

Petition PB-15-13 LUC
May 28, 2015

Appendix B Supplemental Documents



EXHIBIT
B-1

50089D

AERIAL PHOTOGRAPH

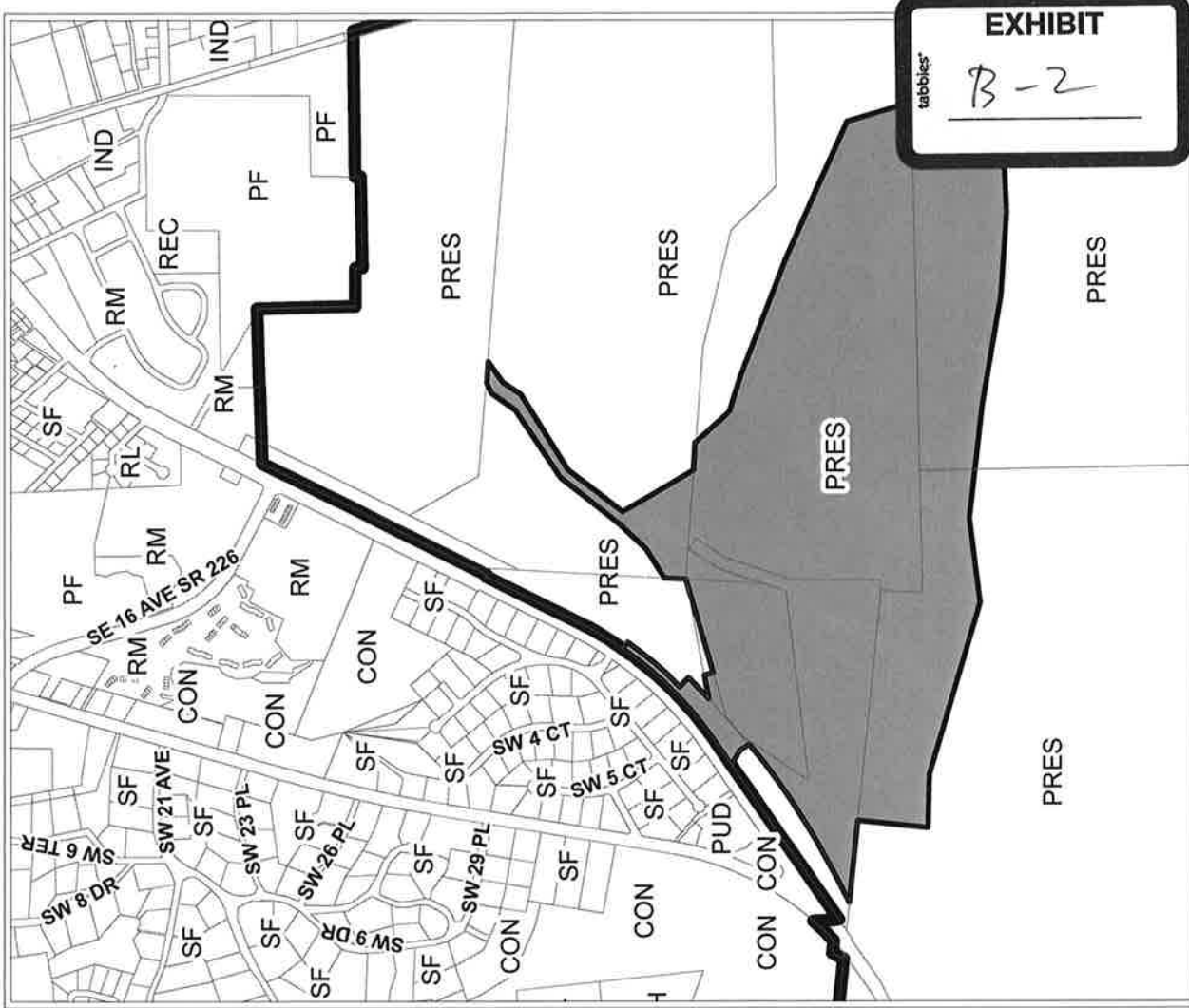
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| <p>No Scale</p> | <p>Name</p> <p>City Plan Board</p> | <p>Petition Request</p> <p>Amend the City of Gainesville Future Land Use Map from Alachua County Preservation to City of Gainesville Public and Institutional Facilities</p> | <p>Petition Number</p> <p>PB-15-13 LUC</p> |
|-----------------|---|---|---|

City of Gainesville Land Use Designations

- SF Single Family (up to 8 du/acre)
- RL Residential Low Density (up to 12 du/acre)
- RM Residential Medium Density (8-30 du/acre)
- IND Industrial
- REC Recreation
- CON Conservation
- PF Public Facilities
- PUD Planned Use District

Alachua County Land Use Designations

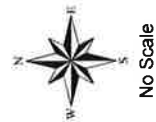
- PRES Preservation



Area under petition consideration

Division line between two land use categories

City Limits



EXISTING LAND USE

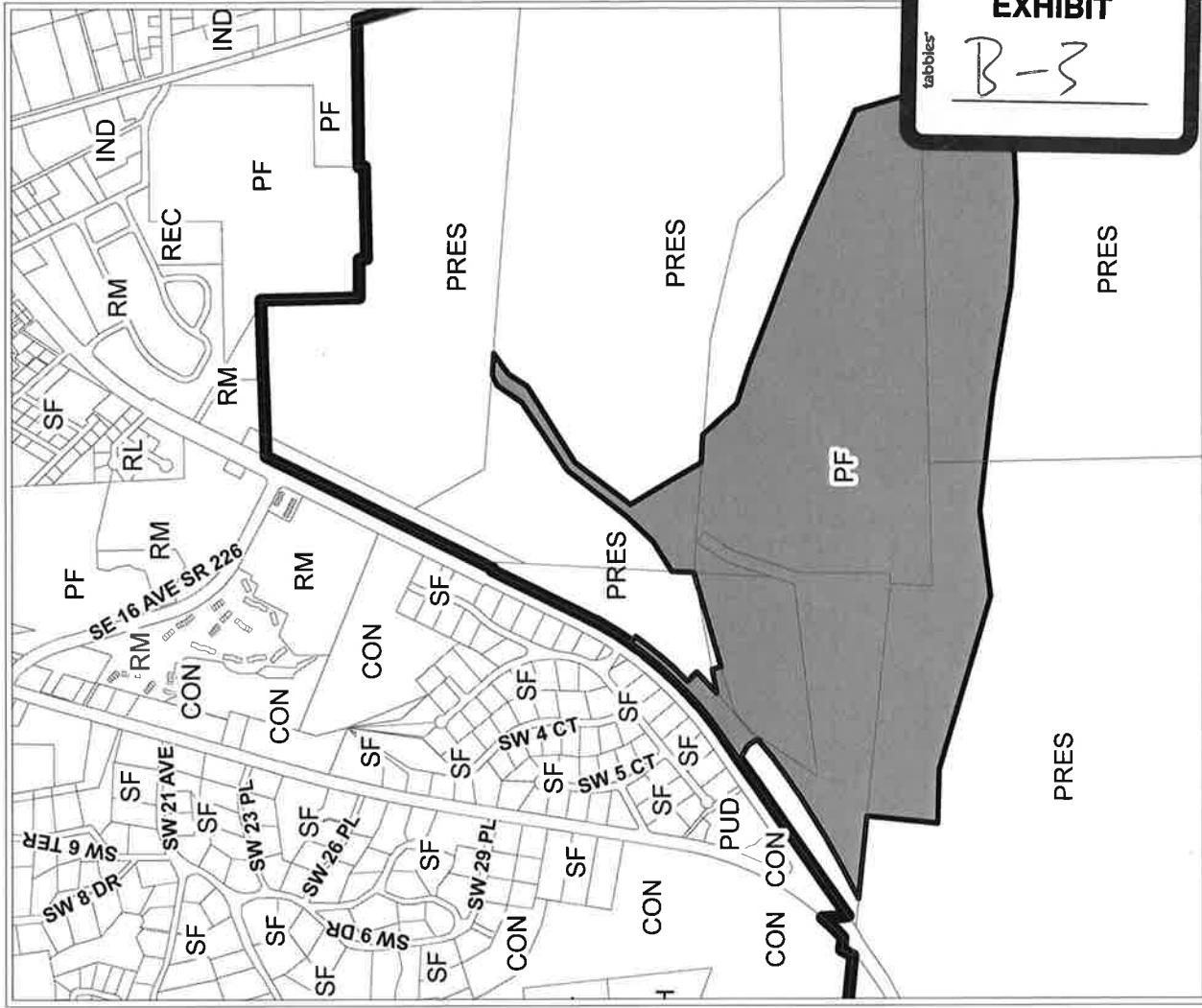
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| | <p>Name</p> <p>City Plan Board</p> | <p>Petition Request</p> <p>Amend the City of Gainesville Future Land Use Map from Alachua County Preservation to City of Gainesville Public and Institutional Facilities</p> | <p>Petition Number</p> <p>150089D PB-15-13 LUC</p> |
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City of Gainesville Land Use Designations

