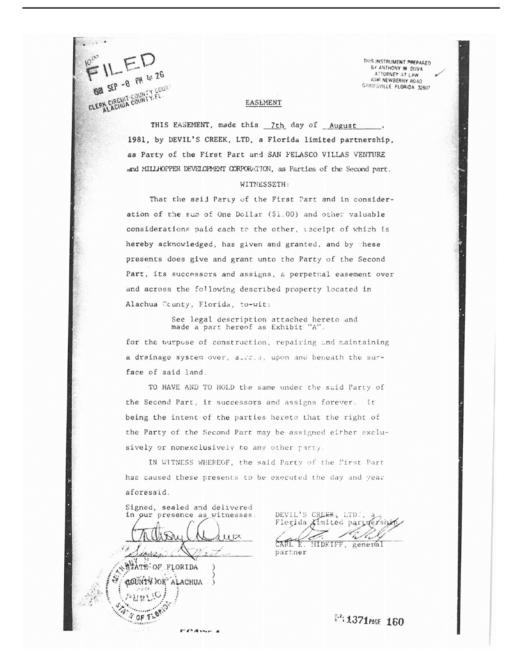


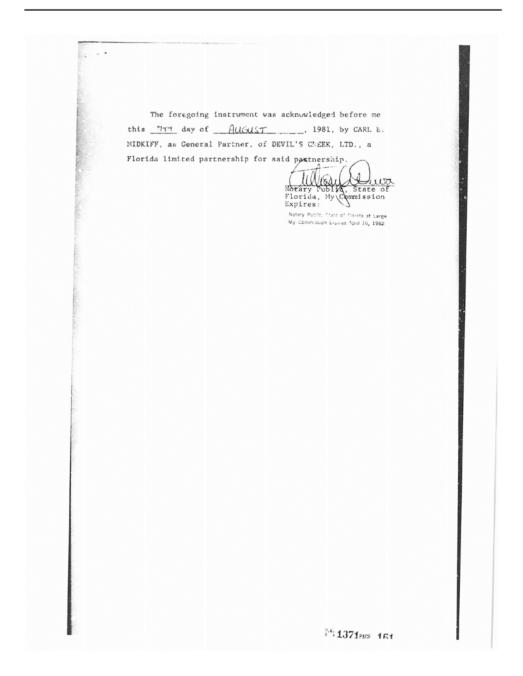
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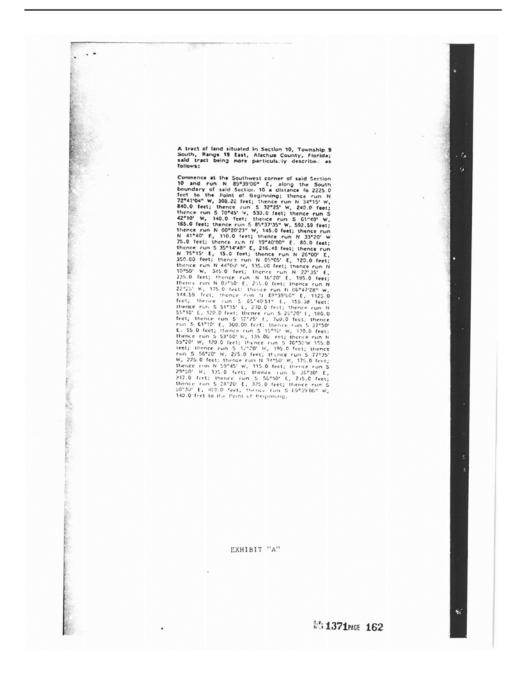
Natural Areas Resource Assessment Blues Creek Unit 5, Phase 2 Planned Development Amendments

Upland set-aside for the existing site plan in relation to the Strategic Ecosystem Overlay. Phase 2: Upland Set-Aside Map **Blues Creek Unit** Figure 32.

Appendix A—Drainage Easement for 90.29-Acre Conservation Area (Parcel 06006-002-000)







Appendix B—Binding Methodology Agreement for Level 1 Review: City of Gainesville



2906 NW 142<sup>nd</sup> Avenue Gainesville, FL 32609

UN 26 2013

### MEMORANDUM

13 June 2013

TO: John W. Hendrix
FROM: Pete Wallace

RE: Blues Creek PUD Unit 5, Phases 2 and 3 Binding Methodology Agreement

Ecosystem Research Corporation was contracted by Alachua Land Investors, LLC to perform an Environmental Assessment of parcels designated for the Blues Creek PUD Unit 5, Phases 2 and 3 development site. The Planning Parcel consists of two (2) Alachua County tax parcels, which total ±121.7 acres (Figure 1). The proposed Development site is contained within parcel 06006-052-000, which totals 36.7 acres. Parcel 06006-002-000 occupies the remaining area of the Planning Parcel and totals ±82.8 acres. This parcel is composed of wetlands and uplands that are dedicated Conservation Resources.

The Project Site and Planning Parcel boundaries as well as Alachua County Tax Identification numbers are shown on Figure 1. The project site is located in northwest Gainesville within Section 10, Township 9 South, Range 19 East. Access to the Planning Parcel is provided via NW 43<sup>rd</sup> Street to NW 73<sup>rd</sup> Avenue. Pedestrian access to the Planning Parcel is best attained at the terminus of NW 80<sup>th</sup> Avenue and NW 69<sup>th</sup> Lane (Figure 2).

The applicant is as follows:

Alachua Land Investors, LLC, Contract Purchaser Larry Ross, President 324 NW 154<sup>th</sup> Street Newberry, FL 32669

The purpose of this correspondence is to establish a Binding Methodology Agreement between the applicant and City of Gainesville, which establishes the survey area and the review process to which the application will be subjected, and includes the following information:

- Boundary of the Planning Parcel;
- Boundary of the proposed development;
- 3. Boundary of the Geographic Study Area for the Resource Assessment; and
- The level of environmental review.

386-462-5005 Petc@EcoSysFl.com

386-462-7748 (f) 352-538-0755 (c)

Mr. John Hendrix MEMORANDUM

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The Binding Methodology Agreement is defined in Section 30-310(g), City of Gainesville Land Development Regulations.

