



CITY OF GAINESVILLE

Public Works Department

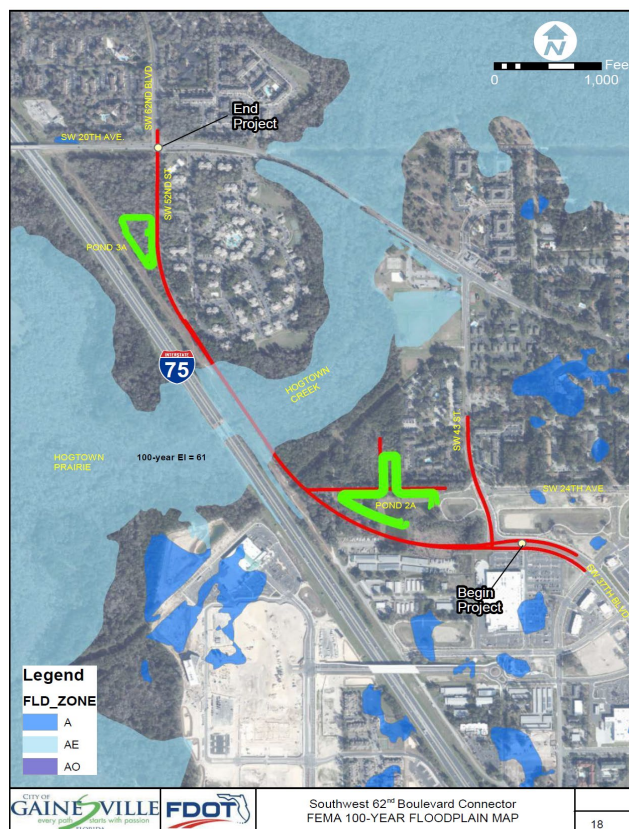
September 8, 2021

Mark Brown, CPSS, Sr. PWS
Interim Natural Resources Program Manager
Alachua County Environmental Protection Department
408 W. University Avenue
Gainesville, FL 32601

**Subject: Proposed SW 62nd Blvd. Connector Project
Countywide Wetland Protection Code
Avoidance, Minimization and Mitigation Plan**

Dear Mr. Brown:

This technical correspondence is provided to address the proposed wetland and buffer impacts and mitigation issues associated with the subject project related to County Wetland Protection Code. The project has been under development for a couple of decades as a collaboration and coordination between the City of Gainesville (COG), Florida Dept. of Transportation (FDOT) and Alachua County (County) (collectively referred to as Agencies) for the proposed construction of the SW 62nd Blvd. Connector (Connector).