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| | |
|---|------------------------|
| PROPOSED LAND USE | |
| Name | Petition Number |
| City Plan Board | 150089D |
| Amend the City of Gainesville Future Land Use Map from Alachua County Preservation to City of Gainesville Public and Institutional Facilities | |
| PB-15-13 LUC | |



RESOLUTION NO. 080771

PASSED February 5, 2009

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF GAINESVILLE, FLORIDA, REQUESTING AN EASEMENT FROM THE BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA TO FACILITATE THE SWEETWATER BRANCH/PAYNES PRAIRIE SHEETFLOW RESTORATION PROJECT; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Gainesville, through its utility enterprise, Gainesville Regional Utilities, and its Public Works Department, proposes to design, install, operate and maintain sheetflow restoration facilities and public use facilities within the Paynes Prairie State Preserve State Park in order to facilitate the Sweetwater Branch/Paynes Prairie Sheetflow Restoration Project, located in Gainesville, Alachua County, Florida; and

WHEREAS, the installation of these facilities will be placed on property which is owned by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida and leased to the State of Florida Department of Environmental Protection, Division of Recreation and Parks via Lease No.2515; and

WHEREAS, the acquisition of a certain easement is necessary to accomplish this installation and operation on State property; and

NOW, THEREFORE BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF GAINESVILLE, FLORIDA:

Section 1. The City of Gainesville hereby requests that the State of Florida Department of Environmental Protection obtain authority from the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida to grant an easement over

State property for the purpose of installing, operating and maintaining sheetflow restoration facilities, public utility facilities, and related appurtenances, including but not limited to grade control structures, trash and sediment traps, a sheetflow distribution canal, paved and unpaved maintenance roads, an enhanced wetland, and public use facilities. Public use facilities to include boardwalks, restrooms, and educational facilities; and

Section 2. That the easement which is necessary for the purposes herein stated, is located within the D. L. Clinch Grant, Township 10 South, Range 20 East, as shown on the attached sketch, attached hereto and made a part hereof, and contains approximately 225 acres more or less.

Section 3. In exchange for the easement the City will donate 185 acres of the "Edwards Tract" to the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. The exchange is contingent upon State of Florida Acquisition and Restoration Council approval of the exchange, St Johns River Water Management District cost share participation, and execution of a Memorandum of Understanding between the Florida Department of Environmental Protection and the City of Gainesville that specifies respective responsibilities of project construction and operation and maintenance.


maintenance roads, an enhanced wetland, and public use facilities. Public use facilities to include boardwalks, restrooms, and educational facilities; and

Section 2. That the easement which is necessary for the purposes herein stated, is located within the D. L. Clinch Grant, Township 10 South, Range 20 East, as shown on the attached sketch, attached hereto and made a part hereof, and contains approximately 225 acres more or less.

Section 3. In exchange for the easement the City will donate 185 acres of the "Edwards Tract" to the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. The exchange is contingent upon State of Florida Acquisition and Restoration Council approval of the exchange, St Johns River Water Management District cost share participation, and execution of a Memorandum of Understanding between the Florida Department of Environmental Protection and the City of Gainesville that specifies respective responsibilities of project construction and operation and maintenance.


Section 4. This Resolution shall become effective immediately upon adoption.

DATED this 5th day of February, 2009.

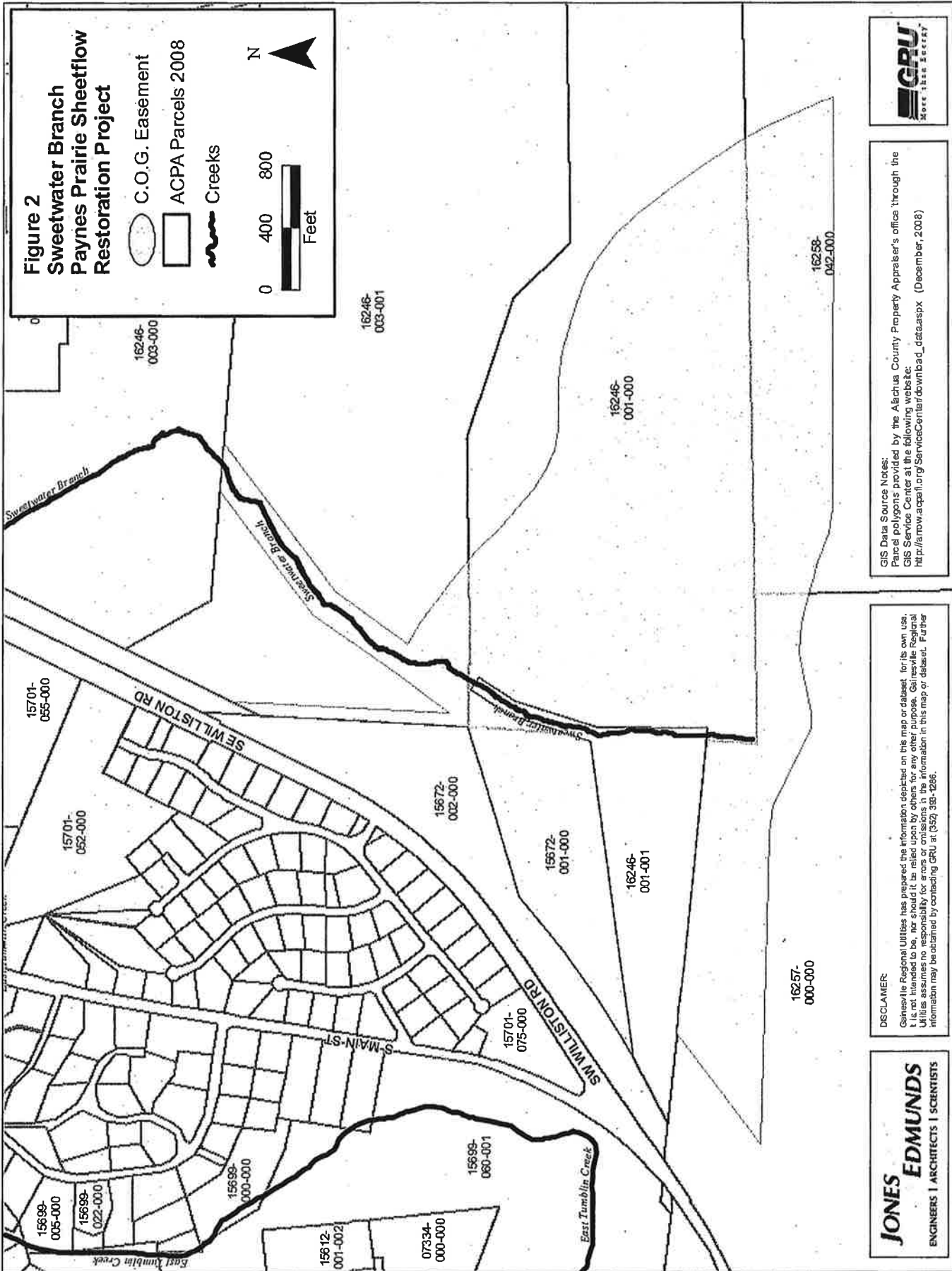

Pegeen Hanrahan, Mayor

ATTEST:

CLERK OF THE COMMISSION
Kurt M. Lannon

Approved as to Form and Legality:
By: 
City Attorney

FEB - 5 2009



JONES
EDMUNDS
 ENGINEERS | ARCHITECTS | SCIENTISTS

DISCLAIMER:
 Geospatial Response Utilities has prepared the information depicted on this map or dataset for its own use. It is not intended to be, nor should it be, relied upon by others for any other purpose. Geospatial Response Utilities assumes no responsibility for errors or omissions in the information in this map or dataset. Further information may be obtained by contacting GRU at (352) 392-1286.

