

# SR 400 (I-4) Project Development and Environment (PD&E) Study FM No.: 432100-1-22-01



# Wetland Evaluation Report (WER)

Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway)

Osceola County (92130) and Orange County (75280), Florida

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# 1.0 Summary of Project

The Florida Department of Transportation (FDOT) is conducting an update/reevaluation for the Project Development and Environment (PD&E) studies for the extension of proposed express lanes for State Road 400 (SR 400)/Interstate 4 (I-4). The project limits in the original PD&E studies were:

- West of Memorial Boulevard (SR 546) to the Polk/Osceola County Line, (29.5 miles);
- CR 532 (Polk/Osceola County Line) to West of SR 528 Beachline Expressway (13.7 miles); and
- West of SR 528 Beachline Expressway to SR 472 (43 miles).

The corresponding environmental documents associated with these PD&E studies include: Environmental Assessment/Finding of No Significant Impact (EA/FONSI) for SR 400 (I-4) from West of Memorial Boulevard (SR 546) to the Polk/Osceola County Line [FPN 201210 (1998)] and from CR 532 (Polk/Osceola County Line) to West of SR 528 (Beachline Expressway) [FPN 242526 and 242483 (1999)] and Final Environmental Impact Statement (FEIS) for I-4 from SR 528 (Beachline Expressway) to SR 472 [FPN 242486, 242592 and 242703 (2002)].

The project limits of the current SR 400 (I-4) PD&E reevaluation, herein referred to as I-4 Beyond the Ultimate (BtU) PD&E Reevaluation Study, include a total of approximately 43 miles of roadway sections east and west of the 21-mile, I-4 Ultimate project. The I-4 Ultimate project consists of reconstruction to include new express lanes for the section of I-4 which extends from west of SR 435 (Kirkman Road) to east of SR 434, and began construction in early 2015. The current I-4 BtU project has been divided into the following five segments:

- Segment 1: SR 400 (I-4) from West of CR 532 (Polk/Osceola County Line) to West of SR 528 Beachline Expressway Osceola County (92130) and Orange County (75280);
- Segment 2: SR 400 (I-4) from West of SR 528 Beachline Expressway to West of SR 435 Kirkman Road Orange County (75280);
- Segment 3: SR 400 (I-4) from 1 Mile East of SR 434 to East of SR 15-600/US 17-92 (Seminole/Volusia County Line) Seminole County (77160);
- Segment 4: SR 400 (I-4) from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472 - Volusia County (79110); and
- Segment 5: SR 400 (I-4) from West of SR 25/US 27 to West of CR 532 (Polk/Osceola County Line) Polk County (16320)

This Wetland Evaluation Report (WER) was prepared for Segment 1 of the SR 400 (I-4) BtU PD&E Reevaluation Study. This WER documents the jurisdictional wetland and other surface water communities found within the project corridor and assesses the size and quality of each system, and the likelihood of involvement during implementation of the project.

# **1.1 Description of Proposed Action**

FDOT is proposing to reconstruct and widen I-4 as part of the I-4 BtU concept. This involves the build-out of I-4 to its ultimate condition through Central Florida, including segments in Polk, Osceola, Orange, Seminole and Volusia Counties. The concept design proposes the addition of two new express lanes in each direction, resulting in a total of 10 dedicated lanes. The project limits for the segment analyzed in this report are within an approximate

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14-mile segment of I-4 which extends from just west of CR 532 (Polk/Osceola County Line) to west of SR 528 (Beachline Expressway), from Milepost (MP) 31.607 to MP 32.022 in Polk County, MP 0.000 to MP 7.885 in Osceola County, and from MP 0.000 to 5.650 in Orange County (herein referred to as I-4 Segment 1) and as shown in Figure 1.1. Although the interstate is a designated east-west corridor, the alignment follows a southwest to northeast orientation through the limits of I-4 Segment 1. The study area in this section from west of CR 532 to west of SR 528 includes the following interchanges:

#### Osceola County

- I-4 and CR 532 (Osceola-Polk Line Road)
- I-4 and SR 429 (Daniel Webster Western Beltway)
- Orange County
- I-4 and SR 536 (Epcot Center/World Center Drive)
- I-4 and SR 535 (S. Apopka Vineland Road)

- I-4 and World Drive
- I-4 and SR 417 (Central Florida GreeneWay)
- I-4 and US 192/SR 530 (W. Irlo Bronson Memorial Highway)
- I-4 and W. Osceola Parkway

I-4 and Daryl Carter Parkway\*
I-4 and Central Florida Parkway

\*Formerly Fenton Street/Wildwood Avenue (previously identified as Lake Avenue in the December 1999 FONSI). Daryl Carter Parkway is currently an existing overpass; alternative evaluations include a proposed full-access interchange.

The proposed improvements to I-4 Segment 1 include widening the existing six (6) lane divided urban interstate to a 10 lane divided highway. In general, the typical section will be consistent throughout I-4 Segment 1 and will have three (3) 12-foot general use travel lanes with 10-foot inside and 12-foot outside shoulders and two (2) 12-foot express lanes with 4-foot inside and 10-foot outside shoulders in each direction. A barrier wall between the adjacent shoulders will separate the express lanes from the general use lanes. Twelve-foot auxiliary lanes will be provided in some areas in both the eastbound and westbound directions. The typical section includes a 44-foot rail envelope in the median within a minimum 300 foot right of way. Figure 1.2 illustrates the proposed mainline typical section for I-4 Segment 1 improvements.



Figure 1.1 – Project Location Map



#### SR 400 (I-4) TYPICAL SECTION

Station 604 + 50.00 to Station 1345 + 48.48 MP 31.607 to MP 32.022 (Polk County) MP 0.000 to MP 7.885 (Osceola County) MP 0.000 to MP 5.650 (Orange County)

Figure 1.2 – SR 400 (I-4) Segment 1 Proposed Typical Section (6+4 with rail envelope)

# 1.2 Purpose and Need

The proposed improvements to I-4 include widening the existing six (6) lane divided urban interstate to a 10 lane divided highway in order to improve traffic operations, enhance connectivity and improve mobility by providing travel choices to the motoring public. I-4 is an east-west limited access freeway which links the west and east coasts of Florida, from I-275 in Tampa to I-95 in Daytona Beach. I-4 spans across six (6) counties in Central Florida, traversing through many cities including Lakeland, Celebration, Orlando, Altamonte Springs, Sanford and DeLand. I-4 is a critical component of Florida's Strategic Intermodal System (SIS) which links seaports, rail, airports and other intermodal facilities. This aspect of I-4's significance is evidenced through connectivity provided by major junctions with I-275, I-75, SR 429 (Daniel Webster Western Beltway), SR 417 (Southern Connector/Central Florida Greeneway/Seminole Expressway), SR 528 (Martin Andersen Beachline Expressway), SR 91 (Florida's Turnpike), SR 408 (Spessard Lindsay Holland East-West Expressway) and I-95.

I-4 serves as the primary corridor in the movement of people and freight between major population, employment and activity centers in the Central Florida region. When the entire Interstate was fully opened in the early 1960's, it was designed to serve intrastate and interstate travel by providing a critical link between the east and west coasts of Central Florida. Although this role continues to be a crucial transportation function of I-4, the highway also serves large volumes of local and commuter traffic with shorter trip distances. Today, the highway serves as the primary link between hotel/resort complexes and tourist attractions such as Walt Disney World<sup>®</sup>, Universal Orlando<sup>®</sup>, SeaWorld<sup>®</sup> Orlando, the International Drive resort area and downtown Orlando. Since I-4 is the only east-west limited access facility that is centrally located between the predominant employment centers and the major suburbs to the north, it has become the primary commuting corridor in the Central Florida metropolitan area.

Growth in Central Florida, over the past decades, has made it difficult for the transportation system to accommodate travel demand. Traffic congestion and crash incidents have resulted in major delays on the Interstate as well as other arterials surrounding the corridor. Increased congestion levels are experienced outside of the typical morning and afternoon rush-hour periods, affecting mobility levels for more hours of the day and impacting other non-commuter/non-weekday travel. The congestion on I-4 is further evidenced by the less than desirable levels of service on the Interstate as well as the crossroads.

Projections of future population and employment in the region indicate that travel demand will continue to increase well into the future. The ability to accommodate the new travel patterns resulting from growth must be provided to sustain the region's economy. Without the improvements, extremely congested conditions are expected to occur for extended periods of time in both the morning and evening peak periods. Due to these congested conditions, user travel times will continue to increase, the movement of goods through the urban area will be slower, and the deliveries of goods within the urban area will be forced to other times throughout the day. The need for improvements to I-4 is illustrated by the important transportation roles I-4 serves to the Central Florida region and the State of Florida. If no improvements are made to the Interstate, a loss in mobility for the area's residents, visitors, and commuters can be expected, resulting in a severe threat to the continued viability of the economy and the quality of life.

This reevaluation involves revising the original design concept showing 6 GUL + 4 SUL from CR 532 to southwest of World Drive , 6 GUL + 2 HOV lanes from southwest of World Drive to northeast of Lake Avenue and 6 GUL + 4 HOV lanes from northeast of Lake Avenue to SR 528, as recommended in the FONSI for SR 400 (I-4) from CR 532 (Polk/Osceola County Line to West of SR 528 (Beachline Expressway) (December 23, 1999), to the current proposed design of four (4) Express Lanes. The Express Lanes are tolled lanes and will extend the full length of the project. The access to/from the tolled lanes will be evaluated as part of this effort to determine if changes are needed from the previously approved concept for access to/from the SUL/HOV Lanes. The original I-4 PD&E Studies involved physical separation between the general use lanes and the SUL/HOV lanes on I -4, with demand management in the HOV lanes. The original demand management strategy was to control the use of the HOV lanes by requiring a minimum number of occupants per vehicle to maintain an acceptable level of service (Level of Service D).

This reevaluation also addresses revising the demand management tool to convert the HOV lanes to tolled express lanes. The express lanes will be separated from the general use travel lanes by two shoulders with a barrier wall between the shoulders. A variable pricing tolling plan is proposed for the express lanes. The tolls will vary by time of day and day of week to maintain acceptable levels of service in the express lanes. The tolls will be collected electronically through existing E-Pass, SunPass and other systems currently in place in the Orlando metropolitan area. The conversion to Express Lanes will maintain the same right of way limits as documented previously and will not change the impacts to the social, natural or physical environment. An update to the Systems Access Modification Report (SAMR) prepared in January 2013 is being completed in conjunction with this effort.

The jurisdictional wetland and other surface waters limits were previously identified, within I-4 Segment 1 limits, in May 1999 Wetland Evaluation Report (WER) as a part of the PD&E study. In addition, the report addressed the potential for wetland and other surface water impacts, it addressed an alternative analysis and avoidance and minimization, as well as conducted a WET II Functional Analysis to assess the impacts and the conceptual mitigation plan. Commitments made at that time included: (1) Minimization and avoidance of wetland impacts, where possible, which would be used based on safe and sound engineering and construction constraints; (2) Agency coordination that would continue during the permitting phase; (3) Adverse wetland impacts would be mitigated based on coordination with agencies during the permitting phase.

This report reevaluates the jurisdictional limits of wetlands and other surface waters within the I-4 Segment 1, assesses the potential for wetland and other surface water involvement, proposes conceptual mitigation needs using the Uniform Mitigation Assessment Method (Chapter 62-345.100, Florida Administrative Code) and updates previous project commitments. This report has been prepared following guidelines presented in the Project Development and Environmental (PD&E) Manual, Part 2, Chapter 18 (FDOT, 8/22/2016) to identify jurisdictional wetlands and other surface waters along the project corridor and to document potential project related impacts.

# 2.0 Methodology and Assessment

The existing right of way of I-4 and newly proposed right of way and pond locations made up the corridor area in which the jurisdictional extent of onsite wetlands and other surface water systems were evaluated. The evaluation included a review of current and historic aerial photography of the study area and ground-truth activities. Current and historical information reviewed included infrared digitally orthorectified quadrangle maps

(DOQ's), U.S. Geological Survey Topographic Maps (Exhibit 2 – USGS Topographic Quadrangle Map), National Wetlands Inventory (NWI) Maps, and Soil Survey Maps (Exhibit 3 – NRCS Soil Survey Map). Jurisdictional limits were identified and limits established in general accordance with the *1987 Corps of Engineers Wetlands Delineation Manual* (Technical Report Y-87-1); the *November 2010 Regional Supplement to the Corps of Engineers Wetlands Delineation Manual*: Atlantic Gulf Coastal Plan Region and the State of Florida's Delineation of the Landward Extent of Wetlands and Surface Waters (Chapter 62-340, Florida Administrative Code). In the event wetland boundaries differed between the two methods, the more "wetland inclusive" extent was used to define that particular wetland system's boundary. The landward extent of surface water systems was recognized to be at the top-of-bank for ditches with side slopes of 1-foot vertical to 4-feet horizontal or steeper or using the seasonal high for swales with side slopes flatter than 1-foot vertical to 4-feet horizontal. Wetlands and other surface waters located within I-4 Segment 1 were classified using the FDOT's *Florida Land Use, Cover and Forms Classification System* (FLUCFCS) (Exhibit 4 – FLUCFCS Map) and the U.S. Fish and Wildlife Service's (FWS) classification system as described in their *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, et. al, 1979).

Ground-truthing of wetland and other surface water assessments were conducted along the project corridor from April to October 2013 with subsequent site evaluations in June and July 2015 using handheld Global Positioning Systems (GPS) devices. In the field, wetlands and other surface waters were generally delineated from the western project limits to the eastern project limits within the existing ROW of I-4 and all proposed stormwater pond area locations. Photographic representation of the wetland and/or other surface waters current conditions are provided in Appendix B.

# 2.1 Land Use Consideration

Land use types found within the project corridor were identified through color aerial and infrared photograph interpretation along with site reconnaissance. The existing land use types within the study area are best characterized as transportation, with residential, commercial, utility facilities, cleared land with the intent to develop, amusement parks, and golf courses immediately adjacent to the corridor. Other land use types found within the project corridor include herbaceous uplands and wetlands, forested uplands and wetlands, lakes, ditches, swales and water retention areas (Exhibit 4 – FLUCFCS Map).

# 2.2 Wetland Function and Value Assessment

The Uniform Mitigation Assessment Method (UMAM) (Chapter 62-345.100, Florida Administrative Code) was used to qualify each jurisdictional system's current condition. The UMAM is a matrix developed by the Florida Department of Environmental Protection (FDEP) for evaluating the functional characteristics of a wetland or other surface water system. The UMAM accomplishes this by assigning a numerical value, between 0 and 10 using whole number increments, to each of three (3) criteria: 1) Location and Landscape Support, 2) Water Environment and 3) Community Structure, where applicable. A criterion score of 10 represents optimal functions provided by a system while 0 represents a complete absence of function or negligible functions. Adding each score from each criterion and dividing that number by the maximum score attainable generates the final UMAM score. UMAM then calculates the functional loss (FL) of a wetland or other surface water by taking the UMAM score and

multiplying the score by the acreage of area impacted. The result is a number between 0 and 1, qualifying the final UMAM score (functional loss of a wetland).

For the I-4 Segment 1 project, UMAM scoring for wetlands and surface water functional loss were summarized by assigning a criterion of Low, Moderate or High. Criteria of Low was given to systems with final UMAM scores between 0 and 0.49, Moderate scored between 0.50 and 0.79, while High scored 0.80 or better.

# 2.3 Wetland and Other Surface Water Descriptions

For this study, jurisdictional systems were identified as either Wetland (WL-#) or Other Surface Water (SW-#) and included the direction of the travel lanes of I-4 (i.e. East (E) or West (W)) relative to the location of the system. The term other surface water generally categorizes existing stormwater ponds, lakes, creeks, ditches or swales, associated with the existing drainage conditions of I-4. Wetland and other surface waters within the study area are described below, summarized in Table 1, and depicted in Exhibit 5 – Surface Water and Wetland Map.

Wetland and other surface water involvement discussed below for I-4 Segment 1 includes roadway and proposed pond sites.

# EASTBOUND I-4

# Wetlands

#### Wetland A(E)

Wetland A (WL-A(E)) is located within the existing ROW of I-4 along the eastbound travel lanes near Station 605. Approximately 0.80 acres lies within the existing I-4 ROW. Surrounding land uses consist of open land, roads and highways, and wetlands. This system is best classified as a Freshwater Marsh (FLUCFCS 6410), and is a low quality system. Dominant features identified within this system include, cattail (*Typha* sp.), foxtail (*Alopecurus* sp.), dog fennel (*Eupatorium capillifolium*), rushes (*Juncus* sp.), bidens (*Bidens alba*), duckweed (*Lemna minor*) and scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and primrose willow (*Ludwigia* sp.) along the margins.

WL-A(E) receives runoff from the existing I-4 eastbound travel lanes and open lands. No wildlife was observed using the system; however, it is anticipated that WL-A(E) could support foraging opportunities for wetland dependent species, in particular avian species.

It is anticipated that approximately 0.80 acres of WL-A(E) will be directly impacted from I-4 Segment 1 improvements.

#### Wetland B(E)

Wetland B(E) (WL-B(E)) is located immediately south of WL-A(E) near Station 605. Approximately 0.37 acres lies within the existing I-4 ROW. Surrounding land uses includes roads and highways, single-family residential, open land, ditches, and a stormwater management pond. WL-B(E) is a low quality system and is best characterized as Wetland Forested Mixed (FLUCFCS 6300). Vegetation present includes a canopy of red maple, water oak (*Quercus* 

nigra), cypress (Taxodium distichum), slash pine (Pinus elliottii), sweetbay (Persea palustris), and cabbage palm (Sabal palmetto); with a mid-story of primrose willow, and elderberry (Sambucus canadensis). Groundcover vegetation includes blackberry (Rubus sp.), taro (Colocasia esculenta), cinnamon fern (Osmunda cinnamomea), royal fern (Osmunda regalis), bidens, bahiagrass (Paspalum notatum), and muscadine grapevine (Vitis rotundifolia).

WL-B(E) receives runoff from existing roads and highways, and the surrounding open land. No wildlife was observed using the area during site reviews; however, it is anticipated that this system provides opportunistic foraging for wetland dependent avian species.

It is anticipated that approximately 0.37 acres of WL-B(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland C(E)

Wetland C(E) (WL-C(E)) is located along the ROW of I-4 eastbound travel lanes, approximately 0.15 miles west of Osceola Polk Line Road near Station 620. Approximately 7.87 acres lie within the existing and proposed I-4 ROW. WL-C(E) is best classified as a Wetland Forested Mixed (FLUCFCS 6300). Surrounding land uses consist of roads and highways, maintained open land, residential development, forested wetlands, upland forests, stormwater ponds, and ditches. The portion this system within the existing ROW is of low quality. Dominant features of WL-C(E) include a vegetation component similar to that of WL-B(E).

WL-C(E) receives runoff from the existing I-4 eastbound travel lanes and surrounding undeveloped lands. A portion of this system is ditched and appears to be altering the hydrologic patterns of WL-C(E), resulting in soil subsidence in some areas. No wildlife species were observed using the system during site reconnaissance activities. It is anticipated that WL-C(E) would support foraging, roosting and denning for wetland dependent species, avian species in particular.