Project Background

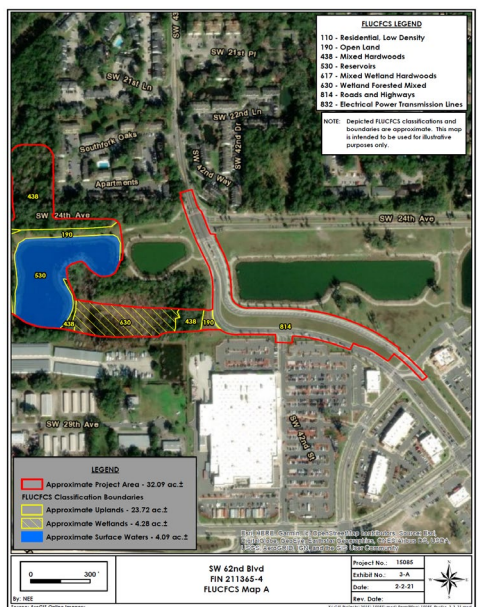
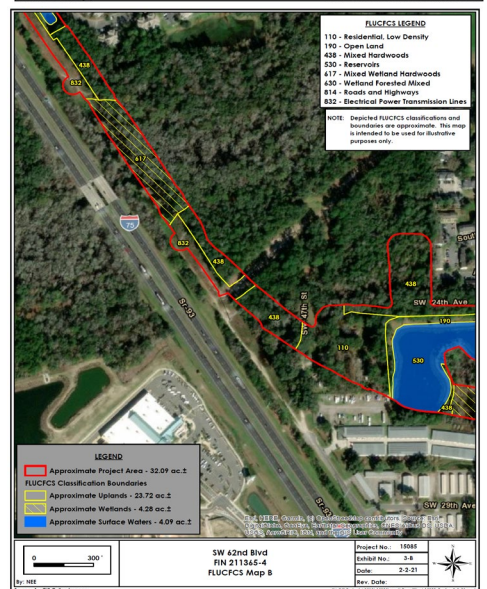
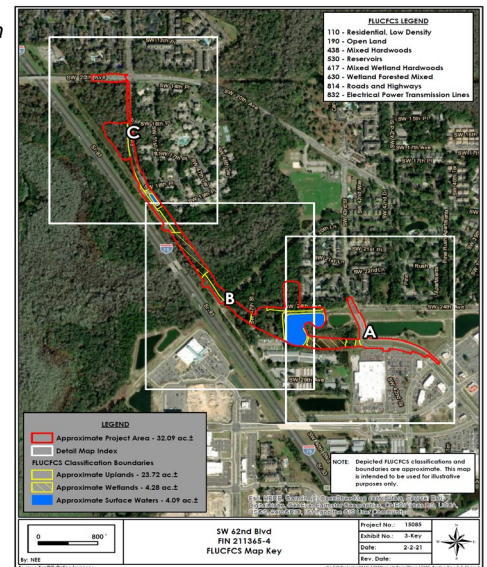
The purpose of the Connector project is to provide an interconnected, multimodal roadway grid system in accordance with the City's and County's Comprehensive Plans. Additionally, the project will provide traffic congestion relief to I-75, SR 121 (SW 34th Street), SR 24 (Archer Road), CR 2074 (SW 20th Avenue), and SR 26 (Newberry Road). As part of Agencies Preliminary Design & Environment (PD&E) study process from 2007 through 2012, evaluation included eleven route alternatives as well as several potential locations for stormwater and floodplain basin sites. The original study area was generally bounded by Archer Road to the south, and the intersection of SW 62nd Blvd. and Newberry Road to the north. Roadway alternatives differed in route, lane number, median width, and incorporation of Bus Rapid Transit (BRT) lanes. The PD&E process included an extensive environmental assessment including a Wetland Evaluation Report (WER) and Endangered Species Biological Assessment (ESBA). The PD&E study led to the preparation of a Preliminary Engineering Report (PER) completed in 2016, followed by the construction plan design phase conducted during the last few years. The selected alternative corridor alignment (above aerial) proposes a 1.1 mile-long project oriented in a generally southeast-northwest direction. This alignment begins at the western terminus of Clark Butler Boulevard and connects to the southern terminus of the existing SW 52nd Street, paralleling I-75 for the northernmost 3,000 feet.

Alternatives Assessment – Wetland & Buffer Issues

The various alternative alignments and facility dimensions evaluated during the PD&E phase included many components and options to possibly avoid and minimize encroachment into wetlands and associated buffers. Since the majority of the existing roads within the study area have existing residential improvements adjacent to the public right-of-way (R/W), there would be substantial legal and financial limitations in being able to justify and pursue condemnation and demolition of residential structures to expand R/W in order to accommodate construction of additional lanes along the existing routes. The only undeveloped area in the potential route options is associated with the Hogtown Creek wetland floodplain that also includes the adjacent COG Forest Park (previous and right aerials, delineated “B” area). Therefore, even if the selected alternative included additional lanes of SW 20th Avenue, this would result in additional encroachment into the Hogtown Creek wetland and buffer compared to the selected alignment.

Located between the selected alignment and I-75 within proximity of the Hogtown Creek floodplain, there is an existing high voltage powerline that requires a clear zone of vegetative management; particularly minimizing coverage of shrubs and trees. Since construction of roadway facilities cannot be conducted directly under the powerline, this limitation requires the selected roadway alignment to shift east of the powerline. As a result, this will encroach up to 160 ft. within the outer perimeter of the forested canopy of the creek wetland floodplain and associated wetland buffers (right aerial, Map B). However, the creek wetland and buffer encroachment has been minimized by selecting a design for a two-lane facility in comparison to the four-lane design alternative. This reduction in lanes will also result in a more narrow 270-ft. long, 60 ft. wide two-lane bridge w/attached multi-use trail to cross Hogtown Creek.

The second wetland crossing proposed by the Connector facility is located east of an existing stormwater basin (blue highlight area on lower right aerial, Map A). As indicated on the aerial, this wetland has been surrounded by the construction of two stormwater basins, industrial complex to the south and Clark Butler Boulevard to the east. The habitat of this wetland transitions through various cycles due to altered hydrology as a result of changes of adjacent land uses. Long durations of drier soil conditions allows tree seedlings to naturally generate, followed by short durations of flooded conditions that have resulted in tree mortality. As also indicated on the right aerial, one of the evaluated alternatives to avoid crossing this second wetland included aligning the Connector to match the current intersection of SW 24th Avenue and Clark Boulevard. Unfortunately this option could not be accommodated due to the limited ability to achieve safe roadway curvature geometry for the Connector. There would also be unsafe traffic flow and volume conditions due to restrictions associated with sequencing of traffic light signals.