#### Specific Methodology

The applicant proposes to perform a Level 2 Review (as specifically described in Section 30-310(e)(3)) of the entire planning parcel, which includes all parcels owned and/or controlled by the applicant located within and adjacent to the proposed development parcel. The review will be conducted within the ±119.5-acre area shown in Figure 1. Within the assessment area, the following activities will be conducted.

- 1. Verification and review of previously established wetland jurisdiction line;
- Survey for presence of listed species;
   Database review for reported listed species occurrence;
- 4. Delineation of listed species habitats, if present;
- 5. Delineation of significant natural communities, if present;
- Description of other regulated natural or archaeological resources, if applicable;
- Delineation of Significant Geologic Resources, if present; and
- 8. Delineation of Strategic Ecosystem Resources.

The Environmental Assessment will be conducted by Ecosystem Research Corporation (ERC). If applicable, ERC will provide recommendations for Avoidance, Minimization, Mitigation, and Monitoring as per guidelines defined in Section 30-310.4. A Conservation Management Area Management Plan will be prepared by ERC if onsite natural resource areas require protection as defined in Section 30-310.3.

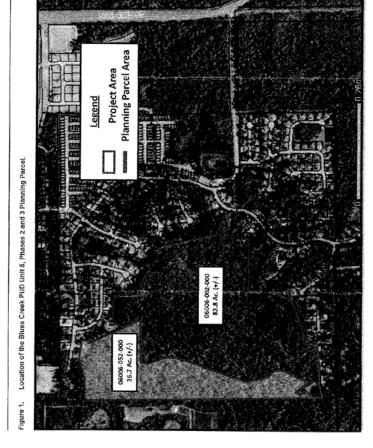
The planning parcel has been delineated based on the occurrence of contiguous parcels owned by the applicant. The development footprint will be determined based on the results of the Environmental Assessment and presented to the City as part of the Development Plan Application.

CITY OF GAINESVILLE

ALACHUA LAND INVESTORS, LLC (Applicant)

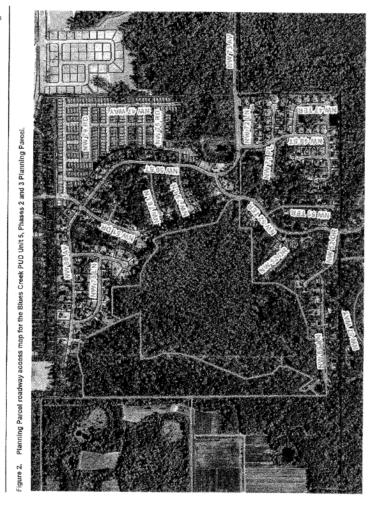
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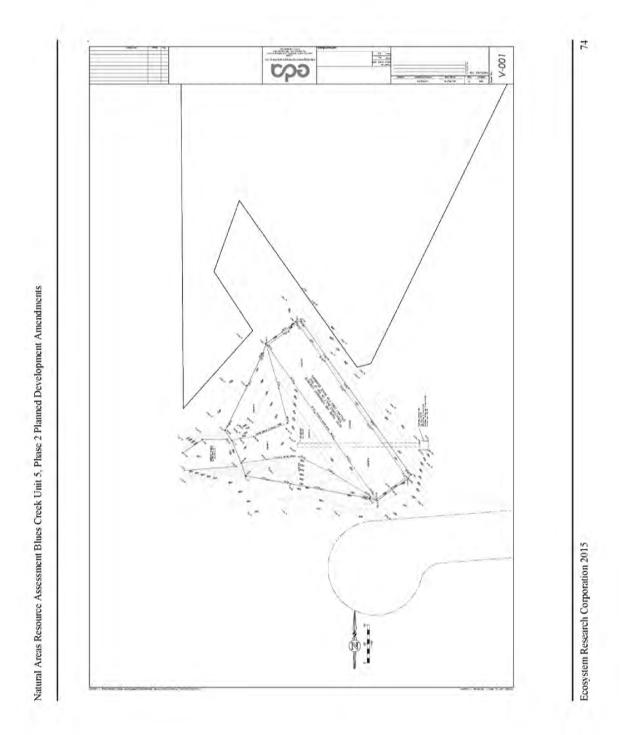
Mr. John Hendrix MEMORANDUM

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Mr. John Hendrix MEMORANDUM

# Appendix C—Survey of Spillway and Control Structure



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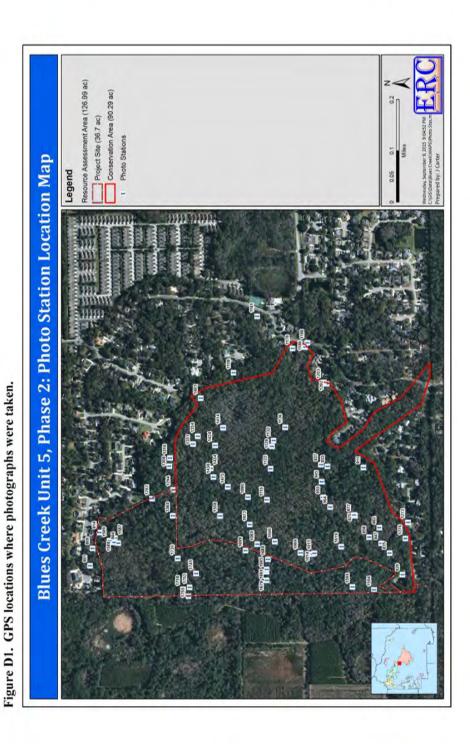
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Photo 1. Landscape depression (GPS 801; off site).



Photo 2. Mesic Hammock (GPS 804).



Photo 3. Shrub wetland (GPS 808; off site).



Photo 4. Shrub wetland (GPS 814).



Photo 5. Blues Creek spillway structure (GPS 820).



Photo 6. Blues Creek overflow structure located on west side of spillway (GPS 820).



Photo 7. Interior view of Blues Creek overflow structure (GPS 820).



Photo 8. Watermarks on trees near Blues Creek overflow structure (GPS 820).



Photo 9. Exterior view of Blues Creek overflow structure (GPS 820).



Photo 10. Interior view of Blues Creek overflow structure (GPS 820).



Photo 11. Upstream view of the east side of the Blues Creek overflow structure (GPS 820).



Photo 12. Pipe west of spillway on downstream side (GPS 820).



Photo 13. Pipe west of spillway within downstream area of where pipe discharges into Blues Creek Excavated Wetland (GPS 820).