It is anticipated that approximately 7.87 acres of WL-C(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 1(E)

Wetland 1(E) (WL-1(E)) is located near Station 660. Approximately 2.95 acres lie within the proposed I-4 ROW. Surrounding land uses include roads and highways, a stormwater management pond, ditches, herbaceous prairie with scattered cabbage palms (*Sabal palmetto*), open land, and commercial development. WL-1(E) is best classified as a Wetland Forested Mixed (FLUCFCS 6300) and is of moderate quality. Dominant vegetation present includes slash pine, red maple, sweetbay, cabbage palm, laurel oak (*Quercus laurifolia*), sweetgum (*Liquidambar styraciflua*), Carolina willow, and bushy broomsedge (*Andropogon glomeratus*).

WL-1(E) receives runoff from surrounding undeveloped lands. No wildlife was observed during site activities; however; it is anticipated that this system could support foraging opportunities for wetland dependent species.

It is anticipated that approximately 2.95 acres of WL-1(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 1A(E)

Wetland 1A(E) (WL-1A(E)) is located within the existing I-4 ROW along the eastbound travel lanes near Station 680. Approximately 0.11 acres lie within the existing ROW of I-4. The surrounding land uses are comprised of roads and highways, partially developed land, wetlands, and open land with scattered cabbage palms. This system is best classified as a Willow and Elderberry (FLUCFCS 6180) and is of low quality. Dominant features consist of open water, Carolina willow, primrose willow, red maple, elderberry, dog fennel, blackberry, ragweed (*Ambrosia artemisiifolia*) and taro. WL-1A(E) is hydrologically contiguous with WL-1(E).

WL-1A(E) receives runoff from the eastbound I-4 travel lanes and the adjacent road. No wildlife was observed using the area during field reviews; however, it is anticipated that this system could support foraging opportunities for wetland dependent species, in particular avian species.

It is anticipated that approximately 0.11 acres of WL-1A(E) will be directly impacted from I-4 Segment 1 improvements.

#### Wetland 2(E)

Wetland 2(E) (WL-2(E)) is located near Station 700, immediately west of Tradition Boulevard. Approximately 0.40 acres of WL-2(E) lie within the I-4 ROW. This system is contiguous with the floodplain of Davenport Creek and is located within a landscape of roads and highways, forested wetlands, and open land. WL-2(E) is bisected by an unimproved road, but maintains a hydrological connection through culverts that underline the road.

WL-2(E) is best classified as Mixed Wetland Hardwoods (FLUCFCS 6170) and is of low quality. Dominant features within this system consists of open water, red maple, hackberry (*Celtis laevigata*), lady palms (*Rhapis excels*), primrose willow, elderberry, taro, maidencane (*Panicum hemitomon*), and pennywort (*Hydrocotyle* sp.).

WL-2(E) receives runoff from I-4 eastbound travel lanes and the surrounding open lands. No wildlife was observed using the system during site reviews; however; it is anticipated that WL-2(E) could support foraging opportunities for wetland dependent species.

It is anticipated that approximately 0.40 acres of WL-2(E) will be directly impacted from I-4 Segment 1 improvements.

#### Wetland 3(E)

Wetland 3(E) (WL-3(E)) is located along the I-4 eastbound travel lanes, near Station 735. Approximately 1.70 acres lie within the ROW of I-4. Surrounding land uses consist of the I-4 eastbound travel lanes, access ramps, open maintained land, and stormwater management ponds.

WL-3(E) is a low quality wetland system that is best classified as Mixed Wetland Hardwoods (FLUCFCS 6170). Vegetation present includes red maple, laurel oak, cabbage palm, American elm (*Ulmus americana*), dahoon holly (*Ilex cassine*), wax myrtle (*Myrica cerifera*), needle palm (*Rhapidophyllum hystrix*), Virginia chain fern (*Woodwardia virginiana*), lizard's tail (*Saururus cernuus*) and green briar (*Smilax* sp.).

WL-3(E) receives runoff from the existing I-4 travel lanes and from two (2) adjacent stormwater management ponds via pond outfall structures. During site reconnaissance, no wildlife was observed using this system. It is anticipated that this wetland community could provide foraging, roosting and nesting opportunities for wetland dependent species.

It is anticipated that approximately 1.70 acres of WL-3(E) will be directly impacted from I-4 Segment 1 improvements.

#### Wetland 4(E)

Wetland 4(E) (WL-4(E)) is located within the southeast quadrant of Old Lake Wilson Road and the I-4 eastbound travel lanes, south of Station 740. Surrounding land uses include forested wetlands, multi-family housing, utilities, Old Lake Wilson Road, and open lands.

This system is best characterized as a Mixed Wetland Hardwoods (FLUCFCS 6170) and is of moderate quality. Vegetation present includes cabbage palm, elderberry, red maple, sweetgum, wax myrtle, elderberry, and cogongrass (*Imperata cylindrical*).

WL-4(E) receives runoff from roads and highways, commercial development and open land. No wildlife was observed foraging within the system during site reviews; however, foraging, nesting and roosting opportunities could be supported by WL-4(E).

WL-4(E) is immediately adjacent to the I-4 ROW and no impacts are anticipated as a result of I-4 Segment 1 improvements.

# Wetland 5(E)

Wetland 5(E) (WL-5(E)) is located near Station 760 along the eastbound access ramp to I-4 from Old Lake Wilson Road. Approximately 4.76 acres lie within the existing and proposed I-4 ROW. Surrounding land uses consists of roads and highways, open land, forested uplands, and commercial development.

This system is best classified as Wetland Forested Mixed (FLUCFCS 6300) and is of moderate quality. Dominant features include slash pine, red maple, Carolina willow, wax myrtle, saw palmetto (*Serenoa repens*), cogongrass, pluchea (*Pluchea odorata*), mock bishop's weed (*Ptilimnium cappillaceum*), juncus (*Jucus effusus*), and spike rush (*Eleocharis* sp.).

WL-5(E) receives runoff from existing roads and highways, commercial development and maintained open land. No wildlife was observed using the system during field review; however, it is anticipated that this system could support foraging, nesting and roosting opportunities for wetland dependent species, in particular avian species.

It is anticipated that approximately 4.76 acres of WL-5(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 6(E)

Wetland 6(E) (WL-6(E)) is located along the existing ROW of I-4 eastbound travel lanes, between Station 785 and Station 815. Approximately 7.83 acres of WL-6(E) lies within the existing I-4 ROW. Surrounding land uses includes forested uplands, utilities, stormwater management ponds, roads and highways, and open maintained land.

This system is best classified as a Mixed Wetland Hardwoods (FLUCFCS 6170), of a moderate quality and includes Reedy Creek (Surface Water 5B(E)), and its associated floodplain. The vegetative fringe of WL-6(E), adjacent to existing I-4 travel lanes, is maintained for existing utilities. Dominant vegetation within limits of the existing I-4 ROW includes red maple, American elm, elderberry, ragweed, carpetweed (*Phyla nodiflora*), and bidens.

WL-6(E) receives runoff from the adjacent roads and highways, forested uplands, and open maintained land. During site evaluations, no wildlife was observed using the system; however, it is anticipated that that WL-6(E) could support foraging, nesting, roosting, and denning opportunities for wetland dependent species.

It is anticipated that approximately 7.83 acres of WL-6(E) will be directly impacted from I-4 Segment 1 improvements.

#### Wetland 6A(E)

Wetland 6A(E) (WL-6A(E)) is located between the existing I-4 eastbound travel lanes and Celebration Boulevard near Station 855. Surrounding land use consists of open maintained land, and the World Drive I-4 eastbound entrance ramp.

This wetland community is best characterized as a Mixed Wetlands Hardwood (FLUCFCS 6170) and is of moderate quality. Vegetation present includes red maple, laurel oak, cabbage palm, American elm, dahoon holly, wax myrtle, needle palm, and Virginia chain fern.

This system receives runoff from the adjacent roads and highways, and open maintained land. No wildlife was observed, however; it is anticipated that this system could support foraging, nesting and roosting opportunities for wetland dependent species, in particular avian species.

WL-6A(E) lies within close proximity to I-4 Segment 1 improvements; however, it is anticipated that impacts to this system can be avoided.

#### Wetland 6B(E)

Wetland 6B(E) (WL-6B(E)) lies just north of WL-6A(E) near Station 865. Surrounding land use consists of open maintained land, commercial development, and the World Drive I-4 eastbound entrance ramp.

This wetland community is best characterized as a Mixed Wetlands Hardwood (FLUCFCS 6170) and is of moderate quality. Vegetation present includes red maple, laurel oak, cabbage palm, American elm, dahoon holly, wax myrtle, needle palm, and Virginia chain fern.

No wildlife was observed, however; it is anticipated that this system could support foraging, nesting and roosting opportunities for wetland dependent species, in particular avian species.

WL-6B(E) lies within close proximity to I-4 Segment 1 improvements; however, it is anticipated that no impacts to WL-6B(E) will result from I-4 Segment 1 improvements.

# Wetland 6C(E)

Wetland 6C(E) (WL-6C(E)) lies just east of WL-6A(E) and WL-6B(E), east of Celebration Boulevard. Surrounding land uses includes stormwater management ponds, multi-family housing, roads and highways.

This wetland community is best characterized as a Mixed Wetlands Hardwood (FLUCFCS 6170) and is of moderate quality. Vegetation present includes red maple, laurel oak, cabbage palm, American elm, dahoon holly, wax myrtle, needle palm, and Virginia chain fern.

No wildlife was observed, however; it is anticipated that this system could support foraging, nesting and roosting opportunities for wetland dependent species, in particular avian species.

WL-CB(E) lies within close proximity to I-4 Segment 1 improvements; however, it is anticipated that impacts to this system can be avoided.

# Wetland 7(E)

Wetland 7(E) (WL-7(E)) is located along the ROW of the I-4 eastbound travel lanes, approximately 0.50 miles east of SR 417 (a/k/a Central Florida GreeneWay) near Station 920. Surrounding land uses include roads and highways, a stormwater management pond, commercial development, and open land.

WL-7(E) is a moderate quality wetland that is best classified as Wetland Forested Mixed (FLUCFCS 6300). Dominant vegetation includes a cypress and slash pine canopy, with red maple, wax myrtle, sawgrass (*Cladium jamaicense*), Virginia chain fern, and swamp fern (*Blechnum serrulatum*) scattered throughout the mid-story and groundcover.

WL-7(E) receives runoff from adjacent roads and highways, and commercial developments. In addition, no wildlife was observed using the system during field reviews; however, it is anticipated that this system could support foraging and roosting opportunities for wetland dependent species, in particular avian species.

No impacts to this wetland system are anticipated to result from I-4 Segment 1 improvements

# Wetland 7A(E)

Wetland 7A(E) (WL-7A(E)) is located near Station 935 along the existing ROW of the I-4 eastbound travel lanes. Approximately 0.21 acres lie within the I-4 ROW. Surrounding land uses include roads and highways, open land, stormwater ponds, and commercial development.

WL-7A(E) is best classified as a Wetland Forested Mixed (FLUCFCS 6300), and is of moderate quality. Dominant vegetation includes red maple, slash pine, cypress, mimosa trees (*Albizia julibrissin*), Carolina willow, saltbush (*Bacharris halimifolia*), elderberry, Virginia chain fern, swamp fern, and muscadine grapevine.

Historically, this system was a part of a larger wetland community to the southeast, but has been bisected by Celebration Boulevard. WL-7A(E) receives runoff from the existing I-4 eastbound travel lanes, Celebration Boulevard, open maintained land, and adjacent commercial development. No wildlife was observed using the system during site review activities; however, it is anticipated that this system could support foraging opportunities for wetland dependent species, in particular avian species.

It is anticipated that approximately 0.21 acres of WL-7A(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 8(E)

Wetland 8(E) (WL-8(E)) is located adjacent to the existing ROW of I-4 eastbound travel lanes, approximately 0.40 miles south of Osceola Parkway near Station 1010. Approximately 0.30 acres lie within the existing and proposed I-4 ROW. Surrounding land uses consist of open land, roads and highways, and multi-family housing.

This system is best characterized as a Mixed Wetland Hardwoods (FLUCFCS 6170) and is of low quality. Vegetation present includes cypress, red maple, Carolina willow, elderberry, and muscadine grapevine.

WL-8(E) receives runoff from the existing I-4 eastbound travel lanes, open land, and adjacent multi-family housing. No wildlife was observed using the system during site reconnaissance. It is anticipated that this system could support foraging and roosting opportunities for wetland dependent species, in particular avian species.

It is anticipated that approximately 0.30 acres of WL-8(E) will be directly impacted from I-4 Segment 1 improvements.

#### Wetland 9(E)

Wetland 9(E) (WL-9(E)) is located near Station 1030 along the existing ROW of the I-4 eastbound travel lanes, approximately 300 feet west of the Osceola Parkway and I-4 interchange. Surrounding land uses include commercial development, Bonnet Creek, open land, and roads and highways.

Wetland 9(E) is best characterized as a Mixed Wetland Hardwoods (FLUCFCS 6170) and is of moderate quality. Vegetation present includes slash pine, red maple, hackberry, wax myrtle, and muscadine grapevine.

WL-9(E) receives runoff from the existing I-4 eastbound exit ramp, adjacent commercial development, and open land. Although no wildlife was observed using the system, it is anticipated that Wetland 9(E) could support foraging, nesting, and roosting opportunities for wetland dependent species, in particular avian species.

It is anticipated that approximately 0.31 acres of WL-9(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 10(E) and Wetland 10A(E)

Wetland 10(E) (WL-10(E)) and Wetland 10A(E) (WL-10A(E)) are located within the existing ROW of the exit ramp from the I-4 eastbound travel lanes to SR 536 near Station 1085. Approximately 1.06 acres of WL-10(E), and 1.24

acres of WL-10A(E) lie within the I-4 Segment 1 improvements. The surrounding land uses consist of stormwater management ponds, upland forests, and roads and highways.

These wetland communities are best described as a Wet Prairie and Cypress (FLUCFCS 6430 and 6210) and are of moderate quality. Dominant vegetation within the wet prairie component of WL-10(E) includes scattered red maple, primrose willow, pickerelweed (*Pontederia cordata*), duck potato (*Sagittaria lancifolia*), torpedo grass (*Panicum repens*), and rushes. The cypress area of WL-10(E) and all of WL-10A(E) is dominated by cypress and slash pines with an understory of ferns.

No wildlife was observed using these systems during site reconnaissance; however; it is anticipated that these wetland communities could support foraging opportunities for wetland dependent species.

It is anticipated that approximately 1.06 acres of WL-10(E), and 1.24 acres of WL-10A(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 11(E)

Wetland 11(E) (WL-11(E)) is located near Station 1085 along the existing ROW of the I-4 eastbound travel lanes, and SR 536 interchange. Approximately 9.99 acres of WL-11(E) lie within the existing ROW of I-4. Surrounding land uses include surface waters, and roads and highways.

This is moderate quality wetland community, and is best classified as a Wetland Forested Mixed (FLUCFCS 6300). WL-11(E) is vegetated by slash pine, Brazilian pepper (*Schinus terebinthifolius*), red maple, sweetgum, Carolina willow, swamp fern, Virginia chain fern, and muscadine grapevine.

WL-11(E) receives runoff from surrounding roads and highways. During site evaluations, no wildlife was observed using the system; however, it is anticipated that this system could support foraging opportunities for wetland dependent species, in particular avian species.

It is anticipated that approximately 9.99 acres of WL-11(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 11A(E), Wetland 11B(E), and Wetland 11C(E)

Wetland 11A(E) (WL-11A(E)), Wetland 11B(E) (WL-11B(E)), and Wetland 11C(E) (WL-11C(E)) are located east of WL-10(E), and south of the I-4 eastbound exit ramp to SR 536. Surrounding land uses include forested uplands, open land, roads and highways, and commercial development.

WL-11A(E), WL-11B(E), and WL-11C(E) are best classified as Cypress (FLUCFCS 6210), and are of moderate quality. Dominant vegetation present includes cypress trees with an understory of ferns.

WL-11A(E), WL-11(B), and WL-11(C) receive runoff from surrounding forested uplands, open land, and roads and highways. During site evaluations, no wildlife was observed using the system; however, it is anticipated that this system could support foraging opportunities for wetland dependent species, in particular avian species.

No impacts are anticipated to WL-11A(E), WL-11(B), and WL-11(C) as part of the I-4 Segment 1 improvements.

# Wetland 12(E)

Wetland 12(E) (WL-12(E)) is located within the interchange of I-4 and SR 536, near Station 1095. Approximately 10.05 acres lie within the existing ROW of I-4. Surrounding land use consists of roads and highways, and forested uplands.

This wetland system is best characterized as a Mixed Wetland Hardwood (FLUCFCS 6170), and is low quality. The vegetative composition found within this community includes slash pine, pond pine, red maple swamp bay, loblolly bay, fetterbush, wax myrtle, dog fennel, ragweed, and Virginia chain fern.

Historically, this wetland was a part of a larger system, which has been bisected by the existing east and west bound I-4 travel lanes, as well as the exit and entrance ramps to I-4. WL-12(E) receives runoff from existing roads and highways. No wildlife was observed using the system during site reconnaissance, but it is anticipated that foraging and roosting opportunities are present for wetland dependent avian species.

It is anticipated that approximately 10.05 acres of WL-12(E) will be directly impacted from I-4 Segment 1 improvements.

#### Wetland 13(E)

Wetland 13(E) (WL-13(E)) is located along the existing travel lanes of I-4 eastbound, approximately 0.80 miles east of SR 536 and I-4 interchange near Station 1145. Surrounding land uses consists of a resort, and forested uplands.

WL-13(E) is best classified as a Freshwater Marsh (FLUCFCS 6410), and is of moderate quality. Dominant features include open water with floating vegetation, a forested fringe, and a dock at the shoreline of the resort.

WL-13(E) receives runoff from upland forests, and commercial development. No wildlife was observed during site field activities.

No impacts to this system are anticipated to result from I-4 Segment 1 improvements.

#### Wetland 13A(E)

Wetland 13A(E) (WL-13A(E)) is located along the eastbound travel lanes of I-4, near Station 1295, approximately 0.6 miles west of Central Florida Parkway. Approximately 3.68 acres lie within the existing and proposed I-4 ROW. Surrounding land uses consist of Lake Willis, existing I-4 eastbound travel lanes, stormwater ponds, open land, forested uplands, commercial and residential development, and roads and highways.

This system is of moderate quality and is best described as Mixed Wetland Hardwoods (FLUCFCS 6170) along its margins. WL-13A(E) is comprised of Carolina willow, cypress, and muscadine grapevine. WL-13A(E) is located at the fringe of Lake Willis.

No wildlife species were observed using this system during site evaluations; however, it is anticipated that foraging, roosting and nesting opportunity for avian wetland dependent species may be present.

It is anticipated that approximately 3.68 acres of WL-13A(E) will be directly impacted from I-4 Segment 1 improvements.

# Wetland 14(E)

Wetland 14(E) (WL-14(E)) is located along the existing ROW of the I-4 eastbound travel lanes, and the exit ramp to Central Florida Parkway near Station 1325. Surrounding land uses consists of forested uplands, open upland, and roads and highways.

This system is best described as a Mixed Wetland Hardwoods (FLUCFCS 6170), and is of low quality. Dominant features of WL-14(E) include cypress, slash pines, red maple, Chinese tallow (*Triadica sebifera*), Carolina willow, cattail, and royal fern.