GIS Data Sources Notes:
 Parcel polygons provided by the Alachua County Property Appraiser's office through the GIS Service Center at the following website:
http://arow.acgall.org/ServiceCenter/download_data.aspx (December, 2008)



Exhibit B-5 Paynes Prairie Sheetflow Project Description from City of Gainesville Public Works Department Website

Paynes Prairie Sheetflow Project

What's the Project?

A 125-acre constructed enhancement wetland will polish the base flow from Sweetwater Branch before it is discharged to a mile long sheetflow distribution channel. Two miles of agricultural drainage canals in Paynes Prairie Preserve State Park will be filled in. This will restore the historic Sheetflow to over 1300 acres of wetlands on Paynes Prairie. The project includes several recreational opportunities for the citizens of Gainesville. A network of trails will allow visitors to walk along the berms that form the enhancement wetland. An outdoor classroom will provide a sheltered place for school groups to gather and learn more about wetlands and their role in Florida's environment. A viewing tower and Visitors Center have been planned as future additions to the park. The tower will provide unsurpassed views of Paynes Prairie in a location easily accessible to Downtown Gainesville. The solar panels on the roof of the tower will provide electrical energy to the Visitors' Center.



Figure 1: Enhancement Wetland

Why are we building a wetland?

The natural sheetflow of Sweetwater Branch onto the Prairie was disrupted by ranchers in the 1930s, when they constructed a ditch to drain portions of the Prairie to expand grazing areas. The ditch diverts the Sweetwater Branch flow directly to Alachua Sink, and has resulted in the dehydration and alteration of over 1,300 acres of prairie wetlands. In addition, the direct connection of Sweetwater Branch to Alachua Sink provides a more direct conduit into the Floridan Aquifer. This channelization of Sweetwater Branch through the Prairie has prevented natural attenuation of the nutrients and has depreciated the water quality flowing into Alachua Sink.

Since most of the urban development in the Sweetwater Branch drainage area occurred long before modern stormwater management and other pollution control regulations, Sweetwater Branch, and in turn the Prairie have been heavily impacted by stormwater runoff. The Main Street Water Reclamation Facility also discharges treated effluent to Sweetwater Branch and is the main contributor of nutrients to the stream.

Alachua Sink is a small lake located within Paynes Prairie, which receives flow from Sweetwater Branch and flows into a sinkhole with direct connection to the Floridan aquifer. Alachua Sink is currently listed as an impaired water body due to high nitrogen levels. A total maximum daily load (TMDL) has been developed for Alachua Sink, which will require reductions in total nitrogen loads from urban runoff, wastewater discharge and other sources.

Figure 2: Public Trails Network



How does the Project improve our environment?

The proposed Sweetwater Branch/Paynes Prairie Sheetflow Restoration project provides a unique and innovative approach to achieving the regulatory water quality improvements, while providing additional environmental benefits:

1. Restore the natural water flow to over 1,300 acres of formerly-impacted wetlands in Paynes Prairie;
2. Create about 125 acres of high-quality wetland habitat;
3. Provide recreation and environmental education opportunities;

4. Protect and improve water quality in Alachua Sink, and the Floridan Aquifer, and;
5. Increase the acreage of conservation lands within the Paynes Prairie Preserve State Park.

Figure 3: Entry to Visitor Center



How did the City get the land?

Most of the project site is located within the Paynes Prairie Preserve State Park. The City of Gainesville, St. Johns River Water Management District, and Alachua County Forever jointly purchased 276 acres of ranch lands located on the southern rim of Paynes Prairie, in August of 2009. Two thirds of the property was jointly donated by the St. Johns River Water Management District and the City of Gainesville to the State of Florida in exchange for a 225 acre easement over the project site. The donated property is now part of Paynes Prairie Preserve State Park. The remaining acreage is owned by Alachua County and will be managed to conserve wildlife. An additional 3.7 acres of the project site is owned by Alachua County. This property is adjacent to Williston Road and will be used to provide public access to the project site. The City of Gainesville and Alachua County are currently involved in negotiations to facilitate the purchase of the remaining parcel.

Figure 4. Solar Viewing Tower



How is this funded?

The proposed Sweetwater Branch/Paynes Prairie Sheetflow Restoration Project will require commitment from multiple organizations to implement. The estimated overall project cost is \$26 million with an annual recurring operations and maintenance cost of about \$1.3 million. The City of Gainesville has received a total of \$3.1 million in funding assistance for land acquisition, design and construction. The City is continuing to pursue grant funding and cost sharing opportunities with project partners that include the St Johns River Water Management District, the Florida Department of Environmental Protection, the Florida Department of Transportation, the Florida Fish and Wildlife Conservation Commission, The US Environmental Protection Agency and Alachua County. The City's goal is to obtain a total of 25% funding assistance. The balance of the funding will come from the Public Works-Stormwater and Gainesville Regional Utilities-Wastewater Capital Improvements budgets.

For additional information, please contact:

Stu Pearson, P.E.

Project Manager

Gainesville Public Works

pearsonsp@cityofgainesville.org

Alice Rankeillor, P.E.

Project Manager

GRU Strategic Planning

rankeilloai@gru.com

Last updated November 4, 2013

<http://www.cityofgainesville.org/GOVERNMENT/CityDepartmentsNZ/PublicWorks/PaynesPrairieSheetflowproject/tabid/648/Default.aspx>

Executive Summary

**A Conceptual Plan for Sweetwater
Branch/Paynes Prairie Sheetflow
Restoration**

EXHIBIT
tabbies B-6



Prepared for
Gainesville City Commission

Prepared by
**Sweetwater Branch/Paynes Prairie Sheetflow
Restoration Team**

March 2007

Introduction

The Paynes Prairie Preserve State Park is a 21,000 acre natural and historical landmark situated in Alachua County at the southern tip of Gainesville, Florida. Paynes Prairie is considered an Outstanding Florida Water and is a valuable resource that has been enjoyed by surrounding communities long before its inauguration as Florida's first State Preserve in 1971.

Alachua Sink is a small lake located within Paynes Prairie, which receives flow from Sweetwater Branch and flows into a sinkhole with direct connection to the Floridan aquifer. Alachua Sink is currently listed as an impaired water body due to high nitrogen levels. A total maximum daily load (TMDL) has been developed for Alachua Sink, which will require reductions in total nitrogen loads from urban runoff, wastewater discharge and other sources.

The proposed Sweetwater Branch/Paynes Prairie Sheetflow Restoration project provides a unique and innovative approach to achieving TMDL requirements, while providing additional environmental benefits. The project will restore over 1,300 ac of impacted wetlands, achieve regulatory TMDL requirements, provide protection of the Floridan aquifer, and offer outstanding wildlife habitat and opportunities for public recreation.

The project conceptual plan represents the culmination of focused efforts from a partnership of organizations including the Florida Department of Environmental Protection, St. Johns River Water Management District, City of Gainesville, Alachua County and the Florida Department of Transportation, District Two.