Photo 14. Mixed Hardwood Swamp (GPS 833).



Photo 15. Elevated lichen line within Mixed Hardwood Swamp (GPS 833).



Photo 16. Mixed Hardwood Swamp (GPS 847).



Photo 17. Mesic Hammock as seen looking northwest from GPS location 856.



Photo 18. Hydric Hammock as seen looking east from GPS location 856.



Photo 19. Blues Creek Mixed Hardwoods and Shrubs (GPS 862).



Photo 20. Buttonbush Pond (GPS 862).



Photo 21. Blues Creek (GPS 875).



Photo 22. Hydric Hammock (GPS 877).



Photo 23. Hydric Hammock (GPS 911).



Photo 24. Hydric Hammock (GPS 933).



Photo 25. Mixed Hardwood Swamp (GPS 937).



Photo 26. Mixed Hardwood Swamp as seen looking north from GPS location 945.



Photo 27. Hydric Hammock as seen looking south from GPS location 945.



Photo 28. Breech in berm (GPS 955).



Photo 29. Water flowing south to Blues Creek (GPS 964).



Photo 30. Mixed Hardwood Swamp (GPS 1009).



Photo 31. Lichen line within Mixed Hardwood Swamp (GPS 1009).



Photo 32. Mixed Hardwood Swamp (GPS 1014).



Photo 33. Very distinct moss line within Mixed Hardwood Swamp (GPS 1014).



Photo 34. Very distinct moss line within Mixed Hardwood Swamp (GPS 1014).



Photo 35. Mixed Hardwood Swamp-Hydric Hammock boundary (GPS 1046).

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Photo 36. Skidder trails location in Hydric Hammock area (GPS 1065).

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Photo 37. Skidder trails found within Hydric Hammock area (GPS 1065).



Photo 38. Boundary of Hydric Hammock-Mesic Hammock (GPS 1065).



Photo 39. Old skidder trails within Hydric Hammock (GPS 1065).



Photo 40. Mesic Hammock (GPS 1073).



Photo 41. Mesic Hammock as seen looking northwest from GPS location 1090.



Photo 42. Hydric Hammock as seen looking southeast from GPS location 1090.



Photo 43. Hydric Hammock (GPS 1115).



Photo 44. Hydric Hammock (GPS 1122).



Photo 45. Pine-Mixed Hardwood Swamp (GPS 1129).



Photo 46. Mixed Hardwood Swamp (GPS 1132).



Photo 47. Large skidder trail in central area of wetland (GPS 1136).



Photo 48. Stormwater inflow (GPS 1159).



Photo 49. Stormwater draining into swamp (GPS 1393).



Photo 50. Major stormwater inflow structure (GPS 1394).

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Photo 51. Blues Creek-culvert inflow area (GPS 1161).



Photo 52. Stormwater inflow (GPS 1161).

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Photo 53. Stormwater inflow (GPS 1178).



Photo 54. Culvert and headwall (GPS 1186).



Photo 55. Lift station (GPS 1198).



Photo 56. GRU sign at lift station (GPS 1198).



Photo 57. Stormwater manhole cover (GPS 1201).



Photo 58. Culvert (GPS 1202).



Photo 59. View downstream from culvert (GPS 1202).



Photo 60. Lift station (GPS 1272).



Photo 61. GRU sign at lift station (GPS 1272).



Photo 62. Stormwater inflow culvert (GPS 1276).



Photo 63. View from stormwater inflow (GPS 1276).



Photo 64. View from stormwater inflow (GPS 1282).



Photo 65. View from culvert (GPS 1282).



Photo 66. View from stormwater inflow (GPS 1282).



Photo 67. Stormwater inflow area (GPS 1294).



Photo 68. Stormwater inflow area (GPS 1308).



Photo 69. Mesic Hammock (GPS 1316).



Photo 70. Hydric Hammock-stormwater area (GPS 1351).



Photo 71. Hydric Hammock-stormwater area (GPS 1354).



Photo 72. Stormwater silt deposition (GPS 1354).



Photo 73. Stormwater inflow ditch (GPS 1401).



Photo 74. Stormwater inflow ditch (GPS 1401).



Photo 75. Lichen line on blackgum within the Mixed Hardwood Swamp (GPS 1414).



Photo 76. Mixed Hardwood Swamp (GPS 1424).



Photo 77. Mixed Hardwood Swamp (GPS 1434).



Photo 78. Mesic Hammock (GPS 1438).



Photo 79. Hydric Hammock as seen looking south from GPS point 1475.



Photo 80. Mesic Hammock as seen looking north from GPS point 1475.



Photo 81. Mesic Hammock as seen looking east from GPS point 1508.



Photo 82. Hydric Hammock as seen looking west from GPS point 1508.



Photo 83. Mesic Hammock (GPS 1569).



Photo 84. Xeric Oak (GPS 1594).



Photo 85. Mixed Hardwood Wetland (GPS 1599; Wetland E).



Photo 86. Lichen line on blackgum (GPS 1599).



Photo 87. Lichen line on loblolly pine and red maple (GPS 1599).



Photo 88. Mixed Hardwood Swamp as seen looking southeast (GPS 1619).



Photo 89. Mixed Hardwood Swamp as seen looking southwest (GPS 1619).



Photo 90. Mixed Hardwood Wetland as seen looking northeast (GPS 1679; Wetland D).



Photo 91. Lichen lines within the Mixed Hardwood Wetland (GPS 1679; Wetland D).



Photo 92. Disturbed shrub area of Mixed Hardwood Wetland (GPS 1684; Wetland D).



Photo 93. Mesic Hammock found east of Wetland D (GPS 1689).



Photo 94. Mesic Hammock (GPS 1699).



Photo 95. Excavated ditch-overflow from wetland (GPS 1730).



Photo 96. Circular depression with wetland (GPS 1745).



Photo 97. View of excavated ditch in Wetland X that diverts flow from IFAS property west of Wetland X to GPS location 1752.



Photo 98. Inflow culvert that routes water from IFAS property into Wetland X within the Project Site (GPS 1755).



Photo 99. Mesic Hammock (GPS 1758).



Photo 100. Matelea floridana.



Photo 101. Matelea floridana.



Photo 102. Matelea floridana.