WL-14(E) receives runoff from the eastbound I-4 travel lanes, and the adjacent forested uplands. No wildlife was observed using the system during field reviews; however, it is anticipated that WL-14(E) could support foraging opportunities for wetland dependent species.

No impacts to this system are anticipated to result from I-4 improvements.

# **OTHER SURFACE WATER COMMUNITIES**

# Ditches<sup>1</sup>

A large percentage of the ditch systems within the I-4 Segment 1 corridor are similar in general conditions, vegetative structure, and hydrological evidence. These systems were individually reviewed in the field; however, are being reported collectively due to their similarities.

# Surface Water(s) (SW) – A(E), 1A(E), 1B(E), 15(E), 16(E), 20(E) 21(E), 23(E), 31(E), 32(E), 32A(E) and 36(E)

SW-A(E), SW-1A(E), SW-1B(E), SW-15(E), SW-16(E), SW-20(E), SW-21(E), SW-23(E), SW-31(E), SW-32(E), SW-32A(E), and SW-36(E) are located along the existing eastbound travel lanes of I-4 from west of CR 532 to west of SR 528 (See Surface Water and Wetland Maps, Exhibit 5). These systems are located within the existing I-4 Segment 1 ROW, and are subject to routine maintenance. Approximately 7.05 acres of upland-cut ditches lie within the I-4 Segment 1 improvements. Surrounding land uses include major roads and highways, access ramps, commercial and residential developments, golf courses, resorts, other surface waters, disturbed forested uplands, forested/herbaceous wetlands, lakes, swales, and open land.

These systems are best characterized as Streams and Waterways/Upland-Cut Ditches (FLUCFCS 5130). During site reconnaissance many systems were either inundated or saturated. Dominant vegetation inhabiting these community types include primrose willow, Carolina willow, wax myrtle, saltbush, cattail, elderberry, taro, dog fennel, ragweed, vasey grass (*Paspalum urvillei*), broomsedge (*Andropogon virginicus*), foxtail, bidens, pennywort, bahia, fleabane (*Erigeron quercifolius*), sedges (*Carex* sp.), torpedo grass, duck potato, pickerelweed, maidencane, *Juncus*, white star sedge (*Rhynchospora colorata*), tickseed (*Coreopsis* sp.), meadow beauty (*Rhexia mariana*),

<sup>&</sup>lt;sup>1</sup> Ditches excavated through upland soils are non-jurisdictional, and therefore impacts associated with these surface waters do not require mitigation.

mock bishop's weed, coinwort (*Centella asiatica*), yellow-eyed grass (*Xyris* sp.), alligatorweed (*Alternanthera philoxeroides*), carpetweed, and hempvine (*Mikania scandens*).

During site reviews, one (1) federally protected wildlife species, the Eastern indigo snake (*Drymarchon corais couperi*), was observed in close proximity of SW-1A(E). No other protected wildlife species were observed utilizing these systems; however, it is anticipated that foraging opportunity for avian wetland dependent species (notably wood storks (*Mycteria Americana*)) may be present.

Common species that were observed foraging within these systems include American crow (*Corvus brachyrhynchos*), Northern cardinal (*Cardinalis cardinalis*), common grackle (*Quiscalus quiscula*), cattle egret (*Bubulcus ibis*), osprey (*Pandion haliaetus*), mocking bird (*Mimus polyglottos*), great egret (*Ardea alba*), and leopard frog (*Rana sphenocephala*).

# Swales<sup>2</sup>

# Surface Water(s) (SW) - 8(E), 10(E), 17(E), 18(E), 26(E), 27A(E), 33(E), 35(E), and 38(E)

SW-8(E), SW-10(E), SW-17(E), SW-18(E), SW-26(E), SW-27A(E), SW-33(E), SW-35(E), and SW-38(E) are located along the ROW of the eastbound travel lanes of I-4 from west of CR 532 to west of SR 528 (See Surface Water and Wetland Map, Exhibits 5). These systems are located within the existing I-4 Segment 1 ROW, and are subject to routine maintenance. Approximately 10.26 acres lie within the I-4 Segment 1 improvements. Surrounding land uses consist of the I-4 travel lanes, commercial development, open maintained land, upland-cut ditches, stormwater ponds, herbaceous/forested uplands and wetlands, and lakes.

These habitat types are best classified as Streams and Waterways/Swales (FLUCFCS 5130) with side slopes flatter than 1-foot vertical to 4-feet horizontal. These systems are typically saturated or inundated, and consist mainly of foxtail, bidens, pennywort, bahiagrass, fleabane, sedges, torpedograss, maidencane, rushes, white star sedge, tickseed, coinwort, mock bishop's weed, and carpetweed.

These systems receive runoff from surrounding roads and highways, commercial development, maintained open lands and are connected to other ditches or outfall to stormwater ponds. No wildlife was observed using these systems during field reviews, but it is anticipated that foraging opportunity for avian wetland dependent species may be present.

# Creeks, Rivers and Lakes

# Surface Water 5B(E)

Surface Water 5B(E) (SW-5B(E)) (Reedy Creek) is located east of the existing I-4 eastbound travel lanes, at Station 813. This system is hydrologically connected to Surface Water 9B(W), which is located west of I-4 at Station 813. Approximately 0.27 acres of SW-5B(E) lie within the I-4 ROW. The surrounding land uses consist of wetlands, maintained ROW, and roads and highways.

<sup>&</sup>lt;sup>2</sup> Swales excavated through upland soils are non-jurisdictional, and therefore impacts associated with these surface waters do not require mitigation.

SW-5B(E) is best classified as a Streams and Waterways (FLUCFCS 5130), and is a moderate quality system. SW-5B(E) consists of open water, with its associated floodplain (WL-6(E)) vegetatively comprised of red maple, American elm, elderberry, ragweed, carpetweed, and bidens.

This system receives runoff from the adjacent roads and highways, maintained ROW, and associated floodplain. During site evaluations, no wildlife was observed using the system; however, it is anticipated that that SW-5B(E) could support foraging opportunities for wetland dependent species.

It is anticipated that approximately 0.27 acres of SW-5B(E) will be directly impacted from I-4 Segment 1 improvements.

# Surface Water 28(E)

Surface Water 28(E) (SW-28(E)) is located east of the existing I-4 eastbound travel lanes, and south of Osceola Parkway. This system is a channelized system (Bonnet Creek) and is a tributary of Reedy Creek and crosses I-4 at the Osceola Parkway/I-4 interchange. Approximately 0.38 acres of SW-28(E) lie within the I-4 ROW. The surrounding land uses consist of wetlands, stormwater management ponds, open land, upland forests, golf courses, resorts, residential and commercial developments, and roads and highways.

SW-28(E) is best classified as a Streams and Waterways (FLUCFCS 5130), Upland-Cut Canal, and is a low quality system. SW-28(E) is controlled at several locations by man-made structures. Dominant features present includes open water with floating duckweed, maintained berms with scattered slash pine, red maple, wax myrtle, and primrose willow.

SW-28(E) receives runoff from the adjacent roads and highways, and is maintained by the Reedy Creek Improvement District. No wildlife was observed using this system during site reviews, but it is anticipated that SW-28(E) provides foraging opportunities for wetland dependent species.

It is anticipated that 0.38 acres of SW-28(E) will be directly impacted as part of the I-4 Segment 1 improvements.

# Surface Water 37(E)

Surface Water 37(E) (SW-37(E)) is located along the eastbound travel lanes of I-4, near Station 1300, approximately 0.6 miles west of Central Florida Parkway. Approximately 1.02 acres of SW-37(E) lie within the existing and proposed I-4 ROW. Surrounding land uses consist of existing I-4 eastbound travel lanes, stormwater ponds, open land, forested uplands and wetlands, commercial and residential development, and roads and highways.

This system is of moderate quality and is best described as Lakes larger than 100 acres, but less than 500 acres (FLUCFCS 5230). SW-37(E) is identified as Lake Willis and encompasses 129 acres of open water with a wetland fringe (WL-13A(E)).

No wildlife species were observed using this system during site evaluations; however, it is anticipated that foraging, roosting and nesting opportunity for avian wetland dependent species may be present.

It is anticipated that 1.02 acres of SW-37(E) will be directly impacted as part of the I-4 Segment 1 improvements.

# Existing Stormwater Ponds<sup>3</sup>

Surface Water(s) (SW) – B(E), 1(E), 2(E), 3(E), 4(E), 5(E), 5A(E), 6(E), 7(E), 9(E), 9A(E), 9B(E), 11(E), 12(E), 13(E), 13A(E), 13B(E), 14(E), 15A(E), 18A(E), 19(E), 22(E), 24(E), 25(E), 27(E), 28A(E), 29(E), 29A(E), 30(E), 30A(E), 33A(E), 34(E), 36A(E), 36B(E), 36C(E), 36D(E), 39(E) and 39A(E)

SW-B(E), SW-1(E), SW-2(E), SW-3(E), SW-4(E), SW-5(E), SW-5A(E), SW-6(E), SW-7(E), SW-9(E), SW-9A(E), SW-9B(E), SW-11(E), SW-12(E), SW-13(E), SW-13A(E), SW-13B(E), SW-14(E), SW-15A(E), SW-18A(E), SW-19(E), SW-22(E), SW-24(E), SW-25(E), SW-27(E), SW-28A(E), SW-29(E), SW-29A(E), SW-30(E), SW30A(E), SW-33A(E), SW-34(E), SW-36A(E), SW-36B(E), SW-36D(E), SW-39(E) and SW-39A(E) are best described as Reservoirs larger than 10 acres, but less than 100 acres (FLUCFCS 5330) and Reservoirs less than 10 acres which are dominant features (FLUCFCS 5340). These systems are located along the eastbound travel lanes of I-4 from west of CR 532 to west of SR 528 (See Surface Water and Wetland Map, Exhibits 5.1-5.21). These systems are best characterized as stormwater management ponds either with well-defined maintained banks and control structures, or stormwater management ponds with defined littoral zones and control structures. Surrounding land use types consist of ramps, roads and highways, forested/herbaceous wetlands and other surface waters, commercial and residential development, open land and upland forests.

During site reconnaissance, these systems were mostly composed of open water with maintained banks. However, ruderal and weedy vegetation (ragweed, dog fennel, Mexican clover (*Richardia scabra*), etc.) were occasionally observed within the littoral zone or along the berms, as well as Carolina willow, primrose willow, wax myrtle, elderberry, common reed (*Phragmites australis*), cattail, dog fennel, ragweed, duck potato, torpedograss, taro, and sedges. These systems provide treatment and/or floodplain compensation for the existing I-4 travel lanes and/or commercial and/or residential developments.

Three (3) protected species, the American alligator (*Alligator mississippiensis*), wood stork, and the tri-color heron (*Egretta tricolor*) were observed using a system during field review activities. No other protected wildlife species were observed; however, it is anticipated that foraging opportunity for avian wetland dependent species may be present. Common species that were observed utilizing these systems include great egrets, American coots (*Fulica americana*), great blue herons (*Ardea Herodias*), and mallards (*Anas platyrhynchos*).

#### WESTBOUND I-4

# Wetlands

# Wetland A(W)

Wetland A(W) (WL-A(W)) is located along the existing I-4 westbound travel lanes, approximately 300 feet east of Ronald Reagan Parkway, near Station 605. Approximately 0.60 acres of WL-A(W) lie within the I-4 Segment 1

<sup>&</sup>lt;sup>3</sup> Permitted stormwater ponds are not considered jurisdictional other surface waters, pursuant to Chapter 62-340, Florida Administrative Code (F.A.C), therefore, alterations or modifications to these systems were not assessed as a part of the total impacts to jurisdictional systems.

improvements. Surrounding land uses consist of roads and highways, open maintained land, wet prairie, and forested wetlands.

This system is best classified as a Freshwater Marsh (FLUCFCS 6410) and is of low quality. Dominant vegetation present within this system includes primrose willow, vaseygrass, maidencane, duck potato, foxtail, torpedograss, sedges, rushes, and pennywort.

WL-A(W) receives runoff from the existing I-4 westbound travel lanes, forested wetlands, and open land. During field reviews, no wildlife was observed using the system, but it is anticipated that WL-A(W) provides foraging opportunity to wetland dependent species, avian species in particular.

It is anticipated that 0.60 acres of WL-A(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 1(W)

Wetland 1(W) (WL-1(W)) is located along the access ramp from Champions Gate Boulevard and the westbound travel lanes of I-4 near Station 615. Approximately 6.92 acres of WL-1(W) lie within limits of I-4 Segment 1 improvements. Surrounding land uses consist of roads and highways, open maintained land, wet prairie, and forested wetlands.

This system is best classified as Mixed Wetland Hardwoods (FLUCFCS 6170) and is of moderate quality. Dominant features within this community type include cypress, dahoon holly, sweet bay, red maple, Carolina willow, primrose willow, buttonbush (*Cephalanthus occidentalis*), wax myrtle, saw grass, cattail, smartweed (*Polygonum hydropiperoides*), foxtail, rushes, torpedo grass, bladderwort (*Utricularia* spp.), and duckweed. Dominant features within the wet prairie consist of slash pine, sweet bay, red maple, Virginia chain fern, carpetgrass (*Axonopus* sp.), yellow eyed grass, rushes, meadow beauty, and yellow batchelor's button (*Polygala rugelii*).

WL-1(W) receives runoff from I-4 westbound travel lanes, and open land. During field activities, no wildlife was observed using the system; however; it is anticipated that this system provides habitat for wetland dependent species.

It is anticipated that 6.92 acres of WL-1(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 2(W)

Wetland 2(W) (WL-2(W)) is located within the infield of the I-4 westbound travel lanes and the access ramp to I-4 from Champions Gate Boulevard, near Station 625. Approximately 1.01 acres of WL-2(W) lie within the ROW of the I-4 Segment improvements. Land uses encompassing this wetland include roads and highways, stormwater management ponds, and maintained open land.

This system is of low quality habitat that is best classified as Mixed Wetland Hardwoods (FLUCFCS 6170). Dominant vegetation present includes red maple, Carolina willow, primrose willow, elderberry, cattail, saltbush, cogongrass, and broomsedge.

WL-2(W) receives runoff from roads and highways, and open maintained land. No wildlife was observed using the system during field reconnaissance, but it is anticipated that WL-2(W) could provide foraging habitat for wetland dependent avian species.

It is anticipated that 1.01 acres of WL-2(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 2A(W)

Wetland 2A(W) (WL-2A(W)) is located along the existing ROW of I-4 near Station 645 and the westbound exit ramp from I-4 to Champions Gate Boulevard. Approximately 0.19 acres of WL-2A(W) lie within the existing I-4 Segment 1 ROW. Adjacent land use types consist of roads and highways, maintained open land, and commercial development.

This system is best classified as a Mixed Wetland Hardwoods (FLUCFCS 6170) and is of low quality. Dominant vegetation present includes cabbage palm, red maple, sweet bay, water oak (*Quercus nigra*), primrose willow, Carolina willow, elderberry, Caesar's weed (*Urena lobata*), and air potato (*Dioscorea bulbifera*).

WL-2A(W) receives runoff from the westbound travel lanes of I-4, open maintained land, roads and commercial development. During site reconnaissance, no wildlife was observed using the system. It is anticipated that foraging and roosting opportunities for wetland dependent avian species could be provided by WL-2A(W).

It is anticipated that 0.19 acres of WL-2A(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 2B(W)

Wetland 2B(W) (WL-2B(W)) is located parallel to the existing ROW of the westbound travel lanes of I-4, approximately 0.2 miles west of Tradition Boulevard, in between Stations 680 and 700. Approximately 0.76 acres lie within the I-4 Segment 1 improvements ROW. Surrounding land uses present includes a golf course, roads and highways, commercial development, open maintained land, and a stormwater management pond.

This system is best classified as a Mixed Wetland Hardwoods (FLUCFCS 6170), with a disturbed fringe, and is of moderate quality. WL-2(B) is vegetated by cabbage palm, sweet bay, red maple, ear pod tree (*Enterolobium cyclocarpum*), hackberry, elderberry, cogongrass, and taro. The interior is of higher quality and consists of cypress, cabbage palm, sweet bay, and red maple, with an understory of Virginia chain fern, and cinnamon fern.

WL-2B(W) receives runoff from roads and highways, golf course, commercial development, and maintained open land. One (1) black vulture (*Coragyps atratus*) was observed in the system during field activities. It is anticipated that WL-2B(W) provides foraging and resting habitat for wetland dependent wildlife species.

It is anticipated that 0.76 acres of WL-2B(W) will be directly impacted as part of the I-4 Segment 1 improvements.

# Wetland 3(W)

Wetland 3(W) (WL-3(W)) is located long the access ramp to I-4 westbound from SR 429 near Station 725. Approximately 4.83 acres of WL-3(W) lie within limits of the I-4 Segment 1 improvements. Land uses adjacent to

this wetland consist of roads and highways, a golf course, commercial development, forested uplands and wetlands, and maintained open land.

This system is a moderate quality community that is best classified as Wetland Forested Mixed (FLUCFCS 6300), with a disturbed edge. Plants that dominate the fringe of this wetland include sweetbay, red maple, slash pine, elderberry, Virginia chain fern, and muscadine grapevine.

WL-3(W) receives runoff from roads and highways, open maintained land, a golf course, and commercial development. No wildlife was observed using this system during field reviews, but it is anticipated that the system could provide nesting, foraging and roosting habitat for wetland dependent species, in particular avian species.

It is anticipated that 3.67 acres of WL-3(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 4(W)

Wetland 4(W) (WL-4(W)) is located along the westbound travel lanes of I-4 approximately, 0.4 miles east of Old Lake Wilson Road, near Station 780. Approximately 1.02 acres of WL-4(W) lie within the I-4 Segment 1 improvements. Surrounding land uses consist of pine plantation, a stormwater management pond, forested uplands and wetlands, pasture, roads and highways, and open maintained land.

WL-4(W) is best classified as Wetland Forested Mixed (FLUCFCS 6300) and is of moderate quality. Dominant features within this system include cypress, red maple, sweetgum, slash pine, wax myrtle, sweet bay, Carolina willow, elderberry, and button bush.

WL-4(W) receives runoff from adjacent agricultural land, roads and highways and open maintained lands. During site evaluations, no wildlife was observed using this system, but it is anticipated that this system could support nesting, foraging and roosting habitat for wetland dependent wildlife species.

It is anticipated that 1.02 acres of WL-4(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 5(W)

Wetland 5(W) (WL-5(W)) is located along the ROW of the existing I-4 westbound travel lanes, approximately 0.6 miles west of World Drive near Station 800. Approximately 1.32 acres lie within the improvements of I-4 Segment 1. The land use types found adjacent to this system include Reedy Creek, forested uplands and wetlands, roads and highways, utilities, pine plantation, and open maintained land.

WL-5(W) is a moderate quality community and is best classified as a Wetland Forested Mixed (FLUCFCS 6300). The most dominant vegetation observed within this system include cypress, red maple, sweetgum, slash pine, wax myrtle, sweet bay, Carolina willow, elderberry and button bush. WL-5(W) is part of the floodplain of Reedy Creek and is contiguous with Wetland 6(E) to the south.

Wetland 5(W) receives runoff from roads and highways, agriculture land, and open maintained lands. No wildlife was observed during site reviews, but it is anticipated that nesting, foraging and roosting habitat for wetland dependent wildlife species is provided by this wetland.