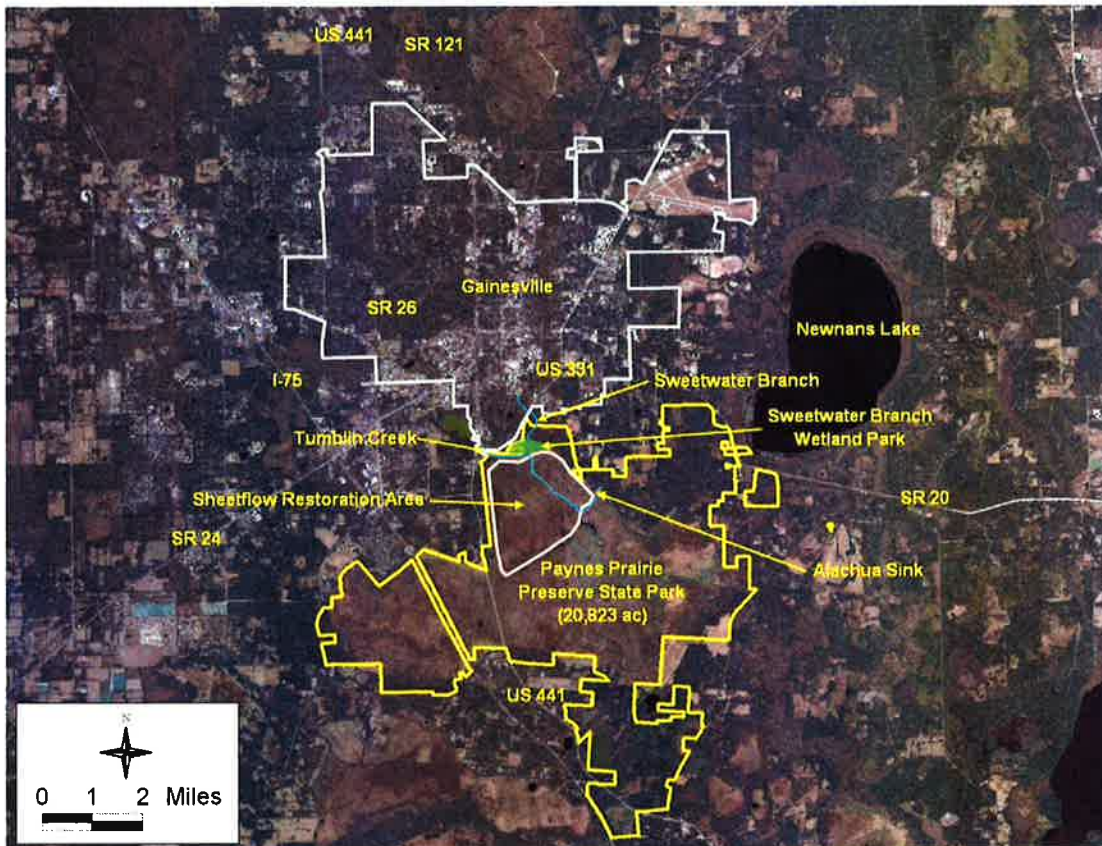


FIGURE 1 Approximate Boundary Map for the Paynes Prairie Preserve State Park Illustrating the Location of the City of Gainesville North of the Prairie and Sweetwater Branch Draining to Alachua Sink.

Background

The natural sheetflow of Sweetwater Branch onto the Prairie was disrupted by ranchers, in the 1930s, when they constructed a ditch to drain portions of the Prairie to expand grazing areas. The ditch diverts the Sweetwater Branch flow directly to Alachua Sink, and has resulted in the dehydration and alteration of over 1,300 acres of prairie wetlands. In addition, the direct connection of Sweetwater Branch to Alachua Sink provides a more direct conduit into the Floridan Aquifer. This channelization of Sweetwater Branch through the Prairie has prevented natural attenuation of the nutrients and has depreciated the water quality flowing into Alachua Sink. The overall water balance to Paynes Prairie has also been affected by diversion of inflows to the Prairie at other locations.

Since most of the urban development in the Sweetwater Branch drainage area occurred long before modern stormwater management and other pollution control regulations, Sweetwater Branch, and in turn the Prairie have been heavily impacted by stormwater runoff. The Main Street Water Reclamation Facility also discharges treated effluent to Sweetwater Branch and is the main contributor of nutrients to the stream.

Conceptual Plan

The conceptual plan for re-establishing sheetflow of high quality water on Paynes Prairie includes upgrades to the Main Street Wastewater Reclamation Facility to optimize nitrogen and phosphorus removal. A 125 acre constructed enhancement wetland will polish the base flow from Sweetwater Branch before it is discharged to a mile long sheetflow distribution channel. Two miles of agricultural drainage canals will be filled so that wetland hydrology can be resorted.

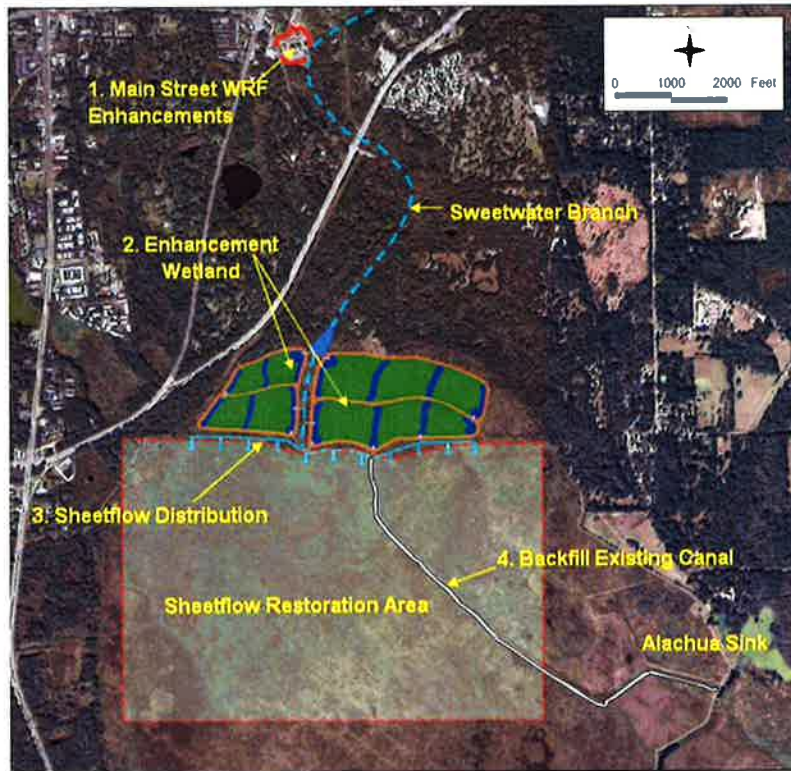


FIGURE 2 Sweetwater Branch/Paynes Prairie Sheetflow Restoration Conceptual Plan

Water entering the Sheetflow Restoration Area must be of sufficient quality to allow the re-establishment of desirable, native wetland plant communities and wildlife habitat. This will require reductions in phosphorus in addition to Nitrogen. Project studies have established the necessary quality levels to ensure that these criteria can be achieved through the proposed combination of Main Street Wastewater Reclamation Facility upgrades and the Sweetwater Branch Enhancement Wetland. These studies have also determined that additional assimilation of residual nutrients will naturally occur within the Sheetflow Restoration Area so that background nutrient levels similar to estimated pre-development concentrations will be achieved.

Project Benefits

The proposed project will restore Sweetwater Branch sheetflow to Paynes Prairie and at a minimum this project is expected to provide the following benefits:

1. Restore (re-hydrate) over 1,300 ac of formerly-impacted wetlands in Paynes Prairie;
2. Cost effectively attain regulatory TMDL requirements for the City of Gainesville and the Florida Department of Transportation, District Two,
3. Create about 150 ac of high-quality wetland wildlife habitat and a public use area for bird-watching and nature study within the Sweetwater Branch Wetland Park;
4. Naturally assimilate other nutrients, sediments and other pollutants in the Sweetwater Branch in order to protect the PPPSP Sheetflow Restoration Area, Alachua Sink, and the Floridan Aquifer; and

5. Restore part of the overall water balance to Paynes Prairie, which has been impacted by diversion of water from the Prairie at other locations.