Photo 103. Rhapidophyllum hystrix.



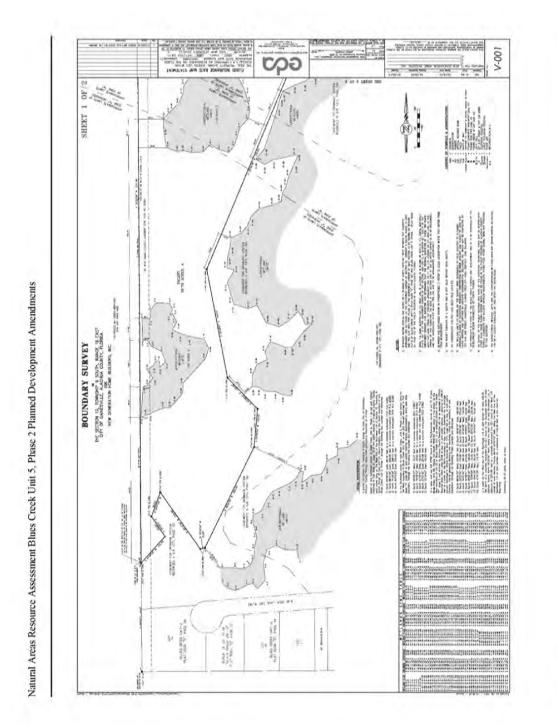
Photo 104. Rhapidophyllum hystrix.



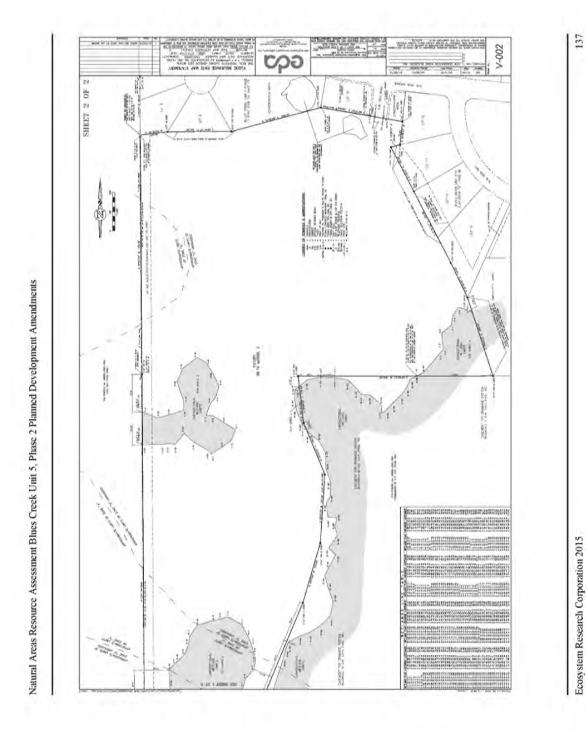
Photo 105. Hexalectris spicata.

## Appendix E—Wetlands Boundary Survey and Topographic Survey

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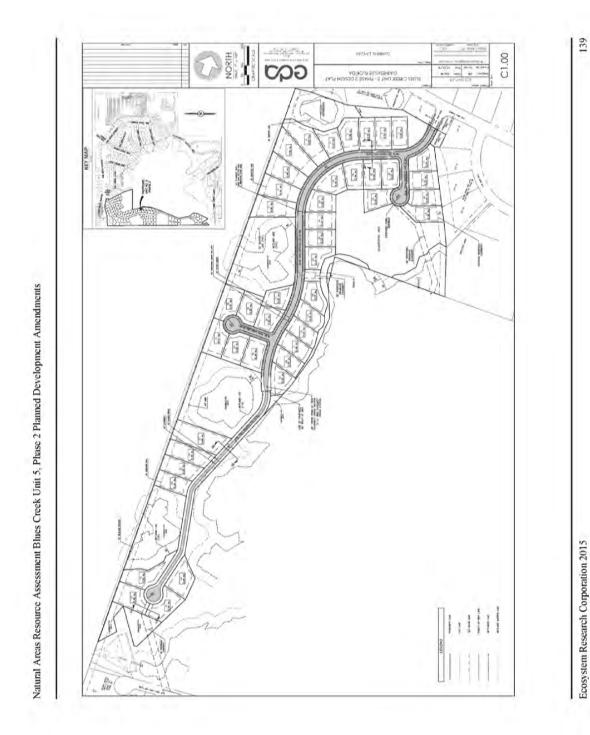


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Appendix F—Design Plat



## Appendix G—Suwannee River Water Management District Correspondence

Ecosystem Research Corporation 2015



9225 CR 49 • LIVE OAK, FLORIDA 32060 • TELEPHONE 388/362-1001 • 800/226-1066 • FAX 388/362-1056

November 3, 2015

Sergio Reyes, P.E. EDA Engineers-Surveyors-Planners, Inc. 2404 NW 43<sup>rd</sup> Street Gainesville, FL, 32606

Subject: District Response for the proposed Blues Creek Unit 5, Phase 2 Final Phase of Development Information Request, Alachua County

Dear Mr. Reyes:

The District has reviewed the documents provided by EDA on September 23, 2015 for the proposed Unit 5, Phase 2 final phase of development and also reviewed Environmental Resource Permit's ERP 001-203770-1 and ERP 001-205624-1. The District's response is listed below.

- EDA requests: Confirmation that the approximately 90 acre area is a nonjurisdictional natural area that was originally permitted by FDEP as an upland overland flow stormwater treatment system and subsequently permitted by SRWMD as a stormwater system designated for stormwater treatment for all phases of the Blues Creek Development.
  - District Response; In 1987 and 1988, the District did not have regulatory jurisdiction over wetlands. The district permitted the natural area as a stormwater system based on Florida Department of Environmental Protection (FDEP) input. Therefore for any permit modifications issued by the District today for the Blue's Creek site, we will not claim this area as jurisdictional.
- EDA requests: Confirmation that temporary impacts for utility installations are permitted in wetland areas (with rule citation).
  - District Response: Temporary impacts to wetlands when installing utilities is permitted and exempted by Chapter 62-330.051(14)(f), Florida Administrative Code (FAC), as long as all impacts to wetlands are restored in accordance with the language in this rule.
- EDA requests: Clarify if any modification to existing SRWMD permits are necessary (for the approx. 90 acre area) to permit and construct Unit 5, Phase 2. If so, what is the process (potential Minor Modification to Existing Permit) and submittal requirements?