It is anticipated that 1.32 acres of WL-5(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 6(W)

Wetland 6(W) (WL-6(W)) lies north of the interchange of World Drive and I-4. Approximately 0.20 acres lie within the existing ROW of I-4 Segment 1 improvements. Surrounding land uses consist of roads and highways, a stormwater management pond, forested wetlands and uplands, and open maintained lands.

This system is best classified as Wetland Forested Mixed (FLUCFCS 6300) and is of moderate quality. Dominant features within this system consist of cypress, red maple, sweetgum, slash pine, wax myrtle, sweet bay, Carolina willow, elderberry, and button bush. During site evaluations, no wildlife was observed using the system; however, WL-6(W) could provide foraging habitat for wetland dependent avian species.

No impacts are anticipated to occur to WL-6(W) as a result from I-4 Segment 1 improvements.

#### Wetland 7(W)

Wetland 7(W) (WL-7(W)) is located at the ROW of the existing I-4 westbound exit ramp to World Drive near Station 860. Approximately 0.31 acres lie within the existing ROW of I-4. Surrounding land uses consist of roads and highways, a stormwater management pond, upland and wetland forests, and open maintained lands.

This system is best classified as a Wetland Forested Mixed (FLUCFCS 6300) of moderate quality. Dominant vegetation within this system includes red maple, slash pine, Carolina willow, wax myrtle, and broomsedge.

WL-7(W) receives runoff from roads and highways and open maintained lands. No wildlife was observed using the system during site reconnaissance, but it is anticipated that wetland dependent species could use the wetland for foraging, roosting and nesting.

It is anticipated that 0.01 acres of WL-7(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 8(W)

Wetland 8(W) (WL-8(W)) is located along the I-4 westbound exit ramp to World Drive, approximately 0.30 miles east of World Drive, near Station 870. Approximately 0.19 acres of WL-8(W) lie within I-4 Segment 1 improvements. Surrounding land uses consist of roads and highways, stormwater ponds, uplands and open maintained lands.

This system is a low quality wetland that is best classified as Mixed Wetland Hardwoods (FLUCFCS 6170). Vegetation found within this system includes Carolina willow, and broomsedge.

WL-8(W) receives runoff from the existing I-4 westbound travel lanes, and open maintained lands. No federally or state protected wildlife species were observed, however two (2) cattle egrets, one (1) osprey and one (1) mocking bird were observed in or near the wetland community.

It is anticipated that 0.19 acres of WL-8(W) will be directly impacted as part of the I-4 Segment 1 improvements.

# Wetland 9(W)

Wetland 9(W) (WL-9(W)) is located near Station 890 along the existing westbound travel lanes of I-4. The surrounding landscape includes roads and highways, stormwater ponds, and open maintained lands.

This system is best classified as a Willow and Elderberry wetland (FLUCFCS 6180) and is of low quality. Dominant features within this system consist of Carolina willow, wax myrtle, elderberry, and muscadine grapevine.

WL-9(W) receives runoff from roads and highways, and open maintained land. No wildlife was observed using this system during site evaluations. Foraging habitat for wetland dependent wildlife species could be anticipated for this wetland.

WL-9(W) lies adjacent to the existing I-4 ROW, and it is anticipated that no impacts to this system will result as part of the I-4 Segment 1 improvements.

#### Wetland 9A(W)

Wetland 9A(W) (WL-9A(W)) is located northeast of WL-9(W) near Station 895. Approximately 0.30 acres lie within the proposed I-4 Segment 1 ROW. Surrounding land uses consist of maintained open lands, and forested uplands.

This system is best characterized as Mixed Wetland Hardwoods and Cypress (FLUCFCS 6170/6210), and is of moderate quality. Vegetation found within this system includes cypress, red maple, sweet bay, cabbage palm, and wax myrtle.

Wetland 9A(W) receives runoff from adjacent uplands. No wildlife species were observed using this wetland community during field reviews; however, wetland dependent avian species could be anticipated to forage in the system.

It is anticipated that 0.30 acres of WL-9A(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 10(W) and Wetland 10A(W)

Wetland 10(W) (WL-10(W)) and Wetland 10A(W) (WL-10A(W)) are located along existing westbound travel lanes of I-4, near Station 915 and Station 930, respectively. WL-10(W) lies adjacent to the existing I-4 ROW, and 0.31 acres of WL-10A(W) lie within the existing I-4 ROW. Surrounding land uses consist of stormwater management ponds, roads and highways, open maintained lands, and upland and wetland forests.

Both wetland communities are described as low quality systems and are best classified as a Wetland Forested Mixed (FLUCFCS 6300). Dominant vegetation includes cypress, slash pine, red maple, water oak, sweet bay, cabbage palm, Carolina willow, wax myrtle, dog fennel, and muscadine grapevine.

Both wetland systems receive runoff from roads and highways, and open maintained lands. No wildlife was observed using either system during site reviews, but it is anticipated that foraging and roosting habitat for avian wildlife species is present.

It is anticipated no wetland impacts will occur to WL-10(W), and 0.31 acres of WL-10A(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 10B(W)

Wetland 10B(W) (WL-10B(W)) is located near Station 940 at the I-4 and SR 417 interchange. Approximately 0.01 acres lie within the existing I-4 ROW. Surrounding land uses consist of open land, stormwater management systems, maintenance roads, forested uplands, and utility easements.

This system is best characterized as a Wetland Forested Mix (FLUCFCS 6300), and is of moderate quality. WL-10B(W) contains a canopy of cypress, slash pine, red maple, water oak, sweet bay, cabbage palm, with an understory of Carolina willow, and wax myrtle

WL-10B(W) receives runoff from roads and highways, stormwater ponds, and maintained open lands. No wildlife was observed during site evaluations; however; it is anticipated that this system could support foraging opportunities for wetland dependent species.

It is anticipated that 0.01 acres of WL-10B(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 10C(W)

Wetland 10C(W) (WL-10C(W)) is located along the existing I-4 westbound access ramp from SR 417, near Station 945. Approximately 3.80 acres of WL-10C(W) lie within the existing I-4 ROW. Surrounding land uses include roads and highways, ditches, maintained open lands, utilities, and stormwater management systems.

This system is a low quality wetland community that is best classified as a Wet Prairie (FLUCFCS 6430). Dominant vegetation consists of Carolina willow, salt bush, broomsedge, carpetgrass, dog fennel, rushes, and Virginia chain fern.

WL-10C(W) receives runoff from roads and highways, and maintained open lands. One (1) red-winged blackbird (*Agelaius phoeniceus*) was observed during site reconnaissance. It is anticipated that this system could support foraging opportunities for wetland dependent species.

It is anticipated that 1.95 acres of WL-10C(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 10D(W)

Wetland 10D(W) (WL-10D(W)) is located just east of WL-10C(W), near Station 955. Approximately 0.16 acres of WL-10D(W) lie within the existing I-4 ROW. Surrounding land uses consist of roads and highways, stormwater management systems, ditches, swales, wetlands and forested uplands, utilities, and maintained open lands.

This system is best classified as Wetland Forested Mix (FLUCFCS 6300) and is of moderate quality. Vegetation found within this system includes slash pine, sweet bay, cypress, red maple, Carolina willow, Virginia chain fern, and poison ivy (*Toxicodendron radicans*).

WL-10D(W) receives runoff from adjacent roads and highways, and maintained open land. One (1) osprey, and one (1) barking tree frog (*Hyla gratiosa*) were observed in the system during site reviews. It is anticipated that this system could support foraging opportunities for wetland dependent species.

It is anticipated that 0.02 acres of WL-10D(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 10E(W)

Wetland 10E(W) (WL-10E(W)) is located along the ROW of US 192, approximately 0.50 miles from the I-4 westbound and US 192 interchange. Approximately 0.20 acres lie within the existing I-4 ROW. Surrounding land uses consist of open maintained land, a stormwater pond, contiguous wetlands, uplands, and roads and highways.

This system is best classified as Wetland Forested Mixed (FLUCFCS 6300) and is of moderate quality. Dominant features within this system include slash pine, red maple, sweet bay, wax myrtle, saw palmetto, Virginia chain fern, elderberry, cogongrass, tickseed, and muscadine grapevine.

WL-10E(W) receives runoff from open maintained land, and roads and highways. No wildlife was observed during field reviews; however; it is anticipated that this system could support foraging and roosting opportunities for wetland dependent species.

No impacts are anticipated to WL-10E(W) as part of the I-4 Segment 1 improvements.

#### Wetland 10F(W)

Wetland 10F(W) (WL-10F(W)) is located along the ROW of US 192, near the interchange of the I-4 westbound to US 192 westbound travel lanes, northwest of Station 970. Approximately 2.83 acres lie within the existing I-4 ROW. The landscape surrounding WL-10F(W) include roads and highways, stormwater management ponds, forested uplands and wetlands, and open maintained land.

WL-10F(W) is best classified a Mixed Wetland Hardwoods (FLUCFCS 6170) and is of moderate quality. Dominant vegetation within this system consists of red maple, Carolina willow, wax myrtle, primrose willow, and Virginia chain fern.

WL-10F(W) receives runoff from roads and highways, open maintained land, and commercial and recreational developments. One (1) vulture was observed during site reconnaissance. It is anticipated that this system could support foraging and roosting opportunities for wetland dependent species, in particular avian species.

No impacts are anticipated to WL-10F(W) as part of the I-4 Segment 1 improvements.

#### Wetland 11(W)

Wetland 11(W) (WL-11(W)) is located adjacent to the existing I-4 ROW, westbound travel lanes, approximately 0.15 miles east of US 192, near Station 980. Approximately 0.30 acres lie within the existing ROW. The land uses that surround this wetland community include roads and highways, stormwater management systems, surface waters, and open maintained lands.

WL-11(W) is a moderate quality system that is best classified as a Mixed Wetland Hardwoods (FLUCFCS 6170). Vegetation present within the system includes red maple, Carolina willow, saw palmetto, and swamp fern.

WL-11(W) receives runoff from roads and highways, and open maintained lands. No wildlife was observed using this system during site reviews; however, it is anticipated that WL-11(W) could support foraging and roosting opportunities for wetland dependent species.

No impacts are anticipated to WL-11(W) as part of the I-4 Segment 1 improvements.

# Wetland 12(W)

Wetland 12(W) (WL-12(W)) lies along the existing I-4 westbound exit ramp to US 192 westbound, near Station 990. Surrounding land uses include wetlands, forested uplands, maintained open lands, and roads and highways.

This system is best classified as a Mixed Wetland Hardwoods (FLUCFCS 6170) and is of moderate quality. Loblolly bay (*Gordonia lasianthus*), red maple, slash pine, and saw palmetto compose the majority vegetation found within this system.

WL-12(W) receives runoff from cleared land, roads and highways and open maintained lands. One (1) swallowtailed kite (*Elanoides forficatus*) was observed flying over the area during site reconnaissance. It is anticipated that this system could support foraging, nesting and roosting opportunities for wetland dependent species.

WL-12(W) lies adjacent to the existing ROW and it is anticipated that no impacts to WL-12(W) will result as part of the I-4 Segment 1 improvements.

# Wetland 13(W)

Wetland 13(W) (WL-13(W)) is located just east of WL-12(W) along the I-4 westbound exit ramp to US 192 westbound, near Station 1010. Surrounding land uses include roads and highways, open land, and forested wetlands.

WL-13(W) is best classified as Wet Prairie (FLUCFCS 6430) of moderate quality. Dominant features of this system consist of sweet bay, pine saplings, goldenrod (*Solidago* sp.), Virginia chain fern, rushes, carpetgrass, yellow batchelor's button, pipewort (*Eriocaulon decangulare*), and spider orchid (*Habenaria quinqueseta*).

WL-13(W) receives runoff from roads and highways and open maintained lands. No wildlife was observed; however, it is anticipated that this system could support foraging opportunities for wetland dependent species, in particular avian species.

WL-13(W) lies adjacent to the existing ROW and it is anticipated that no impacts to WL-13(W) will result as part of the I-4 Segment 1 improvements.

# Wetland 14(W)

Wetland 14(W) (WL-14(W)) is located along the existing ROW of the I-4 westbound exit ramp to Osceola Parkway, west of Bonnet Creek, near Station 1035. Approximately 1.47 acres of WL-14(W) lie within the existing I-4 ROW.

Surrounding land uses include a golf course, stormwater management systems, Bonnet Creek, forested uplands, swales, roads and highways, wetlands and open land.

WL-14(W) is best characterized as Mixed Wetland Hardwoods (FLUCFCS 6170) and is of moderate quality. Loblolly bay, red maple, slash pine, and saw palmetto compose the majority vegetation found within this system.

WL-14(W) receives runoff from a nearby golf course, cleared land, and roads and highways. No wildlife was observed using the systems during site reconnaissance. It is anticipated that WL-14(W) could support foraging, denning and roosting opportunities for wetland dependent species.

It is anticipated that 0.73 acres of WL-14(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 14A(W)

Wetland 14A(W) (WL-14A(W)) is located along the existing ROW of the I-4 westbound exit ramp to Osceola Parkway, east of Bonnet Creek, near Station 1040. Approximately 8.19 acres of WL-14A(W) lie within the existing and proposed ROW. Surrounding land uses include Bonnet Creek, roads and highways, and forested wetlands.

WL-14A(W) is best characterized as Cypress (FLUCFCS 6210) and is of moderate quality. Cypress, loblolly bay, red maple, slash pine, and saw palmetto are found within this system.

WL-14A(W) receives runoff from adjacent roads and highways. No wildlife was observed using the systems during site reconnaissance. It is anticipated that WL-14A(W) could support foraging, denning and roosting opportunities for wetland dependent species.

It is anticipated that 2.30 acres of WL-14A(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 15(W)

Wetland 15(W) (WL-15(W)) lies just east of WL-14(W) within the infield of SR 536 and I-4 westbound near Station 1085. Approximately 1.37 acres lie within the existing I-4 ROW. The adjacent landscape includes ditches, roads and highways, and maintained open land.

This system is a low quality wetland community, and is best categorized as a Mixed Wetland Hardwoods (FLUCFCS 6170). Dominant features within WL-15(W) include red maple, sweet bays, Carolina willow, primrose willow, elderberry, duck potato, and taro.

WL-15(W) is contiguous with an upland-cut ditch, and receives runoff from roads and highways, and maintained open land. During field activities, no wildlife was observed using the system; however, it is anticipated that this system could support foraging opportunities for wetland dependent species, in particular avian species.

It is anticipated that 1.37 acres of WL-15(W) will be directly impacted as part of the I-4 Segment 1 improvements.

# Wetland 16(W)

Wetland 16(W) (WL-16(W)) is located immediately east of WL-15(W) near Station 1090. Approximately 1.06 acres of WL-16(W) lie within the I-4 ROW. Surrounding land uses consist of roads and highways, ditches, and maintained land.

This system is best characterized as Wetland Forested Mixed (FLUCFCS 6300), and is of low quality. Dominant features within this wetland community include sweet and loblolly bays, red maple, slash pine, saw palmetto, primrose willow, wax myrtle, and Virginia chain fern.

WL-16(W) receives runoff from roads and highways, and maintained land. No wildlife was observed during field reviews; however, it is anticipated that this system could support foraging opportunities for wetland dependent species.

It is anticipated that 1.06 acres of WL-16(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 17(W)

Wetland 17(W) (WL-17(W)) is located within the infield of the interchange of Epcot Center Drive and the I-4 westbound travel lanes, near Station 1095. Approximately 9.81 acres of WL-17(W) lie within the existing I-4 ROW. The supporting landscape includes roads and highways, and forested uplands.

This system is best characterized as a Wetland Forested Mixed (FLUCFCS 6170) and is of low quality. Dominant features within this wetland community include slash pine, red maple, loblolly bay, Carolina willow, wax myrtle, elderberry, dog fennel, ragweed, and Virginia chain fern. Historically, WL-17(W) was part of a larger system, and is showing signs of succession as evident by the establishment of upland plant species, loss of organic nature in the soils, and the lack of evidence supporting inundation.

WL-17(W) receives runoff from roads and highways. No wildlife was observed using the system during site reconnaissance; however, it is anticipated that this system could support foraging and roosting opportunities for wetland dependent species.

It is anticipated that 9.81 acres of WL-17(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 17A(W)

Wetland 17A(W) (WL-17A(W)) is located along the existing ROW of Epcot Center Drive and the SR 536 eastbound entrance ramp to I-4. Approximately 1.87 acres lie within the existing ROW. Surrounding land uses consist of roads and highways, maintained land, and Bonnet Creek.

WL-17A(W) is a moderate quality wetland and is best classified as Mixed Wetland Hardwoods (FLUCFCS 6170). Dominant features of this system include cypress trees, red maple, slash pines, Carolina willow, wax myrtle, Caesar's weed, saltbush, blackberry, and muscadine grapevine.

This system receives runoff from roads and highways, and maintained uplands. One (1) osprey was observed nesting on a pole in the vicinity of this system. It is anticipated that this system could support foraging, resting, denning and nesting opportunities for wetland dependent species.

It is anticipated that no impacts to WL-17A(W) will result as part of the I-4 Segment 1 improvements.

#### Wetland 17B(W)

Wetland 17B(W)(WL-17B(W)) is located within the infield of Epcot Center Drive, and SR 536 eastbound to I-4 eastbound entrance ramp. Approximately 3.29 acres lie within the existing I-4 ROW. Surrounding land uses include roads and highways, forested uplands, and an isolated wetland system (WL-17D(W)).

This wetland system is best characterized as a Freshwater Marsh (FLUCFCS 6410) and is of moderate quality. Dominant features of this system consist of carpetgrass, dog fennel, rushes, and other wetland grasses and sedges.

WL-17B(W) receives runoff from roads and highways, forested uplands, and maintained ROW. No wildlife was observed using this system during site review activities; however, it is anticipated that this system could support foraging for wetland dependent species.

It is anticipated that no impacts to WL-17B(W) will result as part of the I-4 Segment 1 improvements.

#### Wetland 17C(W)

Wetland 17C(W) (WL-17C(W)) lies within the infield of Epcot Center Drive and SR 536 eastbound to I-4 eastbound, immediately west of WL-17B(W). Supporting land use types include roads and highways, herbaceous wetlands, and maintained ROW.

This system is best classified as a Mixed Wetland Hardwoods (FLUCFCS 6170), and is of low quality. Dominant features within this system include Chinese tallow, loblolly bay, Carolina willow, smartweed, muscadine grapevine, and standing water.

WL-17C(W) receives runoff from roads and highways, and maintained ROW. Several common bird species were observed in and around this wetland system. Birds observed included the American crow, Northern red cardinal (*Cardinalis cardinalis*), red-winged blackbird, mourning dove (*Zenaida macroura*), swallow tail kite, and a Northern bobwhite (*Colinus virginianus*).

It is anticipated that no impacts to WL-17C(W) will result as part of the I-4 Segment 1 improvements.

#### Wetland 17D(W)

Wetland 17D(W) (WL-17-D(W)) is located adjacent to the ROW of Epcot Center Drive, near the exit ramp to SR 536 westbound. Approximately 0.60 acres lie within the existing ROW. Surrounding land uses consist of roads and highways, maintained ROW, ditches, storm water management system, and commercial development.

This system is a low quality wetland and is best classified as Mixed Wetland Hardwoods (FLUCFCS 6170). Vegetation observed in the system includes cypress, Chinese tallow, red maple, Brazilian pepper, Carolina willow, elderberry, Virginia chain fern, and muscadine grapevine.