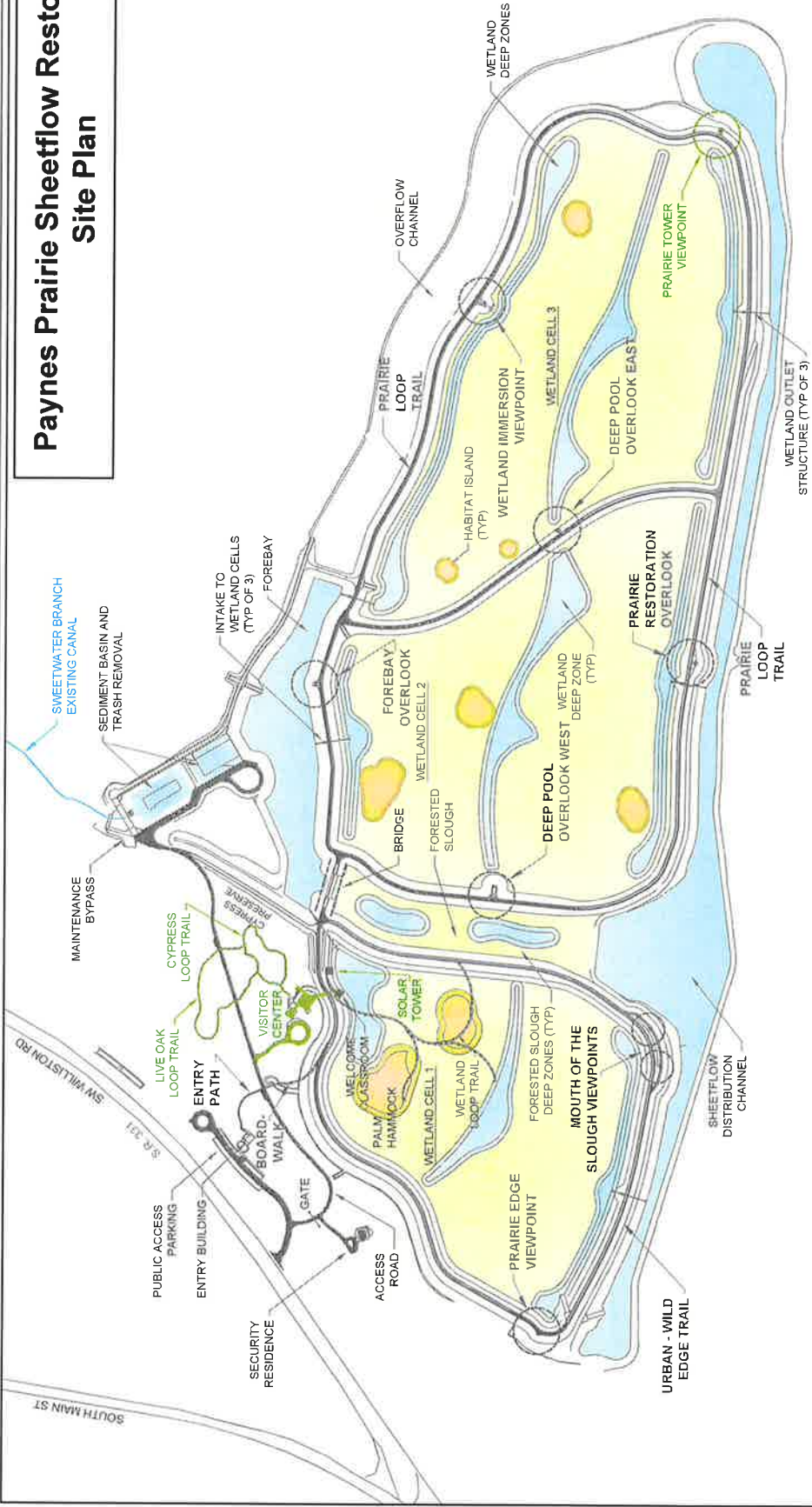
Land Exchange

The proposed enhancement wetland site is located within the Paynes Prairie Preserve State Park. The key element in the development of this project is to locate and purchase a parcel of land and then to exchange it for the project site property. The exchange parcel must be of equal or greater value and acreage and have similar ecological function and be located within the Paynes Prairie Preserve State Park optimum boundary. The project proposal and the land exchange will be presented to the Governor and Cabinet for approval. The St. Johns River Water Management District will provide the City of Gainesville with assistance and guidance through this process.

Implementation

The proposed Sweetwater Branch/Paynes Prairie Sheetflow Restoration Project will require several years and commitment from multiple organizations to implement. The estimated overall project cost is approximately \$24 million with an annual recurring operations and maintenance cost of about \$1.3 million. However, the numerous valuable benefits to the environment and to the citizens of the State of Florida make this project well worthwhile and in the public interest.

Paynes Prairie Sheetflow Restoration Site Plan



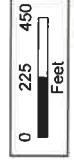
Current Construction Contract

- Access Road/Parking
- Entry Building
- Security Residence
- Sediment & Trash Removal Facility

Future Park Improvements

- Viewpoints/Overlooks
- Shallow Water
- Deep Water
- Habitat Island
- Berm Trails
- Nature Trails
- Boardwalk
- Bridge

- Visitor Center Complex
- Solar Viewing Tower
- Prairie Tower Viewpoint



150089D

Plotted: 05/08/14 11:39am By CAO

EXHIBIT

B-7

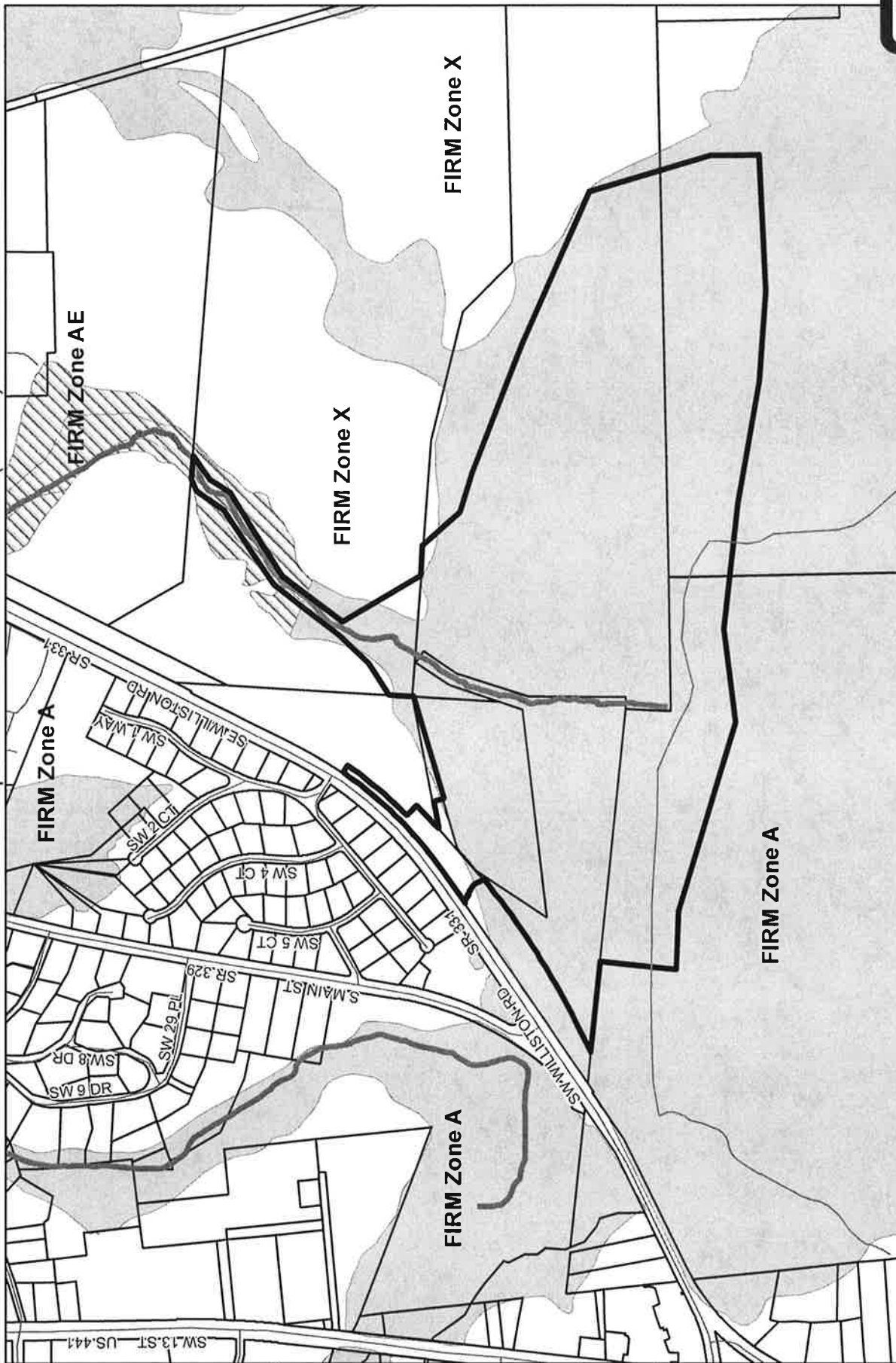
tabbies

PB-15-13 FEMA Special Flood Hazard Area (SFHA)

150089D

tabbles®

EXHIBIT
B-8



This map is for informational purposes only. Do not rely on this map for accuracy of dimensions, size, or location. The City of Gainesville does not assume responsibility to update this information or for any error or omission on this map.