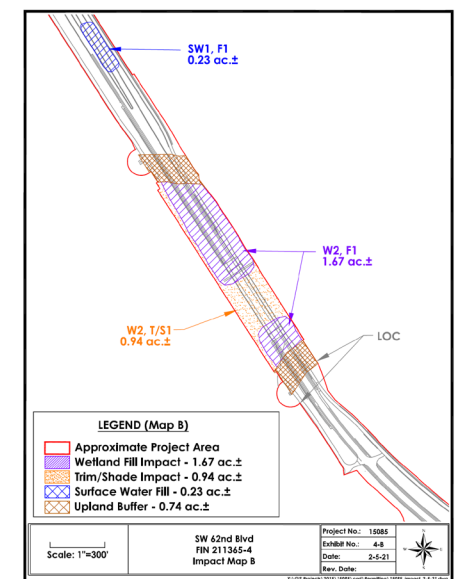
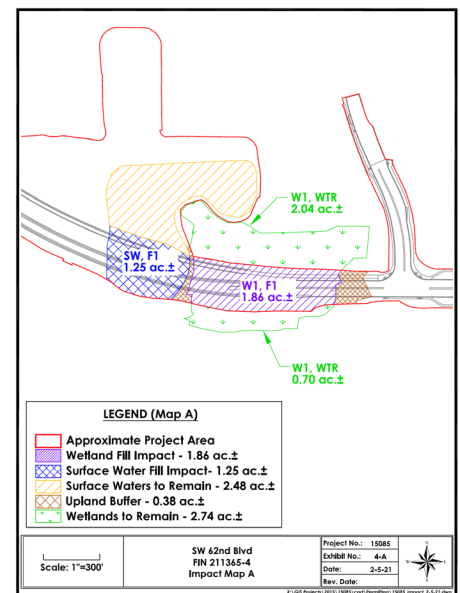


Final Design – Wetland & Buffer Impacts

As a result of almost two decades of evaluations and various designs, the selected design for the Connector is an open swale, two-lane, minor arterial roadway with 11-foot travel lanes and 10-foot outside shoulders (7 feet paved bike lanes) within a roadway right-of-way (R/W) that varies from 100 feet to 154 feet. Stormwater runoff will be collected in roadside ditches and curb inlets and conveyed to stormwater basins. The northern and southern roadway termini will both have raised medians and 4-foot outside paved bicycle lanes with Type F curb and gutter to match the existing roadway sections of Clark Butler Boulevard and SW 52nd Street. A 10-foot multi-use path will be constructed along the east side of the Connector including through the bridge crossing. The proposed project also includes reconstruction of approximately 500 feet of existing SW 43rd Street, drainage improvements along SW 20th Avenue, landscaping, lighting and a new signalized intersection at SW 62nd Boulevard Connector/Clark Butler Boulevard and SW 43rd Street. The project will also include relatively short lengths (less than ¼-mile) of reconstruction, widening, and resurfacing work along Clark Butler Boulevard and SW 52nd Street. The project will connect the Butler Plaza development to SW 20th Avenue, and will provide the missing link to complete SW 62nd Boulevard as a continuous north-south link between Archer Road and Newberry Road. The project will also improve access to the commercial district along Archer Road for residents who live near SW 20th Avenue and west of I-75. This project is classified as a Local Agency Program (LAP) project that is primarily funded with federal and state funds administered by the FDOT, and designed in accordance with FDOT criteria.

As a result of the design, the proposed wetland and buffer encroachments have been minimized to the degree possible while achieving FDOT standards of safe roadway design requirements. As depicted on the right figures (Maps A and B), these encroachments include a combination of direct encroachments such as dredging/filling, trimming and shading of vegetation beneath the bridge; as well as what are referred to as “secondary impacts.” Secondary impacts are associated with wetlands that will remain during post-construction however will potentially have various changes to habitat conditions and wildlife use as a result of the proposed facility. For instance, as depicted on the right center figure (Map A), Wetland 1 will be bisected by the Connector. So the 2.74 acres of “Wetlands to Remain” area (green hatching) bordering north and south of the proposed Connector R/W are evaluated and quantified as secondary impacts to determine appropriate mitigation. For the Wetland 2 Hogtown Creek crossing (Map B - below), the area of secondary impacts has been quantified as the wetland areas located 250 ft. east of the delineated direct impacts as well as remnant linear wetland between the proposed Connector R/W and I-75 R/W. The total direct wetland impacts associated with the proposed alignment is approximately 4.5 acres determined by the uniform wetland mitigation assessment method (UMAM) and secondary impacts quantified as 6.8 acres (total 11.3 acres).