WL-17D(W) receives runoff from roads and highways, commercial development, and maintained open land. No wildlife was observed using the system during site reconnaissance, but it is anticipated that WL-17D(W) could support foraging habitat for wetland dependent species, in particular avian species.

It is anticipated that no impacts to WL-17D(W) will result as part of the I-4 Segment 1 improvements.

#### Wetland 18(W) and Wetland 18A(W)

Wetland 18(W) (WL-18(W)) and Wetland 18A(W) (WL-18A(W)) are located in the infield of the Epcot Center Drive, I-4 westbound entrance ramp, and the I-4 exit ramp to SR 536 westbound, between Station 1105 and 1120. Approximately 6.37 acres of WL-18(W) and 11.58 acres of WL-18A(W) lie within the existing I-4 ROW. Surrounding land uses include roads and highways, and open maintained land.

These systems are best classified as Wetland Forested Mixed (FLUCFCS 6300), transitional, and are of low quality. The dominant vegetation within WL-18(W) and WL-18A(W) include slash pines, red maple, southern magnolia (*Magnolia grandiflora*), loblolly bay, saw palmetto, saltbush, elderberry, and swamp ferns.

Wetland 18(W) and WL-18A(W) receive runoff from surrounding roads and highways, and maintained open land. No wildlife was observed using either community during site reviews; however, wetland dependent avian species could be anticipated to forage in these systems.

It is anticipated that 6.37 acres of WL-18(W), and 11.58 acres of WL-18A(W) will be directly impacted as part of the I-4 Segment 1 improvements.

# Wetland 19(W)

Wetland 19(W) (WL-19(W)) lies along the I-4 exit ramp to SR 536 westbound, near Station 1120. Approximately 0.56 acres of WL-19(W) lie within the existing ROW. Surrounding land uses consist of roads and highways, commercial development, upland forests, and maintained open land.

This system is best classified as a Mixed Wetland Hardwoods (FLUCFCS 6170), and is of low quality. The dominant vegetation found within this system consists of Chinese tallow, red maple, Carolina willow, Brazilian pepper, saw palmetto, maidencane, and Virginia chain fern.

WL-19(W) receives runoff from roads and highways, commercial developments, and maintained open land. One (1) anhinga (*Anhinga anhinga*) was observed roosting in the system during field activities. It is anticipated that this wetland could provide foraging and roosting habitat for wetland dependent species.

It is anticipated that 0.56 acres of WL-19(W) will be directly impacted as part of the I-4 Segment 1 improvements.

# Wetland 20(W)

Wetland 20(W) (WL-20(W)) is located along the I-4 westbound travel lanes, approximately 0.30 miles east of Epcot Center Drive, near Station 1135. Approximately 0.95 acres lie within the existing ROW. The surrounding land uses consist of parking lots, roads and highways, a stormwater pond, and maintained ROW.

This system is a low quality wetland and is best classified as a disturbed Mixed Wetland Hardwoods (FLUCFCS 6170). Plants found within this wetland include red maple, sweet bay, Carolina willow, wax myrtle, elderberry, and muscadine grapevine.

WL-20(W) receives runoff from the adjacent roads and highways, parking lots, and maintained ROW. Two (2) black vultures were observed roosting in the system during site reconnaissance. It is anticipated that WL-20(W) could provide foraging and roosting habitat for wetland dependent species, in particular avian.

It is anticipated that 0.95 acres of WL-20(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 20A(W)

Wetland 20A(W) (WL-20A(W)) is located north of CR 536, west of I-4, near Station 1200. Approximately 0.82 acres of WL-20A(W) lie within the existing I-4 ROW. Surrounding land uses consist of an existing stormwater management pond, parking lots, roads and highways, and commercial development.

This system wetland community is best characterized as a Wet Prairie (FLUCFCS 6430) and is of low quality. Dominant features within this system include Chinese tallow, primrose willow, broomsedge, sand cordgrass (*Spartina bakeri*), duck potato, and Virginia chain fern.

WL-20A(W) receives runoff from the adjacent roads and highways, and parking lots. No wildlife was observed during field activities, but it is anticipated that WL-20A(W) could provide foraging and roosting habitat for wetland dependent species, in particular avian.

It is anticipated that 0.82 acres of WL-20A(W) will be directly impacted as part of the I-4 Segment 1 improvements.

# Wetland 20B(W)

Wetland 20B(W) (WL-20B(W)) is located along the westbound travel lanes of I-4, near Station 1205 east of WL-20A(W). Approximately 0.20 acres of WL-20B lie within the existing and proposed ROW. Surrounding land uses consist of stormwater ponds, commercial development, roads and highways, and maintained ROW.

This system is best categorized as a disturbed Mixed Wetland Hardwoods (FLUCFCS 6170) and is of low quality. Dominant vegetation within this system includes cabbage palm, cypress, sweet bay, laurel oak, Carolina willow, primrose willow, Caesar's weed, blackberry, Virginia chain fern, cinnamon fern, duck potato, bidens, and mock bishop's weed.

WL-20B(W) receives runoff from adjacent commercial development, roads and highways, parking lots and maintained ROW. One (1) osprey was observed near the system during site review activities. WL-20B(W) is anticipated to providing foraging habitat for wetland dependent avian species.
It is anticipated that 0.20 acres of WL-20B(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 20C(W)

Wetland 20C(W) (WL-20C(W)) is located along the existing I-4 westbound travel lanes, approximately 0.7 miles west of Central Florida Parkway, near Station 1295. Approximately 0.45 acres lie within the proposed I-4 ROW. Surrounding land uses consist of citrus groves, disturbed uplands, roads and highways, and maintained ROW.

This system is best classified as a Willow and Elderberry (FLUCFCS 6180) and is of low quality. Dominant features within this system consist of slash pine, Carolina willow, and muscadine grapevine.

WL-20C(W) receives runoff from the adjacent citrus grove, disturbed uplands, roads and highways, and maintained ROW. No wildlife was observed using the system during site reconnaissance; however, it is anticipated this system provides foraging and roosting opportunity for wetland dependent wildlife species, in particular avian species.

It is anticipated that 0.45 acres of WL-20C(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Wetland 21(W)

Wetland 21(W) (WL-21(W)) is located along the shores of Big Sand Lake, northeast of Station 1325. Surrounding land uses include surface waters, planted pine and open lands.

This wetland community is best characterized as a Willow and Elderberry (FLUCFCS 6180) and is of low quality. Vegetation present includes elderberry, Carolina willow, Brazilian pepper, purple passionflower (*Passiflora incarnata*), and Caesar's weed.

During site evaluations, no wildlife was observed using the system, but it is anticipated to provide foraging and roosting opportunity for wetland dependent wildlife species.

It is anticipated that impacts to WL-21(W) will be avoided for I-4 Segment 1 improvements.

#### Wetland 22(W)

Wetland 22(W) (WL-22(W)) lies northeast of the CR 535 and Apopka Vineland Road intersection. Surrounding land uses include commercial development, roads and highways, a stormwater pond, and open uplands. Approximately 4.83 acres of WL-22(W) lie within the proposed I-4 ROW.

WL-22(W) is best categorized as a Wetland Forested Mixed (FLUCFCS 6300) and is of moderate quality. WL-22(W) is vegetated by a canopy of red maple, southern magnolia, pond pine, and slash pine, with a mid-story and groundcover of Carolina willow, castorbean (*Ricinus communis*), Virginia chain fern, and cinnamon fern.

During site reconnaissance no wildlife was observed using this system, but it is anticipated that foraging, roosting and nesting opportunities are present.

It is anticipated that 4.83 acres of WL-22(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### **OTHER SURFACE WATERS COMMUNITIES**

#### Ditches<sup>4</sup>

# <u>Surface Water(s) (SW) – 3(W), 4(W), 13A(W), 20(W), 27(W), 42(W), 44(W), 46(W), 48(W), 49(W), 51(W), 55(W), 57(W), 58C(W), 59(W), 59A(W)</u>

SW-3(W), SW-4(W), SW-13A(W), SW-20(W), SW-27(W), SW-42(W), SW-44(W), SW-46(W), SW-48(W), SW-49(W), SW-51(W), SW-55(W), SW-57(W), SW-58C(W), SW-59(W), and SW-59A(W) are located along the existing westbound travel lanes of I-4 from west of CR 532 to west of SR 528 (See Surface Water and Wetland Maps, Exhibits 5.1-5.21). Approximately 5.65 acres of upland-cut ditches lie within the I-4 ROW. These systems are located within the existing I-4 Segment 1 ROW, and are subject to routine maintenance. Surrounding land uses that encompass these systems include major roads and highways, access ramps, commercial and residential developments, golf courses, resorts, amusement parks, cleared land with the intent to develop, other surface waters, citrus groves, forested and herbaceous uplands and wetlands, creeks, swales, and open land.

These systems are best characterized as Streams and Waterways/Upland-Cut Ditches (FLUCFCS 5130). During site reconnaissance these systems were either inundated or saturated. Dominant vegetation inhabiting these systems include primrose willow, Carolina willow, wax myrtle, saltbush, cattail, elderberry, Caesar's weed, taro, dog fennel, ragweed, vasey grass, broomsedge, foxtail, bidens, bacopa (*Bacopa caroliniana*), pennywort, bahia, fleabane, sedges, torpedo grass, duck potato, pickerelweed, pipewort, water hemlock (*Cicuta douglasii*), maidencane, rushes, white star sedge, tickseed, meadow beauty, mock bishop's weed, smartweed, coinwort, yellow-eyed grass, and carpetweed.

These systems receive runoff from surrounding roads and highways, commercial development, maintained open land and are connected to other ditches or outfall to stormwater ponds. No federally or state protected species were observed utilizing the ditches within the I-4 westbound corridor; however, it is anticipated that foraging opportunity for avian wetland dependent species (notably the wood stork) may be present.

Common species that were observed foraging within these systems include American crow, Northern cardinal, common grackle, cattle egret, osprey, mocking bird and great egret.

#### Swales<sup>5</sup>

# <u>Surface Water(s) (SW) – 5(W), 9(W), 10(W), 13B(W), 16(W), 17(W), 18(W), 22(W), 25(W), 25B(W), 26(W), 27(W), 31(W), 32(W), 33(W), 34(W), 38(W), 41(W), 43(W), 47(W), 48A(W), 50(W), 50A(W), 52(W), 53(W), 54(W), 55A(W) and 58(W)</u>

SW-5(W), SW-9(W), SW-10(W) SW-13B(W), SW-16(W), SW-17(W), SW-18(W), SW-22(W), SW-25(W), SW-25B(W), SW-26(W), SW-27(W)SW-31(W), SW-32(W), SW-33(W), SW-34(W), (SW-38(W), SW-41(W), SW-43(W), SW-47(W), SW-48A(W), SW-50(W), SW-50A(W), SW-52(W), SW-53(W), SW-54(W)), SW-55A(W) and SW-58(W) are located

<sup>&</sup>lt;sup>4</sup> Ditches excavated through upland soils are non-jurisdictional, and therefore impacts associated with these surface waters do not require mitigation.

<sup>&</sup>lt;sup>5</sup> Swales excavated through upland soils are non-jurisdictional, and therefore impacts associated with these surface waters do not require mitigation.

along the ROW of the westbound travel lanes of I-4 from west of CR 532 to west of SR 528 (See Surface Water and Wetland Map, Exhibits 5.1-5.21, Appendix A). Approximately 16.60 acres of upland-cut swales are located within the I-4 ROW. These systems are located within the maintained ROW and are subject to routine maintenance. Surrounding land uses consist of I-4 travel lanes heading westbound, roads, commercial development, open maintained land, upland-cut ditches, stormwater ponds, cleared land, herbaceous/forested uplands and wetlands.

These systems are best classified as Streams and Waterways/Upland-Cut Swales (FLUCFCS 5130). These systems are typically saturated or inundated and consist mainly of duck potato, vasey grass, foxtail, bidens, pennywort, coinwort, bahia, fleabane, rushes, sedges, torpedograss, maidencane, rushes, white star sedge, tickseed, coinwort, mock bishop's weed and carpetweed vegetation.

These systems receive runoff from surrounding roads and highways, commercial development, maintained open land and are connected to other ditches or outfall to stormwater ponds. No wildlife was observed using the systems, but it is anticipated that foraging habitat for wetland dependent avian species may be present.

#### Creeks, Rivers and Lakes

#### Surface Water 9B(W)

Surface Water 9B(W) (SW-9B(W)) (Reedy Creek) is located west of the existing I-4 eastbound travel lanes, at Station 813. This system is hydrologically connected to Surface Water 5B(W), which is located east of I-4 at Station 813. Approximately 0.11 acres of SW-9B(E) lie within the I-4 ROW. The surrounding land uses consist of wetlands, maintained ROW, and roads and highways.

SW-9B(E) is best classified as a Streams and Waterways (FLUCFCS 5130), and is a moderate quality system. SW-9B(E) consists of open water, with its associated floodplain (WL-5(W)) vegetatively comprised of red maple, American elm, elderberry, ragweed, carpetweed, and bidens.

This system receives runoff from the adjacent roads and highways, maintained ROW, and associated floodplain. During site evaluations, no wildlife was observed using the system; however, it is anticipated that that SW-9B(E) could support foraging opportunities for wetland dependent species.

It is anticipated that approximately 0.11 acres of SW-9B(E) will be directly impacted from I-4 Segment 1 improvements.

#### Surface Water 40(W)

Surface Water 40(W) (SW-40(W)) lies along the existing I-4 westbound travel lanes and Osceola Parkway interchange, near Station 1035. This system is a channelized system (Bonnet Creek), a tributary of Reedy Creek, and crosses I-4 at the Osceola Parkway/I-4 interchange. Approximately 4.65 acres of SW-40(W) lie within the existing and proposed I-4 ROW. The surrounding land uses consist of creeks, floodplains, wetlands, open land, upland forests, golf courses, resorts, residential and commercial developments, stormwater management ponds, agricultural lands, and roads and highways.

This system is best classified as a Streams and Waterways/Upland-Cut Canal (FLUCFCS 5130) and is of low quality. Dominant features within this community type consists of open water with floating duckweed, maintained berms with scattered slash pine, red maple, wax myrtle, and primrose willow.

SW-40(W) is contiguous to SW-28(E) underneath the east/west travel lanes of I-4, and receives runoff from the adjacent roads and highways. This system is maintained by the Reedy Creek Improvement District. No wildlife was observed, but it is anticipated that this system provides habitat for wetland dependent species.

It is anticipated that 4.65 acres of SW-40(W) will be directly impacted as part of the I-4 Segment 1 improvements.

#### Cattle Pond

#### Surface Water 8A(W)

Surface Water 8A(W) (SW-8A(W)) is located west of Old Lake Wilson Road, near Station 750, within the I-4 westbound travel lanes. Surrounding land uses consist of pasture, open land, and roads and highways.

This system is best classified as Reservoirs less than 10 acres that are dominant features (FLUCFCS 5340). Dominant features of this system include open water, and algae (*Pediastrum boryanum*).

This system receives runoff from the surrounding pasture lands and roads and highways. No wildlife was observed using the system during site field activities.

SW-8A(W) lies outside of the I-4 Segment 2 improvements and therefore impacts to this system are not anticipated.

#### **Existing Stormwater Ponds<sup>6</sup>**

Surface Water(s) (SW) – 1(W), 2(W), 6(W), 6A(W), 6B(W), 7(W), 7A(W), 8(W), 9A(W), 9B(W), 9C(W), 11(W), 12(W), 13(W), 14(W), 15(W), 15A (W), 17A(W), 17B(W), 17C(W), 17D(W), 19(W), 21(W), 22A(W), 23(W), 24(W), 24A(W), 25A(W), 28A(W), 28A(W), 28B(W), 29(W), 30(W), 35(W), 35A(W), 36(W), 37(W), 39(W), 45(W), 54A(W), 54B(W) 56(W), SW-57(W), 57A(W), 57B(W), 57C(W), 57D(W), 57E(W), 58A(W), 58B(W) and 60(W)

SW-1(W), SW-2(W), SW-6(W), SW-6A(W), SW-6B(W), SW-7 (W), SW-7A(W), SW-8(W), SW-9A(W), SW-9B(W), SW-9C(W), SW-11(W), SW-12(W), SW-13(W), SW-14(W), SW-15(W), SW-15A (W), SW-17A(W), SW-17B(W), SW-17C(W), SW-17D(W), SW-19(W), SW-21(W), SW-22A(W), SW-23(W), SW-24(W), SW-24A(W), SW-25A(W), SW-28(W), SW-28B(W), SW-29(W), SW-30(W), SW-35(W), SW-35A(W), SW-36(W), SW-37(W), SW-39(W), SW-45(W), SW-54A(W), SW-54B(W), SW-56(W), SW-57(W), SW-57A(W), SW-57B(W), SW-57C(W), SW-57D(W), SW-57E(W), SW-58A(W), SW-58B(W) and SW-60(W) are best described as Reservoirs less than 10 acres which are dominant features (FLUCFCS 5340). These systems are located along the westbound travel lanes of I-4 from west of CR 532 to west of SR 528 (See Surface Water and Wetland Map, Exhibits 5.1-5.21). These systems are best

<sup>&</sup>lt;sup>6</sup> Permitted stormwater ponds are not considered jurisdictional other surface waters pursuant to Chapter 62-340, Florida Administrative Code (F.A.C), therefore, alterations or modifications to these systems were not assessed as a part of the total impacts to jurisdictional systems.

characterized as stormwater management ponds either with well-defined maintained banks and control structures, or stormwater management ponds with defined littoral zones and control structures. Surrounding land use types consist of ramps, roads and highways, resorts, commercial and residential development, golf courses, amusement parks, cleared land with the intent to construct, forested/herbaceous wetlands and uplands, other surface waters and open land.

During site reconnaissance, these systems consisted of open water with maintained banks. Ruderal and weedy vegetation (ragweed, dog fennel, Mexican clover, rattle box (*Crotalaria* spp.), etc.) were occasionally observed within the littoral zone or along the berms, as well as cypress trees, red maple, saltbush, Carolina willow, primrose willow, wax myrtle, elderberry, cord grass, canna (*Canna* spp.), broomsedge, maidencane, cattail, duck potato, pickerelweed, torpedograss, bidens, pennywort, coinwort, rushes, sedges and algae.

These systems provide treatment for the existing I-4 westbound travel lanes, and commercial and residential developments.

One (1) federally protected species, the American alligator, was observed. No other endangered, threatened, or listed wildlife species were observed utilizing these systems; however, it is anticipated that foraging opportunity for avian wetland dependent species may be present.

Common species that were observed utilizing these systems include great egrets, cattle egrets, red-winged blackbirds, mocking bird, vulture, mourning dove, leopard frog (*Rana sphenocephala*), American coots, great blue herons, mallards, anhinga and eastern mosquitofish (*Gambusia holbrooki*).

#### Existing and Proposed Stormwater Ponds

Stormwater management for the I-4 Segment 1 improvements will be accommodated through the use of existing stormwater ponds, creation of new ponds, and/or re-grading existing ponds to meet design criteria. Below is a summary of proposed ponds which are proposed, or existing to be re-graded or enlarged.

#### FPC 100 (Recommended)

FPC 100 is a proposed pond located near Station 605, west of I-4. This pond site is proposed within forested and herbaceous upland habitat, and a portion of WL-1(W).