1 inch = 1,000 feet
Contour Data: NAVD 1988 Datum



- Petition Area
- Flood Zone
- A - 100 Year
- AE - 100 Year w/elevation
- X - outside of 100 year



Alachua County Development Review Committee Staff Report

Project Number: 2009121601_F

Revised Preliminary and Final Development Plan for Sweetwater Branch/Paynes Prairie Sheetflow Restoration

SUBJECT: Sweetwater Branch/Paynes Prairie Sheetflow Restoration

DESCRIPTION: A 125-acre enhancement wetland within overall 258 acre project area including sedimentation basin, forebay, stormwater conveyance channels, berms and public access amenities

AGENT/APPLICANT: Jones Edmunds and Associates, Inc.

PROPERTY OWNERS: City of Gainesville and State of Florida

PROPERTY DESCRIPTION:

Location: 3700 Block SE Williston Road

Parcel Numbers: 16246-001-001, 15672-001-000, portions of 16257-000-000, 16246-001-000, 16258-042-000, 16257-000-000, 15672-002-000, 16246-003-001

Section/Township/Range: S: 17, 16, 20 & 21; T: 10S; R: 20E

Land Use: Preservation

Zoning: Conservation, C-1

Acreage: 258 acres

CHRONOLOGY:

| | |
|--|--------------------|
| Preliminary Development Plan BoCC Hearing: | 03/23/10 |
| Final Development Plan Submittal: | 06/20/11 |
| Insufficiency Reports: | 08/08/11, 03/26/12 |
| Final Development Plan Resubmittal: | 02/27/12, 06/11/12 |
| Sufficiency Determination: | 07/18/12 |
| DRC Hearing: | 08/02/12 |

STAFF RECOMMENDATION: Approval of the Revised Preliminary and Final Development Plans with conditions, and issuance of Final CLSC.

DRC ACTION Approved the revised Preliminary and Final Development Plans with conditions and issuance of Final CLSC

Alachua County Development Review Committee Staff Report

DESCRIPTION OF PROPOSED PLAN:

This is a revised Preliminary and Final Development Plan. The original Preliminary Development Plan was approved by the Board of County Commission on March 23, 2010. The project proposes adverse impact to wetlands and is therefore over the development thresholds established in Unified Land Development Code (ULDC) Table 402.44.1 that required this application to be heard by the Board of County Commissioners (BoCC). The Final Development Plan was submitted more than one year after the PDP approval. Therefore, this is considered revised preliminary and Final Development Plan.

Currently, Sweetwater Branch flows directly into the Alachua Sink. Some of the undesirable conditions this causes include excess nutrients and trash and debris discharging to Paynes Prairie and Alachua Sink, which is a direct connection to the Floridan aquifer.

This project will improve water quality in the Alachua Sink by restoring the natural sheetflow of the Sweetwater Branch. It currently carries untreated stormwater from the downtown area through a canal and has a direct path to the Alachua Sink. The water in the Alachua Sink is considered impaired and does not meet current state water quality standards. The St. John's Technical Report on this project provides more information on the project description and history of this area and an excerpt of that report entitled "Excerpt_St. Johns Technical Report" is provided in the packet of material for DRC for this project.

The proposed development plan application is for a 125-acre enhancement wetland on the north rim of Paynes Prairies within an overall 258 acre project area. The purpose of the project is to:

- Eliminate low-quality water in Sweetwater Branch from flowing directly to Alachua Sink and the Floridan aquifer
- Restore the hydoperiod of over 1,300 acres of wetlands through environmental reuse of wastewater effluent and stormwater treatment
- Remove trash and debris from water discharging to Paynes Prairie
- Reduce sediment load from Sweetwater Branch
- Restore part of the overall water balance to Paynes Prairie
- Create approximately 125 acres of wetland wildlife habitat

Alachua County Development Review Committee Staff Report

- Create a public access area for passive recreation and research within the Sweetwater Branch Wetland Park
- Naturally assimilate nutrients, sediments, and other pollutants to protect Paynes Prairie and the Floridan aquifer
- Attain the City of Gainesville's and FDOT Alachua Sink total maximum daily load (TMDL) reduction requirements for nitrogen in a cost-effective way.

To meet the project's water quality goals, the project components and features are designed to provide multiple levels of protection to Paynes Prairie. The primary project components are as follows:

- **Sweetwater Branch Grade Control** – a grade control structure will be incorporated into the entrance to the Sedimentation Basin to reduce upstream erosion and sediment loading to Paynes Prairie.
- **Sedimentation Basin** – The primary sediment-control facility will provide 3,000 cubic yards (CY) of capacity to trap sediment material before it enters the Enhancement Wetland.
- **Trash Removal Facilities** – A floating boom downstream of the sediment removal facility will trap and remove floating material before it enters the Enhancement Wetland.
- **Forebay** – a large pool (70 acre-foot) for attenuating stormwater will provide additional areas for sediment deposition and debris removal. Inlets to the Enhancement Wetland are designed on the south side of the Forebay.
- **Enhancement Wetland** – A 125-acre constructed wetland will provide nutrient removal, beneficial wildlife habitat, and a public use facility. The enhancement Wetland will divert and treat an average daily flow of up to 25 cfs (16 MGD).
- **Sheetflow Distribution Channel** – A large channel will receive stormwater and flow from the Enhancement Wetland and distribute it across the Prairie.
- **Sweetwater Canal Removal** – Existing dikes and dredged material from the canal will be used to fill the canal from the Sheetflow Distribution Channel to Alachua Sink (13,000 feet).
- **Wetland Restoration Area** – Existing natural prairie wetlands will receive water from the Sheetflow Distribution channel and reduce nutrients to background levels.

Public Use

The public use portion of the site consists of trails, boardwalks and berms, observation

Alachua County Development Review Committee Staff Report

towers, an entry building with restrooms adjacent to the parking lot and a visitor's center. The trails, boardwalks and berms will be used to create a self-guided tour designed around a narrative theme of Gainesville's water story. The visitor's center consists of a cluster of smaller buildings: a main hall, restroom, shade pavilion and open air classroom. These structures together total approximately 3,401 square feet. This center is proposed to be within the wetlands and the will consist of raised, pole built structures and have been sited to minimize any disturbance in the area. There will also be a 1,469 sf entry building adjacent to the parking area (outside of the wetland line) that will contain restrooms.

The applicant also proposes to locate an approximately 1,194 sf security residence in the upland portion of the site. Per ULDC 404.25 security quarters are allowed as an accessory use for government facilities subject to site plan review. During the preliminary plan review, staff recommended that the security quarters and any drainfields only be located in the upland portion of the site outside of natural areas and staff has worked with the applicant to ensure that the proposed location is beneficial to provide security for the site and also be appropriately sites.

The project footprint is located within non-forested areas to the greatest extent possible to reduce impacts to the higher-quality forested systems, avoid cultural areas along the prairie rim, and reduce grading requirements. As a result, the project occurs primarily within low- to medium quality, early successional wetlands that is former cattle pasture.

The project will be constructed in phases. The sediment basin, trash removal basin, forebay, wetland cells, maintenance access driveway, utilities, parking lot, berm trails, and seven shade structures will be constructed with the first phase. The wetland boardwalk, entry complex (adjacent to parking area) and wastewater system, visitors center, prairie tower, and the security residence will be constructed at a later date depending on financing. Only building permits and related permits to the wastewater system should be needed for the later phase.