District Response: It appears that the proposed work will qualify as a minor modification under chapter 62-330,315(2)(g), FAC. You will be required to submit an application, construction plans and any other supporting documentation that clearly shows the above referenced requirements are met. Additionally, the appropriate permit fee will be required.

Please feel free to contact me at 386,362.1001 or 800.226,1066 (FL only) should you have questions.

Sincerely,

Tim Sagul, P.E., CFM, Director Resource Management Division

Ecosystem Research Corporation 2015

## **Attachment 3: Photographic Atlas**

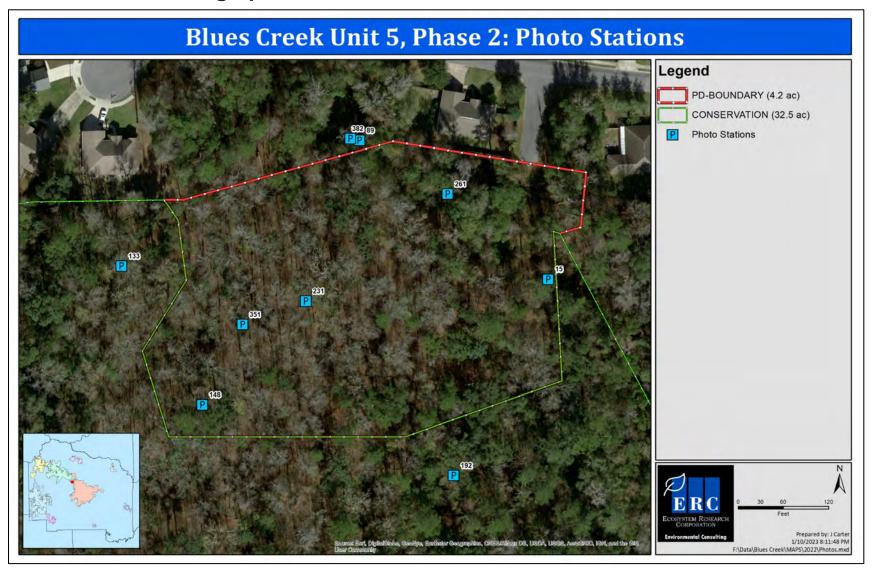


Figure A-1. Photo station locations within the Project Site and surrounding area.



**Photo 1**. Frames 1450–1452 No GPS Point (SW from north edge of sink). View of offsite Landscape depression with flooding and with evidence of higher water levels. This depression is northeast of northwest corner of proposed development site.



**Photo 2**. Frames 1453–1454 GPS 015 (North). View of fill and disturbed habitat in area of old access road in northeast section of site.



**Photo 3**. Frames 1455–1456 GPS 015 (West). View of Mesic Hammock Habitat in northeast area of Site.



**Photo 4**. Frames 1457–1458 GPS 089 (North). View of offsite wetland area in east end of Conservation Area north of Site.



**Photo 5**. Frames 1459–1460 GPS 133 (North). View of dry landscape depression west of northwest property corner. Evidence of higher water that killed vegetation is obvious.



**Photo 6**. Frames 1461–1462 GPS 148 (Southeast). View of intermittent Surface Water 1 depression as seen during the field survey.



**Photo 7.** Frames 1463–1464 GPS 192 (South). View of lower elevation Mesic Hammock Habitat south of the Project Site. These habitats show a denser groundcover habitat.



**Photo 8**. Frames 1465–1466 GPS 231 (Southeast). View of Climax Mesic Hammock Habitat within central area of Proposed Development Parcel. This higher elevation area has a minimal groundcover with small areas of Saw Palmetto.



**Photo 9.** Frames 1467–1468 GPS 261 (Northeast). View of **Wetland 1** within the northeast corner of the site.



**Photo 10**. Frames 1469–1470 GPS 351 (East). View of typical Climax Mesic Hammock Habitat with gently rolling topo and open, park-like appearance. Note very open, sparse groundcover.



**Photo 11**. Frames 1471–1472 GPS 382 (North). View of *Lemna*-covered surface water in flooded wetland north and off site of the Project Site.

#### **Attachment 4: IPaC Consultation**



#### United States Department of the Interior



FISH AND WILDLIFE SERVICE Florida Ecological Services Field Office 1339 20th Street Vero Beach, FL 32960-3559

Phone: (772) 562-3909 Fax: (772) 562-4288
Email Address: fw4flesregs@fws.gov
https://www.fws.gov/office/florida-ecological-services

In Reply Refer To:

January 08, 2023

Project Code: 2023-0031641

Project Name: Blues Creek Unit 5, Phase 2

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

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

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

In addition to MBTA and BGEPA, Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of

DL/08/2023

this letter with any request for consultation or correspondence about your project that you submit to our office.

#### Attachment(s):

- · Official Species List
- · USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

### Official Species List

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

This species list is provided by:

Florida Ecological Services Field Office 1339 20th Street Vero Beach, FL 32960-3559 (772) 562-3909

#### **Project Summary**

Project Code: 2023-0031641

Project Name: Blues Creek Unit 5, Phase 2 Project Type: New Constr - Above Ground

Project Description: Proposed land use change from single family to conservation (32.5 acres)

and an amendment to the existing PD zoning on 4.2 acres to reduce the permitted number of residential units from 44 detached units to 36

attached units.

Project Location:

Approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@29.7231798,-82.40469694180706,14z">https://www.google.com/maps/@29.7231798,-82.40469694180706,14z</a>



Counties: Alachua County, Florida

#### **Endangered Species Act Species**

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

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

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

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.

NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis No critical habitat has been designated for this species.  Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Florida Scrub-jay Aphelocoma coerulescens No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6174">https://ecos.fws.gov/ecp/species/6174</a>	Threatened
Reptiles NAME	STATUS
Eastern Indigo Snake Drymarchon couperi  No critical habitat has been designated for this species.  Species profile: <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened
Insects NAME.	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species.  Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

#### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICES JURISDICTION.

### USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

### **Migratory Birds**

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list 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
Bachman's Sparrow Aimophila aestivalis  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  https://ecos.fws.gov/ecp/species/6177	Breeds May 1 to Sep 30

MUUOIZVZA		
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	
Chimney Swift Chaetura pelagica  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25	
Great Blue Heron Ardea herodias occidentalis  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Jan 1 to Dec 31	
Lesser Yellowlegs Tringa flavipes  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere	
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	
Prairie Warbler Dendroica 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	
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	

#### 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 and understand the FAQ "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:

- 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.
- 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.

#### Breeding Season (iii)

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 (1)

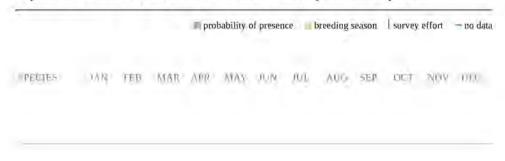
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

#### 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.





Additional information can be found using the following links:

- Birds of Conservation Concern <a href="https://www.fws.gov/program/migratory-birds/species">https://www.fws.gov/program/migratory-birds/species</a>
- Measures for avoiding and minimizing impacts to birds <a href="https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds">https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</a>
- Nationwide conservation measures for birds <a href="https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf">https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</a>

#### **Migratory Birds FAQ**

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

<u>Nationwide Conservation Measures</u> 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. <u>Additional measures</u> or <u>permits</u> 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 <u>Birds of Conservation Concern</u> (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 <a href="Rapid Avian Information Locator">Rapid Avian Information Locator</a> (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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, and <u>citizen science datasets</u>.

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:

- "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> 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 <a href="Northeast Ocean Data Portal">Northeast Ocean Data Portal</a>. 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 <a href="NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf">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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

#### 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

DL/08/2023

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.

#### Wetlands

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers District</u>.

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.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

DL/08/2023

#### **IPaC User Contact Information**

Agency: Ecosystem Research Corporation

Name: Peter Wallace

Address: 2906 NW 142ND AVE

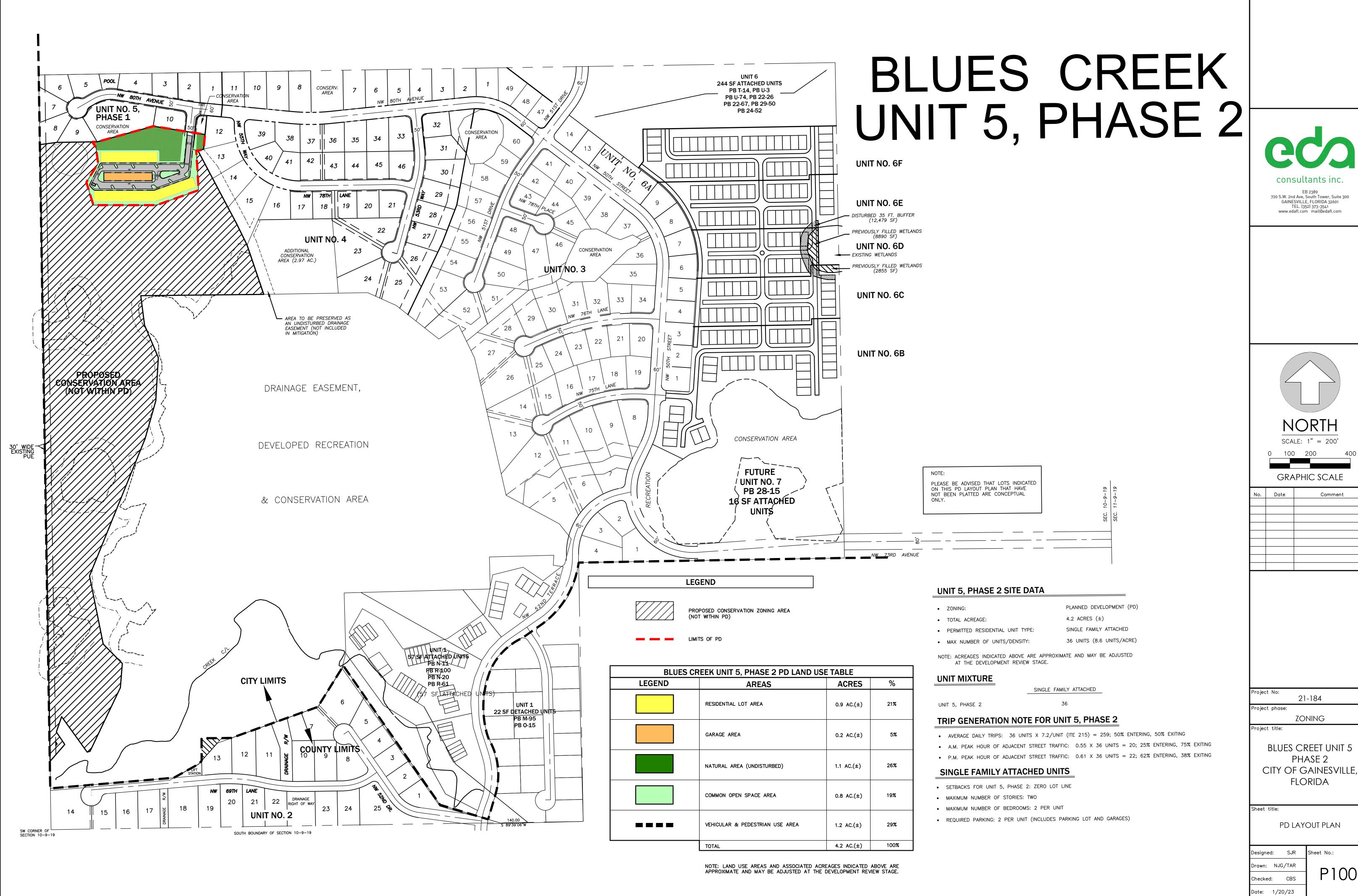
City: GAINESVILLE

State: FL Zip: 32609

Email pete@ecosysfl.com Phone: 3525380755

## Exhibit 3

# PD Layout Plan Sheets



consultants inc.