It is anticipated that 2.14 acres of WL-1(W) will be directly impacted as part of Pond FPC 100 construction for I-4 Segment 1 improvements.

#### Pond 100 (Recommended)

Pond 100 is located within the existing ROW of I-4 near Station 610, east of I-4, approximately 0.44 miles west of Osceola Polk Line Road. This is an existing pond, SW-B(E), that will be enlarged. Habitat types within this system consist of a stormwater pond (SW-B(E)), surface water (SW-A(E)), wetlands (WL-B(E) and WL-C(E)), and maintained uplands.

It is anticipated that 3.60 acres of WL-B(E) and WL-C(E), and 0.19 acres of SW-A(E) will be directly impacted as part of Pond 100 construction for I-4 Segment 1 improvements.

#### FPC 101A (Recommended)

FPC 101A is located near Station 630, east of I-4. This proposed pond is located within a scattered canopy of uplands and wetlands (WL-C(E)).

It is anticipated that 1.02 acres of WL-C(E) will be directly impacted by FPC 101A construction for the I-4 Segment 1 improvements.

#### Pond 101A (Recommended)

Pond 101A is located within the interchange of the I-4 and Champions Gate Boulevard interchange, near Station 630. This is an existing pond, SW-1(W), which will be reconfigured into Pond 101A and Pond 101 B.

No wetland or surface water impacts are anticipated to result from using Pond 101A for I-4 Segment 1 improvements.

#### Pond 101B (Recommended)

Pond 101B is a proposed pond, located near Station 630, and within the interchange of I-4 and Champions Gate Boulevard. This is an existing stormwater pond (SW-1(W)) that will be reconfigured into Pond 101A and Pond 101 B.

No wetland or surface water impacts are anticipated to result from using Pond 101B for the I-4 Segment 1 improvements.

#### Pond 101C (Recommended)

Pond 101C is a proposed pond, located along the exit ramp from I-4 westbound to Champions Gate Boulevard, near Station 635. This proposed pond is located within maintained herbaceous uplands of the existing I-4 ROW.

No wetland or surface water impacts are anticipated to result from the construction of Pond 101C for the I-4 Segment 1 improvements.

#### Pond 101D (Recommended)

Pond 101D is an existing pond located along the exit ramp from I-4 westbound travel lanes to Champions Gate Boulevard, near Station 635. This pond includes the reconfiguring of an existing stormwater pond, SW-2(W).

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using Pond 101D for I-4 Segment 1 improvements.

#### Pond 101E (Recommended)

Pond 101E is located near Station 630, within the existing I-4 ROW. This proposed pond site includes forested and herbaceous upland habitat, and a portion of the existing I-4 eastbound exit ramp.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of this pond for I-4 Segment 1 improvements.

#### Pond 101F (Recommended)

Pond 101F is located east of Pond 101E, adjacent to Osceola Polk Line Road, near Station 635. This is a proposed pond located within forested upland habitat.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of Pond 101F for I-4 Segment 1 improvements.

#### Pond 101G (Recommended)

Pond 101G is a proposed pond, located within the footprint of the existing entrance ramp of Osceola Polk Line Road (CR 532) to I-4 eastbound travel lanes, and maintained upland ROW.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of this pond for I-4 Segment 1 improvements.

#### Pond 102 (Recommended)

Pond 102 is an existing stormwater pond, SW-1(E), located near Station 655, east I-4. This existing pond will be incorporated into the I-4 Segment 1 improvements.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using Pond 102 as a part of the I-4 Segment 1 improvements.

#### FPC 102 (Recommended)

FPC 102 is a proposed pond located south of I-4 ROW, approximately 0.4 miles east of Osceola Polk Line Road, near Station 660. This proposed pond will be constructed within uplands consisting of an open herbaceous prairie with scattered cabbage palm, and wetland (WL-1(E)).

It is anticipated that 2.95 acres of WL-1(E) will be directly impacted from the construction of this pond for I-4 Segment 1 improvements.

#### Pond 103 (Recommended)

Pond 103 is an existing stormwater pond located in the southwest quadrant of the I-4 westbound travel lanes and Tradition Boulevard, near Station 700. This is an existing stormwater pond, SW-6(W), which will be expanded and regraded as part of the I-4 Segment 1 Improvements.

It is anticipated that 0.21 acres of WL-2B(W) will be directly impacted as part of Pond 103 improvements.

#### FPC 103A (Recommended)

FPC 103A is a proposed pond located east of I-4, near Station 697. FPC 103A is proposed within upland habitat, and is adjacent to WL-2(E).

It is anticipated that 0.06 acres of WL-2(E) will be directly impacted as part of FPC 103A construction for I-4 Segment 1 improvements.

#### FPC 103B (Recommended)

FPC 103B is a proposed pond located east of I-4 and Tradition Boulevard intersection. This pond site is located within cleared upland habitat and adjacent to a wetland (WL-2(E)).

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the I-4 Segment 1 improvements.

#### Pond 104 (Recommended)

Pond 104 is an existing stormwater pond (SW-7A(W)) located along SR 429 near Sinclair Road. No modifications to this pond are proposed.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using Pond 104 for I-4 Segment 1 improvements.

#### Pond 105A (Recommended)

Pond 105A is located within the interchange of I-4 and SR 429, near Station 730. This is an existing stormwater pond (SW-7(W)) that will be re-graded. This existing system is located entirely in upland soils.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the re-grading of this pond for I-4 Segment 1 improvements.

#### Pond 105B (Recommended)

Pond 105B is located within the interchange of I-4 and SR 429, near Station 740. This is an existing stormwater pond (SW-8(W)) that will be reduced and re-graded.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading of Pond 105B for I-4 Segment 1 improvements.

#### FPC 105A (Recommended)

FPC 105A is a proposed pond located along the access ramp from SR 429 to the I-4 westbound travel lanes and Sinclair Road, northwest of Pond 104. This proposed pond is located within an upland planted pine community, and a wetland (WL-3(W)).

It is anticipated that 3.67 acres of direct impacts to WL-3(W) will result from the construction of this pond for I-4 Segment 1 improvements.

#### Pond 106A (Recommended)

Pond 106A is located within the ROW of the I-4 eastbound travel lanes, approximately 0.07 miles west of SR 429, near Station 725. This is an existing system (SW-2(E)) that will be reduced and re-graded. This system is located entirely in uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading of this pond for I-4 Segment 1 improvements.

#### Pond 106B (Recommended)

Pond 106B is located near Station 735 within the ROW of the I-4 eastbound travel lanes, and west of WL-3(E). This is an existing system (SW-3(E)) that will be expanded and re-graded. This system is located entirely in uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading of this pond for I-4 Segment 1 improvements.

#### Pond 107 (Recommended)

Pond 107 is located near Station 740, adjacent to WL-3(E) and Pond 106B. This is an existing stormwater pond (SW-4(E)) that will be incorporated in the I-4 Segment 1 improvement project.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from incorporating this pond into the I-4 Segment 1 improvements.

#### Pond 108A (Recommended)

Pond 108A is located within the ROW of the I-4 eastbound travel lanes and east of Old Lake Wilson Road, near Station 750. The site is an existing stormwater pond (SW-5(E)) that will be reduced in size and regraded.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading Pond 108A for I-4 Segment 1 improvements.

#### Pond 108B (Recommended)

Pond 108B is a proposed pond located near Station 755, and east of I-4. This pond is located within Wetland 5(E).

It is anticipated that 2.80 acres of direct impacts to WL-5(E) will result from the construction of this pond for I-4 Segment 1 improvements.

#### Pond 109 (Recommended)

Pond 109 is located within the ROW of the I-4 westbound travel lanes, approximately 0.30 miles west of Old Lake Wilson Road, near Station 775. This is an existing system (SW-9A(W)) that will be expanded and re-graded. Pond 109 is located entirely in uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the I-4 Segment 1 improvements.

#### FPC 109 (Recommended)

FPC 109 is located along the I-4 eastbound travel lanes, near Station 790. This is an existing system (SW-5A(E)) that will be regraded. It appears that this system was historically constructed within a wetland. No modifications to this pond are anticipated.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading on FPC 109 for I-4 Segment 1 improvements.

#### Pond 110 (Recommended)

Pond 110 is located along the I-4 westbound travel lanes and the access ramp from World Drive, near Station 835. This is an existing pond (SW-9C(W)) that will be expanded. Habitat types include uplands, and maintained ROW.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from expanding this pond for I-4 Segment 1 improvements.

#### Pond 111 (Recommended)

Pond 111 is located approximately 0.23 miles west of World Drive, near Station 825, east of I-4. This is an existing stormwater pond (SW-9A(E)) with no proposed modifications.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using Pond 111 for I-4 Segment 1 improvements.

#### Ponds 112A, 112B, 112C, 112D, 112E, 113A, 113B, 113C, 113D and 113G (Recommended)

Ponds 112A, 112B, 112C, 112D, 112E,113A 113B, 113C, 113D, and 113G are located within the interchange of World Drive and the east and westbound travel lanes of I-4, between Stations 840 and 860. These are existing systems (SW-11(W) through SW-15(W) and SW-11(E) through SW-14(E)) that will be regraded. These systems are located entirely in upland soils.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading of these ponds for I-4 Segment 1 improvements.

#### Ponds 113E and 113F (Recommended)

Proposed ponds 113E and 113F are located within the interchange of World Drive and I-4. These proposed systems are situated entirely in uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using these ponds for I-4 Segment 1 improvements.

#### Pond 114A (Recommended)

Pond 114A is located along the I-4 westbound travel lanes, approximately 0.20 miles east of World Drive near Station 870. This is an existing stormwater management system (SW-17A(W)) that will be incorporated into the I-4 Segment 1 design, with no proposed changes.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from using Pond 114A for I-4 Segment 1 improvements.

#### Pond 114B (Recommended)

Pond 114B is an existing stormwater pond, SW-17B(W), located east of Pond 114A, near Station 880. There are no proposed changes to this system.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using Pond 114B for I-4 Segment 1 improvements.

#### FPC 114A (Recommended)

FPC 114A is located along the I-4 westbound travel lanes, approximately 0.7 miles east of World Drive, near Station 895. This site is an existing stormwater pond (SW-17C(W)) with no proposed changes.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using this pond for I-4 Segment 1 improvements.

#### FPC 114B (Recommended)

FPC 114B is an existing stormwater pond, SW-17D(W)), located east of FPC 114A, near Station 905 approximately 0.7 miles east of World Drive and I-4 interchange. There are no proposed modifications to this pond.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using FPC 114B for I-4 Segment 1 improvements.

#### FPC 114C (Recommended)

This new pond site lies just north of FPC 114A, near Station 900. Habitats within the proposed ROW limits include uplands, and wetlands (WL-9A(W)).

It is anticipated that 0.30 acres of direct impacts to WL-9A(E) will result from construction of this pond for I-4 Segment 1 improvements.

#### Pond 115 (Recommended)

Pond 115 is an existing stormwater management pond (SW-15A(E)), located east of Celebration Boulevard, near Station 875, and adjacent to WL-6C(E). There are no proposed changes anticipated to this pond.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using this pond for the I-4 Segment 1 improvements.

#### Pond 116 (Recommended)

Pond 116 is located near Station 920, west of the SR 530 westbound to I-4 westbound entrance ramp. This site is an existing stormwater pond, SW-22A(W), and adjacent to SW-27(W). No changes are being proposed as a part of I-4 Segment 1 improvements.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using this pond for I-4 Segment 1 improvements.

#### Pond 117 (Recommended)

This existing stormwater pond lies along the I-4 eastbound travel lanes, near Station 930. This existing system, SW-18A(E), will not be modified as a part of I-4 Segment 1 improvements.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using Pond 117 as a part of I-4 Segment 1 improvements.

#### Pond 118 (Recommended)

Pond 118 is located along the ROW of the I-4 westbound travel lanes, approximately 0.1 miles west of SR 417, near Station 935. Pond 118 will be reduced and re-graded. This existing system (SW-24(W)) is located entirely in upland soils.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading this pond for I-4 Segment 1 improvements.

#### Pond 119A (Recommended)

This is an existing stormwater pond, SW-24A(W), located near Station 940 and WL-10B and 10-C(W). Pond 119A will be re-graded as part of the I-4 Segment 1 improvements.

It is anticipated that 0.01 acres of WL-10B(W) will be directly impacted as part of re-grading of this pond for I-4 Segment 1 improvements.

#### Pond 119B (Recommended)

Pond 119B lies just east of Pond 119A, and is an existing stormwater pond (SW-25A(W)). This system functions as a part of the existing I-4 design and will be re-graded as part of the I-4 improvements.

It is anticipated that 0.01 acres of WL-10D(W) will be directly impacted as part of Pond 119B re-grading for I-4 Segment 1 improvements.

#### Pond 120 (Recommended)

Pond 120 is located along the ROW of the eastbound travel lanes of I-4 and the access ramp for SR 417, near Station 945. Pond 120 will be reconfigured. This existing system (SW-19(E)) is located entirely in uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from reconfiguring of Pond 120 for I-4 Segment 1 improvements.

#### Ponds 121A, 121B, 122B, 123, 124, 125, and 126 (Recommended)

Ponds 121A, 121B, 122B, 123, 124, 125, and 126 are located within the infield of I-4 and the US 192 interchange, between Stations 970 and 990. These existing stormwater systems (SW-28A(W), SW-28(W), SW-22(E), SW-29(W), SW-30(W), SW-24(E), and SW-27(E)) will be re-graded, with the exception of Pond 121A. These systems are located entirely in upland soils.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading activities of existing ponds for the I-4 Segment 1 improvements.

#### Pond 122A (Recommended)

Pond 122A is located along the ROW of I-4 eastbound, near Station 965. This proposed system and is located entirely in uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of Pond 122A for I-4 Segment 1 improvements.

#### Pond 122C (Recommended)

Pond 122C is located within the ROW of the I-4 eastbound travel lanes, and along the exit ramp to US 192 eastbound, near Pond 122B. This is a proposed pond that will be located within SW-23(E) and open land.

It is anticipated that 0.26 acres of direct impacts to SW-23(E) will result from the construction of this pond for I-4 Segment 1 improvements.

#### Ponds 127, 128B, and 129 (Recommended)

Ponds 127, 128B, and 129 are existing stormwater ponds located just west of I-4 and Osceola Parkway interchange near Station 1030. These existing systems, SW-35(W), SW-37(W), and SW-39(W), currently serve the I-4 and Osceola Parkway facilities. There are no proposed changes anticipated with these ponds.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by using these ponds for I-4 Segment 1 improvements.

#### Pond 128A (Recommended)

Pond 128A is located along the ROW of the I-4 westbound travel lanes, near Station 1025. This is an existing system (SW-36(W)) located entirely in uplands that will be regraded.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading of this pond for I-4 Segment 1 improvements.

#### Pond 130 (Recommended)

Pond 130 is an existing stormwater pond (SW-29(E)) that is located at the northeast quadrant of I-4 and Osceola Parkway interchange, near Station 1045. This system will be reduced and regraded as a part of I-4 Segment 1 improvements.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading activities of this pond for I-4 Segment 1 improvements.

#### Pond 130A (Recommended)

This existing stormwater pond (SW-40(W)) is located near Station 1045, north of I-4 westbound to Osceola Parkway exit ramp. This pond site lies within limits of SW-40(W) and WL-14(W).

It is anticipated that 0.73 acres of direct impacts to WL-14(W) and 3.73 acres of direct impacts to SW-40(W) will result from construction of Pond 130A for I-4 Segment 1 improvements.

#### Pond 131A (Recommended)

Pond 131A is located within the ROW of the I-4 westbound travel lanes, near Station 1075. This is an existing system (SW-45(W)) that will be reduced and re-graded. Habitat types within this system consist of open maintained land, and other surface waters (SW-45(W)).

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from re-grading of this pond for I-4 Segment 1 improvements.

#### Pond 131B (Recommended)

Pond 131B is located along the I-4 eastbound travel lanes and the exit ramp to Epcot Center Drive, near Station 1075. This existing stormwater pond (SW-30A(E)) will be reconfigured. Pond 131B is located within a portion of WL-10A(E), other habitat types include maintained ROW, and upland forests. Impacts to wetlands are anticipated.

It is anticipated that 1.24 acres of direct impacts to WL-10A(E) will result from the reconfiguring of this pond for I-4 Segment 1 improvements.

#### Pond 132 (Recommended)

Pond 132 is located within the I-4 westbound travel lanes and the Epcot Center Drive interchange, near Station 1095. This existing stormwater pond will be reconfigured. Pond 132 is located within WL-17(W) and a portion of forested uplands.

It is anticipated that 9.81 acres of direct impacts to WL-17(W) will result from construction of this pond for I-4 Segment 1 improvements.

#### FPC 132 (Recommended)

FPC 132 is located within the I-4 westbound travel lanes and the Epcot Center Drive interchange, near Station 1085. This proposed pond will be constructed in uplands, and wetlands (WL-15(W)).

It is anticipated that 1.37 acres of direct impacts to WL-15(W) will result from construction of this pond for I-4 Segment 1 improvements.

#### FPC 133 (Recommended)

FPC 133 is located within the ROW of the I-4 eastbound travel lanes and the exit ramp to Epcot Center Drive, near Station 1085. This proposed system is located within WL-11(E), and adjacent to SW-31(E). Impacts to jurisdictional wetlands and surface waters are anticipated.

It is anticipated that 3.41 acres of direct impacts to WL-11(E) will result from construction of FPC 133 for I-4 Segment 1 improvements.

#### Pond 133 (Recommended)

Pond 133 is located within the ROW of the I-4 eastbound travel lanes of I-4 and the Epcot Center Drive exit ramp, near Station 1095. This existing pond lies within limits of WL-12(E), and forested uplands. Jurisdictional wetland involvement is anticipated to result when implementing this pond.

It is anticipated that 10.05 acres of direct impacts to WL-12(E) will result from implementing this pond site for I-4 Segment 1 improvements.

#### Pond 134 (Recommended)

Pond 134 is also located within the I-4 westbound travel lanes and Epcot Center Drive interchange, near Station 1105. This is an existing stormwater pond located within forested uplands and wetlands (WL-18A(W)). Impacts to jurisdictional wetlands are anticipated to result when implementing this pond.

It is anticipated that 11.58 acres of direct impacts to WL-18A(W) will result from the I-4 Segment 1 improvements.

#### Pond 135 (Recommended)

Pond 135 is located within the ROW of the I-4 eastbound travel lanes of I-4 and along the Epcot Center Drive exit ramp, near Station 1105, and adjacent to SW-31(E). This proposed pond is located within uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from construction of this pond for I-4 Segment 1 improvements.

#### Pond 136A

Pond 136A is an existing stormwater pond, SW-33A(E), which will be expanded and re-graded as a part of I-4 improvements. This pond is located near Station 1135, along the existing I-4 ROW of the eastbound travel lanes. Other habitat found within the site includes forested uplands.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from using this pond for I-4 Segment 1 improvements.

#### Pond 136B (Recommended)

Pond 136B is located along the I-4 eastbound travel lanes, approximately 0.3 miles east of Epcot center Drive, near Station 1145. This proposed pond is located entirely in uplands within close proximity to WL-13(E).

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of Pond 136B for I-4 Segment 1 improvements.

#### Pond 137 (Recommended)

Pond 137 is a proposed pond located along the exit ramp of I-4 eastbound to SR 535. Land uses within limits of this pond area include existing roadway, surface waters (SW-33(E)), and maintained ROW.