As also indicated, there will be encroachment associated with modifying the existing stormwater basin just west of Wetland 1. The storage capacity lost by



modifying the basin will be compensated by excavating and extending the same basin northward. There will also be 1.1 acres of encroachment within the 75 ft. buffers of the two wetland crossings.

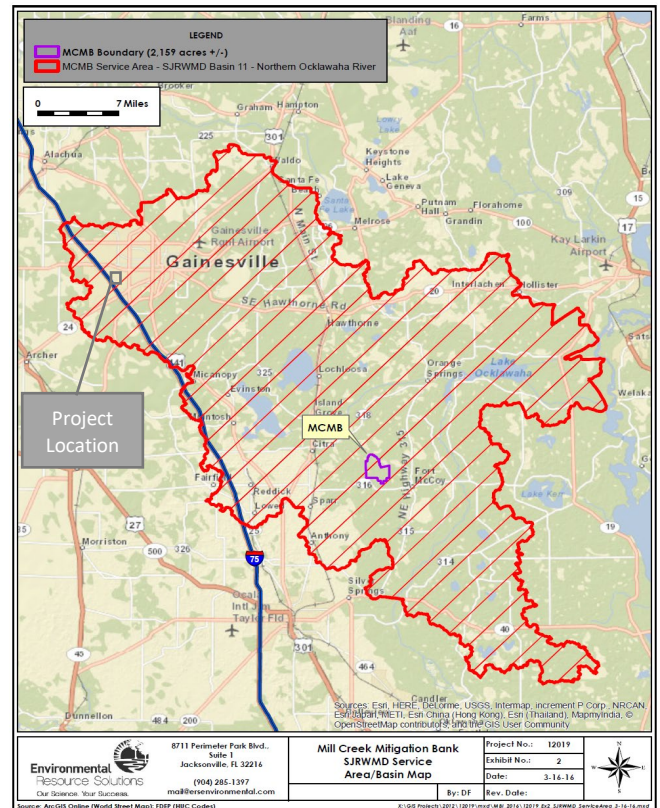
Proposed Wetland Mitigation

As discussed, there are several challenging limitations with attempting to pursue and conduct wetland and buffer mitigation associated with constructing public linear infrastructure projects. Particularly for new alignment projects proposed within an existing developed area since there are restricted R/W options and being able to locate appropriate and adequate habitat acquisition and/or enhancement options. The following are the major issues that have resulted in particular limitations in the evaluation and selection for mitigation options to appropriately compensate for wetland impacts proposed for the Connector:

- **Existing Public Lands/Parks** - After extensive evaluation, there are minimal alternatives for necessary habitat enhancement and restoration opportunities within COG's parks and public lands that could appropriately and adequately fulfill mitigation requirements for the proposed wetland impacts associated with the Connector. However, there is a COG park with a desired wetland habitat enhancement that will be detailed further below (Bivens Arm Nature Park).
- **Potential Land Acquisition** - As previously indicated, FDOT will be cost-sharing the construction of the Connector including the costs associated with wetland mitigation. However, FDOT confirmed for cost-share reimbursement, the COG would not be able to independently acquire additional land rights to fulfill wetland mitigation requirements and if the COG did so, the funding for the project would be pulled. If there were no other mitigation options available, FDOT could acquire property on the behalf of the COG but only at the COG's expense through the federal procurement process which requires 18-24 months. Acquisition of land rights would require the COG requesting an extension on FDOT funding. FDOT recognizes that local government-sponsored transportation projects may have to adhere to local government regulations. However, for FDOT sponsored and co-sponsored projects, FDOT is only required to follow federal and state environmental regulations. Any additional requirements and associated funding a local government has to expend to address local regulations will not be addressed or reimbursed by FDOT. Since mitigation banks are authorized by the State Legislature as appropriate and allowable mitigation alternative that are also supported and extensively utilized by FDOT-sponsored projects, it is highly improbable an extension would be granted by FDOT to allow the COG to evaluate, pursue, negotiate, acquire, design and permit an appropriate mitigation project. In turn, such a delay would severely jeopardize the funding of the project since FDOT would probably designate the allocated Connector funds to other projects.
- **Mitigation Bank** - In 2018, the COG proposed fulfilling a portion the anticipated Connector mitigation requirements by purchasing mitigation bank credits. Since there was not an authorized mitigation bank within the same watershed basin as the Connector or within Alachua County, the Florida Gulf Coast Mitigation Bank was the selected choice. This bank location is located over 30 miles west of Alachua County near Cedar Key, and doesn't have a service area boundary that includes the watershed of the proposed wetland impacts. The Countywide Wetland Protection Code [CWPC, Section 77.20 (e)] states *"mitigation may be located in Alachua County and, to the maximum extent practicable, within the local watershed in which the impact occurs."*