Wetland Impacts

Approximately 205 acres of wetlands are expected to be impacted, either temporarily or permanently, during construction of the project. The majority of these impacts will be temporary wetland impacts that will convert an existing wetland type to a new wetland type. These temporary wetland impacts include 99 acres of wetland impacts to construct the Enhancement Wetland, 21 acres of wetland impacts to construct the deep zones within the Enhancement Wetland, and 23 acres of wetland impacts to construct the Sheetflow Distribution Channel. Some of the wetland impacts will be permanent impacts that will convert existing wetlands to uplands.

Alachua County Development Review Committee Staff Report

A Uniform Mitigation Assessment Methodology (UMAM) analysis was performed during the initial site planning to determine the approximate functional gain and functional loss that would result from the Sheetflow Restoration Project. The UMAM analysis indicated that the project will result in greater wetland function gain than functional loss.

A more detailed analysis of consistency with Alachua County wetland policies and land development code is provided below with the consistency analysis for the Comprehensive Plan and Unified Land Development Code.

CONSISTENCY ANALYSIS:

Following is an analysis of the consistency of the proposed plan with the applicable policies of the Comprehensive Plan and Land Development Regulations.

COMPREHENSIVE PLAN:

CONSERVATION AND OPEN SPACE ELEMENT

The subject property is located within the Preservation Future Land Use Category. Conservation and Open Space (COSE) Element Policy 3.2.1 states that Preservation areas shall consist of publicly owned lands, including lands owned and managed by non-profit organizations, which are intended for use as natural reserves or managed conservation lands for the preservation of natural resources in perpetuity. This property is publicly owned and is intended to be used as managed conservation land.

Conservation and Open Space Element (COSE) Policy 4.7.4 states that development activity shall not be authorized in wetlands or wetland buffers except when all of the following conditions are met:

(Response to each condition is in *italics*)

- (a) The applicant has taken every reasonable step to avoid adverse impact to the wetland and buffer; and

This project is a wetland restoration project in order to improve water quality and by nature impacts the existing wetland. The structures that are surface-water dependent such as the sediment basin, trash removal facility, overflow structures, water control structures are located within the wetland. The visitors' center is also proposed in the wetland and staff is of the opinion that it serves an

Alachua County Development Review Committee Staff Report

overriding public interest due to its educational component. The structures that do not meet these criterion, (septic systems, security quarters, parking area) are proposed to be located on the upland portion of the site outside of the wetland area, thus avoiding adverse impacts for these items.

- (b) The applicant has taken every reasonable step to minimize adverse impact to the wetland and buffer; and

Overall impacts to the site will be minimized. The project components that are not surface-water dependant such as the visitors center that are proposed to be located within the wetlands will be constructed on raised platforms on posts/pilings. A pier foundation will greatly minimize building impact and allow water to move unhindered with the natural patterns of the site.

- (c) The applicant has provided appropriate mitigation for adverse impact to the wetland and buffer; and

Whenever mitigation is required, state law requires a Uniform Mitigation Assessment Method (UMAM) pursuant to Chapter 62-345, F.A.C. This analysis provides a detailed assessment of wetland functional losses, functional gains, and functional net change. The proposed restoration project will result in a wetland gain of 144.75 acres.

- (d) The applicant shows that one of the following circumstances applies:
- 1) Minimal impact activity; or
 - 2) Overriding public interest; or
 - 3) All economically beneficial or productive use of the property is otherwise precluded.

The proposed application meets the overriding public interest circumstance. The purpose of the project is to improve water quality in the Floridan Aquifer and on Paynes Prairie by restoring the natural sheetflow of the Sweetwater Branch. Additionally, the educational purposes of the visitors' center serve a public purpose.

COSE Policy 4.7.5 requires that structural and hydrologic alterations to wetlands be designed to ensure that natural hydroperiods and functions are maintained. The purpose

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of this project is to restore the historic natural sheetflow of the Sweetwater Branch by removing the constructed canal that leads directly to the Alachua Sink.

COSE Objective 3.4 and its policies describes the development review process for Preservation lands with the objective to protect natural resources from activities that would significantly damage the ecological integrity of these areas. Policy 3.6.5 provides that the preservation of conservation areas shall be required on all development sites to the greatest extent possible, consistent with standards which are outlined subsequently in this Element.

Further, policy 3.6.6 states that development on land that includes or is adjacent to conservation or preservation areas shall exhibit best environmental management practices with the emphasis on design with nature, e.g. in the context of natural features of the landscape, such as topographic and stormwater features, vegetative edges, and soil types to avoid and minimize adverse environmental and visual impacts. The major criterion for approval shall be the continued functions, with minimum disturbance, of the ecosystem which the development is impacting.

The proposed Final Development Plan complies with these policies; the ecological integrity and the preservation of conservation areas is maintained to the greatest extent possible. Overall improvements to wetland include a greater wetland function gain than functional loss according to the UMAM analysis.

UNIFIED LAND DEVELOPMENT CODE:

ZONING DISTRICT AND USE REGULATIONS

The site is located in the Conservation, C-1 zoning district, which is a special purpose zoning district. The C-1 zoning district implements the Conservation Land Use designation and those properties which have natural limitation to development because of the sensitive environmental character (403.20). Development in the C-1 conservation district is permitted only as provided in Section 403.20 consistent with the land use designation and in accordance with natural and historic protections in Chapter 406. Per the Use Table in Chapter 404, Article 2, Public Parks are a permitted use within the C-1 zoning district. Unified Land Development Code (ULDC) Section 403.20 provides some standards for development in this zoning district, but they pertain to single family residences. The proposed development was therefore reviewed primarily for consistency with the natural resource protections of Chapter 406 and other related regulations for development in Chapter 407.

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SURFACE WATER AND WETLAND GENERAL APPROVAL CRITERIA

ULDC Section 406.44 provides general approval criteria for projects affecting surface water and wetlands.

The response to each criteria is provided in *italics*.

- (a) There shall be no net loss of wetland values and functions.
The restoration project will result in a wetland net function gain of 144.74 acres according to the UMAM analysis.
- (b) The project is designed to minimize adverse impacts regarding the conservation of populations of fish or wildlife or their habitats.
An objective of the project includes restoring hydrologic and wildlife habitat in approximately 1,300 acres of the Paynes Prairie wetlands by re-establishing the Sweetwater Branch historic sheetflow conditions. The project will not have significant adverse impacts regarding the conservation of population of fish or wildlife or their habitats.
- (c) The project is designed to control and will not cause excessive erosion.
An intensive erosion-control plan has been reviewed by staff. The plan was designed using the Erosion and Sediment Designer and Reviewer Manual, June 2007. The final development Plan includes a stormwater-pollution-prevention plan, construction phasing, and erosion- and sediment-control plans and details and all have been reviewed by staff.
- (d) The project will not adversely affect commercial or recreational fisheries or their habitat.
There are no commercial or recreational fisheries within the vicinity.
- (e) Listed species and/or their critical habitats will not be adversely impacted.
The Paynes Prairie Park State Preserve (PPPSP) Unit Management Plan lists 13 designated plant species as occurring, likely to occur, or known to occur on Paynes Prairie. Of these listed species, the silver buckthorn and Godfrey's swamp privet are known to occur in the uplands along the north rim of Paynes Prairie. The Preserve staff has mapped most of the known individuals of silver buckthorn with GPS and neither this species nor the swamp privet were encountered during the field assessments for this Project.

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The PPPSP Unit Management Plan cites 47 listed species of animals (2 fish, 1 amphibian, 4 reptiles 32 birds, 8 mammals) as occurring or likely to occur within the preserve. Project construction will not cause permanent adverse impact to any of these species. In fact, the project will actually improve habitat for many of them.

- (f) The project will not adversely impact historic resources or paleontological resources.

One of the goals of the PPPSP management plan is to protect cultural resources from damage. The main way this is accomplished is by avoiding ground disturbance and, when this is unavoidable, conducting ground-disturbing activities in accordance with the State of Florida Division of Historical Resources (FDHR) policies. The project was designed and constructed in accordance with FDHR policies.

- (g) Project alternatives and modifications to lessen impacts have been determined to be infeasible, i.e. there are no reasonable design alternatives or modifications available to lessen impacts.