It is anticipated that 0.75 acres of direct impacts to SW-33(E)will result from the construction of this pond for I-4 Segment 1 improvements.

#### Ponds 137A and 137B (Recommended)

Ponds 137A and 137B are located within the existing ROW of the eastbound travel lanes of I-4, near Station 1175. SW-34(E) is an existing stormwater pond that will be split into Pond 137A and Pond 137B.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by implementing these ponds for I-4 Segment 1 improvements.

#### Pond 138 (Recommended)

Pond 138 is located along the westbound travel lanes of I-4, approximately 0.15 miles east of Apopka Vineland Road, near Station 1195. This is a proposed system that will be located within an existing stormwater pond (SW-57(W)), and commercial development, and adjacent to SW-55(W).

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of this pond for I-4 Segment 1 improvements.

#### Pond 138A (Recommended)

Ponds 138A is a proposed pond located north of Pond 138B, near Station 1200, approximately 0.15 miles east of Apopka Vineland Road. The land uses of this site include commercial development with buildings, roads and streets.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of this pond for I-4 Segment 1 improvements.

#### Pond 138B (Recommended)

Ponds 138B is a proposed pond located north of Pond 138, near Station 1200, approximately 0.15 miles east of Apopka Vineland Road. The land uses of these sites include commercial development with buildings, roads and streets, and wetlands (WL-20A(W)).

It is anticipated that 0.82 acres of direct impacts to WL-20A(W) will result from the construction of Pond 138B for I-4 Segment 1 improvements.

#### FPC 138 (Recommended)

FPC 138 is a proposed pond located at the northeast quadrant of Apopka Vineland Road and Winter Garden Vineland Road (CR 535) intersection. Land use within this proposed pond include forested uplands and wetlands (WL-22W)). WL-22(W) is a forested system that extends to the north. It is anticipated that wetland impacts will result from the implementation of this pond site.

It is anticipated that 1.41 acres of direct impacts to WL-22(W) will result from the construction of this pond for I-4 Segment 1 improvements.

#### Ponds 139A and 139B (Recommended)

Ponds 139A and 139B are located within the ROW of the eastbound travel lanes of I-4 near Stations 1270. These are existing ponds that will be reconfigured. Both systems are located within herbaceous uplands and SW-36B(E) and SW-36C(E).

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result by implementing these existing ponds for I-4 Segment 1 improvements.

#### Pond 140 (Recommended)

Pond 140 is located within the ROW of the westbound travel lanes of I-4 near Station 1275. This is an existing pond that will be reconfigured. This system is located within uplands and SW-58B(W).

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from reconfiguring this pond for I-4 Segment 1 improvements.

#### FPC 141 (Recommended)

FPC 141 is located along the eastbound travel lanes of I-4 near Station 1290. This is a proposed pond that will be located within portions of WL-13A(E) and SW-37(E).

It is anticipated that 2.20 acres of direct impacts to WL-13A(E) and 1.02 acres of direct impacts to SW-57(E) will result from construction of this pond for I-4 Segment 1 improvements.

#### Pond 142B (Recommended)

Pond 142B is located along Turkey Lake Road, near Central Florida Parkway and I-4 interchange, and Station 1325. This is a proposed pond that is located within uplands adjacent to the wetland fringe of Big Sand Lake.

No impacts to jurisdictional wetlands and/or other surface waters are anticipated to result from the construction of this pond for I-4 Segment 1 improvements.

Table 1 summarizes the classifications of the onsite wetlands and other surface waters using the Classification of Wetlands and Deep Water Habitats of the United States and the Florida Land Use, Cover and Forms Classification System.

	Sum	nmary of Jurisdictiona	Table 1 al Wetlands and Other Surface Waters
ID	*USFWS Classification	**FLUCFCS Code	Description/ Vegetation Summary
SW-A(E)	PEM2E	5130	Upland and wetland-cut ditch/herbaceous/emergent
SW-1A(E)	PEM2E	5130	Upland-cut ditch/herbaceous/emergent
SW-5B(E)	PEM2E	5130	Streams and Waterways
SW-1B(E)	PEM2E	5130	Upland-cut ditch
SW-8(E)	PEM2E	5130	Swale/herbaceous
SW-10(E)	PEM2E	5130	Swale/herbaceous
SW-15(E)	PEM2E	5130	Upland-cut ditch/herbaceous
SW-16(E)	PEM2E	5130	Upland-cut ditch/herbaceous
SW-17(E)	PEM2E	5130	Swale/herbaceous
SW-18(E)	PEM2E	5130	Swale/herbaceous
SW-20(E)	PEM2E	5130	Upland-cut ditch/mixed wetland hardwoods/herbaceous
SW-21(E)	PEM2E	5130	Upland-cut ditch/emergent/floating
SW-23(E)	PEM2E	5130	Upland-cut ditch/ herbaceous/emergent/floating
SW-26(E)	PEM2E	5130	Swale/ herbaceous
SW-27A(E)	PEM2E	5130	Swale/herbaceous

Table 1							
	Summary of Jurisdictional Wetlands and Other Surface Waters						
ID	*USFWS Classification	**FLUCFCS Code	Description/ Vegetation Summary				
SW-28(E)	PEM2E	5130	Bonnet Creek/emergent/floating/open water/controlled				
SW-31(E)	PEM2E	5130	Upland-cut ditch/herbaceous/emergent				
SW-32(E)	PEM2E	5130	Upland-cut ditch/herbaceous/emergent				
SW-32A(E)	PEM2E	5130	Upland-cut ditch/herbaceous				
SW-33(E)	PEM2E	5130	Swale/herbaceous				
SW-35(E)	PEM2E	5130	Swale/herbaceous				
SW-36(E)	PEM2E	5130	Upland-cut ditch/herbaceous				
SW-37(E)	L2OWH/ PFO67E	5230/6170	Lake Willis/mixed wetland hardwoods				
SW-38(E)	PEM2E	5130	Swale/herbaceous				
WL-A(E)	PEM1E	6410	Freshwater marsh (Disturbed)				
WL-B(E)	PFO67E	6300	Wetland forested mixed				
WL-C(E)	PFO67E	6300	Wetland forested mixed				
WL-1(E)	PFO67E	6300	Wetland forested mixed				
WL-1A(E)	PSS67E	6180	Willow and Elderberry				
WL-2(E)	PFO67E	6170	Mixed wetland hardwoods				
WL-3(E)	PF067E	6170	Mixed wetland hardwoods				
WL-4(E)	PFO67E	6170	Mixed wetland hardwoods				
WL-5(E)	PFO67E	6300	Wetland forested mixed				
WL-6(E)	PFO67E	6170	Mixed wetland hardwoods				
WL-6A(E)	PFO67	6170	Mixed wetland hardwoods				
WL-6B(E)	PFO67	6170	Mixed wetland hardwoods				
WL-6C(E)	PFO67	6170	Mixed wetland hardwoods				
WL-7(E)	PFO67E	6300	Wetland forested mixed				
WL-7A(E)	PFO67E	6300	Wetland forested mixed				
WL-8(E)	PFO67E	6170	Mixed wetland hardwoods				
WL-9(E)	PFO67E	6170	Mixed wetland hardwoods				
WL-10(E)	PEM1E	6430	Wet prairie				
WL-10A(E)	PFO2E	6210	Cypress				
WL-11(E)	PFO67E	6300	Wetland forested mixed				
WL-11A(E)	PFO4E	6210	Cypress				

Table 1   Summary of Jurisdictional Wetlands and Other Surface Waters					
ID	*USFWS Classification	**FLUCFCS Code	Description/ Vegetation Summary		
WL-11B(E)	PFO4E	6210	Cypress		
WL-11C(E)	PFO4E	6210	Cypress		
WL-12(E)	PFO67E	6170	Mixed wetland hardwoods		
WL-13(E)	PEM1E	6410	Freshwater marsh		
WL-13A(E)	PFO67E	6170	Mixed wetland hardwoods		
WL-14(E)	PFO67E	6170	Mixed wetland hardwoods		
SW-3(W)	PEM2E	5130	Upland/wetland-cut ditch/herbaceous/emergent		
SW-4(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-5(W)	PEM2E	5130	Swale/herbaceous		
SW-8A(W)	L2OW	5340	Cattle pond		
SW-9B(W)	PEM2E	5130	Streams and Waterways		
SW-9(W)	PEM2E	5130	Swale/herbaceous		
SW-10(W)	PEM2E	5130	Swale/herbaceous		
SW-13A(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-13B(W)	PEM2E	5130	Swale/herbaceous		
SW-16(W)	PEM2E	5130	Swale/herbaceous		
SW-17(W)	PEM2E	5130	Swale/herbaceous		
SW-18(W)	PEM2E	5130	Swale/herbaceous		
SW-20(W)	PEM2E	5130	Upland-cut ditch/herbaceous/emergent		
SW-22(W)	PEM2E	5130	Swale/herbaceous		
SW-25(W)	PEM2E	5130	Swale/herbaceous		
SW-25B(W)	PEM2E	5130	Swale/herbaceous		
SW-26W)	PEM2E	5130	Swale/herbaceous		
SW-27(W)	PEM2E	5130	Swale/herbaceous		
SW-31(W)	PEM2E	5130	Swale/herbaceous		
SW-32(W)	PEM2E	5130	Swale/herbaceous		
SW-33(W)	PEM2E	5130	Swale/herbaceous		
SW-34(W)	PEM2E	5130	Swale/herbaceous		
SW-38(W)	PEM2E	5130	Swale/herbaceous		
SW-40(W)	PEM2E	5130	Bonnet Creek/emergent/floating/open water/controlled		
SW-41(W)	PEM2E	5130	Swale/herbaceous		

Table 1					
	Sum	nmary of Jurisdictional	Wetlands and Other Surface Waters		
ID	*USFWS Classification	**FLUCFCS Code	Description/ Vegetation Summary		
SW-42(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-43(W)	PEM2E	5130	Swale/herbaceous		
SW-44(W)	PEM2E	5130	Upland-cut ditch/herbaceous/emergent		
SW-46(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-47(W)	PEM2E	5130	Swale/herbaceous		
SW-48(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-48A(W)	PEM2E	5130	Swale/herbaceous		
SW-49(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-50(W)	PEM2E	5130	Swale/herbaceous		
SW-50A(W)	PEM2E	5130	Swale/herbaceous		
SW-51(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-52(W)	PEM2E	5130	Swale/herbaceous		
SW-53(W)	PEM2E	5130	Swale/herbaceous		
SW-54(W)	PEM2E	5130	Swale/herbaceous		
SW-55(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-55A(W)	PEM2E	5130	Swale Herbaceous		
SW-57(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-58(W)	PEM2E	5130	Swale/herbaceous		
SW-58C(W)	PEM2E	5130	Upland-cut ditch/herbaceous		
SW-59(W)	PEM2E	5130	Upland-cut ditch/herbaceous/emergent		
SW-59A(W)	PEM2E	5130	Upland-cut ditch/herbaceous/emergent		
WL-A(W)	PEM1E	6410	Freshwater marsh		
WL-1(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-2(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-2A(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-2B(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-3(W)	PFO67E	6300	Wetland forested mixed		
WL-4(W)	PFO67E	6300	Wetland forested mixed		
WL-5(W)	PFO67E	6300	Wetland forested mixed		
WL-6(W)	PFO67E	6300	Wetland forested mixed		
WL-7(W)	PFO67E	6300	Wetland forested mixed		

Table 1 Summary of Jurisdictional Wetlands and Other Surface Waters					
ID	*USFWS Classification	**FLUCFCS Code	Description/ Vegetation Summary		
WL-8(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-9(W)	PSS67E	6180	Willow and elderberry		
WL-9A(W)	PFO67E/ PFO2E	6170/6210	Mixed wetland hardwoods/Cypress		
WL-10(W)	PFO67E	6300	Wetland forested mixed		
WL-10A(W)	PFO67E	6300	Wetland forested mixed		
WL-10B(W)	PFO2E	6300	Wetland forested mixed		
WL-10C(W)	PEM1E	6430	Wet prairie		
WL-10D(W)	PFO67E	6300	Wetland forested mixed		
WL-10E(W)	PFO67E	6300	Wetland forested mixed		
WL-10F(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-11(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-12(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-13(W)	PEM1E	6430	Wet prairie		
WL-14(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-14A(W)	PFO2E	6210	Cypress		
WL-15(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-16(W)	PFO67E	6300	Wetland forested mixed		
WL-17(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-17A(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-17B(W)	PEM1E	6410	Freshwater marsh		
WL-17C(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-17D(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-18(W)	PFO67E	6300	Wetland forested mixed		
WL-18A(W)	PFO67E	6300	Wetland forested mixed		
WL-19(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-20(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-20A(W)	PEM1E	6430	Wet prairie		
WL-20B(W)	PFO67E	6170	Mixed wetland hardwoods		
WL-20C(W)	PSS67E	6180	Willow and elderberry		
WL-21(W)	PSS67E	6180	Willow and elderberry		
WL-22(W)	PFO67E	6300	Wetland forested mixed		

	Table 1						
	Summary of Jurisdictional Wetlands and Other Surface Waters						
ID	*USFWS Classification	**FLUCFCS Code	Description/ Vegetation Summary				
*United States Fish and Wildlife Service (USFWS) Classifications: PEM2E: Palustrine/Emergent/Non-persistent/Seasonally Flooded/Saturated - LL2OWH: Lacustrine/Littoral/Open Water/Permanently Flooded - L2OW: Lacustrine/Littoral/Open Water - PEM1E: Palustrine/Emergent/Persistent/Seasonally Flooded - PEM1H: Palustrine/Emergent/Persistent/Permanently Flooded - PSS67E: Palustrine/Scrub-Shrub/Deciduous/Evergreen/Seasonally Flooded - PEO67E: Palustrine/Forested/Deciduous/Evergreen/Seasonally Flooded							
**Florida Land Use Cover and Forms Classification System (FLUCFCS Code): 5130: Streams and Waterways (Ditch/Swale) - 5230: Lakes larger than 10 acres, but less than 100 acres - 6170: Mixed wetland hardwoods - 6180: Willow and elderberry - 6190: Exotic hardwoods - 6300: Wetland forested mixed - 6410: Ereshwater marshes - 6430: Wet Prairie							

# 3.0 Wetland Impact Assessment

Preliminary estimates suggest that 112.94 acres of wetland and 45.99 acres of jurisdictional other surface waters communities will be impacted by proposed improvements associated with the mainline of I-4, please reference Table 2. These estimates are based on field assessment of jurisdictional limits and preliminary plan preparation for design. Impacts to jurisdictional areas will be refined, and verified by state and federal agencies, as design details are finalized. The impact areas, quality of each system, and likelihood of requiring mitigation for adverse impacts are summarized in Table 2.

Impacts to surface waters and wetlands during construction will also be classified as temporary or permanent, depending on the proposed level of disturbance. The type and amount of mitigation for adverse impacts will be based on the final impact acreages, the nature of disturbance (temporary or permanent), and the overall quality of the systems.

	Summary of Proposed	Ta Impacts to Juris	able 2 sdictional Weth	ands/Other Surfac	ce Waters
ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed / Impacts (acres)	*Quality (UMAM)	**Mitigation Requirements (Y, N)
Wetlands					
WL-A(E)	6410	0.80	0.80	Low	Y
WL-B(E)	6300	0.37	0.37	Low	Y
WL-C(E)	6300	7.87	7.87	Low	Y
WL-1(E)	6300	2.95	2.95	Moderate	Y
WL-1A(E)	6180	0.11	0.11	Low	Y
WL-2(E)	6170	0.40	0.40	Low	Y
WL-3(E)	6170	1.70	1.70	Low	Y
WL-4(E)	6170	0.00	0.00	-	N/A
WL-5(E)	6300	4.76	4.76	Moderate	Y
WL-6(E)	6170	7.83	7.83	Moderate	Y
WL-6A(E)	6170	0.00	0.00	-	N/A

		Tabl	le 2		
Summ	ary of Proposed In	npacts to Jurisdi	ctional Wetlan	ds/Other Surface	e Waters
ID	FLUCFCS	Total Area	Proposed	*Quality	**Mitigation
	Code	within ROW	Impacts	(UMAM)	Requirements
		(acres)	(acres)		(Y, N)
WL-6B(E)	6170	0.00	0.00	-	N/A
WL-6C(E)	6170	0.00	0.00	-	N/A
WL-7(E)	6300	0.00	0.00	-	N/A
WL-7A(E)	6300	0.21	0.21	Moderate	Y
WL-8(E)	6170	0.30	0.30	Low	Y
WL-9(E)	6170	0.31	0.31	Moderate	Y
WL-10(E)	6430	1.06	1.06	Moderate	Y
WL-10A(E)	6210	1.24	1.24	Moderate	Y
WL-11(E)	6300	9.99	9.99	Moderate	Y
WL-11A(E)	6210	0.00	0.00	-	N/A
WL-11B(E)	6210	0.00	0.00	-	N/A
WL-11C(E)	6210	0.00	0.00	-	N/A
WL-12(E)	6170	10.05	10.05	Low	Y
WL-13(E)	6410	0.00	0.00	-	N/A
WL-13A(E)	6170	3.68	3.68	Moderate	Y
WL-14(E)	6170	0.00	0.00	-	N/A
WL-A(W)	6410	0.60	0.60	Low	Y
WL-1(W)	6170	6.92	6.92	Moderate	Y
WL-2(W)	6170	1.01	1.01	Low	Y
WL-2A(W)	6170	0.19	0.19	Low	Y
WL-2B(W)	6170	0.76	0.76	Moderate	Y
WL-3(W)	6300	4.83	3.67	Moderate	Y
WL-4(W)	6300	1.02	1.02	Moderate	Y
WL-5(W)	6300	1.32	1.32	Moderate	Y
WL-6(W)	6300	0.20	0.00	-	N/A
WL-7(W)	6300	0.31	0.01	Moderate	Y
WL-8(W)	6170	0.19	0.19	Low	Y
WL-9(W)	6180	0.00	0.00	-	N/A
WL-9A(W)	6170/6210	0.30	0.30	Moderate	Y
WL-10(W)	6300	0.00	0.00	-	N/A
WL-10A(W)	6300	0.31	0.31	Low	Y
WL-10B(W)	6300	0.01	0.01	Moderate	Y
WL-10C(W)	6430	3.80	1.95	Low	Y
WL-10D(W)	6300	0.16	0.02	Moderate	Y
WL-10E(W)	6300	0.20	0.00	-	N/A
WL-10F(W)	6170	2.83	0.00	Moderate	Y
WL-11(W)	6170	0.30	0.00	Moderate	Y
WL-12(W)	6170	0.00	0.00	Moderate	Y