Last year the Mill Creek Mitigation Bank was permitted by the SJRWMD. The bank's watershed service area (right figure) includes the proposed Connector alignment, and the bank is located only three miles south of the Alachua County boundary.

- SJRWMD Permitting** – The referenced difficulty in attempting to locate and/or acquire appropriate mitigation options within Alachua County are further demonstrated by the limitations that can be implemented through the required state permitting process. The SJRWMD has confirmed that purchasing credits from the Mill Creek Mitigation Bank will be an accepted alternative to provide mitigation for the wetland impacts associated with the Connector. Since the COG and ACEPD staffs have concurred with the SJRWMD in terms of wetland delineations, proposed wetland impacts, associated habitat conditions and required alternative avoidance & minimization justification; the same associated wetland mitigation requirements would apply for local and state regulations. As stated in F.S. 373.414(1)(b)(4), *“if mitigation requirements imposed by a local government for surface water and wetland impacts of an activity regulated under this part cannot be reconciled with mitigation requirements approved under a permit for the same activity issued under this part, including application of the uniform wetland mitigation assessment method (UMAM) adopted pursuant to subsection (18), the mitigation requirements for surface water and wetland impacts shall be controlled by the permit issued under this part.”* As you are aware, the Hogtown Creek watershed is considered a “stream-to-sink” basin, so wetlands within this basin are not considered Waters-of-the-US (WOTUS). So the federal wetland regulatory agency (USACOE) does not apply Section 404 permitting jurisdiction in this basin. However, federal wetland requirements place hierarchy preference of designating and permitting mitigation to be conducted at mitigation banks. As noted, the Mill Creek Mitigation Bank is only located a few miles south of the Alachua County boundary. This is a very minor distance compared to the locations of other mitigation banks in north Florida. As much as a mitigation bank within Alachua County would be preferable to address the location stated in the CWPC; as stated in F.S. 373.4135(2), *“local governments shall not deny the use of a mitigation bank or offsite regional mitigation due to its location outside of the jurisdiction of the local government.”* Even if the COG had been fortunate to locate appropriate mitigation options within existing public lands, compared to a permitted mitigation bank, there would be a high risk that such options would not be deemed sufficient and/or appropriate by SJRWMD.