The conceptual design of the project underwent several revisions before evolving into the currently preliminary design that was submitted to the County. The preliminary engineering report describes several of the revisions made to maximize the project benefits while minimizing impacts.

- (h) The project does not conflict with any other federal, state or local designed preserve or conservation area.

The project is located in an easement provided by the FDEP on the PPPSP. The project does not conflict with the preserve as it will make it possible for the PPPSP to achieve its long-term habitat management plan for this portion of Paynes Prairie by restoring hydrologic conditions and reducing existing and future nutrient loads to the prairie, thus facilitating establishment of a more diverse emergent wetland plant community adapted to lower nutrient levels.

- (i) Any structure proposed in, on or over surface water is water-dependent. If not water-dependent, the structure must clearly demonstrate an overriding public purpose.

The water-dependent structures for the project include the sediment basin and trash removal facility, the overflow structures, and the water control structures for the wetland.

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The project also includes public-access components that are not surface-water depending, including a Visitors' Center proposed to be located within the wetland. The Visitors' Center will include a main hall, outdoor classroom, gazebo and restrooms. There is an opportunity for ecological learning by making the entire water process visually accessible to the community of Alachua County and others thus serving an overriding public purpose. Structures within the wetland will be constructed on posts/pilings. A pier foundation will greatly minimize building impact and allow water to move unhindered with the natural patterns of the site.

The structures/disturbances that are not water-dependent nor serve an overriding public purpose will be located outside of the wetland area. These include the septic systems for the restrooms, a security residence and parking area.

- (j) There will be no violation of water quality standards; the project complies with state and local water quality rules and standards set forth in Florida Administrative Code... and the Alachua County Water Quality Code.

A fundamental tenet of the proposed sheetflow restoration on Paynes Prairie is that the water quality from Sweetwater Branch entering the Prairie must be consistently improved to a target level that will enhance and promote the eventual reestablishment of desirable native plant communities in the northern portion of Paynes Prairie. The project provides additional protection to the Floridan Aquifer by eliminating the connection of the Sweetwater Branch to Alachua Sink.

- (k) In conjunction with other projects, the project will not result in cumulative impacts that in the aggregate fail the criteria of this Section.

The primary goal of this proposed project is to restore sheetflow of Sweetwater Branch onto Paynes Prairie and restore over 1,300 acres of impacted wetlands. By accomplishing this goal, the Project provides numerous benefits to the environment, the residents, and visitors to the City and Alachua County. In conjunction with other projects, the project does not result in cumulative impacts that in the aggregate fail the criteria in Chapter 406 of the ULDC.

Additionally, Section 406.47 established when to evaluate mitigation proposals. Mitigation may be permitted for new wetland loss only where the applicant demonstrates the activity cannot be located on an upland portion of a parcel and that certain conditions apply. By nature, this activity must take place within the wetland. The project also meets the overriding public interest criteria by improving the water quality.

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CONCURRENCY MANAGEMENT

Roads

The active area of the proposed project site is approximately 2 acres. Using the City Park ITE Code (Code #411) referenced by the applicant, there will be an estimated 183 trips per day to the site. There is adequate capacity on SR 331 (Williston Road) between US 441 and East University Avenue to accommodate the proposed traffic impact. Transportation impacts will be mitigated through payment of the transportation impact fee due to the fact that this property is outside the Urban Cluster. The impact fee will be assessed at the issuance of the building permit for the visitor center and will be based on the active use area as is typical for park sites.

A Final Certificate of Level of Service Compliance will be issued with approval of this development plan. The Final Certificate of Level of Service Compliance is valid for one year.

Schools

The proposed Final Development Plan will consist primarily of non-residential uses and therefore will not affect school concurrency. The proposed security dwelling, an individual single family residence, is exempt.

GENERAL DEVELOPMENT STANDARDS

Street Network Standards

There is one point of ingress/egress to this site off of Williston Road. A public parking lot is proposed and the access leading to this is the only public vehicular access permitted. An unimproved dirt road currently exists along the northwestern boundary of the project which will be upgraded and used to access the proposed sedimentation basin and trash removal facilities, thereby avoiding additional impacts created by constructing a new road. This access roadway will not be open to the public.

Per 407.140 (a)6, for a development containing only one access, an emergency service access shall be provided unless a waiver is granted. The DRC may grant a waiver from the requirement for a secondary access when not feasible due to tract dimensions, topography, or existing development patterns. Staff supports a waiver to this requirement due to the environmental constraints of the project. Further, the Department of Fire Rescue does not require secondary access for this project.

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Parking

There are no parking standards for Public Parks in the parking table of Chapter 407, Article 2. Per 407.14, for uses not listed in the Table 407.14.1, the number of required spaces shall be based on a study that addresses the type of use and estimated total number of trips during peak conditions; estimated parking duration; and estimated number of employees.

The applicant submitted information that states that there will be an estimated 183 trips per day to the site based on the Trip Generation calculation methodology in the latest edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Handbook*, ITE Land Use Code 411 (City Park). Given this number of trips, the parking lot should have between 26 and 52 parking spaces. The proposed design provides 41 parking spaces, which includes two designated handicap spaces. In addition to the 41 parking spaces, a pull-off area can accommodate two school buses parked parallel to the entry drive. Staff supports this methodology.

The final development plan proposes to pave the drive aisle for the parking area and the parking spaces will be aggregate (limestone/recycled concrete).

Building Elevations

Building elevations were provided for the entry building, solar towers, shade pavilions, security residence, and the visitors complex. All structures meet the requirements of Chapter 407, Article 10.

Lighting

Parking lot lighting is proposed and the photometric plan submitted indicates that illumination is in compliance with 407.21 (c).

Landscaping

No project boundary buffers are required per ULDC Table 407.43.1. Conservation and Open Space Element Policy 3.6.8 states that development occurring along the edges of conservation and preservation areas shall be designed to protect and minimize the impact of development on conservation areas through the use of natural vegetative buffers and that buffer widths shall be determined on a case-by-case basis depending on what is demonstrated to be scientifically necessary to protect natural ecosystems from significant adverse impacts. Based on the surrounding land use, staff does not recommend specific project boundary buffers. The proposed development plan

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complies with this policy by utilizing boardwalks, raised buildings and low impact development which minimize the impacts on conservation areas.

An arterial street buffer is required per 407.43 (c) 2. However, due to the right-of-way, the subject property is quite a distance from the current arterial roadway. Additionally, there is a power-line easement that prohibits the planting of tall trees and shrubs. The applicant is therefore requesting alternative compliance per 407.48. Low shrubs are proposed to be planted in the power line easement that will screen the parking area, but no tall shrubs or trees are proposed for this area. Staff supports this request.

Thirty percent of the site is required to have canopy coverage within 30 years per 407.43.2. The applicant is requesting alternative compliance per 407.48 due to the nature of this project. Native aquatic and wetland plants suitable for emergent marsh habitat are proposed for much of this site and staff finds that this fulfills the intent and purpose of the Alachua County Comprehensive Plan and of Chapter 407, Article 4 more effectively than would adherence to the strict requirements. Staff supports this request.

No final certificate of occupancy shall be issued until the County has granted final approval and acceptance of the installed landscape as well as the protection of existing native vegetation. Final approval shall include as-built landscape plan certification from a registered landscape architect certifying that the landscaping is installed and functioning as intended, and that all of the provisions of this Chapter have been met. The land owner shall submit a Certificate of Compliance, in a form acceptable by the Director, to the County as a condition of issuance of a Certificate of Occupancy.

Water and Wastewater Services

This project is located just outside of the Urban Cluster line and the applicant is requesting to extend water services. There is an existing 12-inch wide water main within the eastern right-of-way of Williston Road immediately adjacent to the subject property. The proposed extension will consist of a small-diameter service line (2 to 4 inches) that will provide water to the public-use facilities and to the maintenance area where Sweetwater Branch enters the project site.

ULDC Section 402.139(b)(3) provides criteria and standards for approval of water extensions outside of the urban cluster line and the Board of County Commissioners approved extension of water service with the approval of the Preliminary Development Plan.

This project has three sources of sanitary sewage (Visitors Center, Security Residence, and Entry Building). The sanitary collection and treatment system for each source