Summar	y of Proposed In	Tabl npacts to Jurisdi	e 2 ctional Wetlar	nds/Other Surface \	Waters
ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	*Quality (UMAM)	**Mitigation Requirements (Y, N)
WL-13(W)	6430	0.00	0.00	-	N/A
WL-14(W)	6170	1.47	0.73	Moderate	Y
WL-14A(W)	6210	8.19	2.30	Moderate	Y
WL-15(W)	6170	1.37	1.37	Low	Y
WL-16(W)	6300	1.06	1.06	Low	Y
WL-17(W)	6170	9.81	9.81	Low	Y
WL-17A(W)	6170	1.87	0.00	-	N/A
WL-17B(W)	6410	3.29	0.00	-	N/A
WL-17C(W)	6170	0.44	0.00	-	N/A
WL-17D(W)	6170	0.60	0.00	-	N/A
WL-18(W)	6300	6.37	6.37	Low	Y
WL-18A(W)	6300	11.58	11.58	Low	Y
WL-19(W)	6170	0.56	0.56	Low	Y
WL-20(W)	6170	0.95	0.95	Low	Y
WL-20A(W)	6430	0.82	0.82	Low	Y
WL-20B(W)	6170	0.20	0.20	Low	Y
WL-20C(W)	6180	0.45	0.45	Low	N
WL-21(W)	6180	0.00	0.00	-	N/A
WL-22(W)	6300	4.83	4.83	Moderate	Y
Subtotal Acres		132.75			
Subtotal Impacts			112.94		
Other Surface Waters: Uplan	d-Cut Ditches, Sv	wales, Rivers, C	reeks and Lak	es	
Ditches (SW): A(E), 1A(E), 1B(E), 15(E), 16(E), 20(E), 21(E), 23(E), 31(E),32(E), 32A(E), and 36(E)	5130	7.05	7.05	Low/Moderate	N/A
Swales (SW): 8(E), 10(E), 17(E), 18(E), 26(E), 27A(E), 33(E), 35(E) and 38(E)	5130	10.26	10.26	Low	N/A
SW-5B(E)/Reedy Creek	5130	0.27	0.27	Low/Moderate	Y
SW-37(E)/Lake Willis	6170/5230	1.02	1.02	Low/Moderate	Y
SW-28(E)/Bonnet Creek	5130	0.38	0.38	Low	Y

Summary	of Proposed I	Tabl mpacts to Jurisdi	e 2 ctional Wetla	nds/Other Surface \	Waters
ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	*Quality (UMAM)	**Mitigation Requirements (Y, N)
Ditches (SW): 3(W), 4(W), 13A(W), 20(W), 42(W), 44(W), 46(W), 48(W), 49(W),51(W), 55(W), 57(W), 58C(W) and 59(W), 59A(W)	5130	5.65	5.65	Low	N/A
Swales (SW): 5(W), 9(W), 10(W), 13B(W), 16(W), 17(W), 18(W), 22(W), 25(W), 25B(W), 26(W), 27(W), 31(W), 31A(W), 32(W), 33(W), 34(W), 38(W), 41(W), 43(W), 47(W), 48A(W), 50(W), 52(W), 53(W), 54(W), 55A(W) and 58(W)	5130	16.60	16.60	Low	N/A
SW-8A(W)/Cattle Pond	5340	0.00	0.00	-	N/A
SW-9B(W)/Reedy Creek	5130	0.11	0.11	Low/Moderate	Y
SW-40(W)/Bonnet Creek	5130	4.65	4.65	Low/Moderate	Ν
Subtotal Acres		45.99			
Subtotal Impacts			45.99		
Project Total		178.74	158.93		
*Low= UMAM Score between 0 and 0.49 **Y = Jurisdictional/Mitigation Required	*Moderate= **N = Jurisdicti	UMAM Score betwee onal/No Mitigation Re	en 0.50 and 0.79 equired **N	*High= UMAM Score c /A= No Impacts Anticipat	of 0.80 or better. ed

Table 3 summarizes wetland and other surface water impacts, anticipated to require mitigation, by type (forested wetlands vs. freshwater wetlands) for the Segment 1 design and includes the hydrologic basin where impacts are located.

	Summary of Prop	Table posed Jurisdictional II Anticipated to Rec	e 3 mpacts (Type a quire Mitigatior	nd Hydrologic า	Basin)
Hydrological Basin	Forested Wetlands (acres)	Freshwater Wetlands (acres)	Lakes (acres)	Creeks (acres)	Other Surface Waters (acres)
Horse Creek	0.44	0.13			
Reedy Creek	98.00	4.39		0.65	
Shingle Creek	8.71	1.28	1.02		
Totals	107.15	5.80	1.02	0.65	

59

# 4.0 Alternative Analysis

Reconstruction and widening of I-4 involves the build-out of the mainline of I-4 to its ultimate condition and modification of interchange configurations. As such, the build scenario of the I-4 mainline includes improvements to those land areas within the existing ROW, thus rendering a single design for the mainline and alternative designs for the interchanges. Both the mainline and interchange configuration design will result in impacts to jurisdictional wetland and other surface water communities.

The planned interchange improvements involve work at the junction of existing roads and highways. As such, alternative configurations are restricted in using the existing built conditions. In general, the land uses at the proposed interchanges includes roads and highways, access/exit ramps, forested and herbaceous uplands and low quality wetlands or surface waters. The current interchange layouts represent the best design alternative when considering engineering constraints, health and human welfare and the environment.

# **5.0 Avoidance and Minimization of Impacts**

The proposed reconstruction and widening of I-4, from west of CR 532 (Polk/Osceola County line) to west of SR 528 (Beachline Expressway) is intended to improve the level of service and enhance safety for the traveling public. In meeting the FDOT and the American Association of State Highway and Transportation Standards (AASHTO) roadway design criteria, the ultimate condition build-out of the I-4 mainline presents little opportunities to avoid or minimize adverse wetland impacts within the existing I-4 ROW and alternative interchange designs. In addition, the wetlands and other surface water systems within the mainline ROW are of low to moderate quality, generally isolated from larger more regionally significant systems or have been constructed through upland soils. A large percentage of the jurisdictional communities within the ROW have been altered or have experienced degradation by the presence of the existing I-4 travel lanes, routine maintenance of the ROW and general edge effect experienced by wetlands near disturbed environments.

Site planning modifications include the use of existing stormwater management ponds, relocation of proposed stormwater management ponds and the reconfiguration of ponds to avoid wetland impacts. It is anticipated that jurisdictional systems within the proposed stormwater treatment systems will be avoided and/or minimized to the greatest extent practical while maintaining safety and function. Further avoidance and minimization efforts of wetlands will be conducted during the design and construction phase. Appropriate mitigation will be proposed based on the final roadway design to offset any adverse impacts to jurisdictional wetlands or other surface waters.

# 6.0 Secondary & Cumulative Impacts

It is anticipated that improvements along the mainline of I-4 could result in adverse secondary and cumulative impacts in meeting the intent of sections 10.2.7 and 10.2.8 of Volume I of the Environmental Resource Permit Information Manual. In evaluation of the potential secondary (indirect) impacts to jurisdictional wetlands, the US Army Corps of Engineers (USACOE) matrix tool for determining secondary impacts was considered. The USACOE secondary impact matrix was used due to its more comprehensive approach in calculating the area of influence. In consideration of the USACOE matrix, current design improvements suggest that secondary impacts could range

between 49 acres (75-foot into a wetland system) and 66 acres (100 feet into a wetland system) from I-4 Segment 1 improvements (Please reference Appendix A – Exhibit 6).

It is presumed that cumulative impacts would result should direct impacts occur. However, a cumulative impact analysis and appropriate mitigation could satisfy the cumulative impact presumption. It is anticipated that the proposed project will not result in unacceptable cumulative impacts to wetland functions in the Horse Creek, Reedy Creek, and Shingle Creek Basins provided that there is appropriate and available mitigation within in the same basin as the adverse impacts or that a cumulative impact assessment analysis determines the mitigation plan is sufficient in addressing.

A secondary and cumulative impacts assessment for I-4 Segment 1 improvements will be refined during the permitting phase in determining the exact mitigation needed in offsetting adverse impacts.

# 7.0 Conceptual Mitigation

Mitigation requirements are based on a compilation of wetland parameters including quality, type, function and size. Impacts to wetlands and other surface waters will be avoided and minimized to the maximum extent possible while maintaining safe and sound engineering and construction practices. Primarily, avoidance and minimization efforts are related at the proposed stormwater management pond locations and the ROW of the I-4 corridor from west of CR 532 to west of SR 528.

A mitigation plan that adequately offsets adverse impacts will be developed and implemented prior to construction activities. Adverse wetland impacts that may result from the construction of this project will be mitigated, satisfying the requirements of Part IV. Chapter 373, F.S. and 33 U.S.C.s.1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and/or other mitigation options that satisfy state and federal requirements.

Mitigation Bank service areas and mitigation credit availability for the Horse Creek, Reedy Creek and Shingle Creek Basins are listed in Table 4.

Table 4 Summary of Available Mitigation Credits per Service Area					
Mitigation Bank (MB)	Mitigation Service areas	Credit Availability*			
REEDY CREEK MB	HORSE CREEK, REEDY CREEK AND	40 FORESTED ONLY CREDITS			
	SHINGLE CREEK BASINS	STATE: UMAM, FEDERAL: M-WRAP			
HATCHINHEA RANCH MB	HORSE CREEK, REEDY CREEK AND	120 FORESTED ONLY CREDITS			
	SHINGLE CREEK BASINS	3.92 HERBACEOUS			
		STATE: UMAM			
		FEDERAL: PENDING PERMIT (CAN USE			
		FEDERAL CREDITS FROM FLORIDA			
		MITIGATION BANK: 200 M-WRAP			
		CREDITS AVAILABLE)			

Table 4 Summary of Available Mitigation Credits per Service Area		
Mitigation Bank (MB)	Mitigation Service areas	Credit Availability*
SOUTHPORT MB	HORSE CREEK, REEDY CREEK AND SHINGLE CREEK BASINS	170 FORESTED ONLY CREDITS 4.74 HERBACEOUS CREDITS STATE: LIMANA EEDERAL: LIMANA

\*Based on 2014/2015/February 2016 mitigation credit ledger review & coordination with Mitigation Marketing Resources, LLC.

# 8.0 Coordination

It is anticipated that project improvements will result in impacts to wetlands and other surface waters regulated by the US Army Corps of Engineers (USACOE) and the state of Florida. A USACOE permit under Section 404 of the Clean Water Act is anticipated for proposed project improvements and an Environmental Resource Permit from the South Florida and Southwest Florida Water Management Districts are needed for the project prior to implementation of construction activities. In addition, a National Pollutant Discharge Elimination System Permit from the Florida Department of Environmental Protection will be required.

For the federal permitting process, the project will be conducted following the guidelines of the Quality Enhancement Strategies (QES) as identified in Regional General Permit SAJ-92, addressing the avoidance and minimization for losses of waters of the United States and alternative design changes to minimize wetland impacts to waters of the United States.

# 9.0 Discussion and Commitments

This wetland evaluation was conducted for I-4 PD&E Study Segment 1 – SR 400 (I-4) from west of CR 532 (Polk/Osceola County Line) to west of SR 528 (Beachline Expressway) – Polk County, Osceola County and Orange County in compliance with Executive Order 11990, Protection of Wetlands, to assure that every practicable effort will be made to avoid short and long-term impacts to wetlands. The approximate total of jurisdictional wetland impacts is 112.94 acres and the total impacts to jurisdictional other surface waters that would require mitigation is 1.78 acres. Sufficient mitigation to offset adverse impacts is currently available at the Reedy Creek, Hatchinhea Ranch, and Southport Mitigation Banks.

I-4 Segment 1 is located within two (2) wood stork Core Foraging Areas (CFAs). Wetland mitigation will adhere to the requirements of the *Corps of Engineers and U. S. Fish and Wildlife Service Effect Determination Key for the Wood Stork in South Florida* (2010).

The following commitments are being proposed to ensure that the I-4 Segment 1 project does not result in adverse impacts to wetland communities and the functions they provide.

• FDOT will ensure that mitigation proposed for wetland impacts in any wood stork suitable foraging habitat (SFH) within 2500 feet of the CFA in which wood storks have been documented to forage will adhere to the requirements of the Army Corps of Engineers and USFWS.

- Eastern Indigo Snake Habitat has been identified within the project. FDOT will utilize the US Fish and Wildlife Service Standard Protection Measures for the Eastern Indigo Snake, at the US Fish and Wildlife Service Link:<u>http://www.fws.gov/northflorida/IndigoSnakes/20130812 Eastern indigo snake Standard Protection</u> <u>Measures.htm</u>
- During the permitting process, FDOT will coordinate with federal and state agency personnel to ensure minimization and reduction of adverse wetland impacts have been explored to the fullest extent of the project while meeting engineering standards and practice.
- Wetland impacts (direct and secondary) that will result from the construction of this project will be mitigated pursuant to requirements of Part IV. Chapter 373, F.S. and 33 U.S.C.s.1344. The FDOT is committed to minimize direct, secondary and temporary impacts where feasible.
- During the design, a Quality Enhancement Strategies (QES) addressing the avoidance and minimization for losses of waters of the United States and alternative design changes to minimize wetland impacts (without jeopardizing safety) will be committed by others.

### **10.0 REFERENCES**

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APPENDIX A PROJECT MAPS AND FIGURES

EXHIBIT 1 LOCATION MAP



Exhibit 1

EXHIBIT 2 USGS TOPOGRAPHIC QUADRANGLE MAP



Exhibit 2
EXHIBIT 3 NRCS SOIL SURVEY MAP





Exhibit 3.1



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Exhibit 3.3







Exhibit 3.4A



















Exhibit 3.8

#### NRCS SOIL MAP

22FPC-114

895

FPC-114A

5

37.POMPANO FINE SAND, DEPRESSIONAL 38.RIVIERA FINE SAND 42.SMYRNA FINE SAND 45.WABASSO FINE SAND 5.BASINGER FINE SAND 99.WATER

890

885

37

Allelas

16

Aerial Source: FDOT Dated: 2012. Soil Survey Source: U.S. Department of Agriculture, National Resources Conservation Service (USDA) (NRCS). Publication Date: 2010.

















Exhibit 3.13













Ν

Exhibit 3.16







Exhibit 3.18











Exhibit 3.19A













EXHIBIT 4 FLUCFCS MAP



Exhibit 4.1



Ν

Exhibit 4.2









Exhibit 4.4



Exhibit 4.4A











Exhibit 4.7



Exhibit 4.8







Ν

Exhibit 4.10


Exhibit 4.11



Exhibit 4.12



Ν





Exhibit 4.14



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Exhibit 4.15
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Exhibit 4.17



Exhibit 4.18



Exhibit 4.19



Exhibit 4.19A









Exhibit 4.21

EXHIBIT 5
SURFACE WATER AND WETLAND MAP





















Exhibit 5.4A















Legend















Exhibit 5.11

#### SR 400 (I-4) Project Development and Environmental (PD&E) Study FM No.:432100-1-22-01

District. Service Layer Credits: Source: E GeoEye, i-cubed, Earthstar Geog DS, USDA, USGS, AEX, Getmapping, Ae swisstopo, and the GIS User Community

Source: FDOT Dated: 2012 Hydrologic Source: So



A HILL









Exhibit 5.13





Exhibit 5.14



Exhibit 5.15

























Exhibit 5.19A














EXHIBIT 6
SURFACE WATER/WETLAND IMPACT MAP



Exhibit 6.1



N

Exhibit 6.2















Exhibit 6.4A









Exhibit 6.6







Exhibit 6.8



Exhibit 6.9







Exhibit 6.11









Exhibit 6.13





Exhibit 6.14



Exhibit 6.15



Exhibit 6.16













Exhibit 6.19





Exhibit 19A













Exhibit 6.21

# APPENDIX B SITE PHOTOGRAPHS

Photographic Log					
Client Name:	Project Name:	Project Location:	3E Project No.:		
FDOT- District 5	Segment 1: I-4 from west of CR 532 to west of SR 528	Osceola County	1386-001		
Photo: Date: 1 5/24/2013					
Description: SW-39(W) Typical stormwater pond, located west of I-4 and north of Osceola Parkway looking southwest.					
Photo: Date: 2 5/24/2013					
Description: WL-1(E) Disturbed Willow and Elderberry and Exotic Wetland Hardwoods located on the east side of I-4 and north of Osceola Polk Line Road looking east.					

Photographic Log				
Client Name:		Project Name:	Project Location:	3E Project No.:
FDOT- District 5		Segment 1: I-4 from west of CR 532 to west of SR 528	Osceola County	1386-001
Photo: 3	Date: 5/24/2013			
Des W Daver located side of l of Tradit looking	scription: /L-3(E) hport Creek I on the east I-4 and south ion Boulevard g northeast.	<image/>		
Photo: 4	Date: 5/23/2013			
Des Amphib roads Locatec Center I I-4, lo	scription: ian utilizing a side swale. d along Epcot Drive, west of oking north.			

	Photographic Log				
Client Name:		ime:	Project Name:	Project Location:	3E Project No.:
FDOT- District 5		strict 5	Segment 1: I-4 from west of CR 532 to west of SR 528	Osceola County	1386-001
	Photo: 5	Date: 5/24/2013		-	
	Des S Vegetate pond lo east sid south of from I- look	scription: W-2(E) ed stormwater acated on the de of I-4 and the on ramp -4 to SR 429 ing south.			
	Photo: 6	Date: 9/19/2013			
	Des W Freshv locat eastbou I-4 ea Center sol	scription: L-11(E) vater Marsh ted on the nd ramp from ast to Epcot Drive looking utheast.			

Photographic Log				
Client Name:		Project Name:	Project Location:	3E Project No.:
FDOT- District 5		Segment 1: I-4 from west of CR 532 to west of SR 528	Osceola County	1386-001
Photo: Da 7 5	ate: /24/2013			
Descrip SW-1 Upland-cu located on side of I-4 a of Osceola I Road lookin	tion: (E) ut ditch the east and north Polk Line ng north.			
Photo: Da 8 5 Descrip WL-5( Reedy Creet on the west s and south o Drive lookin	ate: /29/2013 /W) k located side of I-4 of World ng west.			

Photographic Log				
Client Name:		Project Name:	Project Location:	3E Project No.:
FDOT- District 5		Segment 1: I-4 from west of CR 532 to west of SR 528	Osceola County	1386-001
Photo: 9	Date: 5/29/2013			
Des Wi Highly Mixed Hardwo west sic south looking	cription: L-3(W) disturbed d Wetland bods on the le of I-4 and of SR 429 southwest.			05 29 2013
Photo: 10	Date: 5/31/2013		and the second second	
Description: SW-36(W) Maintained stormwater pond located on the west side of I-4 and south of Osceola Parkway.				

Photographic Log				
Client Name:	Project Name:	Project Location:	3E Project No.:	
FDOT- District 5	Segment 1: I-4 from west of CR 532 to west of SR 528	Osceola County	1386-001	
Photo:         Date:           11         5/31/201           3				
Description: Typical moderate quality cypress dome system located west of I-4 and south of Osceola Parkway looking west.	Fis system is located within the	with the study area, but outsil	de of the ROW.	
Photo: Date: 12 5/31/201				
Description: WL-13(W) Wet Prairie located on the west side of I-4 and south of Osceola Parkway looking southwest.				

Photographic Log				
Client Name	:	Project Name:	Project Location:	3E Project No.:
FDOT- District 5		Segment 1: I-4 from west of CR 532 to west of SR 528	Osceola County	1386-001
Photo: 13	Date: 5/9/2013			Star Par
Descrip SW-58 Typical rc swale afte event locate west side o north of Cou 535 lookin	otion: B(W) Dadside er a rain ed on the of I-4 and unty Road g south.			
Photo: 14	Date: 5/31/201 3			24 58./M
Descrip WL-12 Typical mo quality Mixed Hardwoods west of I-4 a of Osceola	otion: 2(W) oderate d Wetland s located and south Parkway.			