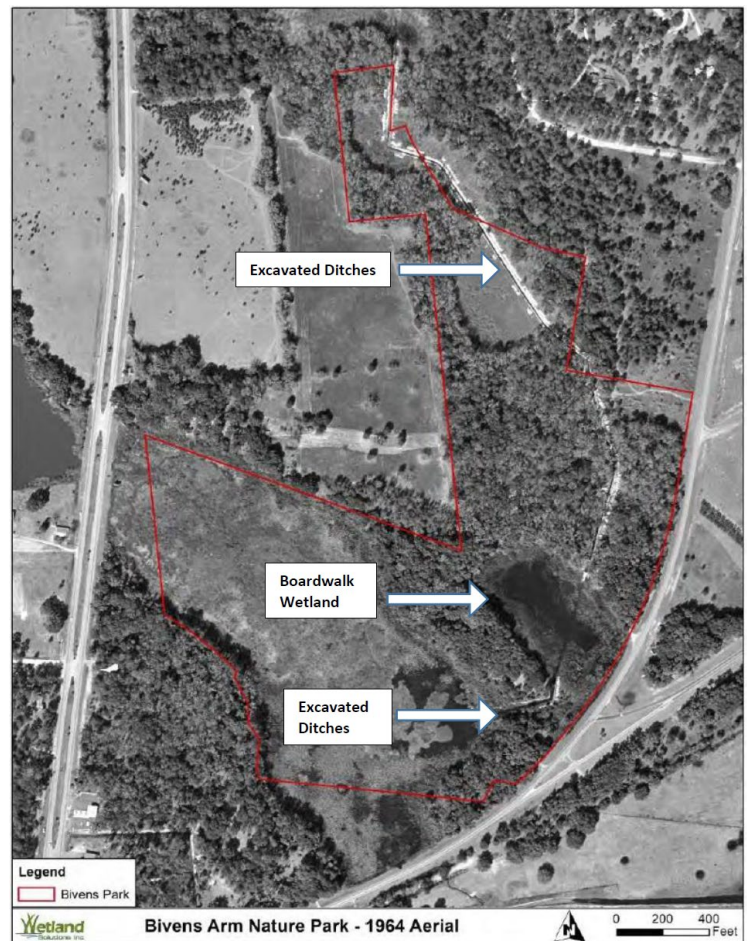
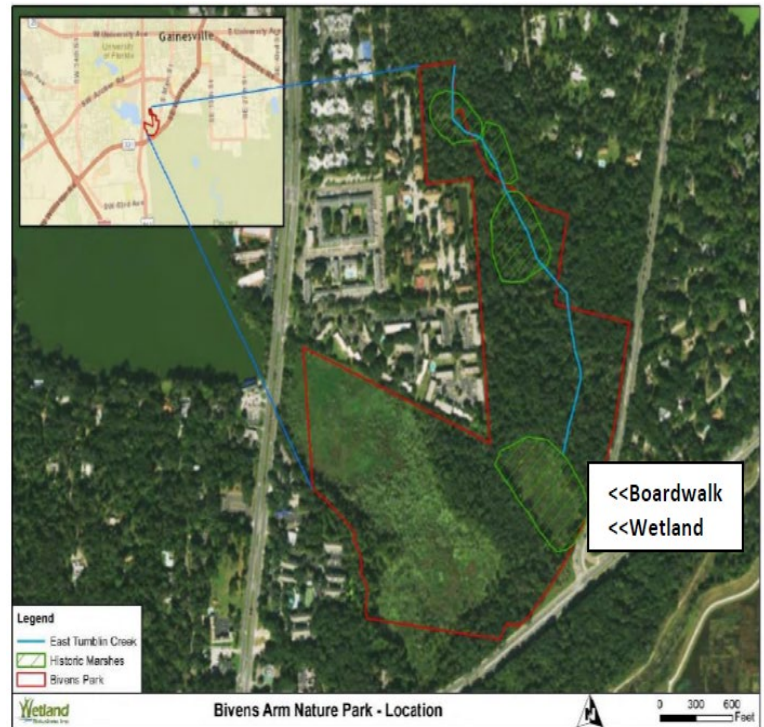


- Perpetual Mitigation Obligations** - As required for SJRWMD, the County and COG, permitting regulations associated with conducting wetland mitigation activities require perpetual obligations of routine habitat maintenance, monitoring and management responsibilities. The associated expenditures that would have to be annually budgeted for these mitigation activities further increases the commitment, responsibilities and expenditures of the COG. In addition, based on the evaluation of various limited habitat enhancement opportunities within COG properties, these commitments would have to be extended to include multiple sites to fulfill mitigation requirements. In turn, the associated costs of perpetual obligations would increase. Purchasing mitigation bank credits would be a single expenditure without the perpetual liabilities and responsibilities associated if the COG pursued and conducted mitigation elsewhere.

Recommended Wetland Mitigation - As a result of these and other reasons, the proposed mitigation for the wetland impacts associated with the Connector includes purchasing credits from the Mill Creek Mitigation Bank. In collaboration and coordination with ACEPD and SJRWMD, the quantity of credits will be evaluated and determined during the permitting process. Based on the UMAM quality assessment of the proposed total of 11.23 acres of direct and secondary wetland impacts, the preliminary estimate of required credits will probably be approximately 4.5 credits. As part of the cost-share agreement, FDOT will reimburse the COG for the expenditures associated with purchasing the mitigation bank credits.