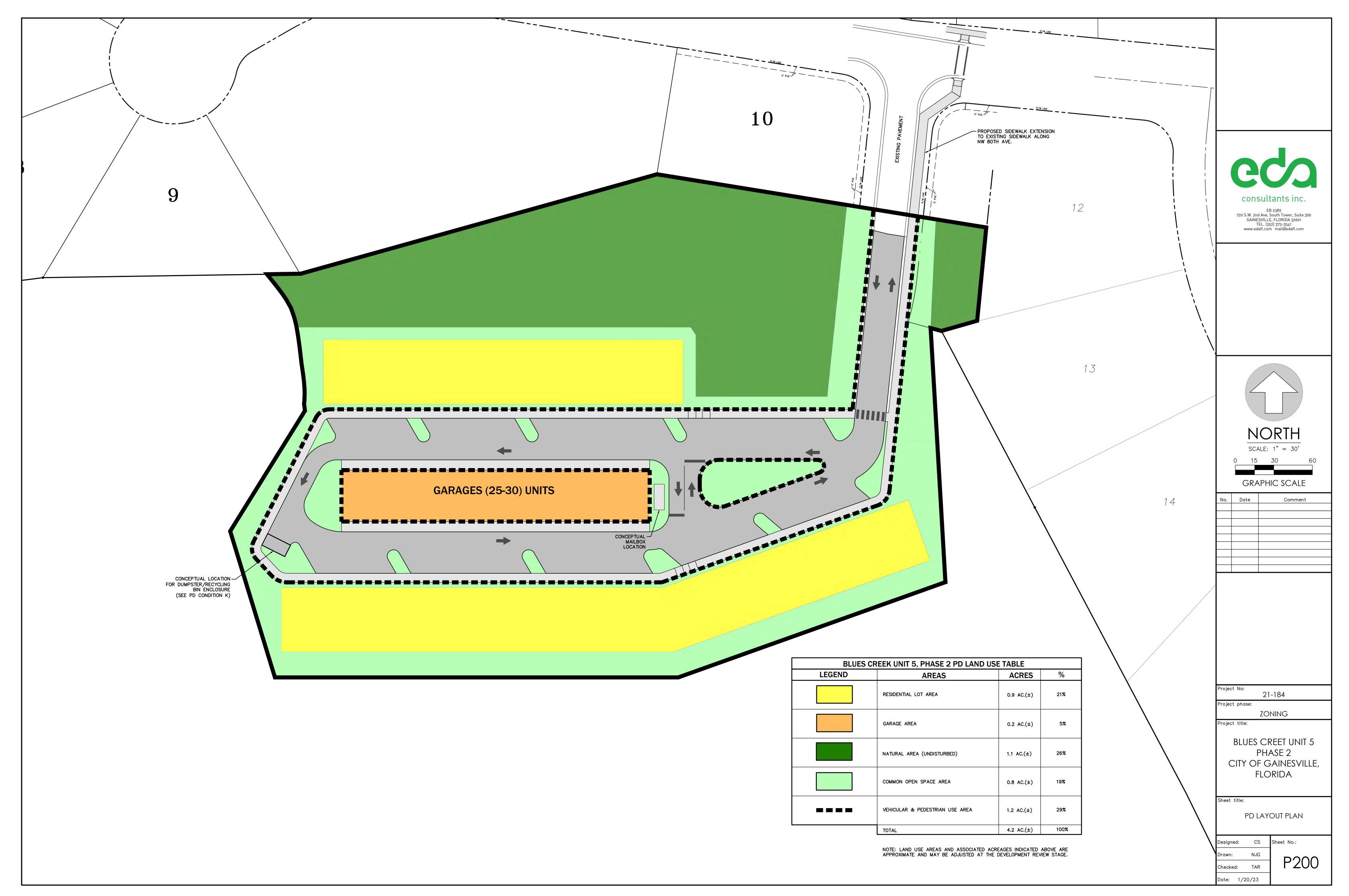
**NORTH** SCALE: 1" = 200'

21-184

ZONING

BLUES CREET UNIT 5 PHASE 2 CITY OF GAINESVILLE, FLORIDA

PD LAYOUT PLAN



. \\server3\engprojects\Blues Greek Unit 5 Phase II - 2021 Townhouses\Plans\Current DWG\2022 - PD Layout Plan\821184PD.dwg, P200 - PD LAYOUT PLAN, 1/20/2023 9:18:16 AM

# Exhibit 4

# **PUD Conditions**

#### **Planned Use District (PUD) Conditions**

- Condition 1: The Planned Use District (PUD) consists of approximately 4.2 acres only and shall be known as the Blues Creek Unit 5, Phase 2 PUD.
- Condition 2: The Future Land Use Map for this property is overlayed with the PUD future land use category with the underlying land use category for the property being Residential Low (RL).
- Condition 3: Allowable uses in the Blues Creek Unit 5, Phase 2 PUD shall be limited to single-family attached residential units on individual platted lots, accessory garages for the residential units, and common areas more specifically delineated in the Planned Development District (PD) zoning ordinance implementing this PUD.
- Condition 4: The maximum number of residential units shall be 36 units, which is a residential density of 8.6 units/acre. The development may have no more than 72 bedrooms.
- Condition 5: The maximum building height shall be 2 stories.
- Condition 6: The implementing PD zoning ordinance must specify dimensional standards including maximum building height, setbacks, and required sidewalk widths.
- Condition 7: Development at the property is subject to applicable Transportation Mobility Program Area (TMPA) criteria as specified in the City's Comprehensive Plan.
- Condition 8: Based on the Institute of Transportation Engineers (ITE) Manual, 11<sup>th</sup> Edition estimates for ITE Code 215 (Single-Family Attached Housing), the maximum total trip generation for the Blues Creek Unit 5, Phase 2 PUD will not exceed 259 new average daily trips.
- Condition 9: Vehicular access to the development from public right-of-way shall be in the form of a private drive that connects to the stub-out at NW 80<sup>th</sup> Avenue and NW 57<sup>th</sup> Drive. Diagonal / angle (pull in) parking is allowed along the private drive.
- Condition 10: The development shall include pedestrian access to the public sidewalk on the north side of NW 80<sup>th</sup> Avenue in the form of a sidewalk and crosswalk system, as depicted on the PD Layout Plan.
- Condition 11: All development within the property must be connected with an internal sidewalk system.
- Condition 12: The implementing PD zoning ordinance must specify the amount of usable open space in future development on the property.