**Countywide Wetland Protection Code
 Proposed Wetland Buffer Mitigation
 Bivens Arm Nature Park – Boardwalk Wetland**

The Countywide Wetland Protection Code (CWPC) requires an average 75 ft. and minimum 50 ft. wetland buffer measured from the delineated boundaries of wetlands and/or surface waters. This buffer requirement exceeds the minimum 25 ft. wetland buffers required by the state (FDEP, WMD's). As previously noted, there will be an estimated 1.1-acres of proposed buffer encroachment associated with construction of the proposed Connector. As with the Connector's wetland impacts, there are not adequate or appropriate on-site mitigation options for proposed buffer encroachment. However, in addition to fulfilling the wetland mitigation requirements through the Mill Creek Mitigation Bank, the COG proposes to also conduct habitat improvements within public lands located in Alachua County to provide appropriate compensation for the proposed buffer encroachment. Based on the evaluation of dozens of COG-Parks property, it has been determined that the most feasible opportunity for habitat improvements is located at the Bivens Arm Nature Park (BANP, right aerals). The COG acquired two parcels associated with the 81-acre BANP; purchasing 57 acres in 1981 and receiving 24 acres in 2004 via donation. As indicated on the previous aerals, a series of large drainage ditches were excavated from 1961-64 that drained four marshes into the eastern portion of Bivens Arm Lake. Also referred to as the East



Tumblin Creek by-pass channel, these ditches have been effective in altering the surface and groundwater hydrology. As a result, the four wetlands have transitioned from historic marsh habitat to combinations of shrub and forested wetlands. This has altered the habitat components and wildlife diversity of these ecosystems.

In 2018, the COG Parks, Recreation and Cultural Affairs Department (PRCA) contracted with Wetland Solutions, Inc. to conduct a feasibility assessment and preliminary cost estimate to evaluate various options to restore marsh hydrology and associated vegetative components. The assessment determined that since the three northern marshes are located along the Park's property boundary, it's probable that additional land acquisition and/or drainage easements would be necessary to restore hydrology for those ecosystems. However, the assessment determined that the southern five-acre, "Boardwalk Wetland," could be restored to marsh habitat without additional acquisitions of property or easements. Additional engineering evaluation will be necessary including hydrologic and hydraulic modeling analysis, followed by construction design plans and permitting of the proposed habitat improvements associated with the Boardwalk Wetland.

Prior to commencing hydrologic restoration, field activities will include removing the majority of generated shrubs and trees within the interior of the wetland utilizing combinations of manual, mechanical and herbicide treatments. As indicated on the aerial and structure figure below, an overflow weir structure will be installed where the East Tumblin Creek ditch outfalls from the southwest perimeter of the wetland and an inlet structure will be installed upstream to prevent head cut erosion. Flashboard risers will be adjusted in the weir to allow the water levels to be periodically controlled in the Boardwalk Wetland. Prior to dry seasons and droughts, additional flashboard risers will be installed to retain more surface water. This will reduce the ability for shrubs and trees to regenerate while increasing the natural recruitment and generation of desirable herbaceous plant species present within the restored marsh. The restored hydrology and vegetative components increases the desired habitat conditions for wildlife species, while improving water quality and attenuation from upstream contributing basin and increasing groundwater recharge. During the rainy season and flood conditions, risers can be removed to ensure the wetland's surface waters retain appropriate levels for wildlife and minimize potential mortality of certain vegetation species within the marsh and as well as the perimeter of upland hardwood hammock habitat. The COG-PRCA will maintain the restored marsh habitat as part of their regular management practices.

The COG-PCRA. has budgeted up to \$200,000 for the vegetation removal, structure construction and perpetual management of the Boardwalk Wetland habitat. However, the necessary final engineering and permitting

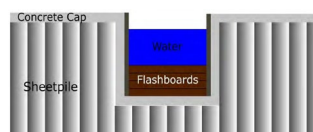


Figure 5-3. Example Ditch Block with Flash Board Riser

associated with the project were not included in the budget scope. As a result, the COG-Public Works Dept. is proposing to allocate the estimated \$100,000 toward this effort. If the consultant's assessment, design and permit estimate is less than the estimate, any remaining funds will be utilized by the PCRA for habitat management at the BANP. This commitment of fund transfer is proposed to be incorporated into an Inter-local Agreement between the COG and Alachua County. The BANP project will be phased to match the funding available, however, grants will be applied for to complete the entire restoration as expeditiously as possible. If for any reason it's determined that the BANP Boardwalk Wetland project cannot be implemented, a contingency option will be incorporated in the agreement to allow the COG utilize the CWPC's in-lieu fee buffer mitigation option and provide the \$100,000 for the County's environmental sensitive lands fund (refer to next section).

Countywide Wetland Protection Code (CWPC) - Criteria

The proposed Connector project design has demonstrated that it sufficiently meets the criteria to allow minimal encroachment of the two wetlands and adjacent buffers, as demonstrated through the avoidance and minimization plan outlined above. To clarify and demonstrate the proposed project achieves the code requirements, below are the individual criteria associated with wetland and buffer encroachment are addressed in ***bold italics***:

Sec. 77.20. - Authorized impacts.

(a) Alteration activities shall not be authorized in wetlands or wetland buffers except when the following criteria are met:

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

The Connector alignment is located within a developed area where alternative route analysis verified additional wetland impacts would be required if constructed elsewhere. The most noteworthy additional impacts for any alternative would be to the Hogtown Creek wetland floodplain.

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

The proposed project designs were narrowed to a two-lane instead of four-lane facility; reducing the encroachment within the two wetland crossings. In addition, the proposed stormwater basin designs were also excluded from wetlands and buffers.

(3) The applicant has provided appropriate mitigation for adverse impacts to the wetland and buffer;

As referenced, the proposed wetland mitigation will include purchasing permit-required credits from the Mill Creek Mitigation Bank. The proposed wetland buffer mitigation will include providing cost-share funds to COG-Parks toward conducting habitat improvements to the five-acre Boardwalk Wetland located at the Bivens Arm Nature Park.

(4) Mitigation may be permitted for new wetland loss only where the applicant demonstrates that the activity cannot practically be located on the upland portion of the parcel or contiguous parcels under common ownership or control. The applicant must demonstrate that one of the following applies:

i. Minimal impact activity; ***Wetland and buffer encroachment is necessary however as noted above, reduced to the least feasible footprint that can achieve the roadway design and safety requirements.***

ii. Overriding public interest; ***The Connector has been through an extensive alternatives evaluation during the last two decades, and considered one of the most critical and necessary public roadway infrastructure facilities within Gainesville and Alachua County.***

iii. All economically viable use of the property is otherwise precluded; ***The proposed Connector facilities will be constructed within a narrow public right-of-way. This right-of-way will not result in restriction for adjacent property owners, and in fact, will increase accessibility for some private and public properties.***

(g) Wetland buffer mitigation shall be provided on or adjacent to the site or offsite or fee-in lieu of land. The order in which mitigation will be considered shall be:

(1) *Onsite restoration or enhancement.*

Due to the limited Connector right-of-way and the quality within and adjacent to the Hogtown Creek wetland floodplain, there are not appropriate on-site habitat restoration or enhancement opportunities within existing public lands.

(2) *Offsite preservation.*

Due to the extended time and limited negotiation options to acquire property as well as limitations for being able to be reimbursed by FDOT, the COG is restricted in being able to acquire property for mitigation options; due to the grant requirements, funding would be pulled if the COG independent acquired property. However, designating \$100,000 toward five acres of proposed marsh habitat restoration within the existing COG-owned Bivens Arm Nature Park would provide an appropriate off-site mitigation alternative to compensate for the proposed encroachment to approximately one acre of wetland buffer.

(3) *Fee-in-lieu of land.* As an alternative to the protection of land, the county may allow contribution of a fee-in-lieu-of-land to the environmentally sensitive lands fund, under which the county shall purchase or manage land to protect natural resources in accordance with standards of this chapter. Where fee-in-lieu of land is allowed, the cash payment shall be equivalent to 150 percent of the average per acre-appraised market value, at the time of permit application, multiplied by the number of acres of regulated buffer area for which mitigation is required, plus estimated total cost of management required to establish the viability of that type of resource.

As referenced, if for some reason additional engineering evaluation determines that restoration within the Boardwalk Wetland at Bivens Arm Nature Park cannot be conducted, the COG-PWD will provide the \$100,000 allocation to the County's environmental lands funds for use as referenced above. Both the Bivens Arm Nature Park and fee-in-lieu options will be finalized as part of a Gainesville and Alachua County Inter-local Agreement.

We hope this information provides sufficient documentation to demonstrate the importance of the Connector project, and fulfills the CWPC requirements and justifications for the proposed wetland/buffer encroachments and appropriate mitigation alternatives. We appreciate the County's assistance and support of the project, and look forward to continued collaboration and coordination.

Sincerely,



Brian M. Singleton, P.E.
City Engineer/Acting Public Works Director
Public Works Department

cc: Stephen Hofstetter, Director, Alachua County Environmental Protection Department
Roxanna Gonzalez, Interim Director, COG Parks, Recreation & Cultural Affairs
Linda Demetropoulous, Nature Manager, COG Parks, Recreation & Cultural Affairs
John Veilleux, PE, Supervising Engineer/Capital Projects, COG Public Works
Alice Rankeillor, PE, Supervising Engineer/Stormwater, COG Public Works