# Exhibit 5

# **PD Conditions**

### Blues Creek PD Conditions (revised from adopted PD Ordinance 150694)

- (A) Lots bordering the 90-acre Drainage Easement, Developed Recreation & Conservation Area in the central portion of the property shall not extend into the 90-acre area. Lot lines for Unit 5, Phase 2 as shown on the PD Layout Plan are conceptual only and when platted all lots shall be configured to maintain a minimum 50-foot buffer between the lot line and the landward extent of any regulated wetland. The exterior building materials and design shall be consistent with the conceptual elevations attached to the PD Report.
- (B) Local streets The private drive system in the PD should, to the maximum extent practicable, avoid minimize crossing flood plain, wetland, seepage or sinkhole areas. Where local streets driveways abut or are proximate to these areas, the surface water management system should promote natural drainage patterns which occur there.
- (C) At the time of final plat approval, Unit 5 Phase 2 shall meet the City of Gainesville Transportation Mobility Program Area (TMPA) requirements or transportation mobility requirements then in effect.
- (D) The stormwater from the PD development shall drain through an existing stormwater pipe system within Parcel Number 06006-052-000 to Development activity within the 90-acre Drainage Easement, Developed Recreation and Conservation Area shall be consistent with Suwannee River Water Management District Permit number 4-87-00067 as it may be amended from time to time. Any utility crossing (including potable water, wastewater, electric and other utilities) between Units 2 and 5, as conceptually illustrated on the PD Layout Plan, shall be limited to an underground, non-open cut type crossing with no surface disturbance. This allowance of utility crossings is consistent with the City's Comprehensive Plan and the Planned Development objectives in the Land Development Code.
- (E) The 90-acre Drainage Easement, Developed Recreation and Conservation Area and proposed Conservation land use area (32.5 +/-acres) all other conservation areas shall be managed and maintained in accordance with the provisions of a conservation management plan and conservation easement, as approved by the City at the time of final plat approval. Drainage easements and utility easements shall be allowed in the conservation areas.
- (F) A lift station shall be allowed to service Unit 5, Phase 2. If a lift station is utilized, the lift station location shall be located on a separate lot and shall be depicted as such on the plat.
- (G) Each housing unit within Unit 5, Phase 2 shall be equipped with a residential sprinkler system in compliance with the current edition (at the time of issuance of a building permit) of the National Fire Protection Association NFPA 13D: Standard for the installation of sprinkler systems in one- and two-family dwellings and manufactured homes requirements for one-family dwellings.

- (H) Access to Lots 1-36 (as conceptually depicted on the PD Layout Plan) in Unit 5, Phase 2 shall be a minimum width of 50 feet, shall be constructed in accordance with the Public Works Design Manual as a public road and shall be dedicated to the City as provided in city code.
- (I) In order to protect the wetlands and wetland buffer areas south of lots 29 and 34-36 in Unit 5, Phase 2 (as conceptually depicted on the PD Layout Plan), access to Lots 37-44 (as conceptually depicted on the PD Layout Plan) shall be in the form of a private drive with a recorded perpetual public ingress/egress easement that includes a public utility easement in favor of the City. The cross-section for this public ingress/egress easement shall be a minimum 40-feet in width and shall include a shared pedestrian facility flush with the pavement with a design that is acceptable to and approved by the Public Works Department during design plat review.
- (F) The allowable uses within the PD are:
  - 1. <u>Attached dwellings in the form of zero-lot line single family attached units on platted lots</u>
  - 2. Accessory garages for the residential units
  - 3. Common area as illustrated on the PD Layout Plan
- (G) Vehicular access to Lots 1-36 (as conceptually depicted on the PD Layout Plan) in Unit 5, Phase 2 shall be in the form of a private driveway (which includes diagonal / angle (pull-in) parking) that connects to the stub-out at NW 80<sup>th</sup> Avenue and NW 57<sup>th</sup> Drive with a recorded perpetual public ingress/egress easement that includes a public utility easement. Pedestrian access shall be in the form of a minimum 5-foot wide sidewalk system that connects all single-family attached units to the public sidewalk on the north side of NW 80<sup>th</sup> Avenue.
- (H)(J) Encroachment in the intermittent surface water area is allowed and Eencroachment of the public road and private drive and public utilities into the 35-foot disturbed wetland and buffer area is allowed in limited areas where site constraints exist in Unit 5, Phase 2. However, a buffer area equivalent in size to an the overall average 50-foot wetland buffer shall be maintained.
- (I)(K) Existing trees that are shown to be preserved on the construction plans and that are approved by the Urban Forestry Inspector may be used to meet the shade tree requirements along the public roads and private drive in Unit 5, Phase 2. Tree barricades shall be used during construction activities to protect existing trees that are shown to be preserved and that will be used to meet the street shade tree requirement along the public roads and private drive.
- (J)(L) Each lot in Unit 5, Phase 2 shall have a minimum area of 0.25 1,000 square feet acres and shall meet the dimensional requirements of the RSF-1 district, except that setbacks shall meet the requirements as shown in (J M) below.
- (K)(M)Setbacks Dimensional standards for lots in Unit 5, Phase 2:

Front 20 FT or the minimum front setback footage at the point where the lot width is

85-feet. 0 feet

Rear 15 FT 0 feet

Side  $\frac{7.5 \text{ FT}}{1}$  0 feet

Side (street) 10 FT 0 feet

Minimum residential density: None

Maximum residential density: 8.6 units/acre

Maximum number of residential lots: 36

Minimum Lot Width: 20 feet

Minimum Lot Depth: 50 feet

Maximum building height: 2 stories

Maximum number of bedrooms: 2 per unit

Common Open Space Area: 0.9 +/- acres

Acreages indicated above are approximate and may be adjusted at the development

review stage.

The maximum number of units per building is 9.

- (L) Common mailboxes shall be located in the common area as conceptually depicted on the PD Layout Plan. A central dumpster for solid waste and recycling, per the approval of the Public Works Department, shall be located in the common area as conceptually depicted on the PD Layout Plan and shall be fully screened.
- (M) Lighting in the PD shall comply with all applicable standards for outdoor lighting set in the Land Development Code, Section, 30-6.12 and shall also limit the maximum mounting height of lighting to not exceed 15 feet.
- (N) A Homeowner's Association and associated regulations shall be established for the Blues Creek Unit 5, Phase 2 PD.

### Exhibit 6

# Conceptual Single Family Attached Unit Front Elevation

